

Spatial Planning as an Approach to Achieve Sustainable Development in Historic Cities

Mohammad Ali Abdi, and Sima Mehdizadegan Namin

Abstract—Sustainable development is a concept which was originated in Burtland commission in 1978. Although this concept was born with environmental aspects, it is penetrated in all areas rapidly, turning into a dominate view of planning. Concentrating on future generation issue, especially when talking about heritage has a long story. Each approach with all of its characteristics illustrates differences in planning, hence planning always reflects the dominate idea of its age. This paper studies sustainable development in planning for historical cities with the aim of finding ways to deal with heritage in planning for historical cities in Iran. Through this, it will be illustrated how challenges between sustainable concept and heritage could be concluded in planning.

Consequently, the paper will emphasize on:

Sustainable development in city planning

Trends regarding heritage

Challenges due to planning for historical cities in Iran

For the first two issues, documentary method regarding the sustainable development and heritage literature is considered. As the next step focusing on Iranian historical cities require considering the urban planning and management structure and identifying the main challenges related to heritage, so analyzing challenges regarding heritage is considered. As the result it would be illustrated that key issue in such planning is active conservation to improve and use the potential of heritage while it's continues conservation is guaranteed. By emphasizing on the planning system in Iran it will be obvious that some reforms are needed in this system and its way of relating with heritage. The main weakness in planning for historical cities in Iran is the lack of independent city management. Without this factor achieving active conservation as the main factor of sustainable development would not be possible.

Keywords—Active conservation, city planning, heritage, sustainable development.

I. INTRODUCTION

SUSTAINABLE development as a new approach was originated with environmental issues, but soon it penetrated in all aspects. [12] It should be mentioned that the concept of sustainability consideration had been taken into account before the Burtland commission.

Considering the future generation and their share of resources and heritage which are in our hand now, is the most important concept in sustainable development. Sustainable development has been introduced to the world with the

essence of balancing and nowadays this concept is the dominant approach in all aspects of planning.

Studying the trends of evolution about heritage planning is very useful. It should be mentioned that in this paper heritage is considered as historic works and buildings which have been remained from the past. Through studying the trends of heritage planning it would be understood that buffering and museum preservation have been replaced by "bringing the past to the future and make a future for the past". [11]

Ashworth in 2002 introduced a process of transforming history to heritage and heritage to a city resource. [8] It has been the result of the definition that history is determined as a heritage and monument toward time for future generation which has been grafted with their history.

So the name of a potential gem could be used for the concept of heritage. The word heritage nowadays is known as a cultural capital but it is not like that in Iran. As Guido Gorzeoni quoted for Italy [20], Iran is also facing "over cultural goods". Some researches in a few important and historical cities in Iran [10] have shown how historical structure and forms of such cities have been deteriorated by city planning and that's why never rose again. While historical monuments and places which could introduce the glory of Iranian history, are not considered in planning, many countries have introduced their scant heritage as a capital to the world and have considered the sustainable development approach as their planning legacy. Therefore, it seems necessary to study appropriate approaches for planning in such Iranian historical cities.

II. URBAN PLANNING APPROACH IN IRAN AND FACING THE HERITAGE

The view with regard to cultural heritage issues have has changed, especially since 1980 and the concept of "a future for the past" in 70s changed to the concept of "a past for future" in 80s and now the slogan "to make the past part of our future" has been created. [11]

In Iran, planning and conservation of historical cities and historical areas began by prior attempts of governmental institute after establishing the Iranian national organization of conservation of historic works in 1965 and some universities efforts which helped to introduce the importance of historical areas. [10] Nowadays the phrase "cultural heritage" has been replaced with phrases like "cultural wealth" or "cultural assets". This issue illustrates the fundamental changes in heritage which is not taken into consideration in Iran. Historical cites in Iran have suffered great damages, especially

Mohammad Ali Abdi is with Building and Housing Research Center of Iran (phone: 00982144215381; fax: 00982144215381; e-mail: abdi@bhrc.ac.ir).

Sima Mehdizadegan Namin is with Department of Urban Planning, University of Tehran, Iran (e-mail: mehdizadegan@ut.ac.ir).

by the hands of modernization trends.

Totally, the trends of changes that accrued in recent decades have caused instability in historical cities. But in recent years compiling strategic planning for conservation and rehabilitation of areas with cultural and historical values has been considered by municipality's organization and office of urban development. These strategic plans consist of a regular process of recognition - analysis and planning - decision taking and suggestions which are attempts to control the physical development according to physical, historical and cultural values and evaluating opportunities according to participation, management and legal issues.

Although, it appears that a positive and promising view has been brought up for heritage, but still Planning and conservation approaches regarding heritages in Iran have been summarized in zoning.

Such way of heritage preservation would not achieve sustainable development in consistence with the structure of city management, as a key factor for sustainable planning. The structure of city management in Iran is as shown as below:

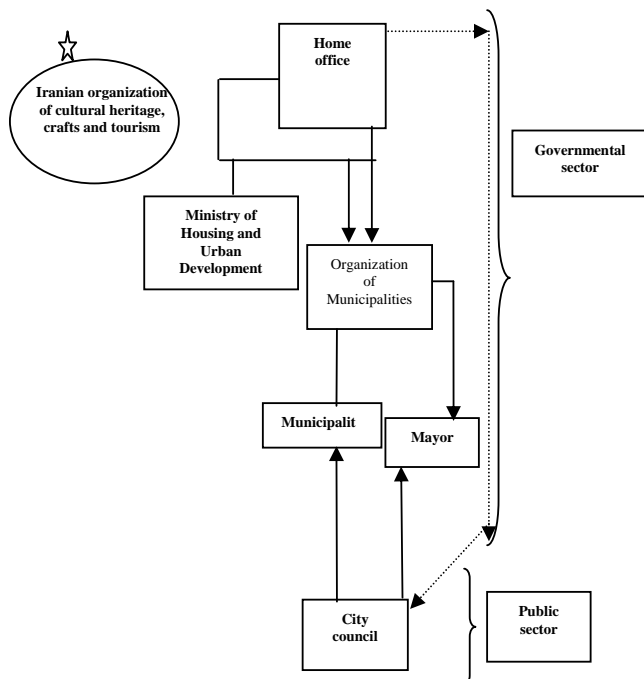


Fig. 1 Structure of city management in Iran

From the figure it is clear that no active participation is considered for organization of cultural heritage- crafts and tourism and no local government is suggested. It is necessary to note that the revenue from cultural heritage, crafts and tourism organization in Iran belongs to governmental assets, therefore the city management has no possible use of these assets.

III. FACING THE PROBLEMS

Compiling the best strategies for urban planning, especially in historical cities, requires studying the different spatial layers. So, it would be possible to analyze the key treats and

opportunities. It is pertinent to mention that due to the physical complication of Iranian historical cities, it is not possible to classify them as has been done by some European researchers, because in each historical era the physical environment is distinguished. [19] Of course some climatic classifications have been considered in Iranian historical cities [26], [14], [13], and it should be noted that according to all aspects and spatial issues such classifications of urban spaces and historical cities are not useful. But according to the location of heritage in city district, following classification could be suggested:

1. Cities with single heritage or monument (containing the monument and building which has remained from the past) as:
 - a) Heritage out of city boundary
 - b) Heritage within the city boundary
2. Cities with historical areas (it should be mentioned that in many cases inappropriate physical-oriented policies have caused deterioration and obliteration in such areas)
3. Cities with multi historical heritage sets (most of historical heritage sets in Iran are from a specific era but in some cases, expansions like Bazaar & religious centers were added to them later.

According to such classifications, the key challenge areas for historical cities could be classified in 3 groups of: economic- environment and social.

The key challenges for three different sectors are shown in the following table. From this table it is obvious that the main problem in such historical cities is the lack of resident's involvement in all areas related to heritage containing preservation, economic profit and participation. Therefore, in some cases deteriorations have been caused by the residents due to their residential renovation limits.

TABLE I
KEY CHALLENGES IN IRANIAN HISTORIC CITIES

| Sector | Key challenges |
|--------------------|--|
| <i>Economic</i> | Vast districts around historical site No economic profit from heritage for local residents Gradual economic activities shut down around historical site |
| <i>Social</i> | Tourism with no carrying capacity Heritage as a difficulty for development in public point of view Lack of public knowledge and participation in conservation process No active roll of heritage in social activities Cultural oppositeness between native residents and tourists |
| <i>Environment</i> | Development limits for residents in heritage limits Loosing balance between heritage and nature No consideration for traditional principles in urban design Visual and environmental pollution No use of vernacular material in constructions No respects for historical environment in new designs Development with no morphological consideration Problems of automobile dependency The lack of city infrastructure in historic area |

IV. TOWARD A MORE SUSTAINABLE DEVELOPMENT

The following process [8] should be elaborated for discussing the issues of planning according to sustainable approach.

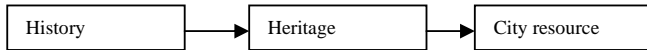


Fig. 2 Process of transformation the heritage to city resources

So what is needed to be accepted from historic cities is the process of city resource creation. This issue could be seen in Europe as replacing the word heritage with assets. Although, use of the city resources is associated with tourism industry, it does not cover all sustainability areas. Considering heritage can cause economic benefits but it doesn't mean to freeze the heritage for conservation purposes. [23]

What is considered in sustainable development is active conservation which could be achieved by reconciliation between all types of compatible activities. [21]

Active conservation is the key to achieve sustainable development in historical cities which also could guarantee the sustainable heritage. [3]

Buffering around heritage and historical site as not active conservation but the development strategies which are compatible with ecological, economic, social and cultural aspects should be considered. [4] Active conservation allows the city management to conserve the heritage and economic and social mechanism of the city. [28]

In the other word, the appropriate solution is to combine past, now and future. Active conservation could be introduced as a method which allows sustainable development in a city. The followings are some planning tools for sustainable development achievement:

Land use -public participation-transforming rate- Cultural parameter -evolution of EIA to SEA [25]

What goes in urban areas is just too dynamic, intricate and mazy. [16] So complication is one of the significant problems in urban planning and design, especially in historical cities. [24] It must be mentioned that revitalization and planning for historical areas, requires the analysis of spatial patterns of activities and then reorganizing them in the three dimensional spaces. [7] So physical planning language is not able to account the needs of planning in such historical cities. Spatial planning through these planning tools will account to more sustainability consideration.

The term spatial bring in to focus on "where are things" whether static or in movement, the protection of spatial places and sites, the interrelation between different activities and networks in an areas, and significant intersections and nodes in area which are physically co-located. [17]

Transforming rate is one of the parameter of urban sustainable development. Evaluation of the city context happens in time, so the slow rate of changes let the residents understand the changes and make it possible to identify or create conservation.

Otherwise, historical districts would become unsustainable and ambiguous. There are some problems in considering cultural aspects and structure of social, economic and ecological evolution. Participation structure in planning doesn't only need material parameters but also there is a need to identify cultural and historical aspects.

Historical districts should be considered according to their spatial integration and complication. [2] This issue needs new tools and it is more than classical assessments of environmental impact. So it should be replaced by SEA. What is considered is not just to decrease the environmental impacts but to maximize the value of heritage recourses in long term period [25].

In the structure of city management in Iran, a lack of guarantee process for active conservation is obvious. The required process for this structure is illustrated in the following graph [6] which contains the key challenges in historic cities.

It must be emphasize that achieving such process requires more public participation in city management, and also rehabilitation of environment requires some return of profit to the local community. And this is the point which could not be achieved through the city management structure in Iran.

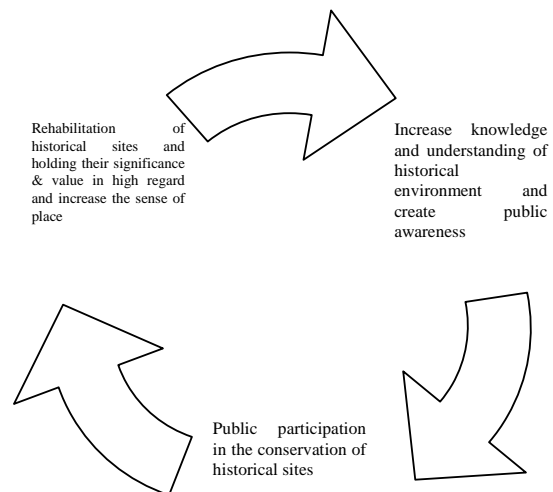


Fig. 3 Sustainable heritage planning process

V. SPATIAL PLANNING, THE KEY TO ACHIEVE SUSTAINABLE DEVELOPMENT

Many issues associated in planning historical cities are based on the importance of heritage and the way it could be considered in spatial structure. Spatial planning theory is about space and what ever occurs there. Hence, paying attention to land-building- their use and relations - also some economic and social factors should be considered. [5] So the spatial solution, considering a mixed idea of planning issues must be emphasized. [18]

Nowadays, criticizing the efforts for planning urban spatial

structure like physical urban land use planning, trying to define a city and its spatial structure in both physical & non physical dimensions.[1] On the other hand sustainable development point of view, emphasizes on financial and economic issues in historical cities.[9]

Sustainable development planning and management in historical cities should emphasize on relations between environment and urban community and economic issues.

Planning policies must contain historical attractiveness as a tourism resource. It means more than just determining buffers around historical site. [22] The main point is the attitude and perspective of looking at the historical site. Planners must be aware that a historical site is not a separated functional zone, [15] but it is essential to be considered as mixed functions and related to other urban areas.

For spatial planning, classification of spaces according to their actual use and consideration of urban and open spaces are useful. It can't be claimed that there is a unique formula for planning and management in historical cities.

Creativity in planning is the only factor which could guarantee the active conservation of heritage. To achieve appropriate planning for cities, three key questions can be mooted: [8], [20]

1. What has changed the city?
2. What kind of city are we looking for?
3. What has happened and what could be achieved?

Evaluating the key challenges and solutions for three above mentioned questions is the answers to historic cities problems. The first and second questions are guidelines to prepare the vision for planning. But the third question is the first step of planning historical cities and the key question in urban planning which provides the chance for creativity. Conservation is the associated part of planning and design process when talking about a city which has special values and heritage.

Two groups of factors must be emphasized for conserving the heritage: [10]

- a) Factors that can cause conservation and preservation of cultural assets and historical sites.
- b) Factors which could cause deterioration of historical sites.

VI. SPATIAL PLANNING IN URBAN DEVELOPMENT PLANS IN IRAN

Physical characters of a city, in the form of studying the land uses and its related predictions are traditionally considered in Iran for preparing city plans. Now it is time to change the traditional view for planning in historical cities.

It must be mentioned that recent trends are not the answer to the demands and necessities of planning in such cities. It is necessary to consider sustainable development in preparing city plans. So it is necessary for plan strategies to reflect the importance of historical environment and social relationship with the build environment.

The main active conservation ideas could be mentioned as the following:

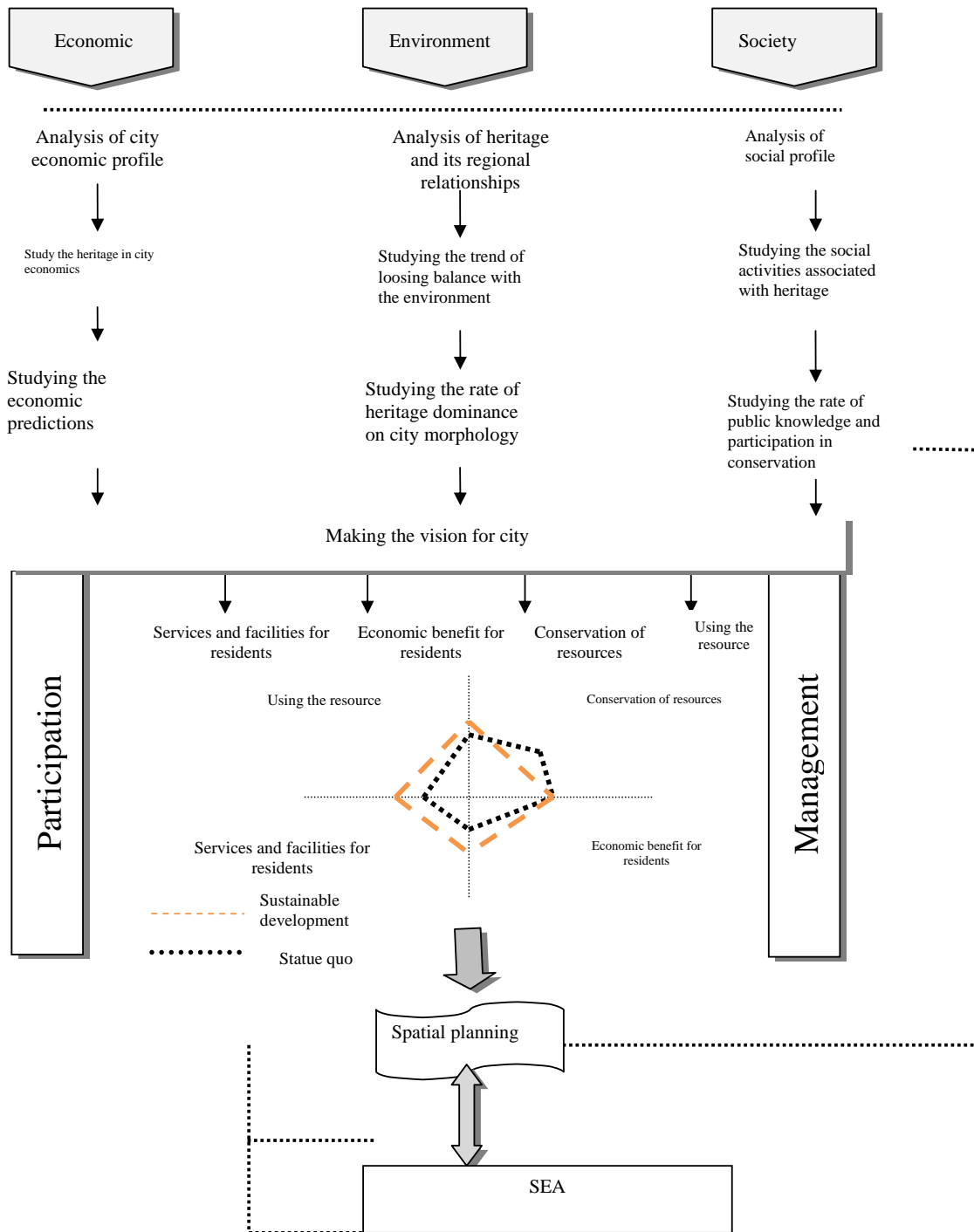
- a) Heritage can create the sense of place
- b) Heritage can create land marks and identification for the city

- c) Heritage can provide basis for economic, social and cultural and environmental activities [27]

So it is necessary to consider two basic supports of "city management and participation" and because of the disciplines of Iranian cultural heritage organization, people and residents look at the heritage as a limit for development, therefore what is needed in spatial planning for historical cities is to create and maintain a balance between 4 issues:

1. Using the resources
2. Conservation of recourse
3. Economic profit for citizens
4. Services and facilities for residents

This approach will promisingly place the city development in a sustainable process direction. The following chart shows the suggested process:



VII. CONCLUSION

Sustainable development is a new approach in planning which encounters heritage as illustrated in the slogan: "make past part of our future".

This is the idea which has resulted from centuries of abortive attempts in heritage planning.

Iranian cultural heritage and crafts and tourism organization has made the slogan: "future belongs to the nation who knows their history" as its top priority process in recent years. This slogan contains two great concepts of conservation and education. Conservation in the form of active conservation is the ideal achievement for sustainable planning and education is a factor which is associated with it. There is not a particular model for planning in historical cities. But by considering the key challenges in historic cities in Iran, 4 main areas can be mentioned.

Two important basic for achieving active conservation are "city management and public participation".

To obtain some planning and design strategies for sustainable development in historic cities, rehabilitation of cultural and social values in the old city form is essential. It must be emphasize that success in such planning is related to both management and participation, there will be no progress in Iran until the gap between conservation disciplines and planning is reduced so that they could be visible simultaneously.

The guarantee for such achievement, beside its usual aspects requires independent city management whom are able to allocate the incomes of heritage for local public services by their legal authorities.

REFERENCES

- [1] A.Madani pour,"Urban space design, an approach with social and physical consideration", translated by F.Mortazai, Tehran: Institute of urban planning associated with Tehran municipality, 2000, pp.47-78.
- [2] A strategic plan for county Donegals heritage, 2007, Available:www.Donegal.ie/libraryASP/future/plan
- [3] Betty.S.F.HO "Achiving heritage conservation in sustainable development", 2000.Available:www.conservancy.org.uk
- [4] Convention for safeguarding of the intangible cultural heritage, 2003, Unesco.Available:Portal.unesco.org
- [5] D.Chapman,"creating Neighborhoods in build environment, translated by Sh.Faryadi &M.Tabibian, Tehran: Tehran university publication, 2002, pp.123-131.
- [6] English heritage sustainable development action plan, 2006, Available: www.english-heritage.org.uk.
- [7] F.S, Chapin,"urban land use planning", Urbana: university of Urbana, Champaign press, 1956.pp:5.
- [8] G.J.Ashworth & J.E, Tunbridge," The tourist historic city (Retrospect and prospect of managing the heritage city)", London: Advances in tourism research series, 2002.pp:61-89.
- [9] M.Aeeni,"Economic, financial and managerial issues of regeneration in the urban distressed areas", Tehran: Building and housing research center publication.2007, pp.153-161.
- [10] M.Falamaki,"Across through Urban regeneration experiences", Tehran: scientific and cultural Institute of Faza publication, 2005, pp.70-75
- [11] M.Habibi,"Urban Regeneration", Tehran: Tehran University publication, 2002, pp.3-5.
- [12] M.Tabibian,"Determinaing the sustainability parameters", Journal of Environmental Studies, Vol.24, 1999, pp.1-12.
- [13] M.Tavasoli,"Principals and methods of housing environment design in Iran", Tehran: Iranian Architecture and urban development research center, 2002, Vol.1, pp: 28-29
- [14] M.Tavasoli,"Urban structure and Architect in the hot Arid zone of Iran", Tehran: Payam and Peyvande no publication, 2002, pp.64-116
- [15] Nara document on Authenticity, 1994.Available:whc.unesco.org [17] P.Geddes,"cities in evolution", Ereest Ben LTD, 1915/1968
- [16] P.Geddes,"cities in evolution", Ereest Ben LTD.1915/1968
- [17] P. Healay," The treatment of space and place in the new strategic spatial planning in Europe ", International journal of urban and regional research, 2004, pp: 28, 45-67
- [18] P.Healey,"Urban complexity and spatial strategies". Cromwell press, 2007.pp:3
- [19] R.Krier,"Urban Spaces", translated by kh.Hashemi nejad, Tehran: khak publication, 2004, pp.15
- [20] R.Vayld,"Economic aspects of cultural heritage", Thran: Amircabir publication, 2003, pp.20-27.ch.7.pp.76
- [21] Review of land use planning, London, 2006, Available: www.heritagelink.org.uk
- [22] Southampton city council Sustainability check list. Available: Southampton.gov.uk
- [23] Sustainable tourism and cultural heritage,ICOMOS.Available:www.nwhf.no/fiels/culture
- [24] T.Terner,"city as landscape", translated by F.Nourian, Tehran: Institute of urban planning associated with Tehran municipality, 2005, pp.47
- [25] U.Hassler & others," cultural heritage & sustainable development in Suit,2002,Available:www.lema.ulg.ac.be/research/suit
- [26] V.Ghobadiyan,"climatic analysis of the traditional Iranian Buildings", Tehran: Tehran university publication, 1998
- [27] World heritage 2007, UNESCO, Available: Portal.unesco.org
- [28] World heritage, shared legacy, common responsibility associated workshop, Italy, 2002, UNESCO, Available: whc.unesco.org

Mohammad Ali Abdi (Tehran, 1971). BS in Civil engineering, University of Tehran, Tehran, Iran (1998). MS in Urban design, University of Tehran, Tehran, Iran (2000).

He was collaborated with Compiling the Housing and urban and rural development in third and fourth development plan of Iran, Compiling the housing vision of Iran, environmental planning and recreational improvement project.

He was the head of Housing and Urban Development planning center of Planning and Management Organization of Iran. Now he is the Head of economic and social research Center of Building and Housing Research Center" BHRC".

Sima Mehdizadegan Namin (Tehran, 1983). BS in Urban planning and design, University of Mazandaran, Babolsar , Iran (2006). MS in Urban and regional planning, University of Tehran, Tehran, Iran (2008)