SUSTAINABLE PRESERVATION STRATEGIES IN HISTORICAL CITIES: AN EXPERIENCE FROM IZMIR AND POSSIBILITIES FOR SUSHA

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Abstract. The rehabilitation of historical cities has been one of the main concerns of both academy and governmental organisations for so far. However, the rehabilitation, transformation and revitalization projects that aim to redefine the urban role of the place cover the risk to weaken the cultural values and to form gaps within the collective memory. Therefore, concepts such as sustainable preservation strategy and holistic approach come to forefront. In this framework, this paper focuses on the conceptual framework of the sustainable preservation approaches. With this in mind, the main parameters of the subject such as sustainability of the cultural entity and place-society relations, improvement of the socio-economic structure and participatory decision processes are taken into consideration. Besides, a rehabilitation intervention focusing on a historical artery of Izmir: Patlıcanlı Street is going to be shared, and some keywords related to the reorganisation of the city of Susha is discussed.

Keywords: Sustainability, Preservation Strategies, Historical City, Heritage Place, Izmir

Introduction. As being the products of different civilizations, multi-cultural societies and their cultural traditions, the historical cities are considered one of the main components of the world heritage. With the monumental buildings that presents the power of previous civilisations, the civil architecture as the products of local production culture, and the cultural landscape, historical cities offer tangible values such as architecture, arts & crafts, documentation, utilization and economic values. Besides being the artefacts of the past and today's urban life, the historic city centres are essential in creating the urban identity [1-4]. Their intangible values such as traditional life routines, rituals, myths and cultural productions strengthen the urban identity and makes these places unique and valuable. Regarding their cultural values, the historical sites should be preserved with a proper conservation strategy and transferred to the future.

Unfortunately, historical cities are threatened even vanished, because of the changes in the social, cultural, economic, and demographic structures. Thus, rehabilitation and preservation projects focusing on these places have been one of the main concerns of both the academy and the governmental organizations so far. However, rehabilitation, transformation, and revitalization projects that aim to redefine a place's urban role and reintegrate it into its former life run the risk of undermining its cultural values and creating gaps in collective memory. Therefore, concepts such as sustainable preservation strategy and holistic approach come to the forefront.

Sustainability based on the need to sustain human life has been one of the main concerns of the public since the 1970's, though it was first voiced in the 18th century. Regarding the loss of natural resources began with the agricultural revolution of the 18th century, Thomas Robert Malthus, a British philosopher and economist, proposed a theory of environmental limitation. Malthus drew attention to the loss of resources and pointed out that food production would not be able to keep up with growth in the human population and was going to result in disease, famine, and war [5]. This suggestion was taken as the birth of the concept of sustainability but could not create public opinion until 19th century.

The transformation of human life gained speed in 19th century and the world introduced with industrialization. In spite of the positive outputs of industrialization process, it brought risks such as decrease in the natural sources, pollution, uncontrolled population growth, unemployment, and power imbalances [6]. In brief, the new world that shaped by the industrialization process foreseen to rule the nature instead of being in harmony with it.

In the second half of 20th century, the loss of natural sources as the destructive effect of industrialization had been a serious topic in United Nations [7]. The concept of sustainable development rose to prominence in the quest to find a way to live in harmony with nature rather than causing a self-inflicted global catastrophe. The ecological limits (Stockholm Conference, 1972), eco-development (United Nations, 1978), equality (Social Union, 1980's), and preservation (IUCN, 1980) were brought to the table through a series of international meetings and workshops. In 1987, WCED (World Commission of Environment &

Development) declared a manifest, the Brundtland Report Our Common Future, to develop a "global view" with respect to our planet's future.

The Brundtland Report is considered as one of the key documents on the concept of sustainability and sustainable development. Within the report, sustainability defined as the act of meeting our own needs without compromising the ability of future generations to meet their own needs [8]. The document based on the main problems such as unequal poverty, rapid and uncontrolled growth, survival from pollution and loss of sources, and economic crisis. The motto was, and still is, "We will succeed or fail together." Regarding the motto and the prior problems, the main goals are equity, environmental development, sustainable social development, and sustainable economic development.

Due to the goals of sustainable development, the environmental, social, and economic strengthening can only be achieved by fulfilling the needs of humans. According to Abraham Maslow's theory of human motivation, man has the desire to be satisfied in all of his wants, even though he requires some basic needs to sustain his life [9]. Regarding this theory, Maslow claims that each satisfaction provokes another desire and none of them are less essential than the other, while some basic needs, as he defined them, are much more common. At the very beginning, the goals of sustainable development gave priority to the basic (material) needs of society, such as food, water, safety, security, and preserving the natural resources and balancing the economy. But now, it is understood that in order to maintain the well-being of societies and their socio-cultural development, physiological and self-fulfilment needs have to be fulfilled. At that point, the built cultural heritage comes to the forefront.

At the very beginning, the goals of sustainable development gave priority to the lower levels of the pyramid that cover the material needs of society, such as food, water, safety, security, and preserving the natural resources and balancing the economy. But now, it is understood that the desire to fulfil the upper levels is actually needed even in extreme bad conditions such as war and disaster. On the other hand, in order to maintain the well-being of societies and their socio-cultural development, the upper levels have to be fulfilled. At that point, the built cultural heritage comes to the forefront.

Heritage places are the spatial outputs of previous civilizations that have been essential to meet the basic needs such as being the shelter, a place to feel safety. Besides, they play an important role in the constitution of place-society relations. Historical sites and cultural environments maintain psychological needs by developing self-esteem & belonging and contribute to satisfaction through arts, crafts and creativity. In this context, preservation of heritage places supports the sustainable development in all three sustainability goals through their meanings and values: Environmental Sustainability, Social Sustainability and Economic Sustainability (Fig.1).
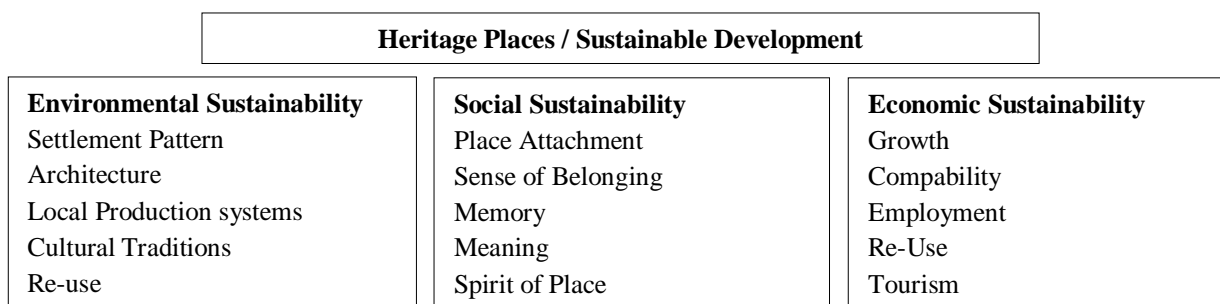
Heritage Places / Sustainable Development		
Environmental Sustainability Settlement Pattern Architecture Local Production systems Cultural Traditions Re-use	**Social Sustainability** Place Attachment Sense of Belonging Memory Meaning Spirit of Place	**Economic Sustainability** Growth Compability Employment Re-Use Tourism

Figure 1. The impact of heritage places on the sustainable development

Heritage places contribute to environmental sustainability with their urban, architectural, arts and crafts, and utilization values. It is critical to preserve settlement patterns that represent daily life routines and historical built stock with its unique architecture that give opportunity to understand the local production systems and cultural traditions and offer knowledge to improve and develop innovative solutions. Besides, re-use of this built stock decreases consumption by maintaining resource productivity, saving non-renewable resources, and improving the quality of life.

Preservation of heritage places contributes to the social sustainability by strengthening the place-society relations through their intangible values. Historical sites support the goal of equity and accessibility

by offering cultural diversity. They create bonds between the past, present and future. Above all, heritage places foster place attachment, sense of belonging, collective memory, meaning, and spirit of place. Besides their positive impacts on environmental and social goals, the preservation of heritage places support the economic sustainability by improving the urban quality and maintaining economic growth on local and national scales [10]. As mentioned above, re-use of the historical buildings enables to strengthen economic value while rehabilitating and valuing their urban districts. Besides, they contribute to tourism by maintaining revival and offering employment and compatibility with the evolution of tourism.

Sustainable Preservation of Historical Districts. Regarding to the multiple correlations between sustainable development and the preservation of heritage places, the concept of *sustainable preservation* becomes important. With the aim of maintaining a sustainable preservation strategy, the goals and methods of intervention has to be clarified regarding to the unique character of the place. Thus, the main steps of the decision process; "understanding the *heritage quality* of place, identifying the *problems* and developing a strategy" has to be identified in details. (Fig.2)

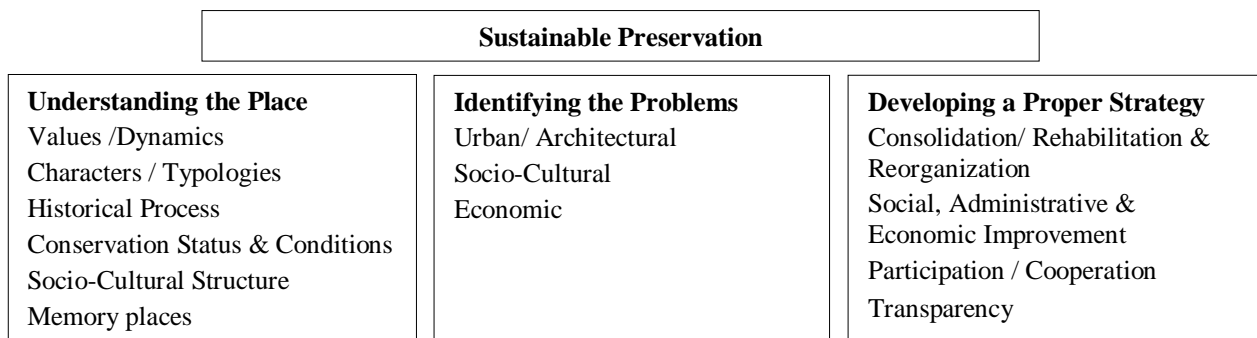| **Sustainable Preservation**		
Understanding the Place Values /Dynamics Characters / Typologies Historical Process Conservation Status & Conditions Socio-Cultural Structure Memory places	**Identifying the Problems** Urban/ Architectural Socio-Cultural Economic	**Developing a Proper Strategy** Consolidation/ Rehabilitation & Reorganization Social, Administrative & Economic Improvement Participation / Cooperation Transparency

Figure 2. Main steps of a sustainable preservation approach

A proper preservation strategy can only develop by understanding the place in all means. The values and dynamics, characters, typologies and historical process have to be analysed in detail, and the findings shall be evaluated in relation to each other by means of urban and architectural qualities, values, conservation status and physical conditions. Besides the physical characteristics, the demographic structure, abilities and skills of the users and tolerance limits of the society shall be defined. Analyses related to the place identity, urban identity, experience routes, memory places have to be determined. Finally, the value mapping, hot points, spirit of place and the leading spaces shall be defined. All the findings shall be juxtaposing to find out the prior places that have to be strengthened, rehabilitate even brought forward or sometimes eliminated.

The second step is the identification of the preservation problems on different scales and contexts. In the urban context, weaknesses related to the built environment, such as urban equipment, access to public services, places of recreation and dialogue, and governance, shall be determined. In the context of built stock, loss and damage to the registered buildings and objects, loss of cultural values, annihilation of place identity, and the effect of all these losses shall be clarified. In order to identify the problems related to the socio-cultural structure, weaknesses in place-society relations such as loss of place attachment and sense of belonging, reasons and effects of abandonment, poverty, and loss of awareness shall be understood. Finally, unemployment, disuse, and the status of both dereliction and gentrification will be identified in the context of socioeconomic structure.

The final step of the process is the development of preservation strategies. Regarding the previous experiences, it is possible to declare that the preservation strategies do not only depend on the unique character of the place but are also define by the socio-economical conjuncture of their periods. This millennium is named the "urban millennium". In this context, for the last two decades, strategies for the long-term preservation of historical cities and their urban identities that based on the principles of participation, cooperation, and transparency have been debated,. On the other hand, expectations that priorities the economic development, ownership interests and tourism policies have strongly taken into concern. As a result of this, the historical districts have revitalised and presented as prestigious venues rather than highlighting their cultural values. Besides, most of these projects focus on the consolidation and reorganization of the

historical built environment, while only some cover social, administrative and economic improvement. All these problematic implementations show that we should take a different approach, a holistic one that prioritises to sustain all the environmental, social and economic welfare. The preservation strategies shall cover physical and social improvement while offering proper economic activities to support the wellbeing of place-society relations. In order to achieve the goals of sustainable preservation of heritage places in a holistic approach; the requirements of all sustainable tools such as consolidation of cultural entities, strengthen the place-society relations, improvement of the socio-economic structure, establishment of participatory decision making process, regeneration of administrative structure and public welfare shall fulfil (Fig.3).
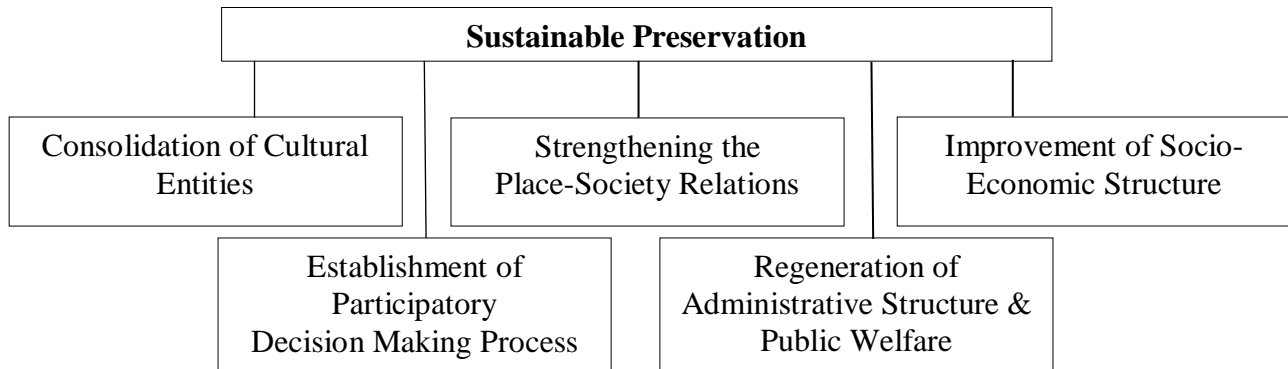
Sustainable Preservation		
Consolidation of Cultural Entities	Strengthening the Place-Society Relations	Improvement of Socio-Economic Structure
Establishment of Participatory Decision Making Process	Regeneration of Administrative Structure & Public Welfare	

Figure 3. Main goals to maintain a sustainable preservation approach.

In order to achieve the goal of Consolidation and Rehabilitation of the Cultural Structure, sub goals such as conservation of the entity, consolidation of the built environment, adaptation of the historic fabric, preservation of natural environment, strengthening the cultural landscape, improvement of urban and architectural quality, and strengthening the quality of life should be maintained. Besides, sustainability of the vernacular and traditional culture shall maintain by understanding the cultural roots, local and traditional production systems shall be analysed, and the traditional crafts, skills and abilities shall be improved. Empowerment of the place-society relations is another main goal of the subject. In this context, strengthening the place identity, sustaining the memory places, developing self-esteem and raising awareness shall maintain. Empowerment of the socio-economic structure is also aimed at a sustainable preservation strategy. In order to achieve this, employment opportunities shall be provided, improving and modernising the skills and abilities shall be improved, and the limits of change shall be redefined. Sustainable preservation implementations may cover different goals due to the prioritised values and problems. The focal point is to understand the dynamics and expectations of the site, and to determine the proper strategy to maintain a holistic and sustainable preservation. As the subject has been target to essential discussions in urban context, many municipalities in Turkiye have tried to find proper solutions to the preservation problems of their historical urban sites. The improvement model for rehabilitation of Patlıcanlı Street of Izmir, that developed by Dokuz Eylul University Faculty of Architecture and financed by the Metropolitan Municipality of Izmir, is one of the these projects.

An Improvement Model Responsive to the Social Change: Patlıcanlı Street, Izmir. Izmir, former Smyrna, is a multi-layered settlement dated back to 8000 B.C., and placed on the southeast slopes of mountain Pagus since 2nd century A.C. The slopes of Pagus were home for Romans, Byzantines, Beyliks and Ottomans, while the macroform of the settlement enlarged towards the coastal areas in the Ottoman period. Coming to the end of 19th century, the slopes became home for Muslim citizens that surrounded by the commercial centre on the west, Jewish quarter on the north, Muslim and Rum quarters on the east. Due to the political and social changes of early 20th century, the demographic structure of the district was altered. After the War of Independence and the constitution of Turkish Republic, the multi-cultural structure of the district almost vanished and the user community mostly moved to the new housing districts that located on the coastal areas. Despite the demographic changes, the original built environment with its monumental buildings, civil architecture and multi-layered urban patterns was sustained. On the contrary, because of the loss of local users, the district has been home to different groups from different regions, and even the refugees. Because

of the loss of sense of belonging and poverty, the built environment has become physically obsolete. Uncontrolled population growth and physical obsolescence caused the annihilation of urban identity. The southern edge of the district, on the other hand, has become an important touristic destination in Izmir because of urban archaeological studies focusing on the Roman Agora of Symrna. Consequently, the rehabilitation and improvement of the district have become an important topic for governmental organizations and the public.

The focus of the project that developed by Dokuz Eylul University Faculty of Architecture was Patlıcanlı Street [11], a main artery that locates on the very core of the district (Fig.4). Main problematic of the project was to develop a preservation strategy that aims to strengthen the urban identity and quality of life. With this in mind, the first step of the study was to understand the current dynamics of the district. Urban, architectural and social structures of the place were analysed and the characteristics of the place such as hot points, environmental perceptions, potential and problematic zones were defined (Fig.4).
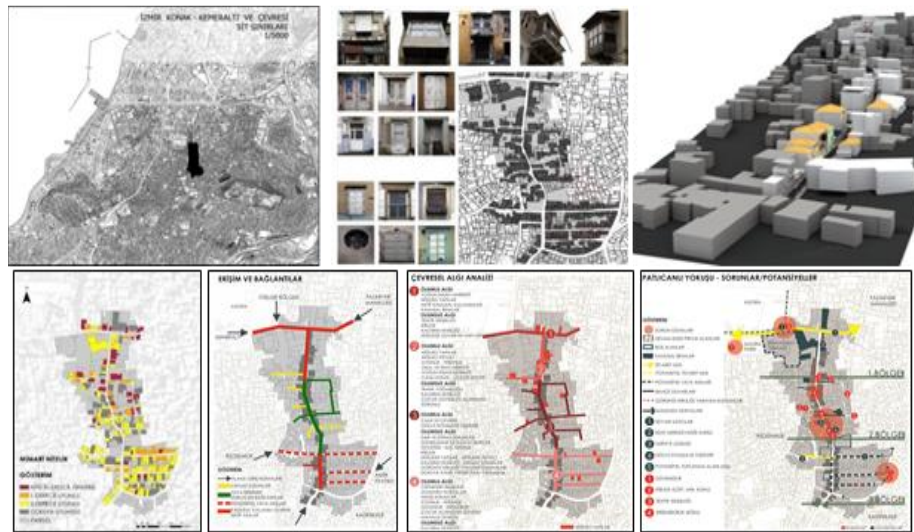

Figure 4. The urban dynamics of the district

The prior goal of the project was to develop an improvement model that could propose rehabilitation interventions to all problematic subjects. The subjects that clarified by site observations, personal interviews and consultation meetings were consolidation and rehabilitation of the built environment, adaptive re-use of derelict buildings, development of interpretations of skills and abilities, and definition of the limits of change. In order to achieve the goals, the limits of the intervention have been defined (Fig.5).
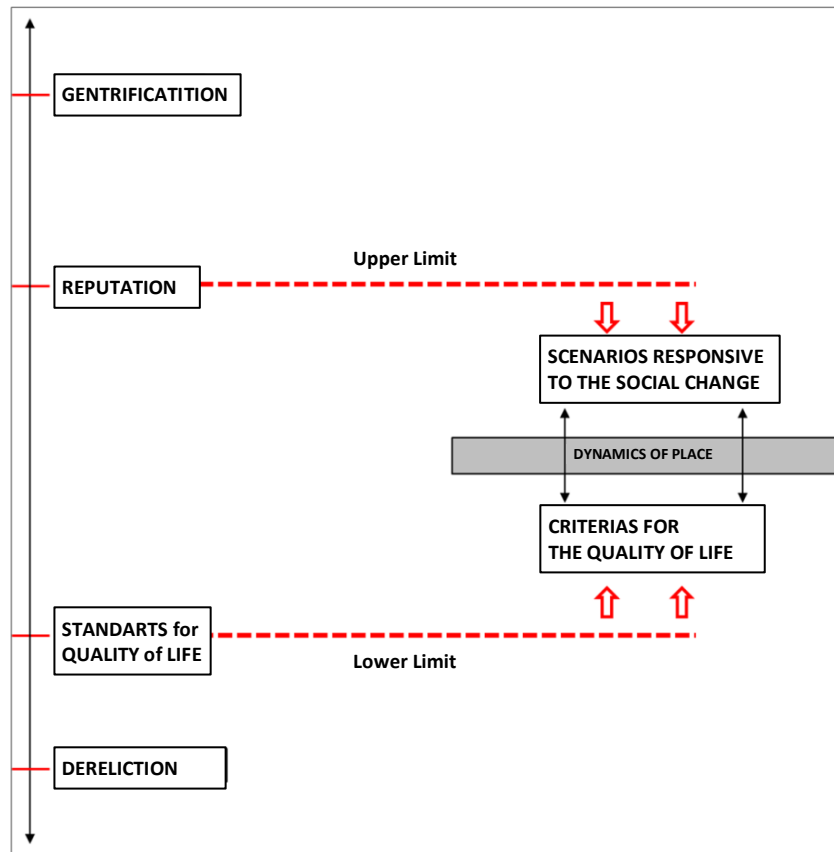
Figure 5. Limits of Intervention

The main problem of the district is *Dereliction*, and if the wrong path is taken, it would cause *Gentrification*. Therefore, the upper and lower limits of implementation are defined. The Upper Limit is defined as *Reputation* while the Lower Limit is defined as the standards of *Quality of Life*. Between these limits the aim was to develop *Scenarios Responsive to Social Changes* that consider the existing problems of the district and enables integration with the city [11]. With this aim, the sub goals are defined as transition from the economic to the social capital, rehabilitation of risk groups, and sustainability of socio-cultural diversity (Fig.6).

In order to maintain the goals of the project; activities, responsible actors and the implementation phases have developed. Besides, three pioneering projects have been proposed as urban catalysts: consolidation of a historical building (re-use as a co-existing place), formation of urban niches (places to interact), and formation of a new memory space (on behalf of the non-existing Mevlevi Lodge) (Fig.7). The rehabilitation intervention of Patlıcanlı Street is still in progress. The development plans have been reorganised due to the above strategies. The interventions related to the urban infrastructure have planned and the relevant units of the municipality develop the related details.

Conclusion and Thoughts on Susha. Regarding their tangible and intangible values, heritage places are at the core of discussions both in the fields of cultural studies and preservation, which highlights cultural diversity, authenticity, and uniqueness. Thus, the preservation strategies related to the conservation of heritage places should be place-specific. The goals, strategies, and actions should be appropriate to the place, and each strategy should define its priorities and limits related to the physical and social character and problems of the place. The goals and acts have to be adopted by all the actors; local users, experts, governmental bodies and financiers, and strategies must be compatible with the current development plans' visions and proposals.
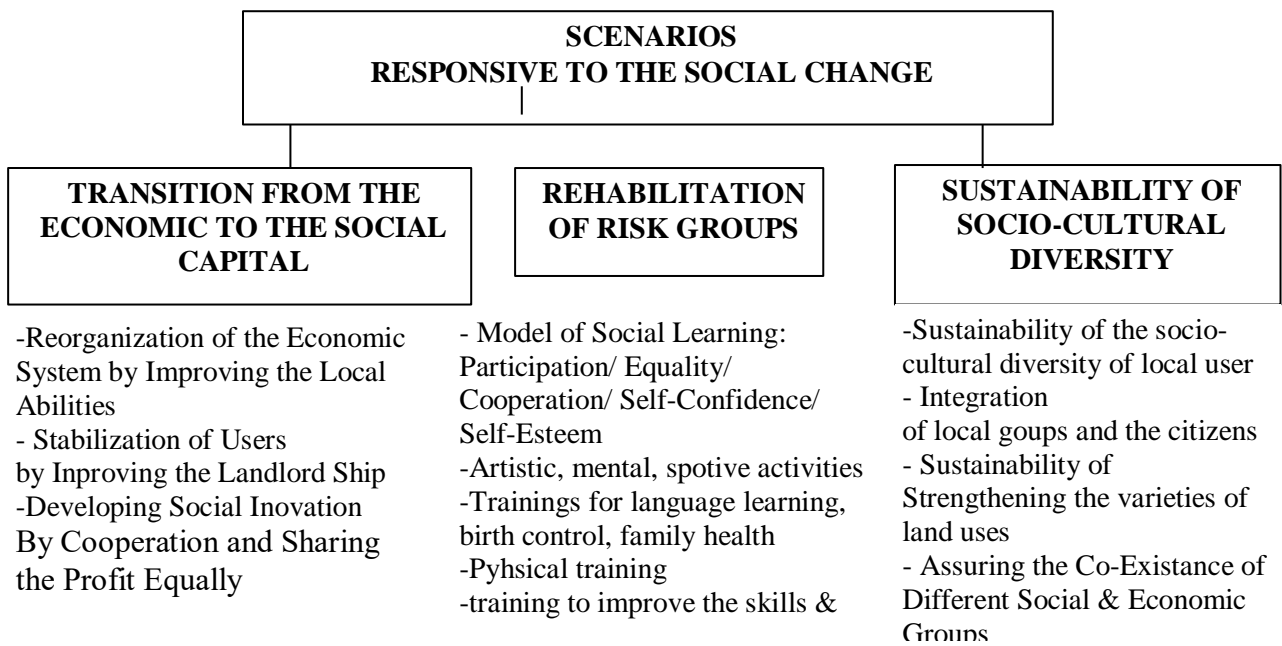
SCENARIOS
RESPONSIVE TO THE SOCIAL CHANGE

TRANSITION FROM THE ECONOMIC TO THE SOCIAL CAPITAL	**REHABILITATION OF RISK GROUPS**	**SUSTAINABILITY OF SOCIO-CULTURAL DIVERSITY**
-Reorganization of the Economic System by Improving the Local Abilities - Stabilization of Users by Inproving the Landlord Ship -Developing Social Inovation By Cooperation and Sharing the Profit Equally	- Model of Social Learning: Participation/ Equality/ Cooperation/ Self-Confidence/ Self-Esteem -Artistic, mental, spotive activities -Trainings for language learning, birth control, family health -Pyhsical training -training to improve the skills &	-Sustainability of the socio-cultural diversity of local user - Integration of local goups and the citizens - Sustainability of Strengthening the varieties of land uses - Assuring the Co-Existance of Different Social & Economic Groups

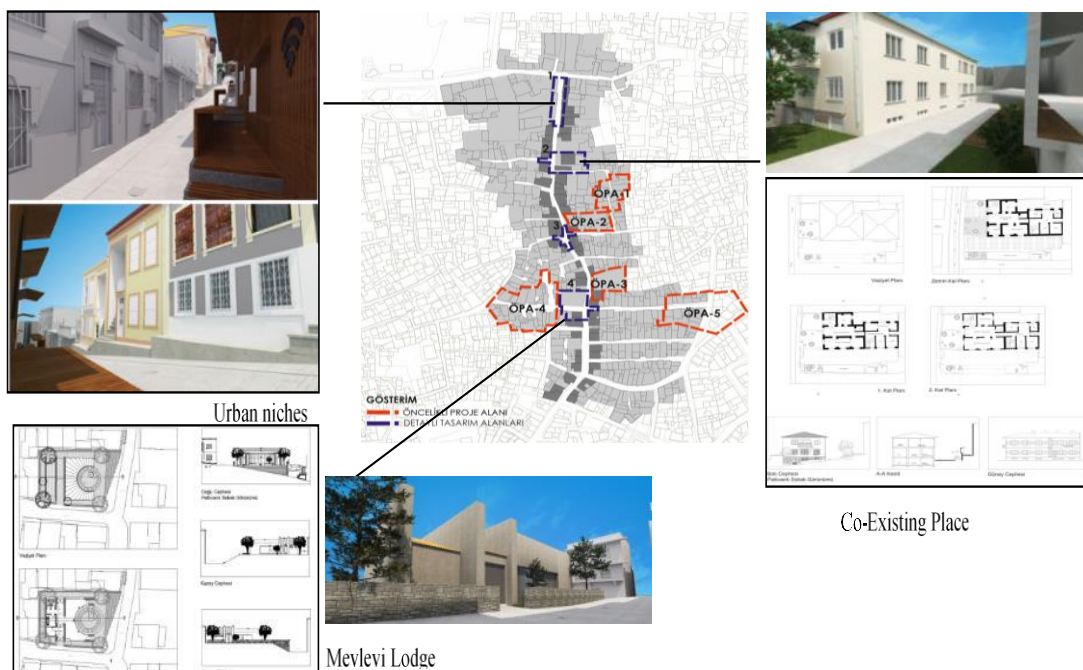**Figure 6.** Strategy and goals of the preservation intervention

Figure 7. Pioneering Projects that will trigger the rehabilitation of the district

Therefore, the common goal should be sustainability by strengthening place-society relations, memory places, quality of life, and socio-economical welfare. In this context, the rehabilitation and reorganization of Susha shall develop with a sustainable preservation strategy. Due to its history and importance in the collective memory, Susha is not only a heritage place with its urban and architectural values but also a memory place within the national identity. Therefore, the rehabilitiation approach has to cover all the tools of sustainable preservation strategies by addressing the issues of physical obsolescence, user loss, dissolution of collective memory, loss of cultural assets, and loss of quality of life.

One of the main decisions within the strategy of intervention is the consolidation of historical building stock. Is the urban texture going to be reconstructed? Is it possible to consolidate the prior places and conserve the others as ruins to preserve the memory of the last decades, or to create new memory places? Is it better to create urban infill by reforming the ruined buildings with the current architectural approaches? Perhaps the

best approach would be place-specific interventions that are based on the building's uniqueness, its place in collective memory, and its role in the past. On the other hand, regarding the loss of user groups and the gap within the collective memory of the citizens, the sustainable preservation approach should be based on identity-oriented strategies. Acts and goals must strengthen the sense of belonging, public awareness must be raised and the limits of intervention must be defined in order to protect the site from the risks of gentrification. Therefore, the preservation of historical cities as components of the world heritage shall consider authenticity, spirit of place, collective memory, sense of belonging, quality of life, and develop identity-oriented strategies within the framework of sustainable preservation.

References
1. Tuan, Y. Space and Place: The Perspective of Experience, Minnesota: Minnesota Press. 1977
2. Assmann, J. Kültürel Bellek. İstanbul: Ayrıntı Yayınları. 2015
3. Lenzerini, F. Intangible Cultural Heritage: The Living Culture of Peoples, The European Journal of International Law, 1 (22), 101-120. 2011
4. Lewicka,M. Place attachment, place identity, and place memory: Restoring the forgotten city past, Journal of Environmental Psychology, 28, 209-231. 2008
5. Oser, J., & Blanchfield, W.C. The Evolution of Economic Thought. New York: Harcourt Brace Jovanovich Inc. 1975
6. Meadows, D., Meadows, D., & Randers, J. Beyond the Limits. London: Earthscan Pub. 1992
7. Mebratu, D. "Sustainability and Sustainable Development Historical and Conceptual Review. Environmental Impact Assessment Review, 18, 493-520. 1998
8. URL 1. https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf
9. Maslow, A.H. A Theory of Human Motivation. Psychological Review, 50, 370-396.
10. Gražulevičiūtė, Indre (2006). Cultural Heritage in the Context of Sustainable Development, Environmental Research, Engineering and Management, 3(37), 74-79. 1943
11. Birol Akkurt,H., Zengin Çelik,H., Güner,D., Erdin,H.E., Özkaban,F.F. Tarihsel Dokuda Sosyal Değişime Duyarlı Bir Sağlıklaştırma Modeli Patlıcanlı Yokuşu-İzmir. TÜBA-KED, 16, 89-107. 2017