2014

American Journal of Engineering Research (AJER) e-ISSN : 2320-0847 p-ISSN : 2320-0936 Volume-03, Issue-12, pp-76-81 www.ajer.org

**Research Paper** 

**Open Access** 

# Renewal and Improvement of the Urban Rusty Areas with Using Of Sustainable Development Approach

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ABSTRACT : Today, sustainable development have been the cornerstone of many official forums of international countries and cities in the world. Its roots can be defined as in the problems that caused by the negative effects of the growing industrial towns and cities sought. On the other hand, the deterioration of tissues in the informal settlement areas that biological evolution is a regional industrial and lack of proper planning, struggled most of the metropolises of the world, and especially Iran country. In the this study, initially it has been apply to definition of urban distressed and sustainable development, then it has been clarified guidance's of modernization about distressed areas and indicators of sustainable development. Then to attention of the need to achieve sustainable development in the all urban areas, urban distressed areas should also follow this approach. After the adaptation of sustainable development indicators in the renovation and improvement urban distressed areas conclude that empowerment and indirect involvement in the tissue repair and replace a physical intervention, undermines the realization of sustainable development. Those indicators renovation and improvement of compliance with the indicators of sustainable development are directly and indirectly, by the summation and finally, the conclusion was that in the topics such as the development of inter-mixing of land uses, density increases, the social and economic networks, creating profit-generating functions and... Should be more emphasis on the urban distressed areas with minimal interference to the body and at the same time to increase the desirability and development.

KEY WORDS: Urban Distressed Areas, Sustainable Development, Renewal and Improvement

#### I. INTRODUCTION & BACKGROUND

Considering that land is a scarce resource, it is thus essential that land especially urban land needs to be properly, efficiently, profitably, feasibly and professionally invested, developed, administered and managed. The objective is to ensure that urban land is used efficiently and effectively in relation to the national development objectives which call for growth with equity (Brebbia, 2000). Whilst it is considered easier and cheaper to look for 'Greenfields' to solve development pressure resulting from rapid urbanization, efficient land use management dictates that there is the need to adapt to external as well as internal pressures within the existing urban area and look at these brownfield as potential sites for re-development that can accommodate the increase in demand for more and better housing accommodation as well as other usage, thus the need for urban renewal or regeneration intervention and policy, through a plethora of initiatives, funding streams, and agencies, using the principles of New Urbanism(or through Urban Renaissance, its UK/European equivalent). Early government policies included "urban renewal "and building of large scale housing projects for the poor. Today with many people interested in moving back to the inner cities, new urbanism has renewed and restored some of these neighborhoods. Due to higher population densities in Europe, economics dictate that extremely low-density housing would be impractical.

According to Roberts & Sykes (2008), termed urban regeneration as a global phenomenon. It is an outcome of the interplay between the many internal forces that are present within the urban areas itself and the external forces that dictate the need for the urban areas to adapt. Within an urban area, a rational pattern of land use will evolve and this tendency is exhibited in all cities irrespective of size, origin or geographical location.

Principle factors that determine the pattern of land use in a particular urban area include competition for sites, accessibility and complementary factor in the sense that once a number of sites in a given area have been developed, this will have a strong bearing on the use of the remaining sites. Urban regeneration can be defined as a social and technical partnership based on the unification of the vision of politicians and designers and on the wide acceptance by the community. It is thus a multi-faceted and complex process which should not be viewed merely as a physical and financial proposition, but as a sociological, cultural, economic and political matter as well (Couch, 1990). Past experience has demonstrated the need to view neighborhood regeneration as comprehensive and integrated process. A realistic renewal program must approach regeneration in a holistic way and be based upon a multi-disciplinary understanding of the social and economic forces affecting urban areas and the physical nature of towns and cities (Roberts & Sykes, 2008). Estimates by the National Association of Home Builders (NAHB 2001) suggest that one in four households in our nation face a serious housing affordability crisis, others argue that our civil society is at risk as a result of a serious civic paralysis resulting in social isolation and a loss of "community" (Murphy and Cunningham 2003), still others suggest that 2/3's of the Michigan's residents living outside of central cities are living in communities struggling with social and fiscal stress thus jeopardizing the public sector's capacity to mobilize the necessary resources essential to a comprehensive revitalization agenda. Regardless of how one describes the scope of the challenges or prescribes the nature of potential solutions, communities in Michigan find themselves at a serious crossroads. They must, in a time of severely constrained economic resources, devise new and creative ways of rebuilding their distressed communities while also reinvigorating their civic society.

#### II. SUSTAINABLE DEVELOPMENT

Sustainable development is a road-map, an action plan, for achieving sustainability in any activity that uses resources and where immediate and intergenerational replication is demanded. As such, sustainable development is the organizing principle for sustaining finite resources necessary to provide for the needs of future generations of life on the planet. It is a process that envisions a desirable future state for human societies in which living conditions and resource-use continue to meet human needs without undermining the "integrity, The United Nations World Commission on Environment and Development (WCED) in its 1987 report Our Common Future defines sustainable development: "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Lee, 2013)." Under the principles of the United Nations Charter the Millennium Declaration identified principles and treaties on sustainable development, including economic development, social development and environmental protection. Broadly defined, sustainable development is a systems approach to growth and development and to manage natural, produced, and social capital for the welfare of their own and future generations. The concepts of sustainable development and sustainability derive from the older forestry term "sustained yield", which, in turn, is a translation of the German term "nachhaltiger Ertrag" dating from 1713 (UN, 2014). Sustainability science is the study of the concepts of sustainable development and environmental science. There is an additional focus on the present generations' responsibility to regenerate, maintain and improve planetary resources for use by future generations.

#### **Sustainable Development Indicators**

#### □ Economic considerations

1. Identify and define the technologies, materials and products and Preventing unsustainable production and consumption in the future;

- 2. Encourage the decentralization of industry;
- 3. Encourage small businesses and self-employment in urban;
- 4. The prevention of irregular migration;
- 5. Changing patterns of production, distribution and consumption of materials;
- 6. Supply growth and economic development.
- 7. Supply of goods required in order to reduce the distance and reduce energy
- 8. Reducing per capita costs of municipal services to enhance the economic viability of the city.
- □ Social and cultural considerations
- 1. Axis of the human being and his needs;
- 2. Deal with the explosion in urban population and reduce the population growth rate to near zero;
- 3. The identity and specific cultural features of the sustaining and strengthening local cultural value;
- 4. Alleviating poverty and reducing class differences changes in behavior to changes in consumption patterns;
- 5. Mobilize women, youth and children to participate in the environmental education and promotion of culture;
- 6. Balanced and equitable distribution of resources between urban areas.

#### **Physical consideration:**

- [1] Precise positioning and optimal design and planning of new towns;
- [2] Ecosystems that surround the city with the manufacturer or absorbent;
- [3] Encourage local scientific knowledge and ingenuity in the field of construction;
- [4] Distribution of the urban space based on hierarchical and fits the context of the ecological carrying capacity of the city (land use planning);
- [5] In considering the specific situation of the environment as a key factor in development planning;
- [6] Designing buildings based on the use of clean energy and promoting their use;
- [7] Design of Buildings Based on Energy Saving;
- [8] Using the Integrated Public Transport System;
- [9] Planning and design standards to increase performance more profitable areas of biological;
- [10] Lighting, water supply and public facilities with minimum cost;
- [11] balanced spatial distribution of public facilities;
- [12] Recycling and reusing space or unused space in the destruction;
- [13] Revision of the rules and regulations of the building in terms of consumption building material;
- [14] Careful attention to the problem of survival for several consecutive generations' buildings;
- [15] Regarding the issue of mixed use and multi-functional use of space;
- [16] The increased density based on detailed studies of the diagnosis and define the extent and distribution of density in urban areas;
- [17] Given the considerable importance of pedestrian pathways and spaces;
- [18] Detailed studies to define and introduce "Urban Sustainability Index" as a tool to measure the movement towards "sustainability" in the process of urban development.

#### **Environmental considerations**

- [1] Linear flow of materials (data) input to the municipal system should be close as possible to a cyclic flow;
- [2] An evaluation of the environmental studies strictly and Urban Development;
- [3] The definition of ecological thresholds and capacity to withstand;
- [4] Reduction of air pollution, noise, waste, sewage;
- [5] Healthy Urban Environment and Health;
- [6] Securing the City to prevent accidents and to minimize the effects of damage;

#### Considerations in decision-making and urban management

- [1] The reform of the common practices of urban planning and studies;
- [2] Participation of urban institutions, scientists and urban planners, designers and society in open discussion;
- [3] To promote and encourage the use of public information public participation;
- [4] The use of advanced computer technology for data analysis, evaluation and presentation of solutions;
- [5] Urban development strategies should be selected from the top 5 Paym apply but must be designed and implemented by people and experts;
- [6] Sustainability information exchange between communities working on a comparative study (Loghayee and Mahmoodzadeh Titkanlou, 1998).

**Distressed areas :** Accurate sense of old or worn not only in public but also among professionals has extensive barrier is not true. Different and sometimes competing interpretations of those words is raised misunderstandings abuse. Appear before any action is necessary to state the relevant rules, the assignment of all kinds of tissues, the nature and the manner and extent of involvement with the institution of the general ledger (Andalib, 2008). Result of natural wear and urban wear in small communities and individuals to prevent or repair and upgrade aging is a natural process. Economic and social factors that are present, they fuel urban wear rate (Mousavi, 2009). Corrosion or the "body" or "work" or the "body of work" together to penetrate. The equations can be formed that represent the types of wear and tear. One group of these equations can be represented as follows:

**Physical Distressed :** This is placed in the path of building quality loss caused by the passage of time, the effects of weather, ground movement, vibrations from traffic or improper maintenance or improper occur. Building and maintaining such a definition, more than what we currently provide regular maintenance needs.

**Functional Distressed** :It can also be caused by deterioration of the quality of the function. The tissue may be designed for functional, and it isn't suitable for current use. So in this case the standards or conditions of a

potential tenant or proprietor not matching. Functional deterioration of a building may be affected by a technical disadvantage. Functional Distressed may also be caused by a variety of features.

**Distressed in mental image :** Distressed and self-concept of mind based on the product mental image or the range. Over time, the change in the human environment, social, economic or natural, historical context without changing your fitness needs of people today and serve it occurs loss. This approach is a value judgment and may in fact be no real substance.

**Distressed in legal and official :** This type of physical deterioration and functional aspects relevant to the claim. It is supposed to foster new standards of health and safety, fire or building regulations, a building may be condemned to depression. Similarly, a building may be legally "worn out".

**Local Rusty** :Local rusty is affected by features functional activities within the scope (Hedaiatnia, 2007). Indicators of old texture:

- 1. At least 50% of its passages have a width of less than 6 meters .
- 2. At least 50% of homes have an area less than 200 meters.
- 3. 50% of homes have at least 3 seismic resistance. (Civil and subsets East, 2008: p 20)

#### Table (1)

The conclusion of the modernization, rehabilitation and reconstruction Distressed city can be seen in the

following table:

Intervention method	Intervention goal	Suggestion principles	Apply method
Protection- health	Improve the quality of urban environment protection	<ul> <li>The urban transformation of the change, according to environmental compatibility, anatomical, functional &amp;</li> <li>Improving the social-psychological cities with valuing art evidence nor historical requirement</li> <li>Contemporary urban spaces for the promotion of tourism</li> </ul>	•Improvements • Renovation
Decorative	<ul> <li>preservation of cultural assets</li> <li>Contemporary frame building</li> <li>aesthetic landscape</li> <li>Socio-economic development with regard to the preservation of cultural and historical wealth</li> </ul>	<ul> <li>•conduct individual interests in order to fulfill the public interest</li> <li>•Construction of a new building to preserve the collective memory and cultural</li> <li>•Maintain facial appearance and overall perspective of historic buildings and collections</li> <li>•Encourage owners to maintain historic buildings and collections through: tax breaks, financial aid, legislation and technical support</li> </ul>	•Improvements • Renovation
Local- thematic	<ul> <li>Development of the</li> <li>Contemporary Old Town with the creation of civic life and urban life</li> <li>protection, monitoring, sustainability</li> <li>regulate the cultural and historical heritage</li> </ul>	<ul> <li>Increased sense of responsibility of state officials and residents of the old city to maintain the positive aspects of the old values of</li> <li>Avoid moving the native inhabitants of the ancient city of and respect for the legitimate demands of the local population</li> <li>community awareness of the value of vernacular architecture with sustainability and preservation of original content</li> </ul>	•Improvements •Renovation • Restructuring

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Comprehensive	•Development physical	•flexible and consistent with the	•Improvements
	space	protection and participation of all social	<ul> <li>Renovation</li> </ul>
	•regulate the development	forces	<ul> <li>Restructuring</li> </ul>
	and protection	<ul> <li>Comprehensive pre-intervention study</li> </ul>	
	• enhance the dynamics of the	• Protection of traditional patterns of old	
	old town of the city	texture	
Urban	Contemporary with the	•damage to surrounding buildings and	<ul> <li>Improvements</li> </ul>
Restoration	promotion of civic life	monuments Remembrance	<ul> <li>Renovation</li> </ul>
		• reconstruction of, buildings and spaces	<ul> <li>Restructuring</li> </ul>
		as LSAT	

Source: Habibi & Maghsoudi, 2009.

Adaptation measures and sustainable development of urban distressed areas : The standards, criteria and guidelines for sustainable development and urban renewal and improvement of the previously mentioned, renovation and refurbishment of worn those approaches that realize sustainable development of urban history or facilitate full compliance with the principles of sustainable development. The criteria considered are two general categories:

**Measures consistent with the principles of sustainable development:**Participation in the restructure and integrate concept of sustainable development is directly involved in the issue of social sustainability which it has been proposed.

- Guided by personal interests in order to fulfill the public interest: all the principles of sustainable development have been founded on the basis of public interest.
- Increasing urban density and the density incentive grant for the restoration worn out buildings of no value and historical identity.
- o Subject increase in urban density and compactness of urban sustainability debate.
- - Protection of traditional patterns of old texture.
- Create a network of economic transactions, and an emphasis on basic employment and employment-related.
- It contributes to economic sustainability in the urban areas encouraged small businesses and selfemployment, and reduce poverty and inequality.

enteria & strategies of Regeleration and Sustainable development.					
Criteria & strategies	Criteria & Sustainable development strategies	Match kind			
Public participation in the reconstruction and	Public participation in the reconstruction and integration	Direct			
integration					
Guided by personal interests in order to fulfill	All the principles of sustainable development have been	Direct			
the public interest	founded on the basis of public interest.				
Increasing urban density and the density	Increasing urban density and compact urban sustainability	Direct			
incentive grant for the restoration worn out	issues raised in the urinary discussion				
buildings of no value and historical identity					
Prevent displacement of the indigenous	Prevent irregular migration	Facilitator			
inhabitants of the ancient city					
Intensive development and maximize land use	Mix land use	Facilitator			
in the tissue					
Increased demand for construction and	Inside Development, a sustainable development approaches	Facilitator			
increased population control	in the problematic context				

#### Table (2)

Criteria & strategies of Regeneration and Sustainable development:

# III. CONCLUSION

Sustainable development is a road-map, an action plan, for achieving sustainability in any activity that uses resources and where immediate and intergenerational replication is demanded. As such, sustainable development is the organizing principle for sustaining finite resources necessary to provide for the needs of future generations of life on the planet. It is a process that envisions a desirable future state for human societies in which living conditions and resource-use continue to meet human needs without undermining the "integrity, The United Nations World Commission on Environment and Development (WCED) in its 1987 report Our Common Future defines sustainable development: "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. For this reason, guidelines for sustainable development is economic growth and prosperity by creating profit-generating functions that areas of small business, job creation and income growth will also add value to the land market.

#### REFERENCES

- [1] Andalib, A. Mosavi, S. (2008). Urban for Chinese Compact, American scientific Journals, Indian research.
- [2] Bebbi, F. (2000). Government and growth, translation, peggi, P & M.
- Couch, Y. (1990). Income expectations, urban migration and employment in Africa. International Labor Review, 104(5), 23. [3]
- [4] Habibi, M. Maghsoudi, M. (2009). Urban Regeneration. Tehran University press.
- [5] Lee, U. (2013). Urbanization and old texture area, AJSCS, Vol 52.
- Mosavi, S. (2009). Urban rusty and its fields. Shora Journal. [6]
- [7] NAHB (2001). Public Affairs with assistance from the. NAHB Economics Group.
- [8] Roberts, J. Sykes, T. (2008). Regional Development Theory. Canada: Mouton & Co.
- [9]
- **UN**, (2014). Urban regeneration in the world. **Watkins Murphy and James V. Cunningham**. (2003). organizing for Community Controlled Development: Renewing Civil [10] Society.