

## **BRIEF REVIEW IN THE CONCEPT OF SUSTAINABLE DEVELOPMENT AND ITS PRINCIPLES**

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**Keywords:** sustainable development, urban development, urbanisation concepts, sustainable city.

**Abstract.** The concept of sustainable development of cities has been introduced as a key solution to reducing the problems of the present and the future. Sustainable development concept has undergone different stages of development since it figured out. The evolution history of the concept has seen the participation of many institutions and organizations, which are currently working intensively to implement their principles and goals. Sustainable development concept has been criticized and interpreted differently over time as being accepted in various areas of human action, the sustainable development definition becoming one of the definitions most mentioned in the literature. During its evolution, the concept adapted to the contemporary requirements of a complex international environment, but the basic principles and objectives, in addition to the problems of their application, remained virtually unchanged. The article examines the concept of sustainable development. Analyzes the historical evolution of the concept of sustainable development. The paper also reviews the definitions of sustainable development according to different resources, as well as the principles of sustainable development and their contribution to city formation.

## **КРАТКИЙ ОБЗОР КОНЦЕПЦИИ УСТОЙЧИВОГО РАЗВИТИЯ И ЕЕ ПРИНЦИПОВ**

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**Ключевые слова:** устойчивое развитие, городское развитие, концепции урбанизации, устойчивый город.

**Аннотация.** Концепция устойчивого развития городов была введена в качестве ключевого решения для уменьшения проблем настоящего и будущего. Концепция устойчивого развития с момента ее разработки прошла различные стадии развития. История эволюции этой концепции свидетельствует об участии многих учреждений и организаций, которые в настоящее время активно работают над осуществлением своих принципов и целей. Концепция устойчивого развития подвергалась критике и с течением времени по-разному трактовалась как приемлемая в различных областях деятельности человека, а определение устойчивого развития стало одним из определений, наиболее часто упоминаемых в литературе. В ходе своего развития концепция адаптировалась к современным требованиям сложной международной обстановки, однако основные принципы и цели, помимо проблем их применения, остались практически неизменными. В статье рассматривается концепция устойчивого развития. Анализ исторической эволюции концепции устойчивого развития. В документе также рассматриваются определения устойчивого развития с учетом различных ресурсов, а также принципы устойчивого развития и их вклад в формирование городов.

### **The historical development of the sustainable development**

The concept of sustainable development emerged in 1970 as a theoretical concept of international strategy [1]. In 1972, the report (Limits to Growth) was presented, which declared that the state of global balance could be planned to meet the basic needs of everyone. The Cocoyoc Declaration came in 1974, and the International Union for Conservation of Nature (IUCN) developed a World Conservation Strategy (WCS), which was the first to use the concept of sustainable development. Then, in 1981, the United Nations Environment Program (UNEP) introduced a new global strategy for the environment to achieve equitable social

and economic development through (our Common Future) report [2]. After that, the Brundtland report has come, which called for a global conference to define the sustainable development. The World Childhood Summit was held in New York in 1990 and the World Conference on Education for All in Thailand in 1990, as well as the Earth Summit held in Brazil in 1992. All of them have resulted in the provision of principles to guide future development and to define the rights and responsibilities of the population in protecting the environment.

The agenda for the twenty-first century has emerged, showing how sustainable economic, social and environmental development can be implemented, and that sustainable development is the way to overcome poverty [3]. It also clarified a framework for sustainable human settlements development. Conferences have been held worldwide, so the Vienna Conference was held in 1993, the Barbados Conference of 1994, the Beijing Conference of 1995, the Yokohama Conference of 1995 and 1996. Likewise, the second human settlements conference was held in Istanbul, which approved the observance of sustainable development and its principles for planning and developing human settlements [4]. To be concluded, the second Earth Summit (Sustainable Development) was held in New York in 1997. This conference endorsed the basic principle of development and its basic idea (that sustainable development is development that takes into account the environment, provided that its primary goal is people) [5].

### **The concept of sustainable development**

There are several definitions that have focused on the concept of sustainable development, including:

1. Sustainable development is development that meets the basic needs of the present generation and does not limit the ability of future generations to meet their needs.

2. Sustainable development is the efficient utilization of natural resources and leaves all choices in front of future generations. The focus on natural resources has been noted here.

3. Sustainable development is the effective resource management to obtain the maximum benefits of economic development, provided that the natural resources are preserved and used in such a way as not to reduce the real income in the future. The focus has been noted in economic aspects.

4. The optimal investment of the environment and the utilization of available resources and possibilities, be they human, material or natural, in an effective and balanced economic, environmental, urban and social manner, to achieve justice for the population without wasting the gains of coming generations. The focus was noted in environmental aspects.

5. Conservation and utilize of renewable natural resources in a way that does not degrade or reduce their usefulness to future generations [6], and here the focus is on material aspects.

6. The utilization of new technology to save natural resources with the aim of reducing pollution, achieving climate stability and accommodating growth in population, and the focus here is on the technological aspects.

7. The conscious management of the available resources, environmental and natural potential, rehabilitation of the degraded and inefficient natural environment, and the focus here was on management aspects.

In general, the paper tends to define the most common definition of sustainable development: "Sustainable development is development that meets the needs of the present without adversely affecting the ability of future generations to meet their needs" [7].

### **The principles of the sustainable development**

These principles can be identified by:

– The limitation of Extensibility and Growth: The extension of cities should be through specific controls, which are for the purposes of future growth, effective planning of spatial variables, and the use of mechanisms for determining urban growth sites. It also accommodating growth and the possibility of its occurrence, which helps the city maintain an orderly size and avoid encroachment on agricultural land [8].

– Achieving self-sufficiency: The city should not only be consumed but it should be productive through the use of labor and energy.

– Achieving local independence: The ability of individuals and societies to form their environment through their needs and aspirations to achieve belonging and a sense of place. As well as the ability to manage their local environment.

– Achieving diversity and social mixing: Providing safe, mixed and economically integrated housing [9], and achieving diversity in economic, social and spatial aspects [8].

– The possibility of applying diversity of uses: Adjusting land-use priorities to form compact cities with various vital uses.

– The possibility of applying the use of public transport: Encourage the use of public transport to increase accessibility to services without relying on private transport. Thus, reduce congestion and pollution, reduce energy consumption, and prioritize pedestrians and then bicycles, then public transportation [9].

– Dispersal of vehicular traffic: Reduce traffic volumes and vehicles that are dispersed as a result of the strength of the public transport system. Also designing the roads to avoid congestion inside urban areas [10].

– Access to services & facilities: The hierarchy of service centres in the city offers a high degree of accessibility and mobility. Therefore, this hierarchy helps increase freedom of choice and achieve self-sufficiency at the local level [8].

– Accessibility to green areas: Green lands are parks and natural areas. In addition to using the distribution of open spaces in the city, starting from the residential compound to the rest of the city levels, accompanied with the support of local agricultural projects and green construction projects [9].

– The environmental impact: Achieving an environment empty from pollution, noise, congestion and crime. As well as identify polluting and degraded urban environments and polluting uses unless they comply with environmental standards [8].

– Degree of adaptability: The importance of flexible city formation to adapt to environmental, economic and social variables.

– Image ability of the city as a whole: The city is a place for working, cultural and recreational places. Therefore, the aesthetic aspect and a clear visual image of the city’s structure must be achieved to fit the architectural model [8].

– Image ability of Part of The City: Formation of the city, distribution of services, open spaces, and highlight of the neighbourhoods with the status of the use centre.

– Sense of place & centrality: The sense of centrality and location within the city according to differs of its urban formation and distance from the centre. The sense of centralization is stronger in the city center than on the city outskirts.

As an application of what has been stated, the Sustainable City is the city that meets the current needs of the population without adversely affecting future needs. For example, a sustainable city is one that achieves development based on social justice and fair distribution, and its development does not affect environmental content. Based on the above concept and principles, a city can be considered sustainable (Fig. 1) according to the availability of the following points:

1. The efficiently of the use of resources.
2. Natural diversity protection.
3. Meet local needs as much as possible.
4. Availability of a job opportunity for everyone.
5. Availability of the health protection.
6. Easy of access to facilities, services and goods.
7. The availability of knowledge and information for the residents to be involved.
8. Providing chances to get an education for all.
9. A comfort and entertainment are available in all residential areas.
10. To have an open and studied spaces that combine beauty and benefit.

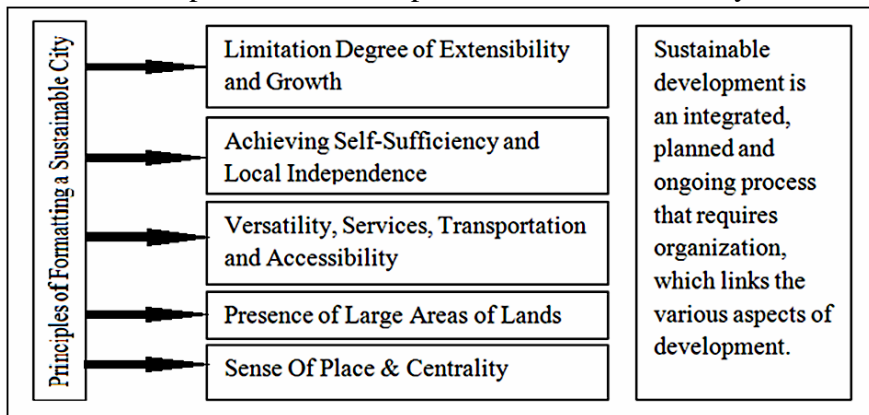


Fig. 1. Principles of formatting a sustainable city

**Conclusion**

Sustainable development is an integrated, continuous and planned process that links to different aspects of development. This underscores the need for effective development formulation that develops new urban cities in a sustainable way that embraces the reality of sustainable development of society and reflects its

vision for the future. Sustainable development must provide fundamental human needs solution, integrating the environmental development and preservation, achieving equality, the cultural diversity, ensuring social self-determination, and maintaining environmental integrity. The sustainable development will lead us to realize the development and upgrading of society by raising the standards of well-being and improving the environmental and living conditions of cities. Although the sustainable development concept has undergone certain changes in the past, its essential principles and objectives have contributed to more conscious attitude adapted to the constraints of the environment. That is why, the concept has been adopted in various areas of human activity. The main constraints to implementing the concept of sustainable development are the level of social and economic development not yet completed by several countries, linked to the lack of technology and financial resources, as well as the diversity of economic and political objectives on an international scale.

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