# **Employing local Materials in Furniture Design at the Marshes Region in Southern Iraq**

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#### **Abstract:**

The environment of water reserves is considered one of the environments full of life and a producer of sustainable materials in nature. It contains biological and ecological diversity of sunlight, fresh water and air. Many species of animals, birds, plants and fish spread and breed in it in addition to the local people who live in such environments. It is spread all over the world. An example of this environment is the so-called marshes environment in southern Iraq. Thousands of years ago, its local inhabitants have taken this environment as their home. They depend for their livelihood on the natural environmental materials available in this region, especially in building their homes and their simple furniture from reed material. As it constitutes the main ecological vital component of this region. In addition, it reflects its cultural and social heritage. However, the marshes region in southern Iraq lacks the employment of local materials in the design of furniture to achieve the ecological compatibility of this region. Therefore, this research seeks to find suitable sustainable solutions and designs for furniture in accordance with its environment. The aim of the research is to employ local raw materials in the marsh's region in southern Iraq in furniture in a sustainable way to achieve environmental compatibility in the vicinity of their presence, to preserve their heritage value. The research adopted the descriptive approach regarding the theoretical part, and for the purpose of obtaining accurate results in order to achieve the objectives of the research, the analytical method was adopted in describing the simple furniture that was included in the internal spaces of the reed house, and the most important local materials used in its manufacture.

One of the most important findings of this research is the utilization of sustainable natural materials in architecture, interior design and furniture has a positive impact on the social, cultural, environmental, economic, and health levels for the region's residents. Therefore, several recommendations were proposed, one of them is encouraging and following up the local craftsmen in the marshes region in southern Iraq to manufacture the homemade furniture and the need to inform them of the various techniques in its industry in order to enhance this inherited craft and promoting the social, economic and cultural level of this region.

## **Keywords:**

local raw materials - furniture design - marshes region in southern Iraq.

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## **Research Introduction:**

The inhabitants of the marshes in southern Iraq have lived since ancient times in a humid area, in contact with nature, rich in its fertility, biological and ecological diversity, and abundance of natural resources. The biosphere, in turn, is reflected in the architecture of this region represented by the reed house, as well as on the nature of living inside it, which is characterized by the use of natural materials in the manufacture of simple furniture that they use, such as clay, straw, reeds, papyrus and palm leaves. Employing such sustainable natural materials has a positive effect on The environmental aspect because it is natural, organic materials that do not cause emissions of harmful gases and can be recycled and analyzed, as well as from the social aspect by upgrading the society of this region and reflecting its civilizational and cultural heritage by preserving the national heritage, as well as being of economic return that contributes to improving the standard of living for them. The research included an environmental study of the marshes area, the biological and ecological diversity of the water reserves, as well as the local raw materials for the area and their general specifications, uses and application in furniture design, highlighting its usefulness and economic importance in the low cost of its implementation as it is made of natural sustainable materials such as reeds, papyrus and palm leaves taken from the environment of the region.

#### **Research Problem:**

The lack of local buildings (reed houses) in the marshes region in southern Iraq to employ local materials available in its environmental surroundings, in designing furniture, in a way that achieves environmental compatibility in this region.

# **Research Importance:**

The importance of the research lies in striving to preserve the ecological character of the marshes region in southern Iraq through the use of local materials available in this region in the design of furniture.

#### **Research Goal:**

The research seeks to employ local raw materials in furniture in the marshes region of southern Iraq, in order to maintain its sustainable environmental identity, and for the purpose of improving the social and cultural level of this region.

## **Research Assumes:**

- 1- The use of local materials for the environment of water reserves in the design of furniture may have an economic return, improve the social level and root the cultural and heritage customs of the country.
- 2- The possibility of employing the material of reeds, papyrus, palm leaves, and raw materials available in the environmental surroundings of the marshes region in southern Iraq in designing furniture for local reed houses.

### **Research Methodology:**

The research depends on the historical method and the descriptive analytical method.

# **Research Results:**

- 1- The marshes region of southern Iraq and the delta of the Mesopotamian Valley have preserved since time immemorial its environmental and biological character and the inherited heritage and historical features of this region, especially the way of building the reed house and its simple furniture that depends on sustainable materials from ancient times until now.
- 2- Exploitation of sustainable natural materials in architecture, interior design and furniture has a positive impact on the social, cultural, environmental, economic and health levels because it is directly linked and harmonious with nature.
- 3- The organic materials in the marshes area of southern Iraq are environmental materials that constitute a large part of people's life. Reeds, sedges, straw and palm leaves, in addition to clay, are among the main organic materials important in building local dwellings floating on the surface of the marshes in southern Iraq. large in the ecological surroundings of this region.
- 4- Clay, reeds, papyrus, wood, leaves and palm fronds can be employed in interior design and furniture and supplies made from these sustainable natural materials available in the environment of the marshes, such as making chairs, sofas, tables, beds and benches.
- 5- Using the natural palm leaf material in making beds, chairs, sofas and tables for its hardness and ability to form, and with specifications suitable for making structural furniture pieces by connecting palm leaf sticks to each other by piercing it with a machine called locally (the answerer), then it is formed by inserting the sticks into the The holes before drying, without using any adhesive, and after drying form a solid mass and hold together.

#### **Recommendations:**

- 1- The importance of employing local materials in interior design and furniture in the marshes area in southern Iraq so that it remains a nature reserve, especially after it was included in the list of the world cultural heritage prepared by the United Nations Educational, Scientific and Cultural Organization (UNESCO) on July 17, 2016 with the application of the provisions of the heritage standard global on it.
- 2- Conducting field studies in the marshes area, specifically designing housing units that include furniture made of local materials available in the environmental environment of this area.
- 3- Designing tourist accommodation units similar to the common architecture in the marshes, represented by the Qasabi House, which relies on sustainable materials for its construction since ancient times until now, including furniture made from local materials.
- 4- Encouraging and following up local craftsmen in the marshes region in southern Iraq to manufacture locally made furniture and the necessity of informing them about the various methods of its manufacture in order to enhance this inherited craft and advance the social, economic and cultural reality of this region.

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