# The impact of reusing glass wastes on public squares beautification in Egypt (Al Remaya Square- Haram – Giza)

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## **Abstract:**

The problem of solid wastes is one of the greatest environmental problems that countries pay a great attention to it, nowadays; this because of its negative effects on health and environment. The main reason behind the growing of wastes in the latest period is the rising of living standards and the industrial and technical progress beside the culture of consumption in the Arab nations that led to great amount of food and products wastes, upon that, countries tried to get benefit from wastes and turn it form indignation to a treasure and resource of money. The environmental glass material wastes are very difficult to be eliminated after using it. Therefore, it is very important to adopt a way by which we can benefit from these wastes to reduce the environmental pollution resulting from it. This way can be done by recycling these wastes and reusing it in another function such as using it to beautify the public squares by a new design which commensurate with the square environmental nature and upon the user's desires, Thus, the current research will discuss the life cycle of product and its impact on the environment, environmental planning, its objectives and its benefits, in addition to designing and beautifying the squares through studying square's elements and a methodology applied to Al Remaya Square, with a view to determine the weaknesses and the square user's needs; in order to develop design solutions to beautify Al Remaya Square (Haram - Giza) by recycling the glass wastes.(11)

## **Research Problem:**

Accumulation of various glass wastes and failure to make use of them in beautifying the Egyptian environment.

Research Importance: The current research is interested in studying the transformation of various glass wastes into various distinguished artworks that contribute to the beautification of the Egyptian environment and reduce the visual and environmental pollution resulting from the accumulation of glass waste.

Search Objectives: This research aims at using the glass waste to beautify the Egyptian environment and to reduce the environmental pollution.

## **Key words**:

Glass-Recycling-Public squares

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## **An Introduction**

The civilized development of man was linked to the level of development of his exploitation of various environmental resources and natural resources, and the impact of man on the environment was limited and negligible in the early ages of his life on earth, where the problem of environmental pollution and the depletion of its resources was not clear as the environment was able to absorb pollutants within the framework of the natural ecological balance The phenomenon of environmental pollution and its exploitation is an old phenomenon that has accompanied human presence on the surface of the earth, but it did not draw attention to it in the past due to the lack of pollutants and the ability of the environment to absorb them. In view of the negative impact of industrial and urban development, as well as the misuse of natural resources and the rapid depletion of natural resources, the phenomenon of deterioration that affects the various elements of the environment such as water, air, soil and biological diversity is clearly evident, and the environment is no longer able to renew its natural resources, and then the balance has been disrupted. between the various elements of the environment, and these elements are unable to analyze the waste and waste resulting from the various activities In this context, voices calling for the need to preserve and protect it from deterioration have been raised, and the environment and the deterioration that affects it has become a subject for studies(), and the research problem has crystallized in the accumulation of various glass waste and not benefiting from it. In beautifying the fields by developing new design solutions for them, the importance of the research: Reaching the transformation of glass waste into distinct works of art that contribute to the beautification of the Egyptian architectural fields and reduce the visual and environmental pollution resulting from the accumulation of glass waste.

## The results were found to be:

- 1. Recycling glass waste creates job opportunities and thus contributes to reducing unemployment rates.
- 2. Paying attention to the design and beautification of the squares is very important to confirm the Egyptian identity and culture.
- 3. The success of the field design depends on the skill and experience of the designer and the link between mass and space with the link between the elements that make up the space, as well as taking into account ergonomic considerations.

## **Recommendations:**

- 1. Establishing repositories for solid environmental waste to make it easier for artists interested in this field to access and use them to produce artworks.
- 2. Adopting the idea of making use of glass waste in the cosmetic fields in the public fields and applying it.
- 3. Interest in studying the areas of design and its relationship to the environment.

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