

Toward Improving Air Quality in Informal Areas in Egypt

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ABSTRACT

Many cities worldwide suffer from air pollution as a result of industries or human activities. Informal areas are highly vulnerable to environmental degradation, including air pollution. The research aims to determine suitable solutions that could be applied to improve air quality in informal areas. This can be achieved throughout using an analytical-qualitative approach, as the study starts with a theoretical part that presents the dimensions of the problem. The research focuses on two strategies that complement Egypt's current efforts and determine relevant urban factors. The theoretical part is followed by a Field study of an informal area in Giza that suffers from air pollution; this includes studies of the current situation and suggested solutions to improve air quality in the informal area. A questionnaire is done to evaluate the implementation feasibility of different solutions to improve air quality in the informal area, one is directed to urban planners, and the other to area residents. The results indicate that both planners and residents are accepting many of the suggested solutions to improve air quality in the studied area, whether by air filtration or circulation, and the differences in opinion was according to considerations including cost or changes in land use. The study concluded that the air quality can be improved in the informal areas that are polluted by using several strategies, mechanisms and treatments.

KEYWORDS:

Air Pollution, Urban design, urban environmental design, Urban upgrading.