11. SOCIOECONOMIC AND COMMUNICATION TOOLS TO ENHANCE ENVIRONMENTAL SECURITY: A CASE STUDY IN EGYPT

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Abstract: An initiative recently completed in Egypt as part of a climate change project illustrates several socioeconomic and communications tools that can be used to enhance environmental security. The primary purpose of the climate change initiative (CCI) project was to reduce the levels of greenhouse gases (GHGs) emitted during production at brick factories in Egypt. This was accomplished through the conversion of the present system, which employs heavy oil (mazot), to natural gas. While the reduction of GHG emissions in Egypt is an important national and global goal, it is relatively meaningless to those most directly affected by the project (i.e., the brick factory owners, workers, and local residents of the surrounding communities). Therefore, project activities not only covered technical matters (related to the conversion of the fuel systems) but extended to environmental and social matters as well. Significant effort was extended to identify ways by which the envisaged technical improvements could facilitate or enhance the social, health, environmental, and economic conditions of those most impacted by exposure to atmospheric emissions, namely brick factory workers and the populations of villages situated in close proximity to them. A socioeconomic assessment was designed with the understanding that technical interventions are more successful when they take into account the social and economic context in which the project is executed. The socioeconomic assessment provided the key link from the technology transfer side of the project to social development priorities (including basic education, basic health and nutrition, and child protection), in order to benefit vulnerable groups (such as children) that are directly impacted by the environmental problems the project sought to resolve. The socioeconomic assessment enabled a holistic understanding of the context within

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which the CCI project was to be executed. It identified issues related to brick factory production and possible actions/actors to address them, produced proposed programming responses, and brought forward a number of potential partners for the implementation of the proposed interventions. The study demonstrated the importance of linking technology solutions to the socioeconomic conditions of people and that the two are inextricably linked. It is a proposed methodology for all environmental projects, not just ones related to climate change. The outcomes were sustained through a strong and effective capacity development program and an effective communications strategy, which will enhance the capacity of targeted organizations to participate in GHG reduction initiatives; enhance awareness of environmental, health and socioeconomic costs and benefits of brick factory retrofits; and result in the implementation of sustainable and replicable emissions reduction projects.

Keywords: socioeconomic; communication; Egypt; greenhouse gas emissions

1. Introduction

An initiative recently completed in Egypt as part of a climate change project illustrates several socioeconomic and communications tools that can be used to enhance environmental security. The Climate Change Initiative (CCI) was an emissions reduction project executed through the Canadian International Development Agency (CIDA). The primary purpose of this project was to reduce the levels of greenhouse gases (GHGs) emitted during production at brick factories in Egypt. This was accomplished through the conversion of the present system, which employs heavy oil (mazot), to natural gas. A group of 50 out of a cluster of 135 brick factories in the Arab Abu Saed area within Giza Governorate was selected for this pilot project. While the reduction of GHG emissions in Egypt is an important national and global goal, it is relatively meaningless to those most directly affected by the project (i.e., the brick factory owners, workers, and local residents of the surrounding communities).

The rural area of Arab Abu Saed is situated 30 km south of central Cairo and roughly 5 km south of Helwan, a region considered as one of the most industrialized areas in greater Cairo and home to a variety of industrial activities. The Arab Abu Saed area falls between two different districts, Helwan, to the north and El Saf, to the south. The area has a cluster of 135 brick factories out of approximately 2000 all over Egypt. The Arab Abu Saed area is subjected to relatively higher levels of emissions than other villages in the impact zone, because of the concentration of brick factories surrounding the