ABSTRACT

Title: Integration of Modern Construction Technologies to Solve Sanitation, Shelter, Erosion and Energy challenges in the DRC.

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Submission Date: August 2011

Purpose: The present dissertation comes as a result of particular concerns about continuous deteriorating standards of living in the Democratic Republic of Congo, especially over the last decade which has recently culminated into unforeseen diseases, sudden deaths and massive emigrations. Deteriorating living conditions in places like the DRC appear to be an important triggering factor for massive immigrations challenges in Western countries.

At the outset it was expected that if life could be bettered in DR Congo, then emigrations would reduce. Construction was chosen as a means that could partially meet this purpose, and the nations with the know-how on the other side were the same that suffered massive immigrations. They were thus considered in a better position to help the country to stabilise and revive through the transfer of knowledge of modern technologies that they would have used to solve similar problems like those found in the DRC in other places.

Methodology: A case study of particular problems that required solutions in a particular country was constituted and, construction was chosen as the testing means of the solutions proposed; a comprehensive literature review was then undertaken. Difficulties were due to budget and time in relation to the scale of the case study and the duration of the research. Thus the telephone and e-mails were the medium for telecommunications. The methodology used was qualitative. Any other method was deemed unfeasible.

The main methods for gathering data were semi-structured interviews. The people interviewed were carefully selected among construction professionals, academics and executives of local companies as well as representatives of Humanitarian missions in the DRC.

Findings: The research found that most sanitation, erosion, shelter and energy challenges were partially caused by nature but, mostly by the State due to negligence and the provision of discriminating laws and measures. There was acute negligence of infrastructures that gave in due to lack of maintenance and lack of investments thereto as well as the absence of investment in education and research. There was an important gap found in the knowledge of modern technologies in the DRC. It was also found that international aid to the DRC was not suitable to the country’s needs. The research concluded with recommendations to get the State to create a framework through the adaptation of laws, rules and regulations as well as investments that could allow emancipation of the population as well as the operation of business.

Keywords: integration, technologies, solve, challenges, DRC.