THE BIENNIAL CONFERENCE OF THE SIERRA LEONE INSTITUTION OF ENGINEERS, Freetown Sierra Leone 29th June – 1st July 2016

"NATIONAL DISASTER RISK MANAGEMENT AND PREPAREDNESS: AN ENGINEERING PERSPECTIVE FOR RESILIENCE"

Drainage Control, a major factor in Disaster Management in Sierra Leone.

Ing. Francis Lahai

Abstract

This paper attempts to look at how drainage, properly designed and managed can be a major mitigating factor in damages caused by floods. With the looming climate change phenomenon making its impact globally, it is observed that several factors contribute to its adverse effects. These include weather patterns, Natural Resources Management, the degree of resilience and risk mitigation measures developed in the affected countries.

The design and maintenance of these infrastructural elements falls on city and town councils within which are engineers whose responsibilities have been subjected to other higher pressures and conflicting resource allocation needs. The engineer has the theoretical skills to control disaster, but in a developing economy, political will, community cooperation, financial and other factors come into play in the choice of the best solutions and these are generally not the original intention of the engineer.

Key words:

Drainage, irrigation, Natural Resource Management (NRM), Climate Change, Disaster Management, Flood, Resource Allocation, mitigation, water engineering.