THE ENVIRONMENT AND RENEWED DISEASE OUTBREAKS IN AFRICA: THE DRIVING FORCES OF CLIMATE CHANGE, UNCONTROLLED URBANIZATION AND ENVIRONMENTAL DEGRADATION.

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Abstract: Globally, emerging and re-emerging diseases such as malaria, tuberculosis, Viral Haemorrhagic Fevers (VHF) especially Ebola and Marburg continue to pose major threats to public health security. In Africa, the incidence of infectious diseases such as malaria, cholera, VHFs, cerebrospinal meningitis has continued to progressively and significantly increase in the last 20 years. The cholera outbreak of 2008/09 in southern Africa affected nine countries with an estimated 191,000 cases and 5400 deaths. Since that unprecedented outbreak, countries such as Zambia, Zimbabwe and Malawi have reported yearly outbreaks with many of them that were hitherto cholera free being classified as cholera endemic. From 2007 to date, Uganda has experienced seven outbreaks of VHFs (three of Marburg and four of Ebola), with three of these outbreaks being reported in 2012 alone. The emergence and re-emergence of these diseases is due to many factors. Firstly climate change resulting in either El Nino or La Nina phenomena, neither of which negatively affects the availability and quality of water, contributes to outbreaks of diseases such as malaria and diarrhoea, especially cholera. Secondly, rapid and uncontrolled urbanization, usually caused by rural to urban migration and by internal displacement of populations, mainly for economic and security reasons, has resulted in huge urban and peri-urban slums, well known for sub-standard and over-crowded housing conditions, poor access to potable water and sanitation, and abject poverty, all of which perpetuate the recurrence of disease outbreaks. Thirdly, changing patterns of land use; deforestation; and recurrent natural disasters, such as floods and droughts, alter the ecology and ecosystems of communities thereby, increasing the human-disease vector interphase, contribute largely to the conundrum. In this paper, we review the situation in the African region using examples of recent outbreaks and, propose a way forward based on the lessons learnt from responding to these outbreaks.

Key words: Climate change, urbanization, environmental degradation, disease outbreaks