Solid waste management in Kigali City, Rwanda

Jean de Dieu BAZIMENYERA¹²,a, Fu Qiang¹,b, Antoine Karangwa³

¹. NorthEast Agricultural University, School of Water Conservancy and Civil Engineering, No.59, Mucai Street, Xiangfang District, Harbin 150030, P. R. China.
². Kigali Independent University (ULK), Gisenyi Campus, Department of Rural Development, Rubavu, P.o Box 248 Gisenyi., Rwanda.
³. Independent Institute of Lay Adventists of Kigali, PO Box 6392 Kigali Rwanda

¹e-mail: bazidieu@yahoo.fr, ²e-mail: fuqiang@neau.edu.cn

Abstract  Solid waste management is becoming an important issue in Kigali City. Batch of wastes can be seen in various spaces such as roads, riversides and many other open spaces, and this constitutes a crucial problem to human beings in particular and environment in general, the accumulation of these wastes will attract rats, insects, flies and many other pathogens which in turn cause problems, such as water contamination, infectious diseases like diarrheal and so on. Rwanda, being a densely populated country, is undergoing rapid urbanization and a huge number of people are leaving rural areas to Kigali City, this leads to an increasing of challenges associated with providing an effective basic infrastructure including solid waste management system. As cities grow, wastes generated increase in volume as well as in variety. Rwandan urban population growth rate was 5% per year in the period 1978-1991 and currently stands at 9% per year and continues to increase. Regarding these changing issues this paper analyzed the current solid waste management system in Kigali City and proposed some approaches which can be used to solve the problems associated with it, where recycling and composting were found to be more suitable.

Keywords: solid waste management, Kigali City, recycling, composting.