Uses of manure from intensive urban poultry units in Western Kenya

Abstract

Poultry keeping is a popular practice in urban centres of Kenya with wastes arising from the poultry units may become too large to be absorbed in the immediate areas of production as crop plots and gardens decrease in size in urban centres leading to public health nuisance and potential for environmental hazards. A study was conducted in four urban centres of Bungoma, Eldoret, Kakamega and Kisumu in Western Kenya to evaluate the alternative uses of poultry manure besides use as soil fertility enhancer. Cross sectional survey was employed in the study. Questionnaire interviews were administered among 475 farmers selected through snowball sampling. Manure uses mentioned by respondents were cattle feed, fertilizing fish ponds and soil crop fields. There was a significant difference across the municipalities with respect to alternative uses of poultry manure ($\chi^2_{9,0,001}$ = 133.3). Sale of poultry manure showed a significant difference ($\chi^2_{3,0}$ $_{0.001}$ = 17.8) across municipalities. Use of poultry manure to generate revenue was emerging in the study area. While this may increase income, it could have a negative epidemiological effect by contaminating the transport routes and sites of deposition. In line with the findings, it was recommended that: Farmers in urban areas should adopt practices that minimize contamination of feed and environmental pollution by manure; Urban policies and programs must ensure safe handling, disposal/transport of wastes from poultry farms.

Key Words: Poultry keeping, Wastes, Manure, Urban