



Improving small-scale farmers' endogenous crop-livestock practices in rural, peri-urban, and urban areas of Benin

Koura B. Ivan^{1*}, Dedehouanou Houinsou², Vissoh Pierre², Houndonougbo F.¹ and Houinato M.¹

¹Department of Animal Sciences, Faculty of Agricultural Sciences, University of Abomey-Calavi, Benin

²Department of Economy, Socio-Anthropology and Communication, Faculty of Agricultural Sciences, University of Abomey-Calavi, Benin

*Corresponding author. Address: Department of Animal Sciences, Faculty of Agricultural Sciences, University of Abomey-Calavi, 01 BP 526 Cotonou; Tel: (+229) 97019780/64321378; Email: kouraivan@gmail.com (Koura BI.)

Keywords: Mixed farming, Manure, crop residues, sustainable agriculture, urbanization.

1 SUMMARY

This study aimed at a describing indigenous crop-livestock systems used in rural, peri-urban and urban areas of Benin for their improvement. A socioeconomic survey was conducted in three areas and two hundred and forty (240) farmers were interviewed on their practices. Three integration levels were identified; no integration (NI, 36%), partial integration (PI, 55%) and total integration (TI, 9%) and the obtained groups were characterized. Then, a multiple correspondence analysis was performed to identify partial integration subgroups. Main Integrated Crops Livestock Systems (ICLS) identified ranged from Low external input agriculture (LEIA) to High external input agriculture (HEIA). While rural farmers preferred Mixed Crop-Livestock Farming with enhancement of cereals and legumes residues (PI) and Mixed Crop-Livestock Farming with utilization of manure and crop residues (TI), those from peri-urban area preferred Mixed Crop-Livestock Farming with value ascribed to roots/tubers residues (PI). Urban farmers' practices were Mixed Crop-Livestock Farming with utilization of bought poultry dejections (PI). Improvement of these systems can be done through a better adequacy of production systems to valorise available crop residues and manure. This is a good issue for smallholders' empowerment and nutrients recycling in farms.
