

# ORGANIZATIONAL PUZZLE OF HOUSEHOLD SOLID WASTE MANAGEMENT IN PORTO-NOVO

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## Summary

This paper describes the restructuring process in the household solid waste management system in Porto-Novo, using a historical perspective. It analyzes the relation between “hard” and “soft” infrastructures and urban ecology, drawing from reports and people's perceptions. Its main focus is on the structural and organizational aspects of the household solid waste management system. This system shows persistent government failure, mainly in regards to coordinating different actors and activities, supplying supportive infrastructure, and involving households in the process. The piecemeal and “laissez-faire” approach to intervention is harmful to policy sequencing and desired

goals. It concludes that all actors involved in the process need to pay more attention to the social construct of urban ecology in order to address who needs to be informed about ecological concerns, and how ecological accountability is socially managed.

## **1. Introduction**

Growing urbanization has become a nagging issue in advanced and developing countries alike. Population pressures and endemic poverty, with their corollaries of air and water pollution and unsanitary land fills, are some of the structural features of large urban settlements. The reasons for these environmental challenges stem from the quasi impossibility for municipalities to keep pace with the growing demands and needs for urban infrastructures and services. Beyond a Malthusian interpretation of issues resulting from urbanization, i.e. the anticipation of a gloomy environmental future regardless of the actions of people, actors' strategic responses have proved very relevant in improving the urban environment.

Coping with the management of urban ecology requires both hard and soft infrastructures at various levels of the urban hierarchy. This hierarchy includes the municipality, sub-municipality, households, and even individuals. Hard infrastructure refers to physical facilities such as landfills, treatment plants, trucks and other solid waste transport forms. Soft infrastructure, on the other hand, refers to institutions. Institutions are understood as humanly devised constraints that structure political, economic, and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights, etc.). The consideration of both these forms of infrastructures implies that proper care of urban ecology does not simply hinge on the availability of physical facilities. Instead, and more importantly, it depends on both formal and informal constraints. The problematic nature of these latter constraints is central to this selection.

The Republic of Benin is not immune from the rising concerns with urban ecology. The persistent degradation of the urban environment is not only due to the lack or shortage of infrastructure and services. Rather, people's perceptions, on the one hand, and the strategic choices they make, on the other hand, constitute constraints on the management of urban ecology. This raises several questions. For instance, how is urban ecology improved through infrastructure and service development? Which strategies are put forward by the actors involved in this process? What are the actors' perceptions of these strategies and the ensuing results of their strategies? This paper assesses these very important questions.

In order tentatively to answer these questions, this paper will analyze the relation between infrastructure and urban ecology from a historical perspective, focusing in particular on structural and organizational aspects, as well as on what has been achieved in terms of policy goals and what people deem important. The aim of this exploration is to inquire into how the relationships between government service, non-government organizations, private operators, and urban dwellers influence policy performance, and how urban ecology might be improved.

To achieve this goal, the paper is organized into seven sections. This first section introduces the problematic. The second section deals with the theoretical considerations about infrastructure and urban ecology, while the third section outlines the methods put to use in this study. The fourth section concerns itself with the main features of Porto-Novo's current household solid waste management system. The fifth addresses the restructuring process in the household solid waste management system and the sixth section analyzes actors' perceptions of structural change. The seventh and last section draws some policy implications and provides concluding comments.

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### **Biographical Sketch**

**Dr. Ir Houinsou Dedehouanou** is originally from Benin where he was raised and received his primary education. He completed his secondary school at the Collège d'Enseignement Général Davié. After his secondary education he joined the National University of Benin, where he obtained his degree as an Agricultural Engineer with a specialization in Agricultural Economics.

After completing this education he obtained his first position as a research assistant in a Farming System Research program. After three years, he received a scholarship for a Master of Sciences degree in Agricultural Economics at the University of Reading (United Kingdom). After receiving this training he joined the National University of Benin, where he began teaching in the field of Regional Economics. Dr. Dedehouanou later earned a Master of Arts degree in Regional Planning at the Institute of Social Studies, The Hague (The Netherlands). He then completed a PhD degree in Regional Planning at the University of Amsterdam in 2002. Today his current research focuses on regional studies and the economics of organizations.