

## **Evaluation of Community Cleansing Costs and Performance in Amazonas State, Brazil**

PAULO ROCHA FARIAS\*, SUELY SANTOS\*\*

*\*ULBRA Lutheran University of Brazil in Manaus, Environmental Engineering Faculty*

*\*\*ULBRA Lutheran University of Brazil in Manaus, Environmental Engineering Faculty*

### **Abstract**

All around the world there are many efforts being conducted to develop new concepts for community cleansing and urban waste management or to transfer experiences from a region to another. However, most of the proposed approaches are turning to be unsustainable, principally because they are not considering all related aspects of the problem. Mainly the social, cultural, environmental, economical and operational aspects, when not looked as a whole, may lead to failures in the system. The elaboration of comprehensive projects to small towns in Amazon Region, Brazil, faces with the lack of basic information and tools about almost all related subjects and accordingly to the approach used here, sustainability can never be reached if the problem is not well know. The team of the Environmental Engineering Course at the Lutheran University of Brazil, in Manaus, is working to collect and analyze the basic facts on community cleansing in the Region and to develop suitable tools to provide administrations with them. Usually, needed information are either not collected in a regular base or are collected in a scattered way throughout many administrative departments and nowhere consolidated. These paper presents the results of a survey on the community cleansing costs and operational characteristics of two small towns (Autazes and Novo Aripuanã) in the Amazon State, Brazil, and compares them with the tax and fees collection and make projections to its increment in the case of supply all inhabitants with the service and attend all the local environmental standards and legislation. The results show that against the common statements of administrators and in spite of the nonexistence of waste collection fees or similar, the amount of collected tax should be enough to finance the operational costs of acceptable communal cleansing in the Region. To face the investment costs with equipment, landfill construction and other programs, there are some federal funds that can be accessed even by small towns. The main constrains to the solution seems to be the lack of political decision, planing, transparency and public involvement.

**Keywords:** Community cleansing, municipal finances, operational costs