WASTE MANAGEMENT FINANCING IN GHANA AND NIGERIA–HOW CAN THE CONCEPT OF POLLUTER-PAYS-PRINCIPLE (PPP) WORK IN BOTH COUNTRIES?

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ABSTRACT

Urban centers in Ghana and Nigeria are experiencing a complex waste management crisis. An assessment of past and present waste management policy plans has revealed several structural weaknesses accounting for this crisis, with indirect causes being lack of well-thought-out management and financial sustainability plans that ensure enduring financing for waste management activities. Therefore, the waste management systems have never run efficiently leading to frequent breakdowns, the consequence of which is the worsening environmental quality in the large cities in both countries. This critical situation in the municipal waste management sector calls for a fundamental reform in the approach to financing environmental infrastructure and the associated policy and institutional arrangements. In this paper, authors outline the potential for application of the concept of "polluter-pays-principle" (PPP); a market-based policy, to provide solution to the problem of waste management financing in Ghana and Nigeria.

Key words: Ghana, Nigeria, Financial sustainability, polluter-pays-principle, waste management financing and waste management systems

1. INTRODUCTION

Management is the process of working with and through people utilizing scarce resources to achieve organizational goals. Literature identifies certain core functions of management: planning, organizing, staffing, leadership, and controlling (1-3). Therefore, any meaningful environmental policy must have robust management plans and functional institutional arrangements at its core (2-4). In many cases, environmental policy has not been effective in African countries owing to the lack of systematic planning (5).

Waste management is a capital intensive undertaking and its financing deserves an all-embracing investment plans. For instance, overly ambitious plans to extend the coverage and level of infrastructure services need to be replaced by more realistic programmes, tailored to provide appropriate operation and maintenance, essential repairs and rehabilitation of critical elements of the MW infrastructure, and building needed new elements in order to ensure cost-effectiveness, within the limits of what households and public budgets can afford. This means that, tough financial constraints faced by the sector in Ghana and Nigeria are an incentive to design more efficient policies, which make the best uses of available financial resources available locally.

By and large, the main sources of funding for waste management activities in both countries includes; revenue generated at District/Municipal Assembly level, the State Government levels, the Central/Federal Government budgetary allocation and external donor support through bi-lateral and multilateral agreements. The major constraints for effective waste collection service delivery and the final disposal include inadequate funds for waste collection, poor urban planning leading to lack of access routes for waste removal, inadequate sanitation facilities, bad habits on the part of residents, among others. Although obstacles to efficient waste management in both countries are many; inadequate budgetary allocation for waste management activities seems to underscore all urban environmental problems. It is widely believed that waste management financing in Ghana and Nigeria is unsustainable. This is because Ghana and Nigeria can no more continue to depend on donor support for waste management financing as this undermines her sovereignty. Besides, the stress on national budget from competing national priorities makes it increasingly unlikely to make available sufficient allocation of funds from the national budget to finance waste management activities. Therefore, the local/municipal authorities may have to turn to self-financing policy reforms and initiatives that show promise for sustainable financial security for waste management.

This also applies that there ought to be a complete policy shift on the collection, transportation and disposal of urban waste to move from the control of local government authorities to increased involvement of the private sector either 'spontaneously' in a free market setting or encouraged through local authorities, non-governmental organisation (NGOs) or community-based organisations (CBOs) in a hybrid couple-system. The existing waste management framework appears to be in line with this hybrid system, but both countries have not made much progress in its implementation probably due to inappropriate implementation plans.

2. OVERVIEW OF CURRENT ENVIRONMENTAL/WASTE MANAGEMENT POLICY IN GHANA AND NIGERIA

Since Ghana attained independence from Britain in 1957, its environmental policy like those of most sub-Saharan nations, have relied heavily on European models as the major development strategy. This strategy focused attention on

urban industrialization and rejected indigenous life-styles in favor of alien or modern systems. Although this strategy has had some positive impact, in most cases, development projects in Ghana as elsewhere in Africa have had adverse environmental impact and endangered the very basis on which sustainability of development depends (6).

Further, despite the establishment of the Ghanaian Environmental Protection Council in 1973 and its adoption of foreign environmental strategies, there was no formal environmental assessment procedure in Ghana until 1995. Therefore, it can be argued that what Ghana needs is a new environmental management approach that will help her achieve sustainable development. This new management approach must recognize the importance of participation of local people in the environmental development process. This notion is now over due not only in Ghana but also in most sub -Sahara African nations (6).

On the other hand, Nigeria is faced with the task of coping not only with localized environmental problems that are generated primarily by local poverty, but also with global environmental problems, which have their origin chiefly in the wealthy industrialized nations. During the past three decades, millions of Nigerians made it known that environmental protection should be an important item on the public interest agenda. This outcry was due to the sahelian droughts, floods, forest fires, technological accidents involving oil spills, industrial chemical effluent, and the increased visibility of toxic waste dumping and contamination of rivers, lakes, soil and air (7).

The kind of environmental policy interventions currently favored by the United States and Western Europe, especially by economists such as Pearce et al. (8), present problems in the context of Ghana, and Nigeria. This is because goods and services such as water, gasoline and transportation are frequently subsidized in these nations, and several other African nations, in an attempt to counter the effects of inflation, and to provide a stimulus to industrial growth. Whatever the true costs and environmental benefits of removing the subsidies on these goods, their removal penalizes the poor and can have a marked effect on their standard of living, especially in urban areas.

3. Alternative Waste Management Financing in Ghana and Nigeria

The development of adequate financial base for the delivery of waste management services and cost recovery mechanisms are two major challenges to be faced in expanding the reach of urban environmental management in many urban areas in Ghana and Nigeria. In an era of decreasing aid and shrinking central government budgets, both countries must find new and innovative ways to draw upon local capital markets for financing waste management. In the broader context, the lack of innovative ways to finance waste management in Ghana and Nigeria seems to hinder efficient waste management services delivery, which ultimately causes systemic environmental pollution and deterioration.

Both countries must look beyond holding onto overused traditional practices by exploring new marketing concepts to the delivery of environmental management services. This should include making waste management activities more attractive to all actors. This may demand making decisive changes in waste management policy by taking into account contextual realities in Ghana and Nigeria.

Three levels of policy framework for governing waste management can be identified as follows: (i) “cleansing”; (ii) “environmental”; and (iii) “integrated”. Under the “cleansing” approach, priority is placed on removal of wastes from immediate areas of human activity in order to protect human health. The final point of management of the waste is of lesser importance. Waste management services are delivered as a public sector function and are largely financed (at both capital and recurrent cost levels) from general public sector revenues.

Also, the “environmental” approach to waste management policy framework, increased focus is placed on protection of human health and the environment from the consequences of the way solid waste is managed, particularly at the point of disposal. Waste management services continue to be delivered primarily as a public sector function and are substantially financed (at both capital and recurrent cost levels) from general public sector revenues, although elements of user-pay cost recovery may be introduced such as households and institutions paying for their wastes to be lifted. Ghana and Nigeria waste management policy framework could be described as a mixed of cleansing and environmental policy approaches, but with greater lean to cleansing. In other words, urban residents in both countries appear to only worry about the impact of waste on their health status, but less so about the impact on the health of the environment. Hence, as long as the waste is out of homes, residents care very little about where it goes. They fail to connect the link between environmental health and human health.

However, the “integrated” policy approach is characterised by financing and cost recovery structures that distribute costs most broadly across society. This policy framework has two key consequences:

1. The costs of managing wastes in ways that meet minimum environmental standards become integrated into the price of products and, therefore, in the economic activity of the community.
2. An economic basis is established for product manufacturers and waste generators to minimise waste, since the more waste they generate, the greater the cost of disposal.

“Integrated” waste management policy approach assumes to follow the principle of economic based incentives which drive waste minimization at source. In other words, a platform is created for waste generators to pay for its collection and disposal and this induces responsible behaviours at homes regarding how much waste is generated. The cost incurred for generating specified amount of household wastes in turn would facilitate cost recovery on waste management investment made by local authorities. To avoid cost, individuals and institutions would be compelled to turn to waste minimisation, reuse, recycling and composting, which are important elements of sustainable integrated solid waste management. Fundamentally, the “integrated” policy approach makes for the availability of funds for self-financing waste collection and final disposal activities.

The adoption of “integrated” waste management policy approach has inherent opportunities for incorporation of many incentive-based instruments which inform waste management decisions and actions at generation sources through to disposal facilities. Most promising among these economic based controls is the Polluter-Pays-Principle (PPP) which unlike the command-and-control policy instruments relies upon market incentives to cause a desired behavioural change in waste generation and management actions.

The polluter-pays principle (PPP) is one of the core principles of sustainable development. PPP was first recognised and defined at international level in the 1972 Recommendation by the Organisation for Economic Co-

operation and Development (OECD) Council on Guiding Principles concerning International Economic Aspects of Environmental Policies (9-10). In 1975, the European Community adapted and defined the PPP as the basic principle for its environmental policy.

The principle aims to ensure that the polluter bears partially or fully the cost of environmental damage and/or the cost incurred in controlling pollution (the abatement costs and environmental recovery cost). In other words, the cost of these measures should be reflected in the cost of goods and services which cause pollution in production and/or consumption. In more explicit terms, most economic activities (goods as well as services) cause various environmental impacts at different stages of production, transportation, consumption and disposal. According to the polluter-pays-principle, the costs incurred during environmental impact mitigation should be borne by the entities whose activities are responsible for inducing the environmental impact at each stage of the product's life cycle. One way of doing this is to internalise the environmental costs into market prices.

First and foremost, the PPP is purely a product of welfare economics which implies that the cost of marketed goods and services should reflect their full social cost, i.e., production and environmental cost. The fact that an industry discharges polluting substances into the environment means that environmental resources are used as a production input or factor. As long as these environmental resources are not properly priced, ultimately leads to wastage which is consequent to inefficient use of resources. The absence of pricing of environmental resources is; in economic terms, the very root of environmental pollution, depletion of environmental resources and environmental deterioration and the associated so-called "external costs" must be "internalised". The PPP essentially means that this internalisation must be achieved at the polluter level. In other words, the primary purpose of the PPP is to inject into the economic system price signals that reflect the "cost" of the environment; if an economic activity causes environmental damage. This stands to reason that the incorporation of PPP into national waste management planning in Ghana and Nigeria could bring about improved environmental quality. However, the proposed policy regime may raise the following key questions:

- Will the strengths compared to weaknesses of the PPP as a waste management tool tilt in favour of the strengths in its application in both countries?
- How will private participation in waste collection play out and be made more effective with the adoption of PPP given the cultural, political and economic landscape in both countries?
- Will the personnel capacity and current institutional structures be compatible with waste management policy transition in Ghana and Nigeria from one that is "cleansing/environmental" in character to one that is "integrated"?
- How would local communities in Ghana and Nigeria perceive the integration of PPP into national waste management policy?

4. POTENTIAL BARRIERS TO THE IMPLEMENTATION OF PPP IN GHANA AND NIGERIA

The fundamental assumption inherent in PPP is that a truly market-based economic instrument will not in itself contain any scientifically unfounded discriminatory element of an environmental nature against a sector, process, material, section of the society, etc. It is the political decision on which its application is based which may be scientifically unfounded. This means that how PPP will work in both countries largely depends on existing institutional structures and policy framework. This also means that the population should understand the objective of the policy for it to be accepted. The existing institutional structures and policy framework must allow for compatibility with the inherent assumptions and objectives of PPP, which means they must be receptive to adaptability. We envisage that the implementation of PPP in Ghana and Nigeria will most likely encounter the following barriers; poverty, proportionality, cost/benefit balance, administration/implementation and consultation/transparency barriers.

5. WAY FORWARD

The environmental management systems proposed for Ghana and Nigeria should be operationalized through a number of principles, the most important being, giving the responsibility to every member of the community in the form of orientation or environmental education towards conservative use. Others are judicious use of available resources in view of the need for self sufficiency and independence from outside support; a minimal degree of specialization among community members and thus a widespread knowledge of the environment and its management; and also the recognition of psychological and spiritual values. Such involvement demands as propriety, some upgrading of environmental awareness among school curriculum, the people of Ghana and Nigerians in general. The recycling of waste product, utilization of refuses organic fertilizers, biomass and so on should be encouraged. These have great potential as raw materials, but are currently not well utilized in the two nations.

Finally, environmental policies in the twenty-first century should be concerned with the problems arising out of poverty and those that arise out of the very process of development. The remedial approaches to these problems are closely interwoven with policies for sustainable development. These policies should embrace wider dimensions than the growth of gross national product alone, and must include some of the major environmental problems that arise in the context of urban and rural poverty. The problems of poor water supplies, inadequate sewerage, sickness, nutritional deficiency, and bad housing need to be dealt with in the process of planning and policy making.

Many environmental problems in Ghana and Nigeria cannot be addressed effectively with western-based models and regulatory policies alone, in addition, indigenous citizen participation, incentives, and educational efforts may be useful supplements. The governments of Ghana and Nigeria should encourage the private sector to be involved in research as well as cleaning the environment. Government agencies that are not providing adequate environmental services should be privatized.

6. CONCLUSION AND RECOMMENDATIONS

The current national policy on waste management in Ghana and Nigeria does include PPP considerations. However, many waste management policy reforms have been implemented in the past largely to commercialise waste

management activities. For example under successive waste collection sector policy reforms, both countries observed two different institutional and/or organizational regimes; from an initial entirely public sector dependence to a current mix of public-private partnership. It must be conceded that there is a great potential for adoption of PPP into waste sector policy to achieve desired environmental benefits. But advisedly, the PPP should be built into national environmental sanitation policy only cautiously starting in urban areas and then eventually scaling up to include rural areas. This way, lessons learned from its implementation in urban areas with higher literacy rate could be applied to guide implementation in rural areas with lower literacy rate.

As a first step, all technical and social factors must ensure wide public acceptance of the initiative. Otherwise, however promising the implementation of PPP would be in achieving set environmental objectives, it certainly stands a high risk of failure if it does not receive public acceptance. For this to work, municipal authorities would first work out practical feasible strategies of its implementation paying attention to how to compute environmental cost attributable to each category of waste products and the pricing of waste collection services. This may be based upon weight/unit price or any other unambiguous pricing mechanism that allows for proportionality. In considering both technical and social factors underlying the feasibility for the adoption of PPP into both countries National Environmental Sanitation Policy, it is necessary to clearly define at which stage of its activities, company, person, household and so on could be held directly responsible for the environmental impact it causes. The economic cycle not only consists of finished goods producers, but also includes raw material suppliers, the trade unions, the transport sector, waste treatment agencies and the consumer. These operators also have to be taken into account when allocating responsibility for and the costs of environmental impact. In this way, the polluter-pays principle can and must be applied so as to ensure that responsibility is shared among all actors along the chain.

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