

Solid Waste Approach for Project Identification and Selection

Abstract

Solid Waste management is considered one of the main components of an integrated development program. This is mainly due to its potential serious impacts on public health as well as the national environment and economy.

The International Community, through the Millennium Development Goals, has set a commitment for all member states to develop, adopt environmentally sound solid waste management policies, programs and plans that are well adopted within the overall national development programs.

For Lebanon, this would involve the preparation of a national vision for an integrated waste management plan based on a set of principals that sets the framework of how this should be:

- i. National, in the sense that it involves participatory approaches from nation-wide stakeholders.
- ii. Integrated, by taking into consideration all relevant components of the solid waste sector and ensuring strong linkages with other national development sector plans.
- iii. Environmentally sound, in that it protects the natural resources and does not put any significant short or long term pressures on the people and the environment.
- iv. Flexible, in the sense that it allows for ample space for variability and/or creativity on small and large scales within overall set guidelines and policies.
- v. Technically applicable and feasible within the Lebanese context and experience.
- vi. Economically motivating, in the sense that it fosters the development of agriculture, industry and trade markets.
- vii. Assessable, according to a set of performance indicators.
- viii. Sustainable, in the sense that it is financially affordable, socially acceptable and politically supported within a set horizon.

There are many options for MSW management, and generally none of these options might be correctly chosen as being absolutely better than the other. However, the site specific characteristics (environmental, technical know-how, socio-economic, financial, institutional, lessons learned and political) of each country, region or area, determine the most suitable solid waste management plan. Such plan could contain one or a combination of options for components management such as waste reduction, separation, reuse, recycling, recover, collection, treatment and disposal.

Based on lessons learned from the current waste management practices in Lebanon, the Consultants strongly believe that the priority issues that need to be addressed are the management issues and definition of responsibilities. This would lead to a defined setup

related to the institutional and financial aspects followed by the socio-economical and technical aspects. The following table presents few options for waste management in this regard:

Table 1 Vision Options for MSW Management

Option	Description	Collection		Treatment		Disposal	
		Infrastructure	Operation	Infrastructure	Operation	Infrastructure	Operation
A	MSW shall be managed by local authorities under the guidance and support of the Government	LA ¹ /G ²	LA	LA/G	LA	LA/G	LA
B	MSW shall be managed by the Government similar to GBA	G	G	G	G	G	G
C	Collection by the local authorities, Treatment and Disposal by Government	LA/G	LA	G	G	G	G
D	All infrastructure by the Government, Operation by the local authorities	G	LA	G	LA	G	LA
E	MSW shall be fully managed by local authorities	LA	LA	LA	LA	LA	LA

¹ Local Authority: Municipality, Union of Municipalities

² Government

It is to be noted that all the above options may be viable, however based on the previous discussions particularly the Vision criteria/objectives, the lessons learned from the current waste management practices and the on going legislations and waste management strategies that are being developed, the Consultants recommend a staged waste management vision as follows:

Adopt Option C, move gradually to option D, step up to Option A and ultimately to option E.

Such a staged approach ensures smooth transition towards the ultimate vision providing for ample evaluation and tailoring of waste management practices taking into consideration the various legal, institutional, technical, financial and socio-political strengths and constraints. This Vision with its particular components is elaborated further in the following sections.

Summing the above in a more or less concise statement in terms of policy development would mean the following:

- On the short term (1-3 yrs) business as usual to continue with major improvements on Performance and Accountability both technically and financially; develop and enforce the solid waste framework law.
- On the medium term (3-8 yrs): all necessary legal, administrative, financial and technical mechanisms developed by the government for a national integrated solid waste management policy that adopts the provision of the Vision's staged approach
- .On the long term (8-10 yrs): increase the involvement of the local communities in developing, implementing and monitoring site specific short and long term solid waste management plans under the umbrella of the policy developed in the medium term

Ultimately (10-15 yrs) having Local Authorities solely responsible for managing their solid waste under the Government's guidance thus attaining the ultimate targeted vision option E.

Project Selection Criteria

The criteria for the selection of projects are:

- Inline with vision principles
- Based on needs, assessments
- Environmental impacts
- Socio economic impacts
- Awareness and capacity building
- Institutional setup
- Sustainability