AUB Task Force on Solid Waste Management: Addressing the Lebanon Trash Crisis

Beirut, Lebanon - 28/09/2015 - On July 17, 2015, the Naameh landfill was finally shut down, 12 years after its initial closing date. The Government of Lebanon had no contingency prepared to deal with waste management, and trash quickly began to overflow from the streets and riverbanks of Beirut and Mount Lebanon in what can now be considered Lebanon’s worst trash crisis in history.

Sixty AUB professors and 16 students and staff convened to form a university-wide Task Force aimed at addressing Lebanon's trash crisis. The Task Force includes individuals with a wide range of expertise across the spectrum of disciplines associated with waste management (e.g. air, soil and water pollution; solid waste management; chemistry; public health; inflammatory diseases, etc.). It has been meeting periodically to assess the trash crisis and its solutions, and plans to release a report of its major findings in a press conference on October 29, 2015.

In the meantime, and considering the urgency of the discussed temporary solutions and the diversity of opinions regarding waste management, the AUB Task Force would like to share its preliminary assessment of current practices and its roadmap for waste management in Lebanon. Having reviewed available and currently employed waste disposal options and noted the deficiencies and environmental disadvantages associated with many of them (see Figure 1 below), the Task Force found that most of these options are not recommended as sustainable waste management solutions for Lebanon.

<table>
<thead>
<tr>
<th>Waste Management Option</th>
<th>Effect on:</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Air</td>
<td>Water</td>
</tr>
<tr>
<td>Open Dumping</td>
<td>Emission of toxins</td>
<td>Contamination due to mixing with leachate</td>
</tr>
<tr>
<td>Landfills (waste is buried without ground or air treatment)</td>
<td>Emission of toxins</td>
<td>Contamination due to mixing with leachate</td>
</tr>
<tr>
<td>Sanitary Landfills (waste is buried either underground or in large piles. Sanitary landfills work by layering waste and soil in a large hole in the ground that is lined with plastic and clay)</td>
<td>Lower emission of toxins</td>
<td>No contamination due to the elimination of the contact of leachate with water</td>
</tr>
<tr>
<td>Incinerators (burning waste at high temperatures until it is reduced to ash)</td>
<td>High emission of toxins IF not regulated</td>
<td>If not properly disposed of, ash can mix with water</td>
</tr>
</tbody>
</table>
The Task Force considers that any solution must incorporate the 3R’s (Reduce, Reuse and Recycle), and include organic composting as well as dumping in sanitary landfills or controlled and monitored incineration as a last resort. Moreover, solutions should present a balance of environmentally beneficial, feasible, cost-effective, and socially sensitive practices that work together to reach the desired goal. Hence, a “one size fits all” solution to waste management is unlikely to function efficiently at all levels of government. Consequently, while the Task Force is presenting a national-level “roadmap” to waste management (see Figure 2 below), it is still working on refining the different levels of implementation and target-specific solutions.

**Figure 2: Flow Chart demonstrating a potential succession of classifications for dealing with waste**

This set of steps, or “roadmap”, will be further developed during a public conference on October 29, 2015, that aims to offer individuals, as well as municipality and government representatives, specific guidelines to tackle the solid waste management issue. More details about feasibility and methods of implementation will be disseminated through workshops, conferences and manuals.

The Task Force is currently working on nine projects, covering the entire range of waste management issues, from surveying diseases and pest populations, to developing several waste reduction and disposal campaigns targeting individuals and municipalities. The Task Force will continue to conduct research and experiments in order to generate scientific data that can be used in proposing policies and formulating sustainable solutions.

The Task Force and AUB’s Nature Conservation Center (NCC) plan to continue sharing findings and results as they become available and are presently planning three events for this purpose,
first of which is an awareness-raising debate that will take place on October 6, 2015 as part of NCC’s “Ta3a Ne7ke” debate series, in addition to a workshop for villages participating in the “Baldati Bi’ati” program, scheduled for October 17, 2015, and finally the aforementioned conference on October 29, 2015.

For more details on the work of the AUB Task Force, please contact Drs. Najat A. Saliba (ns30@aub.edu.lb) and Jad Chaaban (jc11@aub.edu.lb).

ENDS

For more information please contact:
Maha Al-Azar, Director of News and Information, ma110@aub.edu.lb, 01-75 96 85

Note to Editors
About AUB
Founded in 1866, the American University of Beirut bases its educational philosophy, standards, and practices on the American liberal arts model of higher education. A teaching-centered research university, AUB has more than 700 full-time faculty members and a student body of about 8,000 students. AUB currently offers more than 100 programs leading to the bachelor’s, master’s, MD, and PhD degrees. It provides medical education and training to students from throughout the region at its Medical Center that includes a full service 420-bed hospital.

Stay up to date on AUB news and events. Follow us on:
Website: www.aub.edu.lb
Facebook: http://www.facebook.com/aub.edu.lb
Twitter: http://twitter.com/AUB_Lebanon