

Talking Garbage



By Ramzi Sansur

Garbage, commonly known among environmentalists as solid waste, has always been and will remain an important issue that confronts every society. During the last 150 years, the industrial revolution has increasingly shaped what we now consider as garbage. Sources of solid waste vary and are classified mainly into five categories.

1. *Domestic waste* is the largest volume of waste produced in Palestine. It is composed of an assortment of wastes such as organic, plastics, paper, glass, metal, wood, and others.
2. *Business waste* is composed mainly of paper waste and electronic components.

3. *Industrial waste* includes primarily building excavations, stones, and, to a lesser extent, industrial by-products that include certain chemicals and solvents.
4. *Agricultural waste* is composed of organic wastes, plastics, and pesticides.
5. *Nuclear waste*, as a result of nuclear stations in Israel (there are no nuclear stations in Palestine), is a concern. Nuclear waste management is top secret, but leakages do exist.

The issue here is not the waste in itself but proper waste management in order to reduce the health and environmental implications that such wastes may pose. To ensure proper solid waste management the involvement of many sectors of society is needed, in addition to strictly enforced regulations. Solid waste management is often synonymous with the three Rs: Recycle, Reuse, Reduce, which are self-evident.

Palestine lacks a proper waste-management system. There are multiple factors that contribute to this, including community awareness and education, participation of key players, space allocation, and enforcement of regulations.



Waste that collects on our streets and countryside is a major source of pollution and affects not only the beauty of our land but also our health and the health of our children. Improper management of waste does not improve the situation, and government needs to do better in this regard. But what is most needed is a collective effort that comes from the grassroots.

Many community groups and governmental and nongovernmental agencies have been or still are involved in community education, targeting various sectors of the society. Their activities aim principally to raise awareness of proper solid waste management, such as waste sorting, reuse, recycling, and disposal. Unfortunately, such efforts have not borne much fruit. Palestinian citizens seem to consider public spaces as the “preferred” place in which to dispose of waste. Our streets are full of



Up until recently, the Ramallah garbage dump was a source of toxic fumes from the burning waste. Currently, it is used as a transfer station from where collected garbage is sent.

litter, and around each and every waste container there is enough waste to fill many other containers. This is a clear indication of limited if not a complete lack of awareness and the absence of law enforcement. Yes, laws do exist in Palestine, but for some reason they are rarely enforced. This situation is sad, if not depressing. Schools make an effort to raise awareness among students on proper waste disposal; yet, as everybody knows, the areas surrounding schools are littered with waste. Unfortunately, young children and teenagers emulate their parents who do not hesitate to throw everything in the streets and on sidewalks.

This unfortunate reality must be taken seriously, and measures to remedy the situation must be adopted through intensified awareness raising and enforcement of regulations. The main concern of this article, however, is not only the improper solid waste management at present, but also proper solid waste management that, if tactfully applied, will reduce the volume and type of waste produced. This mainly includes on-site or off-site sorting of waste that aims to recycle as much of it as possible before the rest is dumped in sanitary landfills.

On the issue of recycling, the poor economic situation in Palestine has driven many individuals to collect some waste for recycling. They (including very young children) usually search through litter on the streets to collect metal and plastic waste; they even dig through garbage containers to look for such waste. Paper and carton waste is being collected to some extent, and this situation could be improved. Municipalities can assist by increasing the amount of paper waste that is collected. Businesses, universities, and governmental and nongovernmental institutions can easily dedicate containers to sort and collect waste. This would be a small but significant effort, but regrettably it is not well regulated or encouraged, and it is



Modern Art. Used tires pose a serious problem that needs to be addressed. One possible way to recycle them is to pulverize them and use them in asphalt for paving roads.

certainly not rewarded. The bulk of this collected waste mainly reaches Israeli recycling businesses, and to a lesser extent Palestinian enterprises, which benefit from it.

Although there have been plans to select sites for the proper disposal of waste, the situation is very complex, largely as a result of the Israeli occupation, as much of the areas that can be designated as landfills fall in Area C. The most important handicap, other than choosing a site in Area C, is obtaining the agreement of Israeli authorities in the selection of such a site. Selection of any site anywhere in the world is normally based on Environmental Impact Assessment (EIA), distance from inhabited areas, and technology chosen for proper solid waste management in that particular proposed landfill. In the Palestinian context, the policies of occupation

play an excessive and domineering role. An example of this is the process of choosing a site in the Ramallah district. The German government allocated tens of millions of Euros for such a project and worked with various German and local consulting firms and individuals to put forward a solid waste management plan and select a site. This planning included the drafting of a feasibility study that gave approval to the site and fell in line with findings of a study carried out by international and local professionals and experts that showed that recycling costs not only add very little to solid waste management costs but in the long term can also generate enough income to cover landfill operating costs. But sadly, all efforts were met with obstinate Israeli objections and maneuvering that managed to thwart all attempts to select a site. At one time,

even the German donors objected to the proposed recycling plan set forth in the feasibility study. They claimed that the reason was the high cost, in complete contradiction to the above-mentioned international study that had proven otherwise. In the end, the plan that had cost millions of euros to draft was scrapped mainly due to Israeli objections that were posed under the pretext of the project's negative impact on the environment and groundwater – fully in contradiction to the findings of the feasibility study that had declared the proposed measures to be safe. The fact was – and still remains – that Israel wanted to use the landfill as well for the waste generated by its settlements, a point rejected by Palestinians who demand that Israel not dispose of its waste on Palestinian land.

At any rate, proper waste management can be a lucrative business for the



Photo by Muhammad Awad.

private sector, as sorting and recycling of waste generates money to offset operational cost and composting of organic waste and/or trapping of biogases from landfills generates energy that can be sold to the grid. Such management systems are practiced in many countries, including Israel, and are not too difficult to implement. This is true especially in Palestine, where donors are willing to allocate funds for such activities that will drastically reduce the volume of waste that reaches a landfill.

Another main concern is the health implications of the current solid waste management situation in Palestine. As we all know, municipalities and village councils collect garbage from streets and from containers scattered throughout the communities located within their boundaries to send them

to garbage dumps and a few landfills. (There is one in Jenin, another one in Bethlehem, and a third is in the making in Jericho.) More often than not, this waste is incinerated, in other words torched, and the fumes travel downwind to residential areas. The waste may be deliberately incinerated or light up spontaneously due to fermentation of organic components. Although the waste reduction that results from incineration may be good for the municipalities, the health implications, especially of improper incineration, have become obvious over the years in the increase in morbidity and mortality among citizens. Children and young adults are the most vulnerable groups due to their small body weight in relation to the dose of toxic material that they inhale.

Because of the various components found in garbage and its sources – domestic mixed with industrial and others – the incineration of such waste releases toxic fumes, organic and inorganic, that are very harmful to people, especially children and young adults, and those who live or work downwind of the garbage dumps. These fumes contain known carcinogens such as polycyclic aromatic hydrocarbons (PAH), dioxins, vinyl chlorides, pesticides, and heavy metals such as cadmium, arsenic, and mercury. There has been an increase in cancers in children in Palestine over the past 30 years. The same is true for Israel. The cause for such an increase is way beyond the scope of this article, but the main culprits are chemicals, be they from improper waste management, exposure to

pesticides and chemical fumes, air pollution, or other forms of intake. Such cancers manifest themselves in various types of blood leukemia, Hodgkin's and non-Hodgkin's lymphoma, and certain brain tumors. A study needs to be done to determine "hotspots" of such diseases so as to determine probable causes and ways to manage them. My previous TWIP article titled "The Chemical Soup We Live In" is truer now than ever. And we are not alone; Israel is in no better shape. Cancer has become the biggest contributor to morbidity and mortality in Israel and Palestine.

In studies carried out in the United Kingdom to examine the risk factors connected with living downwind from a waste incinerator, it was predicted that there would be an increase of 0.02 percent in cancer rates for people living within 5.5 km downwind from the incinerator and around 0.16 additional deaths over a 25-year period. These numbers are alarming, especially as they refer to the negative health effects of an incinerator and not of the improper burning of garbage, as happens in Palestine.

So what are the solutions? The answer is simple yet complex. It includes changing people's attitudes towards waste management and enforcement of regulations, coupled with proper solid waste management and well-sited sanitary landfills. The current approach to environmental awareness has largely failed, being one sided and unidirectional. What is needed is better involvement of the society, as opposed to lectures, seminars, and wasteful conferences. Truly stated, it has to come from the grassroots and definitely not from above. We as environmental educators have failed. I say that with full honesty – otherwise, the situation would be drastically different. Our government and law enforcers have also failed. Laws by themselves do not change attitudes; proper enforcement is a key factor. Peer pressure, especially among the younger generation to help



Open Door Policy. Large metal garbage containers, common in many parts of the country, invite vermin and stray animals, and are a source of nuisance and odor.



Hidden Agenda. Garbage thrown anywhere, here in a hidden alley, makes up no less than 30 percent of collected garbage.

stop this onslaught on the environment should be encouraged, and those actively involved should be publically rewarded.

As a people, we need to break away from our selfish and self-centered “I” attitude and move to the “we” attitude. I can do it, I can make a change – but we can do it better. We as a community can do a lot better if we start acting as responsible citizens and stop leaving matters to others. As such, we need to look deeply into changing attitudes in order to benefit the communities in which we live. We are drowning in our own garbage to the extent that it is very difficult to walk on a street or take a country drive without seeing garbage sprouting all around us. Our health and that of our children is being affected by our careless waste management, and unless we shake up

the old self, we shall continue to drown in our chemical soup, be it garbage or otherwise. Our children grow up seeing garbage all around as the norm, when any rational society would not accept such a depressing situation. Looking at a TV documentary program on Sweden, I could not help but remark how “abnormal” the streets and countryside are. It was “nauseatingly” clean.

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