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Waste Management Initiatives in India for Human Well Being

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ABSTRACT

The purpose of this paper is to examine the present approaches to the various waste management initiatives implemented in India for the benefit of human welfare. The other goal is to offer some ideas and recommendations for enhancing Indian municipalities' waste management procedures. The research used to write this report was secondary. Current waste management reports and suggestions for system improvement from planners, non-governmental organizations, consultants, government accountability bodies, and important industry specialists are examined. It provides in-depth information about the several waste management programs in India and identifies areas where waste management could be improved for the benefit of society. The goal of the paper is to comprehend the significant role that our nation's formal sector plays in trash management. This work is original and could be further extended.

Keywords: India, Recycling, Waste Disposal, Waste Management

INTRODUCTION

"There are only three things in life that are certain: waste, change, and death." Nobody is able to stop these things from happening in our lives. But we can get ready if we manage things better. We'll discuss waste and trash management in this section. Everybody has the right to food, clean water, and air. By keeping an environment that is clear and healthy, this right can be upheld. Let's tackle the first query: what exactly is waste? Waste is any material that is not required by the maker, owner, or processor. Waste is typically defined as material that is dumped in landfills after a product's lifecycle is complete. "Anything that does not create value" is how most organizations Green Entrepreneurship Startups describe waste (BSR, 2010). In a common man's eye anything that is unwanted or not useful is garbage or waste. However scientifically speaking there is no waste as such in the world. Almost all the components of solid waste have some potential if it is converted or treated in a scientific manner. Therefore, solid waste might be defined as "Organic or inorganic waste materials produced out of household or commercial activities, which may be of great value to somebody else but have lost their value in the eyes of the first owner."(W.D. Robinson, 1986).

Waste generation is an unavoidable part of any living space, regardless of size. Since the beginning of civilization, humans have increasingly drifted from nature, and today's human society has seen a dramatic transformation in lifestyle. The type and volume of trash that a community produces is a direct indication of this shift. By managing the garbage properly, we may make money while disposing of or reusing it. Indian cities which are fast competing with global economies in their drive for fast economic development have so far failed to effectively manage the huge quantity of waste generated. There are about 593 districts and approximately 5,000 towns in India. About 27.8percent of India's total population of more than 1 billion (as per Census 2001) lives in urban areas. The projected urban population percentage is 33.4 percent by the year 2026.The quantum of waste generated in Indian towns and cities is increasing day by-day on account of its increasing population and increased GDP. The annual quantity of solid waste generated in Indian cities has increased from six million tons in 1947 to 48 million tons in 1997 with an annual growth rate of 4.25 percent, and it is expected to increase to 300 million tons by 2,047 (CPCB, 1998). Population explosion, coupled with improved life style of people, results in increased generation of solid wastes in urban as well as rural areas of the country. In India like all other sectors there is a marked distinction between the solid waste from urban & rural areas.

However, due to ever-increasing urbanization, fast adoption of 'use & throw concept'& equally fast communication between urban & rural areas the gap between the two is diminishing. The solid waste from rural areas is more of a biodegradable nature & the same from urban areas contains more non-biodegradable components like plastics & packaging. However, the negative attitude towards solid waste and its management is prevalent in both sectors. The practice of 'making garbage invisible' is common. In India, it is the responsibility of the urban local bodies (commonly called the municipal corporations/councils) to manage public health related activities. However, with growing public

and political awareness, as well as new opportunities created by economic growth, the solid waste management is beginning to receive proper attention. Various initiatives taken by the government, non-governmental organizations (NGOs), private companies and local public have significantly increased in the last few decades.

Land filling is still the predominant solid waste management option in the United States, as well as in many other countries around the world such as India. It is well known that the current waste management policies in place are unsustainable in the long run. As a result, the waste management industry is undergoing drastic changes to offer more sustainable options. We explore these options in the hopes of providing the waste management industry with a more affordable and socially acceptable alternative to our current waste dilemma. In this paper, we outline various advances in the field of waste management. We focus on the current practices related to the waste management initiatives undertaken by India. We also highlight some initiatives undertaken by the United States federal government, states, and industry groups. The goal of this document is to gather knowledge about various initiatives undertaken in both countries and to identify where there is room for improvement in waste management.

Classification of Waste

There may be different types of waste such as Domestic waste, Factory waste, Waste from oil factory, E-waste, Construction waste, Agricultural waste, Food processing waste, Bio-medical waste, Nuclear waste, Slaughter house waste etc. We can classify waste as follows:• Solid waste- vegetable waste, kitchen waste, household waste etc. • E-waste- discarded electronic devices such as computer, TV, music systems etc.

- Liquid waste- water used for different industries, tanneries, distilleries, thermal power plants
- Plastic waste- plastic bags, bottles, bucket, etc.
- Metal waste- unused metal sheet, metal scraps etc.
- Nuclear waste- unused materials from nuclear power plants Further we can group all these types of waste into wet waste (Biodegradable) and dry waste (Non-Biodegradable).

Wet waste (Biodegradable) includes the following:

- Kitchen waste including food waste of all kinds, cooked and uncooked, including eggshells and bones
- Flower and fruit waste including juice peels and house-plant waste
- Garden sweeping or yard waste consisting of green/dry leaves
- Sanitary wastes
- Green waste from vegetable & fruit vendors/shops
- Waste from food & tea stalls/shops etc.

Dry waste (Non-biodegradable) includes the following:

- Paper and plastic, all kinds • Cardboard and cartons
- Containers of all kinds excluding those containing hazardous material
- Packaging of all kinds
- Glass of all kinds
- Metals of all kinds
- Rags, rubber
- House sweeping (dust etc.)
- Ashes
- Foils, wrappings, pouches, sachets and tetra packs (rinsed)
- Discarded electronic items from offices, colonies viz. cassettes, computer diskettes, printer cartridges and electronic parts.
- Discarded clothing, furniture and equipment

In addition to the above wastes, another type of waste called “Domestic Hazardous Waste” may also be generated at the household level. These include used aerosol cans, batteries, and household kitchen and drain cleaning agents, car batteries and car care products, cosmetic items, chemical-based insecticides/pesticides, light bulbs, tube-lights and compact fluorescent lamps (CFL), paint, oil, lubricant and their empty containers. Waste that is considered hazardous is first required by the EPA to meet the legal definition of solid waste. The EPA incorporates hazardous waste into three categories. The first category are source-specific wastes, the second category is nonspecific wastes, and third, commercial chemical products.

Generally, hazardous waste “is waste that is dangerous or potentially harmful to our health or the environment. Hazardous wastes can be liquids, solids, gases, or sludge. They can be discarded commercial products, like cleaning fluids or pesticides, or the by-products of manufacturing processes (EPA Wastes Website, 2010).Similarly there is

"Non Hazardous waste". There are many definitions of hazardous and non-hazardous waste within the US federal government, states and industry groups. The Department of Defence (DOD) and The Environmental Protection Agency (EPA) define waste as "the extravagant, careless, or needless expenditure of DOD funds or the consumption of DOD property that results from deficient practices, systems, controls, or decisions. In addition, "abuse is the manner in which resources or programs are managed that creates or perpetuates waste and it includes improper practices notinvolving prosecutable fraud" (EPA Wastes Website, 2010). The Environmental Protection Agency (EPA) defines solid nonhazardous waste as "any garbage or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities" (EPA Wastes Website, 2010).

The definition of non-hazardous waste can also include financial waste. In 2009 the US Presidential Executive Order, Reducing Improper Payments and Eliminating Waste in Federal Programs was initiated to eliminate payment error, waste, fraud and abuse in major Federal government programs due to public zero tolerance of fraud, waste and abuse.

This Executive Order is based upon a transparent, participatory and collaborative comprehensive framework between the government and public

Disposal Vs. Management

There are many ways to get rid of waste from the general population. However, disposal of waste is now becoming a serious and difficult issue for every human habitation around the world. Simply disposing of solid waste outside of sight does not eliminate he problem, but only indirectly increases it. At a certain point, it becomes beyond the control of everyone. The effects of this practice, such as health risks, pollution of land, water, air and food, unpleasant environment, loss of valuable resources from solid waste, etc., are well known. Therefore, it is important to focus on proper waste management globally and nationally. Waste management is a matter of concern as the more advanced the human settlements become, the more complicated the waste management becomes. There is a constant search for good solutions for this problem, but it is becoming more and more apparent that solutions based on technology without human intervention will not last for long and will only make matters worse.

Proper management of solid waste, which usually includes segregation, scientific recycling of all components, is in fact the best way to deal with solid waste. Solid waste management (SWM) is a commonly used name and defined as the application of techniques to ensure an orderly execution of the various functions of collection, transport, processing, treatment and disposal of solid waste (Robinson, 1986).

It has developed from its early beginnings of mere dumping to a sophisticated range of options including re-use, recycling, incineration with energy recovery, advanced landfill design and engineering and a range of alternative technologies. It aims at an overall waste management system which is the best environmentally, economically sustainable for a particular region and socially acceptable (World Resource Foundation, 996; McDougall et al., 2001). This not only avoids the above referred consequences but it gives economic or monetary returns in some or the other forms.

BASIC PRINCIPLES OF SOLID WASTE MANAGEMENT

1) 4Rs: Refuse, Reduce, Reuse & Recycle

• Refuse: Do not buy anything which we do not really need.
• Reduce - Reduce the amount of garbage generated. Alter our lifestyle so that minimum garbage is generated.
• Reuse - Reuse everything to its maximum after properly cleaning it. Make secondary use of different articles.
• Recycle – Keep things which can be recycled to be given to rag pickers or waste pickers (Kabadiwallahs).Convert the recyclable garbage into manures or other useful products.

2) Segregation at source: Store organic or biodegradable and inorganic or non- biodegradable solid waste in different bins. Recycle of all the components with minimum labor and cost.

3) Different treatments for different types of solid wastes: One must apply the techniques which are suitable to the given type of garbage. For example the technique suitable for general market waste may not be suitable for slaughter house waste.

4) Treatment at nearest possible point: The solid waste should be treated in as decentralized manner as possible. The garbage generated should be treated preferably at the site of generation i.e. every house Figure 1- An ideal Solid Waste Management at a glance Source- Shrikant M. Navrekar, "Sustainable Solid waste Management: Need of the hour"

Waste Management System in India

Waste management market comprises of four segments - Municipal Waste, Industrial Waste, Bio- Medical Waste and Electronic Waste Market. All these four types of waste are governed by different laws and policies as is the nature of the waste. In India waste management practice depend upon actual waste generation, primary storage, primary collection, secondary collection and transportation, recycling activity, Treatment and disposal. In India, municipality corporations play very important role in waste management in each city along with public health department. Municipal Corporation is responsible for the management of the MSW generated in the city, among its other duties.

The public health department is responsible for sanitation, street cleansing, epidemic control and food adulteration. There is a clear and strong hierarchy of posts in the Municipal Corporation. The highest authority of Municipal Corporation rests with the Mayor, who is elected to the post for tenure of five years. Under the Mayor, there is a City Commissioner. Under the city commissioner, there is Executive Officer who supervises various departments such as public health, water works, public works, house tax, lights, projection tax, demand and a workshop, which, in turn, all are headed by their own department heads.

The staffs in the Public health department are as follows: Health officer, Chief sanitary and food inspector, Sanitary and food inspectors, Sanitary supervisor, Sweepers, etc. The entire operation of solid waste management (SWM) system is performed under four headings, namely, street cleansing, collection, transportation and disposal. The cleansing and collection operations are conducted by the public health department of city Municipality Corporation, while transportation and disposal of waste are carried out by the transportation department of city Municipality Corporation.

The entire city can be divided in to different zones. These zones are further divided into different sanitary wards for the purpose of solid waste collection and transport operations.

Currently waste management in India mostly means a picking up waste from residential and industrial areas and dumping it at landfill sites. The authorities, usually municipal, are obligated to handle solid waste generated within their respective boundaries; the usual practice followed is of lifting solid waste from the point of generation and hauling to distant places known as dumping grounds and/or landfill sites for discarding. The treatment given to waste once thus emptied is restricted to spreading the heap over larger space so as to take away the waste from the public gaze. Waste collection is usually done on a contract basis. In most cities it is done by rag pickers, small- time contractors and municipalities. Initiatives taken by Private Companies There are various private companies that are providing complete solutions for waste management.

For example Subhash Projects and Marketing Limited (SPML) is a leading Engineering and Infrastructure development organization with 26 years in Water, Power and Infrastructure. Today SPML is surging ahead in Urban Infrastructure, Solid Waste Management, Water and Waste Water Systems, Cross Country Pipelines, Ports and SEZs, through BOOT/PPP initiatives. “SPML Enviro” is an integrated environment solution provider arm of Subhash Projects and Marketing Limited (SPML). It provides complete solution in relation to collection, transportation & disposal of municipal / hazardous waste, segregation and recycling of municipal waste, construction & management of sanitary landfill, construction & operation of compost plant and waste to energy plant at the Delhi airport and Hyderabad Airport.

SPML Enviro has invested in the necessary resources and partnerships to provide solid and water treatment solutions. It expertise includes solid waste-to-resources’ solutions – universal, industrial and medical waste. SPML Enviro has teamed up with PEAT International, North Illinois, and USA, a waste-to-resources company specializing in treating and converting waste to usable resources. PEAT's proprietary Plasma Thermal Destruction Recovery (PTDR) technology is an environmentally friendly process that converts wastes into non-toxic synthetic gas (which is a valuable source of alternative energy) and other useful end-products.

The PTDR is a proven, cost- effective, environmentally clean and commercially viable solution for waste remediation. SPML Enviro together with its joint-venture partners, has proven capabilities to successfully execute projects on turn-key basis involving Okhla sewage treatment plant, Delhi Jal Board, Bewana common effluent treatment, Delhi State Industrial Development Corporation, Delhi State Industrial Development Corporation, Yelahanka primary/tertiary sewage treatment plant, Bangalore Water Supply and Sewerage Board, Okhla common effluent treatment plant, Sewage treatment plant,Mysore, Karnataka water supply and sewerage board, etc.

SPML has also formed a jointventure with the US based Company INSITUFORM Technologies (INC.). INSITUFORM is a pioneer in sewer rehabilitation projects worldwide. The Company brings with them a No Dig Technology that eliminates replacement of old sewers. In this, pipe within a pipe concept - a liner is inserted into the sewer, which makes it as good as new Initiatives taken by Indian corporate In India, there are various initiatives taken by many corporations. For example HCL Info system believes that the producers of electronic goods are responsible for facilitating an environmental friendly disposal, European Scientific Journal June 2015 /SPECIAL/ edition ISSN: 1857 – 7881 (Print) e – ISSN 1857- 7431 119 once the product has reached the end of its life.

HCL Info system supports the ongoing initiative for separate e-waste legislation in India. HCL has been working on an easy, convenient and safe programme for recycling of e-waste in India. HCL has created the online process of e-waste recycling request registration, where customers (both individual and corporate) can register their requests for disposal of their e-waste. Apart from corporate customers, HCL has extended its e-waste collection program to retail customers also through its HCL Touch spread points spread across the country HCL extends the recycling facility to its users regardless of the fact, when and where they purchased the product. To promote recycling of electronic waste, Nokia India launched a 'Take Back' campaign where customers can drop their old handset in the company's stores and win gifts. The take-back campaign is aimed at educating mobile phone users on the importance of recycling e-waste. As a part of this initiative, Nokia encourage mobile phone users to dispose their used handsets and accessories such as charges and handsets, regardless of the brand, at any of the recycling bins set up across Nokia Priority Dealers and Nokia Care Centers.

ITC Ltd has chosen energy management, environmental & waste management and social & farm forestry as major focus areas for CSR. Specific processes include recycling/reuse of paper mill back water for dilution of bleached pulp, recycling of paper machine primary clarifier outlet water for miscellaneous uses, etc. These are few examples to how that Indian corporate is not behind in producing initiatives related to waste management. Challenges in India Key issues and challenges include lack of collection and segregation at source, scarcity of land, dumping of e-waste, lack of awareness, etc. Simple dumping of mixed waste is the practice followed practically everywhere and especially in the developing countries as they cannot mobilize financial resources for applying expensive technology propounded by the developed countries. In India, "The new Municipal Solid Waste Management Rules 2000", which came into effect from January 2004, fail, even to manage waste in a cyclic process.

Waste management still is a linear system of collection and disposal, creating health and environmental hazards. Urban India is likely to face a massive waste disposal problem in the coming years. Until now, the problem of waste has been seen as one of cleaning and disposing as rubbish. But a closer look at the current and future scenario reveals that waste needs to be treated holistically, recognizing its natural resource roots as well as health impacts. Waste can be wealth, which has tremendous potential not only for generating livelihoods for the urban poor but can also enrich the earth through composting and recycling rather than spreading pollution as has been the case. Increasing urban migration and a high density of population will make waste management a difficult issue to handle in the near future, if a new paradigm for approaching it is not created. A strong need felt on private sector participation in waste management but we cannot ignore the risk of private sector participation. The risks associated with involving the private sector could be low stakeholder cooperation, a lack of transparency, or a commercial failure that would disrupt public services.

An additional pertinent inquiry pertains to the effectiveness of public-private partnerships. We recall that French conglomerate Onyx and a Chennai-based corporation collaborated on waste collection. However, we are genuinely unsure of its level of practical effectiveness. The Corporation made a sizable payment for the removal of trash. However, the business was the target of complaints. Either way, the business was just gathering trash and disposing of it at the disposal sites. Gathering and disposing of waste is not an engineering marvel. The way forward is proper waste management policies which must be adopted and responsibilities of each are defined in proper manner and correctly watched, if the municipal authorities get the private companies (like onyx) to composting and recycling wastes rather than just dumping it. Suggestions for future improvement the political will is the first priority. Generally government bodies and municipalities give priority to present problems which they face but do not think for future problems due to environmental decay. Their view is that, they will solve problems when they will face it but not now. Because doing something for environment does not provide political gains or assure next time seat. Now questions is that how can we change this mentality? We believe there should be a positive approach for a long time planning and implementation.

Legislation and its effective enforcement is a key to sustainability for which the framework requires to be established. Efforts to improve waste storage and collection are required. This can be done when each household and locality are provided standard bins that are placed outside for ease of collection. In areas where this is not appropriate, centrally located waste collection points should be established that are shared by a number of households.

Wastes need to be increasingly sorted at the source, to separate materials that can be recycled and to reduce the amount of wastes requiring collection and disposal. Co-operation is required among communities, the informal sector, the formal waste collectors and the authorities. An effective Solid Waste Management system should aim at minimizing manual handling and 100 % collection & transportation of solid wastes should be achieved. In solid waste management, one thing became very clear that segregation at source is to be practiced. There are lots of initiatives to manage wastes but goes in vein because of not identifying wealth in wastes.

In India, we cannot afford sanitary land filling as land is precious here and there are lot of municipalities who do not have land as trenching ground. The source segregation needs lot of study on human behavior against waste littering. A persistent sensitization program is to be arranged agreeing to the emotions of the inhabitants towards their city and eventually it'll work as ponders. In the event that squander isolation is practiced, the potential dangers can be minimized straightforwardly. Other than, the quality of materials recovered will be way better due to nonappearance of

blending. The pickers can in this way, get superior cash on the materials recovered other than having lesser threats of catching maladies, cuts and wounds experienced within the regular hone of squander picking. The appropriation and exchange of the advances from the created nations without adjusting them to the neighborhood or territorial point of view would be erroneous on the portion of the creating nations. Therefore, the technical aspects for a waste management would have to consider many points for planning and implementation of strategies according to situation of the country. It would call for the strengthening of the management sector which has to go hand in hand with technical planning.

General public can play a very important role. Public participation is necessary for a proper waste management system. Changes in the habits of segregation, littering, can change the approach towards wastes. For example, in a heritage town of West Bengal, there was a movement related to waste management. Within a span of two years it successfully sensitized residents for segregation at source and not littering in open areas. Now the city is really becoming clean and other people are also participating in the movement. In order to improve the ystem efficiency and increase the coverage to 100 percent in each city, it is recommended to explore alternative arrangements for collection of waste like involving private operators. A mechanism to generate revenue from the citizens should also be developed. However, the approach to public-private partnerships pursued in the developed countries cannot be replicated for Indian towns in general. This approach can only be implemented after some modifications considering the local conditions. There may be separate parallel decentralized schemes by the government.

Financial support by the community based on decentralized schemes will provide the right impetus for the development of waste management method. In India waste management could materialize only if service delivery will be linked to private sector participation. “It is imperative that the private sector comes forward and enables the public sector stakeholders to devise appropriate frameworks that result in a win-win for both sides.” Although there are some initiatives taken by corporate but there is strong needs that all corporate must come forward to take first step. At least they should manage their industrial waste rather littering and throwing in the rivers as we can find many examples in Indian cities like Kanpur, Varanasi, Agra, etc. The private sector could also play an important role in building the capacities of municipal bodies. Solid waste management, along with recycling, presents plenty of opportunities for partnerships.

For example, EXNORA is an NGO in Chennai that focuses on the environment through their solid waste management program, which works in municipalities throughout Tamil Nadu. In fact, despite the lack of proper legal and financial support by public agencies, the informal sector has a firm standing and gives an invaluable service to a large section of the society in relation to waste management. There is an urgent need to understand the vital role of this informal sector engaged in municipal solid waste management, study their socio-economic conditions, and to integrate them with the formal sector to achieve sustainable solid waste management on one hand and improve their living conditions on the other. The possible future policy options available with the policy makers for management of municipal solid waste are to promote either/all of the existing alliances between private-private enterprises, private-public enterprises and private-public-community. The selected scenario should be based on socio-economic, environmental and health considerations. It should fulfill the basic goal of recycling the maximum waste generated, creating maximum employment through cleaner methods without bringing any threat/reducing the potential health hazards to the lower rung of the waste recycling sector and improving their socio-economic conditions, as well.

Another option is to promote formation of micro-enterprises among the waste-recycling sector through various policies. It is observed from various case studies of developing countries like Latin America, Egypt, etc. that if waste pickers and recyclers get official recognition from the local authorities and they organize themselves and institutionalize their activities, there is an overall improvement in the living conditions of these people. Micro-enterprises in the field of solid waste management sector are a new process in India and only few examples are available. The Self Employed Women’s Association (SEWA), Ahmedabad, India successfully improved the living conditions of women paper pickers, by organizing them into cooperatives and by searching for easily accessible raw materials in bulk quantity

CONCLUSION

It is suffice to say that we require a more rigid coordinates and key squander anticipation system to viably address wastage related issues. There's an urgent have to be construct upon existing frameworks rather than attempting to supplant them indiscriminately with models from developed countries. To anticipate any scourge and to form each city a sound city-economically and ecologically, there's a critical require for a well-defined vital squander administration plan and a strong implementation of the same in India. To realize monetary maintainability, socio-economic and natural objectives within the field of squander administration, there's a thought to methodically analyze the qualities and shortcomings of the community as well as the metropolitan organization, based on which a compelling squander administration framework can be advanced with the support with the participation of various stakeholders in India. The public apathy can be altered by awareness building campaigns and educational measures. Sensitization of the community is also essential to achieve the above objectives and we need to act and act fast as every city in India is already a hotbed of many contagious diseases, most of which are caused by ineffective waste management.

All these above said suggestions are given in relation to India and will be effective only when we individually feel the responsibility of making environment clean. As general public, we cannot do much in policy and regulations formulation, adoption of newer technologies related to recycling and other waste management options but we can play a very important role in this process if we can adopt only few tips. Here are a few tips to achieve this goal

1. Keep our self-informed: It is important that we are in the know about what is happening on the environment front. Read about how untreated sewage is thrown into the rivers, attend public lectures about air pollution, & keep in touch with new policies that affect our environment. The more informed we are, the better equipped we are to fight such issues.
2. Consume less: Motto: Refuse.....Reduce....Reuse... Recycle .This means consuming fewer resources, reusing whatever we can and finally recycling what cannot be reused. This process greatly reduces the garbage.
3. Say 'No' to plastic bags: One of the biggest sources of pollution in Indian cities is the ubiquitous plastic bag. Refuse to accept one. Instead, carry a cloth shopping bag with us.
4. Separate our garbage: India has one of the world's most efficient recycling mechanisms. Use the service of our raddiwalla. Newspapers, bottle cans and other such recyclables can fetch us money and in the process we can help to save the environment. Rag pickers, too, perform a vital function for the city. Kitchen garbage (biodegradable) should be separated from no biodegradable waste.
5. Compost our organic waste: Start a vermiculture bin. We can convince our neighbours to start a vermiculture bin also to produce manure.
6. Stop burning garbage: Ask our neighbours to desist from burning solid wastes. It may seem harmless but smoke emitted from leaves contributes to air pollution. Also, when there are plastic in the heap, it emits dangerous toxic fumes. Leaves can be converted to fertilizer through composting & plastic can be recycled.

REFERENCES

[1]. Business for Social Responsibility (BSR) (2010). "The New Frontier in Sustainability", the Business Opportunity in Tackling Sustainable Consumption.
[2]. Central Pollution Control Board of India (CPCB) (1998), "Status of solid waste management in metro cities", CPCB.
[3]. Gibbs and Soell (2010). "Sense and Sustainability Among Consumers and Fortune 1000 Executives, Gibbs and Soell, Inc. Municipal Solid Waste (Management and Handling) Rules 2000, Ministry of Environment and Forests, Government of India, issues on 25 September 2000 National Archives and Records Administration Federal Register (2007).
[4]. "Executive Order 13423 – Strengthening Federal Environmental, Energy, and Transportation Management", The President, Part II.
[5]. National Archives and Records Administration Federal Register (2009). "Executive Order 13514 – Federal Leadership in Environmental, Energy, and Economic Performance", The President, Part VII.
[6]. Office of Management and Budget (OMB) (2010). "Cutting Waste and Saving Money Through Contracting Reform".
[7]. Organization for Economic Co-operation and Development (OECD) (2000).
[8]. "Strategic Waste Management", Environmental Policy Committee, Working Party on Pollution Prevention and Control, Reference Manual.
[9]. Organization for Economic Co-operation and Development (OECD) (2007).
[10]. "Guidance Manual for the Implementation of the OECD Recommendation (2004) 100 on Environmentally Sound Management (ESM) of Waste".
[11]. Organization for Economic Co-operation and Development (OECD) (2006). "Improving Recycling Markets".
[12]. Organization for Economic co-operation and Development (OECD) (2005)."OECD's Work on Sustainable Materials and Waste Management".
[13]. Robinson, W.D. (1986). The Solid Waste Handbook: A Practical Guide, John Wiley and Sons, Chichester. Shrikant M.Navrekar (2008), "Sustainable Solid waste Management: Need of the hour",
[14]. Nirmal Gram Nirman Kendra, Govardhan (Gangapur) Nashik The KPMG Government Institute (2010). "The Executive Order on Improper Payments: A Practical Look at What Government Agencies Can Do to Address This Presidential Call for Action", KPMG LLP.
[15]. World Business Council for Sustainable Development (WBCSD) (1996). "Eco- Efficient Leadership for Improved Economic and Environmental Performance. World Resource Foundation (1996), "So what is integrated waste management?