

# Need of Foreign Direct Investment in Solid Waste Management Sector in Urban India

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**Abstract:** In India, solid waste management in towns and cities is a major challenge for Government. Proper solid waste management is not practiced in India. Urban local bodies do not have necessary knowledge and fund to address the challenge. Therefore, participation of private sector may be useful and international private sector entities involved in solid waste management activities needs to participate for solving solid waste management issues in India. Till date, foreign direct investment in the sector is not significant as there are impediments. In this paper, the issues impeding foreign direct investment in the sector have been analysed.

**Index Terms:** Urban Local Bodies, Foreign Direct Investment, solid waste management, segregation of waste

## 1. INTRODUCTION AND CONTEXT:

Urban areas of India are facing a huge problem of solid waste management. Urban local bodies responsible of solid waste management in their jurisdiction areas are not fully successful in their effort. They do not have necessary fund and technical expertise to manage the issue. The solution to this problem needs to be addressed by involving large private sector foreign companies, who have necessary fund and expertise. There is a huge scope of foreign direct investment in the solid waste management sector in India. Even when Government has allowed foreign direct investment in the sector, there are very less investment and participation of foreign companies. This is due to various impediments and they are to be addressed.

## 2. PRESENT STATUS OF SOLID WASTE MANAGEMENT IN URBAN INDIA:

According to an approximate estimate, India generates about 62 million tons of municipal solid wastes in a year. Out of this, approximately 43 million tons of wastes are collected annually, 12 million tons of wastes are treated and about 31 million tons of wastes are disposed off in landfills. As a result, residents of many towns and cities are facing nuisance from uncollected and unprocessed solid wastes, affecting their quality of life.

In Indian cities and town, the quantities of solid wastes to be processed and disposed are very high. Therefore, development of new sanitary landfills is not feasible. Large land areas required to develop sanitary landfills are not available within a reasonable distance from urban area limits. Wherever any land is identified by urban local bodies for sanitary landfill sites, resistance from people living near proposed sites deters final selection of the sites. Thus, urban local bodies are finding it very difficult to select land to develop new sanitary landfills and solid waste processing plants. Therefore, India must look to innovative methods for processing and treatment of solid wastes. These methods should require minimum land and result in increased resource recovery, waste to energy generation, organic waste to compost production, etc. The general issues in solid waste management in India are as below:

- i) In India, segregation of solid waste does not take place within households. This is due to prevailing solid waste characteristics within Indian households and mindset of Indian people. Indian population do not make any effort to separate biodegradable and non-biodegradable wastes within households. Hence, collected solid wastes are mixed in nature.
- ii) In many Indian cities, a part of generated solid wastes is not collected. Also, collected solid wastes are dumped at disposal sites without any processing. In many cities and towns, there are no demarcated disposal sites and collected solid wastes are dumped on road sides on the periphery of the towns. This has caused environmental degradation of the urban areas.
- iii) Many urban local bodies do not have sufficient resources and expertise for proper waste collection, storage, and treatment and disposal arrangement. The failure of urban local bodies is specifically distinct in processing and treatment of solid wastes. Because of this, the municipal authorities are facing public criticism and some of them have received notices from Pollution Control Boards. Higher officials of urban local bodies have developed helpless feeling for being unable to manage solid wastes properly.
- iv) In many big cities in India, the existing landfill sites are not managed scientifically. Mixed solid wastes are transported to landfill site. There is no segregation and processing of wastes at landfill site. The transported solid wastes are simply dumped at the site. As a result, the design periods of the existing land fill sites are exhausted. The landfill sites cannot absorb more solid waste any more. Thus, there is an urgent need of rehabilitation of the existing landfill sites. Urban local bodies and associated operators in the sector do not have expertise to rehabilitate the existing landfill sites.

v) In India, a large numbers of waste to energy plants are established in different cities. They are based on conventional combustion technology of the wastes. Majority of them are not functioning properly. The plants are established by Indian companies and they do not use modern technologies such as high temperature pyrolysis, plasma arc technology, etc.

### 3. NEED OF FOREIGN DIRECT INVESTMENT IN SWM SECTOR:

There is shortage of technical and financial expertise in the solid waste management sector of India. The best and most appropriate methods of waste collection, treatment and disposal practiced in developed countries are not used in India. These methods need high level of technology and capital costs. In India, 100 per cent foreign direct investment is allowed under the automatic route for urban infrastructure, including waste management, subject to relevant rules and regulations. Therefore, there are opportunities for foreign companies to enter and work in the Indian solid waste management sector. But, there are impediments in participation of foreign players in the solid waste management sector. They are mentioned below.

### 4. CURRENT IMPEDIMENTS:

The impediments are as below:

- i) Government subsidies are available for companies interested in setting up waste processing facilities. But, the process of obtaining Government subsidies is complicated.
- ii) There is a dire need for increased awareness within households and businesses about how to dispose of their waste in a responsible manner. General public, who generate solid wastes are not serious in appropriate segregation of wastes. This attitude of Indian population has created resistance to foreign companies to participate in the sector.
- iii) Indian population has limited environmental awareness and low motivation to cleanliness and sanitation. This has inhibited innovation and adoption of new technologies that could transform waste management in India to profitable business. Public attitude to waste is a major barrier to improving solid waste management in India.
- iv) Waste management needs to be regarded throughout Indian society as an essential service requiring sustainable financing. Indian population and municipal authorities are generally not willing to pay required fee or service charge for solid waste management services. This attitude has inhibited foreign companies to participate in the sector.
- v) Most of the urban local bodies in India have administrative deficiencies. They lacks competence to prepare detailed project reports involving solid waste processing technologies practiced in developed countries and prepare high quality international bids to attract international companies. At the same time, foreign companies in the sector are skeptical about required financial return from their investment in India.

### 5. RECOMMENDATIONS:

The following are the major recommendations:

- i) Indian solid waste management sector needs to attract businesses especially from foreign companied having high capital and technological expertise. For this to happen, all impediments as mentioned above are to be addressed.
- ii) In general, urban local bodies in India are not successful in treatment and disposal of solid wastes and they do not have the ability to do the needful. Therefore, there is a need of establishment of a strong and independent authority at Central level like National Highway Authority of India (NHAI) to work for processing and treatment of solid wastes in different towns and cities in India. The authority should be made responsible to develop solid waste processing plants in different cities and towns of country. Appropriate laws need to be enacted for the purpose. This authority should be entrusted in preparation of detailed project reports, bidding documents, processing of bids, etc. Due to this, foreign companies may be willing to participate in the solid waste management sector in India.

Disclaimer: The findings and conclusions presented in the paper are personal opinion of the author.