SOLID WASTE MANAGEMENT DISTRICT KORANGI AND DISTRICT KEMARI, KARACHI

A Report by TJ Consulting



BACKGROUND

One of the consequences of the urbanization in Karachi has been the increasing volumes of solid waste, which has cost the city a considerable sum of money. Due to a lack of financial and technical resources, the municipal body of Karachi struggles to manage solid waste in a safe and sustainable way. This raises the important issue of how to deliver quality service in the face of financial and skill constraints in the public sector.

To overcome the problems related to solid waste management, the City District Government of Karachi (now defunct) carried out a study which showed that approximately 9,440 tones of solid waste was generated in Karachi daily. However, rapid establishment of new housing sectors and industrial estates, construction activity and a variety of institutions have over the years contributed to waste generation.

The current poor solid waste management practices demand a mechanism for efficient solid waste management. Lack of planning, inappropriate technology and poor management are obviously the main areas of concern and require a serious effort from government authorities and other agencies to achieve efficiency in the management of solid waste.

DISTRICTS AND POPULATION OF KARACHI

There are 7 district (including new district Keamari) of Karachi totalling population of 16,051,521. Details given below:

S. NO	DISTRICTS OF KARACHI	POPULATION		
1	KARACHI WEST DISTRICT	2,086,767		
2	KEAMARI DISTRICT	1,827,990		
3	KARACHI SOUTH DISTRICT	1,791,751		
4	KARACHI CENTRAL DISTRICT	2,971,626		
5	MALIR DISTRICT	2,008,901		
6	KORANGI DISTRICT	2,457,019		
7	KARACHI EAST DISTRICT	2,907,467		
	TOTAL	16,051,521		

Other district except Keamari and Korangi already outsourced for Solid Waste Management to Chinese contractor by Government of Sindh at Price of \$ 27 per ton per day.

POPLUTION MIX OF DISTRICT KORANGI AND KEAMARI

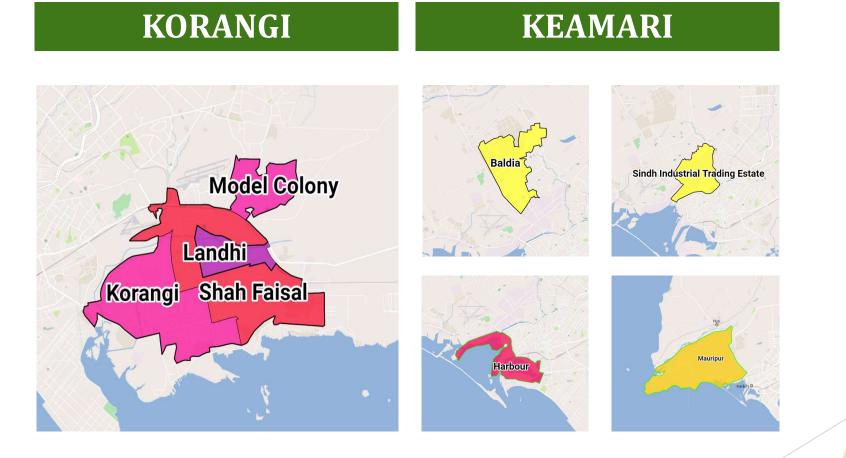
There are 4 divisions (carved out from Karachi West District) of Keamari totalling population of 1,827,990. Details given below: There are 4 divisions of Korangi totalling population of 2,457,019. Details given below:

S. NO	DIVISIONS OF KEAMARI	POPULATION
1	BALDIA	832,768
2	S.I.T.E	404,757
3	HARBOUR	397,671
4	MAURIPUR	192,794
	TOTAL	1,827,990

S. NO	DIVISIONS OF KORANGI	POPULATION	
1	SHAH FAISAL	447,993	
2	MODEL COLONY	383,801	
3	LANDHI	553,665	
4	KORANGI	1,071,560	
	TOTAL	2,457,019	

These two districts (Keamari and Korangi) have total population of 4,285,009 could be a pilot project for whole Sindh based on successful models adopted in the country i.e. Lahore.

MAP OF DISTRICT KORANGI AND KEAMARI



WASTE MANAGEMENT IN LAHORE ON COMPETITIVE PRICES

Lahore considered to be one of the most cleanest cities in Pakistan, replicating its success path in Karachi can improve solid waste management service quality on competitive pricing. Since the inception of Lahore Solid Waste Management Company (LWMC), M/s ISTAC, a company of Municipality of Istanbul, is providing technical support to LWMC through consultancy agreement. This contact of consultancy is from Dec 2010 – Dec 2013. ISTAC has assisted LWMC in improving its institutional structure. It conducted waste characterization studies, prepared waste management plans, design of outsourcing of SWM system for Lahore, design of sanitary landfill and conducted training of LWMC's professional staff. ISTAC is currently engaged in preparation of integrated Solid Waste Management Plan, Hospital, Industrial and Packaging waste management plans. LWMC designed new Solid Waste Management System with the assistance of M/s ISTAC to outsource the SWM services in the city of Lahore to international companies. This outsourcing has been done through transparent international bidding and various internal firms were considered before awarding the contract to the 2 Turkish companies i.e. Albayrak and Ozpak against an amount of US \$320 million for 7 years. Turkish contracts brought international expertise along with modern equipment and vehicles for carryout SWM operations. The workshops have been upgraded and M/s Ozpak has also started manufacturing of 0.8 M3 containers in the workshop. The contractors have brought in additional vehicles like hauler dumper, mini dumpers, chain arm rolls to address the SWM issue on the ground. Presently, about 1500 Km of roads are mechanically swept along with washing of about 100 Km of area daily. More than 80% waste collection efficiency has been achieved by the contractor in their respective zones which was only 60% at the onset of the project.

COMPARISON BETWEEN LAHORE AND KARACHI

СІТҮ	POPULATION	SOLID WASTE TONS PER DAY	WASTE PER PERSON PER DAY PER KG	COST PER DAY PER TON (\$)	MANAGEMENT
LAHORE	11,130,000	6,510	0.58491	13	OZPAK & ALBAYRAK
KARACHI	16,051,521	9,440	0.58811	27*	CHANGYI KANGJIE SANITATION ENGINEERING COMPANY LTD

*Cost of South and East Districts of Karachi

THANK YOU

