

**PUBLIC PRIVATE PARTNERSHIP PROJECT  
INTEGRATED SOLID WASTE MANAGEMENT SYSTEM  
TEHSIL MUNICIPAL ADMINISTRATION CHARSAKDA**

**PRELIMINARY INFORMATION MEMORANDUM**

**FEBRUARY 2008**



<b>Abbreviation</b>	<b>Description</b>
EOIs	Expression of Interests
IEE	Initial Environmental Examination
IPDF	Infrastructure Project Development Facility
MC	Municipal Council
NUDP	NWFP Urban Development Programme
NWFP	North West Frontier Province
PPP	Public Private Partnership
SWM	Solid Waste Management
TMA	Tehsil Municipal Administration, Charsadda

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## 1. Summary of the Project

<b>Project name</b>	Charsadda Solid Waste Management Project			
<b>Location</b>	Four MCs of TMA Charsadda and MC Utmanzai			
<b>Private Party</b>	To be selected after competitive bidding process			
<b>Implementing Agency</b>	Tehsil Municipal Administration, Charsadda			
<b>Concession Period</b>	To be decided by the Implementing Agency after competitive bidding process			
<b>Project Facilitator</b>	Infrastructure Project Development Facility, Ministry of Finance, Government of Pakistan			
<b>Transaction Advisors</b>	M. Yousuf Adil Saleem & Co., Chartered Accountants; Member of Deloitte Touche Tohmatsu			
<b>Industry Classification</b>	Primary:	Solid Waste Management		
	Secondary:	Solid Waste Collection & Transportation Material Recycling Organic Fertilizer		
<b>Transaction Mode</b>	Public Private Partnership			
<b>Project Area dynamics 2008 (Estimated)</b>	<b>Population</b>	<b>Households</b>	<b>Shops</b>	<b>Waste generation</b>
	<b>0.13 Million</b>	<b>17,000</b>	<b>8,000</b>	<b>24,000 Tons p.a.</b>
<b>Project Status</b>	<ul style="list-style-type: none"> <li>• Technical feasibility conducted under NUDP</li> <li>• Financial feasibility assessed by the Transaction Advisors</li> <li>• Transaction approved by TMA Charsadda</li> <li>• IEE of the project completed</li> </ul>			
<b>Project Description</b>	<p>Set-up and operate an Integrated SWM system within the vicinity of 4 MCs of Charsadda as well as MC of Utmanzai. The project encompasses at a minimum:</p> <ol style="list-style-type: none"> <li>1. Collection &amp; transportation of existing waste lying in the project area and disposal into the Landfill</li> <li>2. Provision of door to door waste collection services</li> <li>3. Waste consolidation at transfer station</li> <li>4. Transportation of waste from Transfer Station to Landfill site</li> <li>5. Manual material recovery of recyclables</li> <li>6. Final disposal into the land fill</li> </ol> <p>TMA Charsadda may include the following in the Project:</p> <ol style="list-style-type: none"> <li>1. Mechanized material recovery facility</li> <li>2. Compost plant</li> </ol>			

<b>Project Investment</b>	Estimated investment requirement is between Rs. 30 to 80 million depending on the option decided upon by the TMA.
<b>Transaction Steps</b>	<ol style="list-style-type: none"><li>Step 1. Expressions of Interests (EOIs) from interested parties.</li><li>Step 2. Due-diligence by Potential Investors.</li><li>Step 3. Prequalification of Potential Bidders.</li><li>Step 4. Request for Proposals from Potential Bidders.</li><li>Step 5. Submission of Proposals by Bidders.</li><li>Step 6. Selection of Private Party.</li><li>Step 7. Concession Agreement between TMA Charsadda and Private Party.</li><li>Step 8. Financial Close by the Private Party</li><li>Step 9. Sub-lease of Project Land for the Landfill and Transfer Station to the Private Party</li><li>Step 10. Construction/Set-up by the Private Party</li><li>Step 11. Provision of Services by the Private Party during the Concession Period</li><li>Step 12. Transfer of Project Assets by the Private Party to the TMA at the end of Concession Period</li></ol>
<b>Taxes</b>	The project is subject to taxation in accordance with the laws of the Government of Pakistan.

## 2. Project Background and Description

### Project Background

Sanitation Department of TMA is the sole authority responsible for the management of Solid Waste generated in the city encompassing collection of waste to its final disposal. However, due to lack of resources, the waste management has become a challenge for TMA.

In response to the challenge the TMA has prioritized the need to address this issue and has been actively perusing their endeavour to improve level of municipal services to the public. In this regard the TMA has also taken some concrete steps especially in the area of SWM including acquiring a suitable piece of land for the landfill. However, in view of the technical capacity, financial constraints and fruits of PPP, TMA has decided to implement the project with the participation of private sector.

### Project Area

The project area comprises of 4 MCs of Charsadda Tehsil and Utmanzai MC is located in the province of NWFP, in the District of Charsadda. Tehsil Charsadda is a flat and fertile plain, adjacent to River Jindai which flows around the Tehsil moving along the west side of the Tehsil and falls into River Khiali in the south. Charsadda is located 29 Kilometres from Peshawar and is situated in the productive and well-watered Peshawar plain. Charsadda District derives its name from it's headquarter city and was a Tehsil of Peshawar District before being upgraded to the status of District in July, 1988.

Total area of Charsadda MC is 1,201 Hectares and built up area is 455 Hectares (38%). According to 1998 Census the population count was 87,218 persons. Assuming a growth rate of 2.53% per annum based on the average of population growth rates of 1971 Census and the 1998 Census, the 2007 population is estimated at around 110,000 people. Likewise, the population of MC Utmanzai was 18,931 according to 1998 Census and in 2007 is estimated to be around 22,000 with an average growth rate of 1.61% pa.

TMA is situated 34°-03' and 34°-28' North latitudes and 71°-28' to 71°-53' East longitudes with an altitude above mean sea level of 300 m approximately.

### Existing Waste Management at Charsadda

At present, performance of SWM at Charsadda is marginal in both qualitative and quantitative terms, with the main deficiencies like low levels of service, low collection efficiency, inadequate cleaning of streets and roads, indiscriminate dumping of solid waste in open areas. Waste is littered by the residents of Charsadda in the open plots and around the town graveyard. It is estimated that approximately 30,000 – 40,000 tons of solid waste is littered in the project area.

Street sweeping is being performed manually by sweepers and the waste is stored at the pick up points which may be called filth heaps. Tractor trolleys are used to lift the wastes from these filth heaps manually, which is then taken to the nearest disposal site. Due to indiscriminate littering of solid waste, many streets are not cleaned completely. The area is quite congested and for waste collection sweepers use small, hand-held brooms for sweeping and wheel barrows for collecting the sweepings.

There are no steps taken to treat the waste, resulting in organic materials, hazardous and dangerous items finding their way onto open areas. The current practice is extremely dangerous for the general population and ecology.

### **Existing Primary and Secondary Collection**

Current waste collection level from the project area has been estimated at 38% and primary collection of solid waste is invariably performed by the sanitary workers of TMA. Household members or shop keepers bring the waste to the self designated dump points, mostly a small area on the narrow street or round the corner of a bigger street or dump the waste indiscriminately. From these points sanitary workers take the waste in wheel barrows to primary collection points mainly along the roads with a good vehicular access. The primary points are old masonry filth depots or just arbitrary spots on the ground. The Municipal staff collects the waste on tractor trolleys from the primary points and dumps the same at the nearest disposal site. Collection frequency from various points is irregular, varying between daily to once a week.

### **Existing Material Recovery Practices**

Some portion of valuable recyclable materials contained in solid waste, like paper, plastics, bones, bread, metals and glass etc. are either separated at source by the household and sold to resource collectors or is mostly extracted by the scavengers from the streets and open heaps. The material thus collected is sold to the kabarias. There are about 35 small and big shops of kabarias in Charsadda city dealing with the recovered materials, who in turn sell the materials either to the whole sellers or industries in other cities.

Estimated number of resource collectors and scavengers in the project area are around 500. It is estimated that the informal recycling of solid waste is 20% of the waste produced in Charsadda. The envisaged SWM system, with door to door collection and safe disposal will eliminate unhealthy scavenging activities and will provide substantial revenue stream to the Concessionaire through recovery and sale of recyclable material.

### **Project Objectives**

The objectives of the project are to establish an Integrated SWM System under Public Private Partnership mode to achieve desired level of collection and disposal efficiency, whereby the private party will be involved in SWM from collection of waste till its final disposal. Project envisages collection of household and commercial solid waste from shops. Waste thus collected will be consolidated at a transfer facility within Charsadda city, before being transported to Landfill site.

### **Project Stakeholders**

At current stage of procurement, the project has following main stakeholders discussed below:

#### **Tehsil Municipal Administration Charsadda – TMA**

Currently SWM tasks are being performed by the TMA and who in turn is responsible for collection, transportation and disposal of solid waste at the project area. Sanitary section within Food and Sanitation Department of TMA perform these tasks with a total strength of 104 employees including a Food and Sanitary Inspector, eight Sanitary Supervisors, eighty one Workers and fourteen Support Staff. Out of this total strength, seventy two employees are directly involved in the task of collection, transportation and disposal of waste. TMA is the sponsor and the Implementing Agency of the Project.

**Infrastructure Project Development Facility – IPDF**

IPDF is a company established under section 42 of the Companies Ordinance 1984 under the aegis of Ministry of Finance, to foster development of Infrastructure Projects in Pakistan. IPDF has been set-up for meeting the purpose of bringing the public and private sector players together to address the infrastructure needs of Pakistan. IPDF is acting as a facilitator on behalf of local, provincial and federal governments for the Public-Private Partnering. IPDF's mandate is to help public sector agencies, at all tiers of the Government, to improve infrastructure development proposals and prepare for tendering to the private sector, without becoming a contract signatory to the transactions.

### 3. *Project Overview*

Salient features of the proposed project are:

1. Project area comprises of all four MCs of Charsadda City and the MC Utmanzai.
2. Project scope includes:
  - Collection and disposal of existing solid waste littered throughout the project area estimated to be around 30,000 to 40,000 tons;
  - Door to door collection and proper transportation of solid waste;
  - Material Recovery of Recyclables (Manual or possibly Automated)
  - Compost Plant (Possible)
  - Final disposal at the Landfill.
3. The Private Party will be responsible for collection and transportation of existing solid waste littered throughout the project area to the proposed landfill.
4. Waste collection and disposal system by the Private Party to be implemented in phases with an aim of achieving 90% waste collection efficiency within two years of commencement of operations.
5. TMA would impose Service Charges at varying rates to the household and commercial ventures for collection of solid waste. Private Party will be responsible for collection of Service Charges from households and commercial ventures.
6. TMA will transfer the tasks of waste collection, transportation and disposal of Solid Waste to the Private Party. However, TMA will continue to be responsible for basic municipal services like street sweeping, maintenance of public parks and areas.
7. TMA will sublease Landfill site at Dheri Zardad to the Private Party and a plot within Charsadda city for setup of a transfer facility.
8. The Private Party will have multiple revenue streams including:
  - User/Service Charges
  - Sale of recyclable material
  - Sale of compost (possible)
9. TMA will deploy a monitoring mechanism to evaluate waste collection and disposal activities of the Private Party. The concession agreement will carry provisions for imposing penalties to the Private Party in case of underperformance.

#### **Timing of Project/Phases of Implementation**

Proposed project envisages achievement of following level of collection and disposal services through phased implementation:

Year 1 - Quarter 1	30%
Year 1 - Quarter 3	60%
Year 2 - Quarter 3	90%

#### **Private Party**

It is envisaged that the selected Private party chosen through a competitive bidding process will constitute a separate legal entity / Special Purpose Vehicle (incorporated as a limited liability company) exclusively for the project with which the Concession Agreement will be signed by the TMA.

#### **PPP Structure**

SWM project in Charsadda is envisaged under Built Operate and Transfer mode of PPP. Private Party will construct the facilities operate for the term of concession period and transfer the assets

to the TMA at the end of the Concession Period. Transaction structure for implementation of projects will comprise of following:

**TMA to:**

- Grant concession of project
- Sub-lease land for the Landfill and transfer station
- Ensure strict enforcement of municipal laws
- 

**Private Party to:**

- Develop and agree proposed project implementation concept and investment plan
- Ensure timely investments as per agreed plan through debt and equity injection
- Undertake collection of service charges from the general public
- Ensure compliance of environmental laws for collection and transportation
- Ensure meeting of agreed service levels

**Project Specific Requirements**

- **Design**

Concessionaire will be required to design an environmentally friendly landfill site at project location and will ensure compliance of all relevant environmental laws.

- **Services**

Responsibility of Concessionaire will encompass provision of Integrated SWM services i.e., from collection till final disposal of waste.

- **Legal**

Compliance with all relevant laws and regulations as applicable in Pakistan.

- **Safety**

Concessionaire shall be required to keep its operations environment friendly and take necessary measures to ensure safety of its employees and other persons from death or other injury during all phases of project.

#### 4. *SWOT Analysis*

The ensuing paragraphs present Strengths Weaknesses, Opportunities and Threats associated with the project.

- **Strengths**

- **Environment Friendly;** The proposed project envisages environment friendly design of SWM system, which will result in a definite positive impact on the environment.
- **Steady stream of Waste;** The proposed project structure provides a steady stream of waste, which in turn guarantees optimum utilization of project plant, equipment and human resources as well as substantial revenue streams to the prospective Private Party.
- **Added Employment;** Project operations will provide substantial additional employment opportunities to local communities, which will enhance economic activities in Charsadda and its adjacent areas.
- **Exclusive Rights;** Private Party will be given exclusive right to collect the waste in project area, in other words, there will be no direct competitor.

- **Weaknesses**

- **Lack of Community Awareness;** One of the major weaknesses attached to this project can be lack of awareness and cooperation by the community towards SWM project. The marketability of the project is dependent upon creation of awareness amongst the community.
- **Emerging Industry;** SWM is an emerging industry in Pakistan, which brings with it issues of hesitation on part of investors and availability of trained professional resources for the project operations.

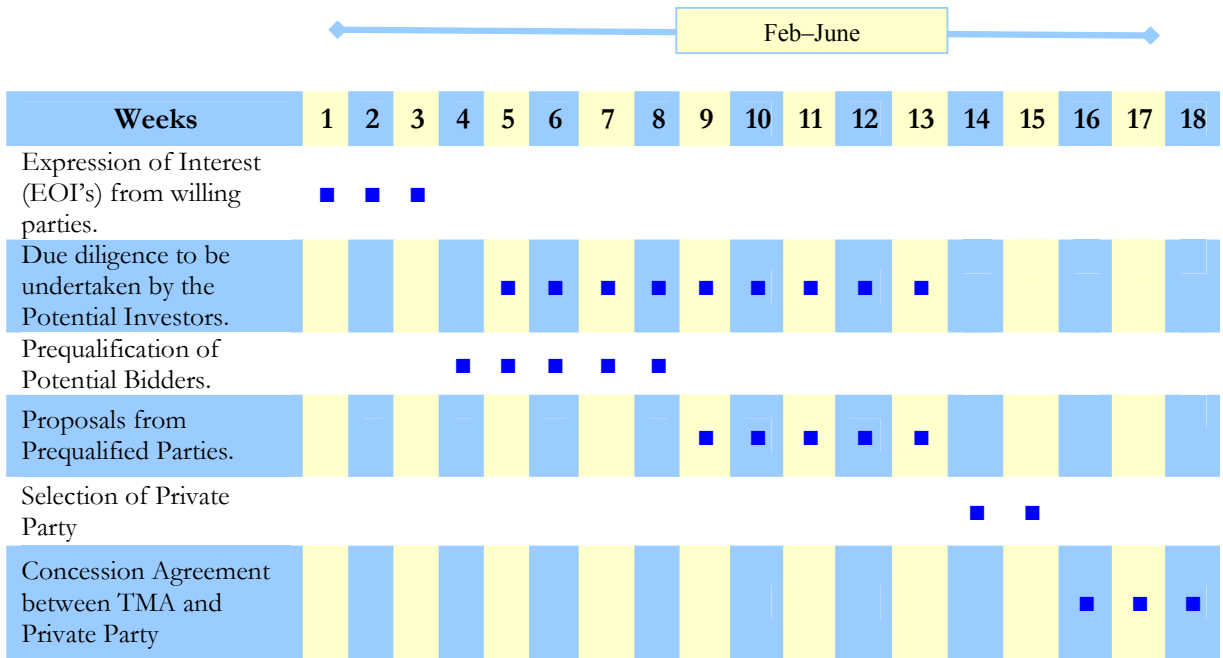
- **Opportunities**

- **First of its kind in NWFP;** The project is first of its kind in NWFP, if implemented successfully, the Private Party will be in an advantageous position to secure other concessions within the Province.
- **Extensions and Ancillary Activities;** Project scope can easily be extended by concessionaire with introduction of material recovery and recycling activities, composting of organic material and downstream value addition. These activities will have positive impact on useful life of landfill site as well as generation of added revenue streams.

- **Threats**

- **Political interference;** Like every project of such a nature, there is a threat of political interference from within the pressure groups active in the project area.
- **Leniency in enforcement of Municipal Laws;** As the success of the project greatly depends upon strict enforcement of municipal laws by the TMA, any leniency in this respect will prove to be a major setback for the project implementation.
- **Non-Acceptability;** In case of ineffective public campaign or project implementation, the general public might show reluctance in accepting the project.

**5. Indicative Time line**



Transaction Advisor has prepared this Preliminary Information Memorandum based on data and assumptions provided in the technical study and data obtained from TMA. This PIM does not purport to contain all the information related to the Project. While all efforts have been made to incorporate all information relevant to the proposed transaction, the TA does not make any representations or warranties, express or implied as to the adequacy, accuracy, completeness or reasonability of the information contained in this PIM. No decision should be based solely on the basis of the information provided by this PIM. The TA and IPDF have no liability for any statements, opinions, information provided by this PIM. Furthermore, the TA and IPDF shall have no liability for any statements, opinions, information or matters (expressed or implied) arising out of, contained in or derived from, or for any omission from, this PIM or in any other written or oral communication transmitted to third parties in relation to this transaction.

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