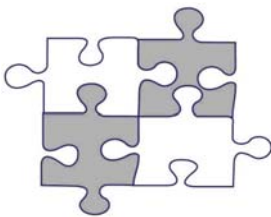



**SOLID WASTE MANAGEMENT
STAKEHOLDER CONSULTATION**

FAISALABAD

MARCH 20, 2007



**THE URBAN UNIT
P & D DEPARTMENT
GOVERNMENT OF THE
PUNJAB**



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Table of Contents

Acknowledgements	3
Acronyms	4
Preface	5
Background	6
Purpose of the visit	6
Presentations	6
Question and Answer Session	9
Appendix	
i. Photo Gallery	11
ii. List of the Participants	12

Acknowledgements

The Urban Unit owes a debt of appreciation to District Nazim and District Coordination Officer (DCO) Faisalabad for their encouragement and support. We also thank District Nazim and DCO for their political commitment to improve the existing solid waste management system in the city of Faisalabad. This has been a great help to assess the stakeholder's needs and assessment.

We are also thankful to all the Union Council Nazims who participated in the meeting with great interest.

Acronyms

CDGF	City District Government Faisalabad
DCO.....	District Coordination Officer
HCS.....	Hauled Container System
HWM.....	Hospital Waste Management
MRF.....	Material Resource Facility
SCS.....	Stationary Container System
SWM.....	Solid Waste Management
UC.....	Union Council
WTE.....	Waste to Energy

Preface

Faisalabad is facing serious problems with respect to Solid Waste Management (SWM). City District Government Faisalabad (CDGF) lacks institutional and technical capacity to deal with the issue of waste management. The Government of Punjab has realized the potential issues and has been investing significantly to improve the solid waste management facilities in Punjab. The Chief Minister has announced a special financial assistance of Rs. 600 Million for the improvement of SWM in Faisalabad. The responsibility of preparing an Integrated Solid Waste Management Plan has been assigned to the Urban Unit. In this regard the Urban Unit prepared a PC-I for the city of Faisalabad which has been approved by the Planning and Development Department, Government of Punjab.

The District Coordination Officer (DCO) and District Nazim of Faisalabad requested the Urban Unit to explain the designed project to the stakeholders of the project. The Urban Unit team visited the Faisalabad to hold a stakeholder meeting with the Union Council Nazims.

The detailed presentations were given to the participants.

Background

The City District Government Faisalabad (CDGF) is responsible for the solid waste management (SWM) in the city. The existing waste collection and transportation system is not only inadequate but also inefficient and expensive.

The CDGF showed their concern to develop and improve the SWM. The Provincial Government under the Chief Minister's initiative provided special financial assistance of Rs. 600 Million to the CDGF for the improvement of Solid Waste Management.

The Urban Unit provided the technical assistance in preparing a comprehensive integrated SWM plan. The CDGF prepared a PC-I based on integrated SWM plan. The DCO Faisalabad desired that the plan be shared and discussed with UC Nazims from Faisalabad city. A meeting was arranged by the District Nazim Faisalabad on March 20, 2007.

2. Purpose of the Visit

The purpose of the meeting was to explain the prepared plan to the UC Nazims. This meeting was arranged on the request of District Coordination Officer (DCO) Faisalabad.

The objective of the meeting was stakeholder consultation. The stakeholder consultation has been an important aspect for successful project completion. The key benefits of the stakeholder consultation are:

- Improved project design by drawing on local knowledge to ensure that designed project accurately reflects stakeholder priorities and needs.
- Means of verifying the relevance and appropriateness of proposed interventions.

- Strengthened stakeholder commitment to, and ownership of, policies.
- Greater willingness to share costs leading to improved project services.
- Enhanced sustainability as a result of increased stakeholder ownership.
- Opportunity to foresee and/or resolve potential obstacles, constraints and conflicts.
- Means to identify and address potential negative social and environmental impacts involved in project implementation.
- Capacity-building of stakeholders and local institutions (including their capacity to analyze problems and initiate other development activities).
- Means of ensuring that project benefits are distributed equitably.
- Strengthened working relations between stakeholders and the government.

3. Presentations

Two presentations were given to the participants by the Urban Unit in Jinnah Hall, Faisalabad. One on the general SWM and the second was about the comparison between the existing and the proposed system.

Participants were given general information about the composition, types, sources & components of solid wastes.

Following are the basic components of the SWM system:

- Generation
- Collection
- Storage
- Transport
- Resource Recovery
- Disposal

It was explained in detail how primary collection should take place through door to door collection. Mechanical sweeping would be introduced for the first time in the city of Faisalabad.

The storage includes temporary containment of solid waste. Transportation mode was also illustrated through diagrams. The type of vehicles was also showed to the UC Nazims which includes:

- Arm Rolls
- Mechanical Sweeper
- Water Sprinklers

Pros and cons associated with different types of transportation were also elucidated. Major concepts associated with SWM were also briefly told to the participants which encompasses resource recovery, composting and landfill sites.

Detail pictographic explanation was also shown about the scientific method of solid waste disposal. Moreover its applicability and adoptability in local conditions were also elaborated.

In the second presentation, participants were demonstrated about the comparison between the existing and the proposed SWM system in which they showed keen interest. The theme of the second presentation was Integrated Solid Waste Management and its benefits to the local communities.

Collection

Collection at present is not only inefficient but also expensive due to improper design of the basic collection tool i.e. handcart. For this purpose the Urban Unit has proposed more proficient designed handcart to serve the purpose of primary collection.



Figure: *Existing Primary Waste Collection System*



Figure: *Proposed Handcarts for Primary Collection*

Storage

Existing storage situation has resulted in the storage capacity deficit of 1139 tons of the total waste to be collected. This storage deficit has lead towards the uncontrolled open dumping which are backwashed in many health and environmental hazards.



Figure: *Existing Open Dumping of Waste*

To prevent open dumping of solid waste, storage containers are proposed by the Urban Unit which shall provide appropriate segregation activities within the enclosures,

aesthetically clean look and promote the resource recovery.



Figure: *Proposed Infrastructure for Waste Storage and Segregation of Recyclables*

Transport

Existing waste transportation system is based on tractor trolleys which is highly incompetent, uneconomical and inefficient. The Urban Unit after critical evaluation in terms of cost and efficiency has designed efficient system for transportation.



Figure: *Existing Waste Transportation System*



Figure: *Proposed Waste Transportation System*

Disposal

The present practice is open and haphazard dumping which is a serious threat to public health and the environment. There are two dumping sites available for disposal of solid wastes. There exists no infrastructure, equipment and machinery for operation and maintenance of these dumping sites.



Figure: *Present Waste Disposal Practice*

Under this project, sufficient infrastructure and machinery shall be provided to maintain and operate these dumping sites in an acceptable manner.



Figure: *Proposed Landfill Site for Waste Disposal*

The advantages associated with the scientific disposal of solid waste are controlled dumping & data management, minimized health & environmental impacts and proper monitoring of waste transportation system.

4. Question & Answer Session

Presentations were given on general SWM and existing system was compared with the proposed SWM system in Faisalabad. A 30 minute question answer session was held at the end of the presentations. Participants voiced their concerns, raised local issues and gave suggestions to be incorporated into the proposed SWM plan. Details of the suggestions and comments are as follows:

Mohammad Aslam (UC-182)

He appreciated the overall plan but he had few reservations regarding placement of containers. He mentioned that Faisalabad is a densely populated city; therefore it would not be possible to place the containers in the city.

The Urban Unit responded and explained that 400 container locations have already been identified in the city. The survey was conducted by the team from the Urban Unit with the assistance of SWM officials.

Hajji Abdullah Khan (UC-223)

He inquired about the size of the containers to be placed in the city? He also asked about the capacity of the vehicles proposed by the Urban Unit? Lastly he asked that the area under the jurisdiction of the CDG is too large therefore city needs 3 – 4 landfill sites so as to reduce transportation cost. His suggestion was to cover the containers as there were health and safety issues related to the open containers during transportation.

He was informed that size of the container shall be 5 cubic meter having waste carrying capacity of 2.5 – 3.0 tons per trip. He was told that each vehicle would be capable of making six trips a day that would enable each vehicle to transport approximately 15 – 18 tons of solid waste per day. This would increase waste transportation capacity.

He was also informed that scale of economy lies with the bigger size of landfill site. Bigger the size of landfill site the most economical would be its construction, operation and maintenance. It was replied that the littering of roads could be avoided by covering the transportation vehicles with tarpaulin.

Shafqat Aalam (UC-244)

He asked that the proposed system is identical with the existing system or is it entirely a new and different system? He also raised his concerns regarding public awareness. He emphasized that to make any system a success we need to invest in infrastructure as well on public awareness. He stressed that for the effective implementation of this project, people need to be educated at the household level.

He was told that the proposed system consists of two components; one is the soft component and the other is the hard component.

Hard component will be incorporating the machinery, equipment and infrastructure etc., whereas the soft component includes public awareness, community participation through corner meetings, training of the staff and reaching people through social mobilizers and awareness officers etc. The training of staff and education of the people will help in the effective implementation of the project.

Asif Iqbal Naib Nazim

He asked that who will be the monitoring and implementation agency of this project.

He was informed that the implementation of the project will be through newly recruited staff, by the Urban Unit, to be placed at the disposal of CDGF. However, the project will be monitored by the Urban Unit.

Fouzia Sohail, Member CDGF

She pointed that the staff to be recruited for implementation of this project should comprise of local people. She was of the opinion that the professionals from other cities should not be placed in Faisalabad.

The second suggestion was related to hospital waste in Faisalabad. She emphasized that there is no concept of hospital waste management in the city and people are not aware as how to dispose off this waste. She suggested making a separate plan for hospital waste management.

She was informed that the Urban Unit has already advertised to recruit staff for SWM projects in the nine cities of Punjab. The local people would be given priority, as far as possible, if they fulfill all pre-requisites for the positions advertised.

Regarding HWM, she was informed that the proposed SWM plan includes awareness campaigns to promote at source segregation of hazardous and non-hazardous hospital wastes.

A separate collection of hazardous hospital waste and disposal at the designated cell at landfill site has already been proposed to reduce associated health and environmental impacts.

Haroon Yaseen UC-218

He pointed out the health and safety issues related to solid waste in the city. He explained that Faisalabad being the industrial hub of the country has lead to industrial & heavy toxic metal pollution.

In his view point that needs to be controlled through some consolidated industrial waste management plan. Moreover he also emphasized the health and safety issues related to sanitary workers. His suggestion was to improve the working and health conditions of the sanitary staff.

In response he was informed that initially a comprehensive survey has been proposed to collect data regarding quantity and quality of

different types of industrial wastes. However, it was told that as far as occupational health and safety equipment are concerned that could be provided from the budget of City District Government Faisalabad.

DO-SWM Faisalabad

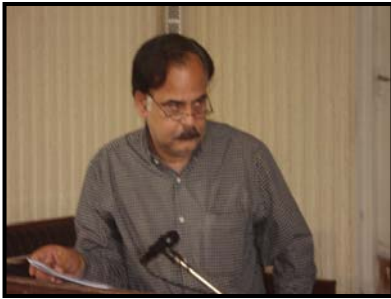
He raised the issue that there is a deficit of sanitary workers. Therefore more sanitary staff should be recruited in order to achieve maximum street sweeping.

His second concern was to promote resource recovery activity at transfer stations rather than at enclosures. Lastly he talked about the option of waste to energy (WTE) and he mentioned that it should be included in the project.

In response he was informed that the existing strength of sanitary workers involved in the primary waste collection were sufficient. He was told that the transfer station cum MRF is not economically feasible option for Faisalabad City.

Furthermore, the distance of landfill site from the city center does not permit establishment of waste transfer station. With respect to the waste to energy (WTE) it was clarified that the composition of solid waste does not make such projects an economically feasible option.

Photo gallery



LIST OF THE PARTICIPANTS

SR. NO	UNION COUNCIL NAZMIS	UNION COUNCIL NO
1.	Mr. Riaz Kamboh	UC-225
2.	Mr. Anwar-ul-Haq	UC-249
3.	Mr. Iqbal	UC-219
4.	Mr. Shehzad Mozzam	UC-222
5.	Mr. Ch Mohammad Aalam	UC-265
6.	Mr. Abdul Rashid	UC-186
7.	Mr. Abdul Ghaffar	UC-204
8.	Mr. M. Aslam	UC-182
9.	Mr. Sattar Yousaf	UC-203
10.	Mr. Mirza Sharif Mughal	UC-214
11.	Mr. Mian Tahir Ayub	UC-206
12.	Mr. Rana Liaqat Ali	UC-270
13.	Mr. Afzaal Shaheen	UC-287
14.	Mr. Abdul Sattar Ansari	UC-212
15.	Mr. Mohammad Tayyab	UC-201
16.	Mr. Tariq Kamboh	UC-194
17.	Mr. Mohammad Ayyub	UC-211
18.	Mr. M. Saleem	UC-278
19.	Mr. M Aslam	UC-282
20.	Mr. Mohammad Shahid Shaheen	UC-195
21.	Mr. Ashraf Malik	UC-183
22.	Mr. Malik Arshad Ali	UC-271
23.	Mt. Mohammad Ali Kamboh	UC-215
24.	Ms. Farzana	UC-207
25.	Mr. Mohammad Yonus	UC-208
26.	Mr. Malik Taaj Ahmad	UC-281
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29.	Mr. Shahid Ahmad Awan	UC-208
30.	Mr. Rana Zaheer-ud-Din	UC-288
31.	Mr. Rana Mohammad Mazher	UC-213
32.	Mr. Mian Mohammad Aslam	UC-199
33.	Mr. Hajji Abdullah	UC-223
34.	Mr. Rana Tariq	UC-259
35.	Mr. Haroon Yaseen	UC-218
36.	Mr. Manzoor Ahmad	UC-216
37.	Mr. Abdul Rasheed	UC-262

38.	Mr. Ch. Mujhaid	UC-178
39.	Mr. Ch. Jamil Ahmad	UC-269
40.	Mr. Sharraft Ali Doggar	UC-220
41.	Mr. Shafqat Aalam	UC-244
42.	Mr. Irfaan Ali	UC-196
43.	Ms. Azra Naeem	UC-178
44.	Ms. Aqeela Nazir	UC-206
45.	Mr. Farrukh	UC-253
46.	Mr. Shahid Amir	UC-205
47.	Ms. Fouzia Sohail	Member CDG
49.	Mr. Hajji Basharat	UC-188
50.	Mr. Aslam	UC-285
51.	Dr. Aslam Pervaiz	DDO-SWM Faisalabad
52.	Dr. Rai Qammar	DO-SWM Faisalabad
53.	Mr. Naseem Ahmad	EDO-MS Faisalabad
54.	Mr. Gul Hafeez	SPU Faisalabad
55.	Mr. Abdul Qadir	UC-236
56.	Mr. Mohammad Siddiqi	UC-189
57.	Ms. Samman Rafi	Lyalpur Town
58.	PA to Nazim	Zila Council
59.	Mr. Rana Tariq Aziz	UC-197
60.	Mr. Karram Rasool	UC-247
61.	Mr. Ajmal	UC-280

The Urban Unit Team

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4	Ms. Nudrat Chaudry	SWM-Research Associate