

Local Government & Community Development Department



Punjab Cities Program

Gap Analysis

of

Municipal Services infrastructure & service delivery

In

Jhang City



Punjab Municipal Development Fund Company

Section-1 City Background

1.1. District Status

Jhang city is the headquarter of Jhang District, and is located in the central portion of the Punjab province. It is very old district and had Chiniote Tehsil as part of this district. In the year 2009 the tehsil of Chiniot was transformed into a separate district. It is known for the shrine of Sultan Bahoo and Heer and Ranjha's Tombs.

1.2. Location

The city of Jhang is situated at 72°-20' East and 31°-16' north at a distance of 92 km from Faisalabad, and 252 km from Lahore. The city is located on the east bank of Chenab River.

1.3. The Climate

The climate over here is extreme both in winter and summer. May June & July are the hottest months with maximum & minimum temperatures of 40 & 28 degree centigrade respectively. December to February are the coldest months with maximum and minimum temperature of 27 & 6 degree centigrade. The average annual rainfall is 288 mm mostly occurring in summer.

Demographic status

The population census report of year 2017 has not been published by Government of Pakistan however the provisional data released by the relevant department shows a population of 414,131 persons within municipal limits. As per land scan process to estimate the population in close approximation, the entire inhabited areas of Jhang city had population of 464,149 persons in the year 2017 with an annual growth rate of 1.31 % and it is expected to rise to 528,665 persons in the year 2027.

1.4. Data collection

The formats for the data collection about the municipal services were designed and sent to the Municipal Committee. After receipt of these formats, the city was visited to;

- 1) Verify and correct the data provided by the municipal committee.
- 2) Update the descriptive maps of all the services by consultation with MC staff & Public Health Engineering staff.
- 3) Identify the required improvements and extension of the municipal services infrastructure.
- 4) Identification of Public Private Partnership projects already executed
- 5) Identify the capacity of the key officers to undertake the PPP projects and collaborative projects with other government agencies and MCs
- 6) Public opinion surveys regarding the delivery of municipal services.

1.5. Situation analysis and Gap analysis

Situation analysis of the existing municipal services infrastructure and the quality of service delivery was done. Gap analysis was done to identify the problems, bottlenecks and shortcomings in the infrastructure itself and its operation & maintenance for each municipal service along with the correction/updating of descriptive maps which has been described in the following sections.

Section-2 Water supply system

2.1. Existing situation

Jhang city is located on the east bank of the Chenab River and hence the ground water is chemically fresh but bacteriologically contaminated. The facility of water supply does not exist in the entire city except in the Satellite Town.

The inhabitants have their own water sources such as hand pumps or motorized pumps. Due to lack of awareness about potable water, the citizens are extracting contaminated water from the shallow aquifers. However 57 No's ultrafiltration plants have been installed in the city for supply of potable water to the citizen and most of the residents are fetching drinking water from these filtration plants. The detail of these plants is as under;

S.N.	Maintained by;	No of plants
1	Municipal Committee Jhang	14
2	Rotary Club	18
3	Various schools	25
	Total	57

2.2. Water sources

2.2.1. The existing water sources

The City is not equipped with water supply system except for satellite town where 2 tube wells with 2 OHRs are operating and serving this area. One tube well and OHR in functional in MC office for meeting the requirement of firefighting and MC office.

Total Source capacity

Area	Total No. of tube wells	Abandoned	Functional	Capacity each (cusecs)	Total capacity (cusecs)	Working hours per day	Daily water production (mgd)	
							Present water production	Possible with 14 hours pumping
MC office	2	1	1	1.00	1.00	5.0	0.113	0.315
Satellite Town	4	2	2	1.00	2.00	8.0	0.360	0.63
Dhaji Road	1	1	0	0	0	0	0	0
Grand total	7	4	3		3.00	-	0.473	0.945

Condition of tubewells

3 Nos functional tubewells are working satisfactorily. No replacement is required.

2.3 Storage Capacity:

No ground storage is required over here. The detail of overhead storage is given below;

S.N.	Water works	No. of OHRs	Capacity (gallons)
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1	Municipal Committee Office	1	100,000
2	Satellite Town	2	50,000
	Total	3	200,000

2.4 Problems and gaps in the system

2.5.1 Water shortage

No water shortage exists in the city as most of the residents have their own sources of water and they are getting drinking water from the filtration plants. MC is not in favor of execution of the water supply system in unserved areas of the city as no one will apply for the connection.

2.5.2 Un Served Areas (shown in light pink color in the map)

Entire Jhang city is unserved with water supply facility except satellite town

2.5 Water supply hours and consumer connections in Satellite Town

Water Supply hours				Consumer connections			
Morning	Midday	Evening	Total	Domestic	Commercial	Industrial	Total
3	3	2	08	375	48	Nil	423

2.6 Total coverage of the city

Present total coverage of the city is just 3%.

2.7 Tariff structure

The consumer connections are not metered and hence water wastage should be predominant over here. The tariff comprises of flat rates not even levied according to the area of houses.

Total Nos of consumer connections and water rates are given below;

Total Nos of connections			Tariff Rates per month		
Domestic	Commercial	Industrial	Domestic	Commercial	Industrial
423	Nil	Nil	Rs. 180	Rs. 360	Nil

But MC is not collecting any water user charges

2.8 Required rehabilitation of the water supply system

Under mentioned components of the existing system need rehabilitation. Component wise details are given below;

2.9.1 Tube wells

No repair or replacement of tubewells or pumping machinery is required as MC does not want to operate the water supply system further.

2.9.2 Repair of Filtration Plants:

Maintained by	Total Nos	Repair Required
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MC Jhnag	14	14
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2.9.3 Distribution system:

3 % of the city area is equipped with the distribution system. Water supplied to the satellite Town residents is contaminated bacteriologically because of leaking pipe lines and consumer connections in the underground. The pipe lines have outlived their life and numerous leaks emerge every month which are repaired but still the network is not capable to work now. All pipeline need replacement but MC is not in favor of further operation of this system now.

2.9.4 Replacement of consumer connections

Old underground portions of the GI piping of the consumer connections have got rusted and perforated and major source of water contamination. Hence the underground piping & saddles of 423 substandard connections need replacement but as the system is not to be operated further hence no replacement is proposed.

2.9 O&M Charges and revenue recovery

The operation & maintenance charges and the revenue recovered during the last four years is given below;

Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total for five years
O&M charges (million Rs)	1.610	1.660	2.130	2.440	1.920	9.76
Revenue recovery (million Rs)	0	0	0	0	0	0
Recovery % as compared with O&M exp.	0	0	0	0	0	0
Subsidy injected (million Rs)	1.610	1.660	2.130	2.440	1.920	9.76

2.10 Manpower deployment

Slot	Sanctioned strength	Existing strength	Vacant post	Manpower on daily wages	Total man power deployed
Tubewell operators	7	6	1	-	6
Chowkidars	1	1	0	-	1
Electricians	1	1	0	-	1
Plumbers	6	6	0	-	6
Total	15	14	1	-	14

No additional manpower is required.

2.11 Service delivery

1. Whole of city is un-served except Satellite Town as explained above. Contaminated water is being supplied from this network because it has outlived its life.
2. The citizens in rest of the city have established their own reliable water sources because of chemically fresh water in the underground. However this water is mostly contaminated

bacteriologically and most of the people do not drink this water. They are fetching their drinking water needs from 57 ultrafiltration plants installed in the city at various places (14 Nos maintained by MC) as mentioned above. So as such there seems to be no need for a water supply system over here as the residents will not be take connections.

3. The need for new water supply system should be established by consumer surveys so as to see if the residents of the city are ready to take water connections from the water supply system if constructed. Execution of the water supply system without determination of the public opinion will be large wastage of funds.
4. None of the consumer connection in the existing water supply system in Satellite Town is metered and it is proposed to meter all the consumer connections if the system operation is to be continued by MC which does not seem to be possible as no consumer is ready to pay water charges.

Section-3 Sewerage system

3.1. Existing situation

3.1.1. Coverage:

Entire city has been divided in 7 drainage zones each served by disposal stations. Some of the areas in the city have been served with main, branch and lateral sewers but most of the areas are served by main and branch sewers but no laterals have been laid and the streets and roads are served with surface drains discharging waste water into the sewers but without the gully grating chambers.

The city also contains un-served areas where the sewerage system is needed. Some of the main sewers have been choked and require replacement. Some other main sewers are facing numerous crown failures and it is becoming increasing difficult for MC Jhang to repair these crown failures to keep the sewers functional.

3.1.2. Sewers

Total length of sewers

The length of sewers as per information provided by the Municipal Committee, are given below; these are very approximate lengths and may vary if actually measured at site;

Approximate lengths of sewers

Sewer dia. (inch)	9	12	15	18	21	24	27	Total length in Km
Length in feet	16400	28800	22500	17600	10360	9360	7800	
Sewer dia (inch)	30	36	42	48	54	66	72	37.86 Km
Length in feet	3800	3800	3800	-	-	-	-	

3.1.3. Pumping / disposal stations

a) *Functional pumping stations*

Jhang city is presently having 9 disposal stations in 7 drainage zones. Two disposal station named as Garay Band and Old Gadianwala are pumping waste water from surface drains whereas rest of the 7 disposal stations as shown below are fed by separate sewerage systems. The details of each of them are given below.

Zone No	Location	Nos of collect tanks	No of pumps	Discharge each (cusecs)	Total discharge (cusecs)	Motor BHP	working status	S. Carrier			Ultimate disposal
								Size (feet)	Length (ft)	Condition	
1	Chak Khokhra	2	3	6	18	60	Functional	2.5x3	600	Satisfactory	Broad Irrigation
2	Farooq Abad	1	2	6	12	60	--do--	do	150	--do--	do
3	Karmaan Wala	2	2	6	12	60	--do--	do	500	--do--	do

	Town										
4	Harmal Pura	1	2	10	26	100	--do--	do	1200	--do--	Khairwala Drain
			1	6		60					
	Garayband	2	2	6	12	60	--do--	do	300	--do--	--do--
5	Lakhi Wala	2	4	6	24	60	--do--	do	150	--do--	--do--
6	Chak Noor Shah	2	3	6	18	60	--do--	do	150	--do--	--do--
7	Old Gadianwala	1	1	1.5	1.5	15	--do--	do	100	--do--	--do--
	Tibba Registan	2	3	3	9	30	--do--	do	350	--do--	Waste Water Pond
	Total	15	23	-	132.5	-					

b) Disposal stations under construction

Under mentioned three disposal stations were taken up for construction on the bank of Khairwala storm water drain by defunct TMA Jhang for draining the northern areas of the city but the works could not be completed even by this time for want of funding. 85% of the civil works have been completed and no pumping machinery has been erected.

- 1) Gadianwala,
- 2) Gogay wala,
- 3) Tibba sultan

The disposal stations are required to be completed to relieve the northern areas from drainage issues

3.2. Main issues and problems in the system

The main problems and bottlenecks confronted by the city are given below;

3.2.1. Areas flooded with waste water

Following areas of the city are flooded with waste water due to malfunctioning of the sewerage system.

1. Main challeyaan wala	2. Basti Ata wali	3. Mohallah gosia
4. Ghalla mandi	5. Bulaq shah	6. Marzi pura east & west
7. Basti dewan wali	8. Basti sheeni wali	9. Pepsi agency
10. Ghaziabad	11. Mukhtarabad	12. Farooqabad
13. Dhaji road	14. Rail bazar	15. Chambaili market
16. MPA road	17. Burji chowk	18. Yousaf shah road
19. Mohallah yaboo wala	20. Jalaabad	21. Nasirabad

22. Session house road	23. Sultan wala	
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3.2.2. Un-served areas

Following areas of the city have not been provided with sewerage system as yet.

1. Mohalla Hussainiabad	2. Rao Colony	3. Officer Colony
4. Lala Zar Colony-2	5. Mohalla Sadiqabad	6. Mohalla Kot Sai Sig
7. Mohalla Mai Heer	8. Rehman Garden	

3.2.3. Cleaning or replacement of sewers

Undermentioned sewers are malfunctioning due to silting up and choking conditions.

S.N.	Location	Approx. Length (feet)	Diameter (Inches)	Problem	Solution
1	Mala pind chowk To Hurmal pura disposal	4900	33	Recurrent crown failure	Replacement
			36		
2	Railway station chowk To Tarzan chowk	6500	18	do	do
			27		
			33		
3	MPA road	2400	27	Gradient problem and recurrent crown failure	do
4	Nawaz chowk to Chandni chowk	1500	18	Choked	do
5	College chowk To Noor shah disposal	4850	24	Choked	do
			30		

3.2.4. Disposal/pumping stations

Under mentioned repairs/replacements are needed in the civil works of the disposal stations;

Zone No	Location of disposal works	Repair of Collecting tanks	Repair of screening chambers	Repair of pump houses	Total pumping units		Repair of Pumping Units
					Capacity (cusecs)	Nos	Nos
1	Chak Khokhra	2	1	1	6.0	3	1
2	Farooq Abad	1	1	1	6.0	2	1
3	Karmaan Wala Town	2	1	1	6.0	2	1
4	Harmal Pura	1	1	1	10.0	2	-
					6.0	1	1
	Garayband	2	1	1	6.0	2	1
5	Lakhi Wala	2	1	1	6.0	4	1
6	Chak Noor Shah	2	1	1	6.0	3	1
7	Old Gadianwala	1	1	1	1.5	1	1
	Tibba Registan	2	1	1	3.0	3	1
Total		15	9	9		23	9

3.2.5. Sewer cleaning & dewatering machinery:

MC is using undermentioned machinery for cleaning and de-silting of sewers and for dewatering of storm and waste water:

S. No.	Equipment/machinery details	Total available No's	Nos needing repairs
1	Jetting machines	2	1
2	Sucker machines	2	2
3	De-watering sets.	42	10

3.2.6. Provision of effective cleaning machinery & equipment

- 1) Sewers are being de-silted manually from manholes only which is the most inefficient method. For cleaning of barrels of the sewers at least 2 Nos. winch machines are required to eliminate the choking of sewer line.
- 2) MC is not de-silting the collecting tanks due to which the sewer lines are being choked. Hence 02 Nos winch machine for the de-silting of collecting tanks will be required to keep the collecting tanks free of silt and giving free flow of water in the collecting tanks.
- 3) Similarly the sullage carriers are not being de-silted properly by MC because of dearth of labor and cleaning machinery. These are also responsible for flooding of waste water in the city. Hence at least 01 No back-hoe machine for the de-silting of sullage carriers is required.

3.2.7. Provision of gully grating chambers & manhole covers

No gully grating chambers have been provided at junction of surface drains and the sewers to trap the silt and the floating materials. As such all these materials are flowing into the sewers and are the main reason for choking the sewers.

The gully grating chambers to connect the surface drains with the sewers are required to be provided in the entire sewerage system.

Manhole covers at many places are missing and MC is not attending these complaints because of money constraints. Hence MC will need to replace the missing manhole covers along with some base frames. MC should keep adequate number of manhole covers in stock to replace the covers immediately after these are damaged or stolen.

3.2.8. Repairs & replacement of other components

These components include;

- Repair of boundary walls of disposal stations;
- Repair of portable electric dewatering/sullage pumping sets 3.0 cusecs = 2Nos
- Repair of 5 Nos staff quarters.

3.3. Waste water treatment

Waste water from all the disposal works is being discharged in the storm water/seepage drains without treatment. Waste water treatment plants are required to be constructed to lower down the BOD level as per National Environmental Quality Standards (NEQS).

3.4. Completion of under construction disposal works (3 Nos)

The above mentioned three disposal works to cover the northern areas of the city could not be completed by MC because of financial constraints. These are required to be completed now.

3.5. Consumer connections

No consumer sewer/drain connection survey in the city has been conducted by this time. Hence the exact number of these connections cannot be estimated at this stage.

3.6. Tariff structure

No service charges have been levied for the liquid waste management. The key officers and the public representatives are not giving attention to levy the service charges and collection of the revenue. The service is totally being subsidized which is exerting large financial pressure on the MC budget.

3.7. Operation & maintenance cost vs revenue recovery

The operation & maintenance cost of the sewerage system for the last five years is given below;

O&M Expenditure vs Revenue Recovery (million Rs) (includes manpower, electricity, repairs/replacement & supplies)						
Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total for 5 years
O&M expenditure	50.020	57.310	52.920	39.720	40.630	240.6
Revenue earned	0	0	0	0	0	0
Subsidy injected	50.020	57.310	52.920	39.720	40.630	240.6

3.8. Manpower deployed

The manpower deployed for operation & maintenance of the system has been shown in section-10 of the report. In total a sanctioned strength of 87 persons exists out of which 51 persons are working presently whereas 36 slots are vacant and could not be filled up because of ban on the recruitment. Against these slots, 30 Nos workers have been employed on work charged basis.

MC is demanding additional manpower because of increase in population as they are serving those areas in the city which are not included within the municipal boundary.

3.9. Conclusions and Service delivery level

- a) The city has main and branch sewers on main roads and streets but a very small area is equipped with lateral sewers. Most of the city is being served with surface drains discharging into the sewers without gully grating chamber which is allowing all the silt and the floating materials in the sewers and is the main reason for chocking of sewers. No effective de-silting and cleaning of sewers is being done due to shortage of staff.

- b) Waste water flooding is occurring in the areas given above due to choked/semi choked sewers which is damaging the public as well as private property apart from creating insanitary condition and spreading vector borne diseases.
- c) Lateral sewers are required to be laid in the left over area to provide the facility to entire city.
- d) The unserved areas should be provided with the facility.
- e) 3 Nos incomplete disposal works should be completed and commissioned to give relief to the northern areas. For doing so the site situation should be carefully examined to see if the water from all three areas can be collected at one disposal works as in that case only one disposal works will be completed which will affect saving in capital as well as in operation & maintenance of the facilities.

Section-4 Solid waste management

4.1 Existing situation

4.1.1 Available resources

a) Equipment & machinery

Under mentioned collection and transportation machinery is available with MC to handle the solid waste.

S.No	Equipment/machinery details	Total available Nos	Nos in working condition	Nos needing repairs
1	Tractor trolleys	11	11	11
2	Arm rolls	20 (on rent)	8	8
3	2.5-5 m3 containers	150	150	150
4	Front blade tractors	02	01*	0
5	Front End loader (4 wheel drive)	04	03*	0
6	Front End loader (2 wheel drive)	2	01*	0
7	Water bowers with tractor	01	01	0
8	Mechanical sweeper	1	0	1
9	Loader rikshas	15	15	15

*The remaining non-functional machinery is being repaired by MC from their own sources.

The main transportation vehicles e-g Arm Rolls have been obtained on rent from Faisalabad Municipal Corporation and as such no MC arm roll is available. Most of these arm rolls have gone nonfunctional and large amount of rent is outstanding against the MC but due to financial constraints this rent could not be paid.

The existing transportation machinery available with MC are the tractors drawn trolleys which are not efficient giving rise to low efficiency of collection and disposal of the waste and as a result of that MC is facing increased waste management cost as well as complaints regarding the insanitary conditions in the city. Efficient and cost effective machinery is needed to increase the efficiency of collection and transportation for improving the sanitary conditions in the city and lowering down the operational and maintenance costs.

b) Manpower Deployed

The manpower deployed for collection, transportation and disposal of the solid waste is given in the table below. As indicated by MC Officers, this manpower is not sufficient to serve the entire city at the given standards. Actual requirement will be identified after detail design and implementation of the project.

Slot	Sanctioned strength	Existing strength	Vacant post	Manpower on daily wages	Total man power deployed presently
Sanitary workers	430	255	175	121	376
Vehicle drivers	26	9	17	0	9
Supervisors	17	16	1	0	16

Sanitary inspectors	4	2	2	0	2
Total	477	282	195	121	403

The recruitment of manpower against the sanctioned slots has not been made possible because of recurrent ban on the appointments. The city has un-satisfactory solid waste management system. Limitation in resources is described as under;

4.2 Reasons for poor service

Resources available to handle the solid waste are limited to serve the whole area of city. Limitation in resources is described herein.

- Total available regular strength of the sanitary staff excluding the top slots is 477 Nos out of which the manpower presently deployed is 282 Nos whereas 121 sanitary workers have been deployed on daily wages to fill the gap. 195 slots are vacant and employment has not be done on these slots due to recurrent ban on new recruitment. The key officers should get permission for recruitment on the vacant slots which will solve the issue of manpower to major extent.
- Tractor trolleys are most inefficient transport machinery which require more O&M charges as well as time as compared to modern compactor trucks. In spite of having 11 tractor trolleys MC is not able to cover the entire area of the city.
- No landfill site is available for dumping of solid waste. Currently waste is being dumped along the road side which is totally unhygienic.
- The waste is being openly dumped without compaction and provision of earth covers which is creating all sort of hazards say; pollution of underground water, vector and vector borne diseases, obnoxious smell and high insanitary conditions.

4.3 Un-served and partially served areas

The entire city is not served with solid waste collection and disposal. The efficiency of the services is 68% as given below. Most of the areas of the city remain either un-served or these are partially served. The detail of these areas is given blow.

4.3.1 Partially served areas

No regular service is rendered in the under mentioned areas. The main complaints are attended by sending the machinery & labor once or twice a week.

Abadi Noor Shah, Abbas town, Murshiya wala, Gulab wala, Basti Loharan Wali, Chah Tootan wala, Chah Raelay wala, Islamabad-2, pathan colony, Christen colony, Basti Aminabad, Basti Dewan wali, Jalalabad, Yousafwala, Basti Noorpura, Babrana, Mohalla Pindi, Bullaq shah, Pipliyan wala, Ariyan wala, Ladhan shah, Malik colony, Sultan wala, Sultan noor, Yabu wala, Samanabad, Waqas colony, Chand wala, Atta wali, Hafizabad, Mai heer, Fareedabad, Hasan nagar, Jabar nagar, Kot Sai Sag, Ghazi abad, Rana colony, Rehmaat street, Peer Phatan, Iqbal nagar, Satellite town, Chaudary colony, Gulshan Fatima, Lala zar, Farooqabad.

4.3.2 Un-served areas

Under mentioned areas are still un-served;

Thatta Zulfiqar Wala, Kothian Wala, Khumara Wala, Kalo Wala, Officer Colony, Lala Zar Colony-2, Rao Colony, Mohalla Hussainiabad, Mohalla Bajy Wala, Mohalla Sadiqabad, Basti Abadi Kot Akbar, Basti Malah Wali, Qadri Colony, Basti Ali Muhammad Araiyan, Gulshan Colony, Mohalla Akbar Pura, Mohalla Ali Abad, Mohalla Islam Nagar, Mohalla Abadi Hermal Pura, Bashir Colony, Mohalla Babrana2, Qasmi Colony, Lakhi Wala, Basti Kal Wali, Rehman Town, Ali Town, Al Karam, Wapda Colony, Abadi Chiniot Mor

4.4 Solid waste Generation & Disposal

The solid waste management efficiency along with present dumping sites are given below;

Total waste generated per day		Total waste collected (Tons)		% Efficiency of disposal	Name of dumping sites
Cubic meters	Tons	Cubic meters	Tons		
340	170*	230	115	68%	Gojra Road
Distance from city center (Km)					9 KM
Open dumping= O Landfill= LF					O

*Assumed density of loose solid waste = 500 KGs per cubic meter

4.5 Landfill Site development

Area of 22 Acres on Gojra bypass road is available for construction of landfill. However the suitability of the landfill site will be determined after detailed surveys and design of the project by catering the requirement of the environmental standards in vogue in Punjab.

4.6 Vehicle parking Area:

MC owned area of 2.0 acres is available in Muhamllah Cha Shadi Wala for development as parking area for solid waste transportation vehicle and other MC vehicles.

4.7 Levying of sanitation fees

No sanitation fee has been levied by MC and the entire expenditure given below is being met from MC's own resources and the PFC share being given by Provincial government.

4.8 Solid waste management financials (million Rs.)

The annual expenditure incurred by MC for last 5 years is given below which includes manpower, energy, repairs, supplies etc.)

Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total for 5 years
O&M Expenditure (million Rs)	17.090	12.440	14.150	16.970	23.600	84.250
Revenue collection	0	0	0	0	0	0
Subsidy injected	17.090	12.440	14.150	16.970	23.600	84.250

MC will have to levy the sanitation fee to meet the expenditure on solid waste management or at least to lower down the subsidy presently being injected.

4.9 Service delivery

At the average, the service delivery level is not satisfactory. Some portion of the city is either un-served or partially served because of shortage of sanitary staff and machinery & equipment whereas the existing machinery and equipment is inefficient having costly operation and maintenance.

The solid waste is being dumped along the Gojra Road because no proper landfill site is available which is creating hazards like obnoxious smell, sub soil water pollution and breeding of vectors causing water borne and vector diseases. Apart from that this is also creating insanitary conditions resulting in frustration in the citizen. MC has a piece of land measuring 22 acres for the development of Landfill site but it could not be developed due to financial constraints.

Section-5 Roads

5.1 City Roads Hierarchy

The main roads in the city and emerging from the city have under mentioned hierarchy;

S.No	Name of the road	Owner department
1	Khanewal-Kabir Wala Road	Provincial Highway
2	Jhang-Toba Road	do
3	Jhnag To Shorkot	do
4	Jhnag To Gojra	do
5	Sargodha Road	do
6	Old Chiniot Road	do
7	Syedana Wala	do
8	Faisalabad Road	do
9	Jhang By pass	do
10	Fateh Shah Road	District Council
11	All other roads	Municipal Committee

All these roads have been marked on the map of the city in different colors

5.2 Existing situation

Few of the primary roads in MC Jhang are in good condition & many main roads need rehabilitation, resurfacing and widening & improvement. Further many of the secondary roads/streets require either rehabilitation or new construction with concrete pavers. The detail of the problem roads is given below;

5.3 Inventory of roads

Inventory of primary & secondary roads in Jhang City is given on the next page.

Inventory of primary & secondary roads in Jhang City

Sr.#	From	To	Road information					
			Category of road	Length (km)	Width (ft)	Type of pavement	Road condition	Road drainage (yes/No)
1	Pakka Railway Road Old Chiniot Road	Babe Umar	C	1.4	20	TST	poor	No
2	Sargodha Road	Ayaoub Chowk	A	3.5	24+24	TST	Good	Yes
3	Faisalabad Road	Ayaoub Chowk	B	1.0	24	TST	Good	Yes
4	Katcha Railway Road Old Chiniot Road	Shereen Chowk	C	1.2	20	TST	poor	No
5	Rasheed Chowk	Sargodha Road	C	0.8	20	TST	poor	No
6	Adhiwal Chowk	Tanga Adda Jhang City	C	2.25	20	TST	poor	No

7	Sargodha Road Chungi No.22	High School Chowk/ Thana City	C	2.3	20	TST	poor	No
8	Hafiz Abad Chowk Old Chiniot Road	Tibba Registan	C	1	15	TST	poor	No
9	Tanga Adda City	Jora Khu	C	1.2	15	TST	poor	No
10	Jora Khu	Babe Usman	C	1.5	15	TST	poor	yes
11	Cycle More / Lorry Add	Governmnet Girls College	C	1.7	15	TST	poor	No
12	Zacha Bacha Hospital Link	Sargodha Road	C	1	15	TST	poor	Yes
13	Sargodha Road	Chak Noor Shah Disposal	C	1.5	15	TST	poor	No
14	Bye Pass Chowk, Sargodha Road	Eid Gah	C	1	15	TST	poor	No
15	Adhiwal Chowk	Via Sabzi Mandi Tanga Adda Saddar	C	2	20	TST	poor	No
16	Sargodha Road	Jhang Road (MPA Road)	C	1	20	TST	poor	No
17	Sabzi Mandi	Bye Pass Via Basti Kal Wali	C	2.5	20	TST	poor	No
18	MPA Chowk Jhang Road	Street A-Rahman Wali Bhabhrana Mohallah	C	1	20	TST	poor	No
19	Chiragh Pehalwan Akhara	Jhang Bazar Chowk	C	1.25	22	TST	poor	No
20	Jhang Bazar Chowk	Tanga Adda Jhang Saddar	C	0.75	20	TST	poor	No
21	Chiragh Pehalwan Akhara	Byepass / Hifazti Bund	C	0.9	20	TST	poor	No
22	Chiragh Pehalwan Akhara	Harmal Pur Disposal	C	2.25	20	TST	poor	No
23	Bhabhrana Mohallah / Laila Majno Gate	Abot Pur Chowk Via Bulaq Shah Road	C	2.3	20	TST	poor	No
24	Abot Pur Chowk	Station Chowk	C	1.15	20	TST	poor	No
25	Bohar Wala Chowk	Toba Road Via Millat College	C	0.7	25	TST	poor	No
26	Thana Saddar Chowk /Islamia School	Toba Wala Phatak Toba Road	B	2.25	25	TST+Asphalt	poor	No
27	Fowara Chowk	Kot Road Via Main Bazar	C	0.8	18	TST	poor	No
28	Railbazar Chowk Pakka Kot Road	Ayoub Chowk	C	1.05	30	TST	poor	No
29	Darul Sakina Road Rehmat Street	Gojra Road	C	0.4	15	TST	poor	Yes
30	Dhudhi Mor Via Musa Chowk	Forest Office Link Chiniot Road	C	0.85	15	TST	poor	No
31	Musa Chowk	Khokha Chowk	B	1.2	20	TST	poor	No

32	Link Chiniot Road Green Belt	Behari Colony Via Bashir Chowk	B	0.9	12	TST	poor	No
33	Bihari Colony	Link Chiniot Road Via Riaz Chowk	B	0.9	12	TST	poor	No
34	Satellite Town Internal Roads		C	5	12	TST	poor	No
35	Toba Road Railway Phatak	Faisalabad Road Railway Phatak Via Railway Colony	B	2.25	18	TST	Good	No
36	Ghalla Mandi	Nawaz Chowk Via Dpo Residance Back	C	1.1	18	TST	poor	No
37	Fowara Chowk Dhajji Road	Bulaq Shah Ground	C	1.5	15	TST	poor	No
38	Chandni Chowk	Dhajji Road Via Gumbado Wali Masjid	C	1.1	15	TST	poor	No
		Total length		56.45				

Road categories A = dual carriage way

B = Single road with two lanes

C = Single road with one lane

5.4 Required interventions

5.4.1 Resurfacing of roads

Below given roads have developed potholes and broken edges and need resurfacing. The drainage system and pavement of shoulders if required will also be included in repairs. The wearing surface to be repaired will be TST..

Sr.No.	Name of Roads	Length (Rft.)
	Jhang Sadar	
R1	Jhang Bazar Chowk to Lela Majnoo gate	1250
R2	Block shah road via Hasnana Mohallah chowk lolay shah Grave yard	3150
R3	Old Khawaja sweet to Marzai wali Masjid	1450
R4	Graveyard Boundary wall to link Mai Chalaian wala Darbar	1325
R5	Wapda office S,E to back DPO office link Nawaz Chowk	1312
R6	Thana Saddar SHO office to Sheyan Molvi Masjid (Kotwali road)	1115
R7	Street Rasheed Khan wali opposite highway office mohallah wala	550
R8	Chowl Jogyian wala House Machian wala to Mohallah Bagh wala	850
R9	Main Bazar kot road Pacca to Fawara Chowk	2100
	Satellite Town	
R10	Behari colony via Riaz Chowk to chiniot road	4050

R11	Back of Model Bazar Circle of Tanki No.1	3280
R12	Govt Girls High school via National Bank regional office to chiniot road by pass road	1450
R13	Noorani Masjid wala road to Hussain road Rizwan Masjid	1672
R14	Rizwan Masjid road to W Block	1425
R15	Gulshan Fatima park A block Adjoining road	775
R16	Awais Chowk ground to 3 Marla Scheme	1026
R17	House Haji Manzoor to old Office Housing B block	1275
R18	Wajahat Shaheed Groud Adjacent road	1075
R19	Jamia Usmania to Behari colony via Masjid Allah wali	1125
R20	Malik Usman wala road Hadhari ground	450
R21	Haji Sher road B block	393
	Jhang city	
R22	Mohallah Qazian wala Hefazati Bund	1140
R23	Bab-e-Umar chowk to Khoh Jora wala Graveyard	610
R24	Milad chowk towards Majeed Public school back side Phare Shah Park to Sarghodha Road	1635
R25	Link road Katcha road to Pakka Railway road	541
R26	Masjid Habib to Jhang road street Sheikh Shahid Councilor wali	1220
R27	Ganda Nala to Taqwa Masjid link Katcha Railway road	390
R28	Tanga Adda to Ganda Nala link Sherien chowk	1650

5.4.2 Widening & improvement of roads

MC desires to widen and improve the below mentioned roads;

Sr#	Name of road	ROW	Length	Existing Width	Proposed Width	Construction /improvement of drains Required	Shoulders pavement Required
		Ft	Km	Ft	Ft	(YES/NO)	(YES/NO)
W1	Rasheed Chowk To Sargodha Road	70	0.8	20	20+20	Y	Y
W2	Adhiwal Chowk To Tanga Adda	65	2.25	20	20+20	Y	Y
W3	Adhiwal Chowk To Tang Adda Sadar	50	2.0	24	20+20	Y	Y
W4	Sargoda Raod To MPA Road	40	1.0	24	30	Y	Y
W5	Charagh Pehalwan Akhara To Hifaztibund	40	2.25	12	20	Y	Y

W6	Bohar Wala Chowk To Toba Road	55	0.70	25	20+20	Y	Y
W7	Dhudhi Mor To Forest Office	60	0.85	15+15	20+20	Y	Y
W8	Musa Chowk To Khokha Chowk	60	1.2	20+20	25+25	Y	Y
W9	Link Chinoit Road Green Belt To Behari Colony Via Bashir Chowk	70	0.9	12+12	20+20	Y	Y
W10	Link Chinoit Road Green Belt To Behari Colony Via Riaz Chowk	35	1.8	12	20	Y	Y
W11	Station Chowk To Railway Station	50	0.75	15	20	Y	Y

5.4.3 Construction of new roads

Sr#	Name Of Road	ROW	Length	Width	Construction of drains Required	Shoulders Pavement Required
		Ft	Km	Ft	(YES/NO)	(YES/NO)
N1	Katcha Railway Road To Shereen Chowk	35	1.2	20	Y	Y
N2	Scycle More To Govt. Girls College	25	1.7	16	Y	Y
N3	Sargodha Road To Chak Noor Shah Disposal	30	1.5	16	Y	Y
N4	Sabzi Mandi To By-Pass	40	2.5	24	Y	Y
N5	MPA Chowk To Street A-Rahman Wali	20	2	16	N	N
N6	Chiragh Pehalwan Akhara To Hifazitibund	30	0.9	20	N	Y
N7	Darul Sakina Road To Gojra Road	18	0.4	15	N	Y

Section-6
Parks and open spaces

6.1. Existing situation

6.1.1. The existing Parks

Jhang City has four parks as mentioned below;

S.N.	Name of park	Area in Kanals	Ownership & maintained by
1	Jamil Shaheed Park	9	Municipal Committee Jhang
2	Nawaz Sharif Park	60	do
3	Gojra Road Railway Crossing Park	5	do
4	DC Park	2	do

6.1.2. Existing condition of Parks

S No	Name of Park	1	2	3	4
		Jamil shaheed Park	Nawaz sharif Park	Gojra road railway crossing Park	DC Park
1	Location	Near DC House	Baba Ali	Near Gojra road railway crossing	Near Ganda toya
2	Area of Park in Kanals	9	60	5	2
3	Watering & Irrigation				
a	Tube well	No	No	No	No
b	Water Supply from municipal system	No	No	No	No
c	Underground water tank	No	No	No	No
d	Pumping unit	Yes	Yes	No	No
e	Distribution pipe lines	Yes	Yes	No	No
f	Valves	Yes	Yes	No	No
g	Sprinkler system	Yes	Yes	No	No
4	Landscaping & Plantation				
a	Grass beds	Poor	Poor	Poor	NA
b	Flower beds	NA	NA	NA	NA
c	Hedges	NA	NA	NA	NA
d	Plants	Poor	Poor	NA	Poor
5	Lights				
a	Poles and masts	Good	Good	NA	NA
b	Cables	Good	Good	NA	NA
c	Brackets and lights	Good	Good	NA	NA

d	Bulbs and tubes	Good	Good	NA	NA
e	Control units	Good	Good	NA	NA
6	Structures				
a	Buildings	Good	Good	NA	NA
b	Fountains & water fall structure	Good	NA	NA	NA
c	Walkways	Good	Poor	NA	NA
d	Bridges & culverts	NA	NA	NA	NA
e	Boundary wall & gate	Good	NA	NA	NA
f	Toilets	Poor	Poor	NA	NA
g	Lakes & brooks	Poor	NA	NA	NA
7	Mechanical equipment				
a	Pumping units	Good	Good	NA	NA
b	Swings	Poor	Poor	NA	NA
c	Children games	Poor	Poor	NA	NA
d	Fixtures	Poor	Poor	NA	NA
e	Benches	Poor	Poor	NA	NA
8	Sanitation & water supply				
a	Litter bins	Poor	Poor	NA	NA
b	Toilet fixtures	Poor	Poor	NA	NA
c	Sewerage system	Poor	Poor	NA	NA
d	Vegetation cuttings & disposal	Poor	Poor	NA	NA
e	Drinking water	Poor	Poor	NA	NA
f	Water pipes	Poor	Poor	NA	NA

6.2. Rehabilitation of the existing parks

Some of the facilities in these parks are working in good condition but some of these are in poor condition and need to be rehabilitated. On the other hand some important facilities are missing and need to be provided. The detail of all the required interventions in these parks for their upgrading is given blow;

S No	Name of Park	Jamil shaheed Park	Nawaz sharif Park	Gojra road railway crossing Park	DC Park
1	Location	Near DC House	Baba Ali	Near Gojra road railway crossing	Near Ganda toya
2	Area of Park in Kanals	9	60	5	2
3	Plantation of ornamental trees	Required	Required	Required	Required
4	Provision and fixing of brackets and lights on the existing light poles	Newly installed		Required	Required
5	Irrigation system	Sprinkler system available	Sprinkler system available	New system required	New system required
6	Provision of sprinkler lawn watering system	Existing	Existing	Required	Required
5	Installation of Service cables and LT Control	Not Required	Not Required	Required	Required

	panels				
6	Toilets & toilet fixtures	Rehabilitation of existing toilets	Rehabilitation of existing toilets	New Required	New Required
7	Lakes	No lake is there.	Rehabilitation of existing lake	No lake is there.	No lake is there.
8	Swings	Rehabilitation of the existing swings	Rehabilitation of the existing swings	New Required	New Required
9	Children electric outdoor games	Provision of space and three phase power connections for leasing the space to private sector installations.		-	-
10	Benches	Rehabilitation of the existing benches if possible or provision of new concrete benches		New required	New Required
11	Sewerage system	Rehabilitation of the toilet sewerage system	Rehabilitation of the toilet sewerage system	Provision of new drainage system for new toilets	Provision of new drainage system for new toilets
12	Drinking water	Rehabilitation of the existing facilities	Rehabilitation of the existing facilities	Provision of new facility	Provision of new facility
13	Cafeteria	Required	Required	Required	-
14	Parking lots	Rehabilitation of existing parking lots to provide more space and parking facilities		New required	-
15	Restraints for entry of the vehicles in the parks	The entry gates of both parks should be provided with podiums and stairs on both sides for beauty and vehicles restraint		-	-

6.3. Open spaces to parks

There is no open space in the city

6.4. O&M expenditure and revenue recovery

Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total for 5 years
O&M expenditure	1.20	2.20	1.760	1.030	1.350	7.54
Revenue earned	0	0	0	0	0	0
Percentage recovery vs O&M cost	0	0	0	0	0	0
Subsidy given	1.20	2.20	1.760	1.030	1.350	7.54

Section-7 Street Light

7.1. Existing situation

The detail of existing street light facilities in Jhang city is given below which includes street light on main roads and ward wise number of lights, type of light and status of operation.

A. Detail of street lights on main Roads								
Sr. No	Road	Type of luminaries				Total	Operational Status	Poles type WAPDA pole / street light pole
		Sodium	LED (100W)	Tube light (40 W)	Energy Saver / light bulb			
1	Ayoub Chowk To College Road	-	-	12	18	30	Partially Operational	St light pole + WAPDA
2	Ayoub Chowk To Railway Crossing	-	-	20	10	30	Partially Operational	WAPDA pole
3	Ayoub Chowk To By-Pass	-	35	-	-	35	Partially Operational	WAPDA pole
4	Ayoub Chowk To Rest House	-	20	-	-	20	Partially Operational	St light pole + WAPDA
5	Ayoub Chowk To Chandni Chowk	-	2	31	-	33	Partially Operational	WAPDA pole
6	Chandni Chowk To Disposal works	15	5	58	-	78	Partially Operational	WAPDA pole
7	Adhiwal Chowk To Tang Adda Sadar	-	20	30	-	50	Partially Operational	WAPDA pole
8	Charagh Pehalwan Akhara To Hifaztibund	-	-	50	-	50	Partially Operational	WAPDA pole
9	Adhiwal Chowk To Tanga Adda	-	6	46	-	52	Partially Operational	WAPDA pole
10	Chungi No. 22 To High School Chowk	-	-	4	-	4	Non-Operational	WAPDA pole
11	Tanga Adda City To Jora Khu	-	-	-	2	2	Non-Operational	WAPDA pole
12	Jhang Bazar To Tanga Adda	-	-	-	2	2	Non-Operational	WAPDA pole
13	Musa Chowk To Khokha Chowk	-	-	50	-	50	Partially Operational	WAPDA pole
14	Link Chinoit Road Green Belt To Behari Colony	-	-	25	-	25	Partially Operational	WAPDA pole
15	Link Chinoit Road Green Belt To Behari Colony Via Riaz Chowk	-	-	30	-	30	Partially Operational	WAPDA pole

16	Satellite Town Internal Roads	-	-	150	200	350	Partially Operational	WAPDA pole
17	SP Road	-	4	16	-	20	Partially Operational	WAPDA pole
18	DC House Road	2	1	7	-	10	Partially Operational	WAPDA pole
19	Nawaz Chowk To Jail Road	-	-	26	-	26	Partially Operational	WAPDA pole
20	Shaheed Road	-	-	10	-	10	Partially Operational	WAPDA pole
21	Gojra Road	-	100	-	-	100	Partially Operational	St light pole + WAPDA
Total		17	193	565	232	1007		

The lights on the some roads in the table, are mounted partly on the MC poles and partly on the WAPDA poles. The light on rest of the 19 roads are mounted on the WAPDA poles and fed by separate conductor owned and maintained by the MC Jhang.

B. Detail of street lights in different wards			
The ward wise detail of the lights is given below which also include the lights on the main roads as given above.			
Sr. No.	Ward	Area	Total Lights
1	Ward 1	Mohallah Gadhian Wala New Eid Gah Abadi , Street Anwar Jatt Wali	500
2	Ward 2	Mohallah Qazian Wala, Street Muslim Sheikh Abadi, Khon Joran Wala Mohallah Chaman Pura	550
3	Ward 3	Chungi No.22 Abadi Noor Shah Basti Nishan Wali, Street Zulifqar Wali Street Qadri Wali, Behind Gilani School Sargodha Road	590
4	Ward 4	Pakka Railway Road, Basti Abdullah Pur Mohallah Arrayian Wala, Street Masjid Hamza Wali Railway Station Road Jhang City	560
5	Ward 5	Mohallah Hathiwan Street Methay Wali Street Sarajan Wali, Street Afaq Philips Wali Street Arif Wali, Darbar Asim Shah Mohallah Sharifan Wala, Street Sabir Wali	500
6	Ward 6	Mohallah Munchian Wala Chah Nishan Wala, Behin Peharay Shah	580
7	Ward 7	Basti Kal Wali, Behind Abadi Adhiwal High School, Govt College For Boys	590
8	Ward 8	Mohallah Ghulab Wala, Azad Nasir Road , Mohallah Gadhian Wala, Mohallah Qahran Wala, Paharay Shah	600
9	Ward 9	Naqad Pura, Ali Town, Amir Colony	605

10	Ward 10	Millat Colony, Masjid Habib Adjoining Street, Ch Colony Boarding House.	580
11	Ward 11	Rasheed Chowk Railway Line Adjoining Abadies, Amin Abab , Basti Odan Wali , Pathan Colony, Christian Colony	570
12	Ward 12	Mohallah Shah Kabeer Wala, Sherin Chowk, Street Chak Wali, Street Zulifqar Wali, Katcha Railway Road, Basti Loharan Wali, Chah Hamyion Wala	585
13	Ward 13	Mohallah Kapayian Wala, Yousaf Abad, Street Baray Tangli Wali	600
14	Ward 14	Behind Lorry Adda , Basti Dewan Wali Gharbi, Imam Bargah Sharqi,	590
15	Ward 15	Madni Colony , Marzi Pura Sharqi	650
16	Ward 16	Jalalabad, Street New Abadi Tanki Wali Imam Kot Jalalabad	640
17	Ward 17	Bhatha Yousaf Wala, Abadi Yousaf Abad Basti Dewan Wali, Street Middle School Wali	660
18	Ward 18	Basti Noor Pura, Shahdab Colony, Faisal Colony , Canal Road	600
19	Ward 19	Dhaji Road, Street Press Wali, Street Abida Hospital Wali Katran Bair Wala, Mohallah Sahiwalia	690
20	Ward 20	Chambali Market, Street Pathran Wali, Street Rao Fiaz Wali , Street Ikhlaiq-Ul-Hassan Wakeel Wali, Street Mamoo Doodh Wali	620
21	Ward 21	Mohallah Bhabrana, Street Gandi Wali, Street Pipple Wali, Street Mahran Wali, Opposite Chori Garan	610
22	Ward 22	Mohallah Adjoining Budhay Wala Mohallah Sheikh Lohari, Mohallah Tahlian Wala	650
23	Ward 23	Katcha Kot Road, Pakka Kot Road, Mpa Road, Mohallah Gohar Shah, Basti Elahi Baksh Colony, Main Bazar, Street Fardoos Cinema Wali	620
24	Ward 24	Ahmad Nagar, Hussain Abad, Chungi No.1 Street Pindi Wali, - Street Nalay Wali	620
25	Ward 25	Adjoining Marzi Pura Gharbi , Mohallah Illah Abad	645
26	Ward 26	Basti More Wali, Basti Kahji Wali, Mohallah Bhabrana Wala, Qasmi Colony, Basti Loharan Wali	655

27	Ward 27	Mohallah Arryian Wala , Mohallah Sultan Wala, Street Pipple Wali Street Middle School Wali Street Ch Adrees Wakeel Wali	610
28	Ward 28	Chaman Pura, Purani Eid Gah, Mohallah Gohar Shah, Mohalalh Haqnawaz, Mohallah Ghosyia Abat Pura, Bakar Khana Road Chota	600
29	Ward 29	Mohallah Ghosyia Tarzan Road, Qasre Zahra Road , Malik Colony	620
30	Ward 30	Mohallah Lolay Shah, Basti Hurmal Pur, Basti Salhoon Shah Stret Khadam Shah Wali, Janaz Gah Road	640
31	Ward 31	Bashir Colony, Mair Chalian Wala Road Hanief Colony	610
32	Ward 32	Zulifqar Colony, Mohallah Baboo Wala, Mohallah Chandan Wala	630
33	Ward 33	Qasre Zahra Road , Malik Colony , Tarzan Road	660
34	Ward 34	Dhup Sari, Mohallah Hasnana Road, Street Ali Loharan Wali, Street Chaki Wali	620
35	Ward 35	Street Nalkay Wali, Abkari Road , Bloq Shah Road, Street Ghujra Wali ,	630
36	Ward 36	Khaki Shah Road , Mohallah Sultan Wala, Mohallah Muhammady , Mohallah Peeron Wala	570
37	Ward 37	Civil Line , Chah Fareed Wala, Street Burji Wali	510
38	Ward 38	Mohallah Saman Abad Street Ehle Hadis Wali, 55 Foot Road Basti Atta Wali New Abadi	600
39	Ward 39	Mohallah Hussain Abad, Toba Road, Basti Atta Wali, Basti Ali Arryian	550
40	Ward 40	Gulshan Colony, Nasir Abad, Street Imam Bargah Wali	560
41	Ward 41	Adjoining Street Basti Atta Wali Adjoining Basti Ali Arryian Street Pipple Wali	550
42	Ward 42	Station Road, Nazeer Colony, Ghala Mandi , Akbar Pura	560
43	Ward 43	Ch Colony, Rafique Abad, Iqbal Nagar, Farooq Abad, Saman Abad, Chah Murad Wala, Basti Islam Abad	550

44	Ward 44	Sadique Abad, Sultan Colony, F Block, Chah Bajay Wala, Tube Well No.3 Tube Well No. 4 Sugar Mill Colony, Officer Colony Toba Road	560
45	Ward 45	Behari Colony Basti Mochian Wali, Basti Khushian Wali Nasira Abad Street Lahore Tent Service Wali	605
46	Ward 46	Basti Faiz Abad Mohallah Ghosia, Mohallah Sharifan Wala Chungi No.22 Road	560
47	Ward 47	A Block, B- Block, Masjid Sadiquia Z Block Ex- Police Station Road	580
48	Ward 48	Ch Boota Road Behari Colony A Block Usmania Masjid	555
49	Ward 49	Ghazi Abad, Rana Colony, New Rana Colony , Tahir Colony, Darul Sakina Road	590
50	Ward 50	Rehmat Street Major Colony, Mukhtar Abad Mohalalh Muhamamdy Gojra Road, Islam Nagar, Gilani Colony	550
Total			29730

Total number of street light includes 7530 tube lights, 22,000 energy sever / light bulb and 200 LED Lights.

7.2. Rehabilitation of the existing street lights

Replacement of luminaries, cables, LT Panels etc. by LED 120 Watts on roads given below:

Sr. No.	Name of road	No. of Lights
R1	Ayoub chowk to Faisal abad road Phatak	27
R2	Millat college chowk	9
R3	People chowok New Eid Gah	19
R4	Link jail road	5
R5	Chungi No 3 to 4	11
R6	Lolay shah grave yard	27
R7	Milad chowk to grave yard	5
R8	Session chowk to Ayoub chowk	11
R9	Ayube chowk to Railway station Jhang City	21

Provision of new street lights

The lights on the below mentioned streets/ roads have been erected on WAPDA poles with separate conductor owned and maintained by MC. New poles with cables, brackets and LED

lights are required to be provided on these roads. As such this is to be treated as a new project and not the rehabilitation of the existing facility;

New street lights		
Sr. #	Name of road/street	Length (Km)
N1	Ayoub Chowk To College Road	0.7
N2	Bus stand road	0.40
N3	Rasheed Chowk To By-Pass	2.5
N4	Session Chowk To Chandni Chowk	0.5
N5	Chandni Chowk To Disposal 1	2.35
N6	Adhiwal Chowk To Tang Adda Sadar	1.4
N7	Charagh Pehalwan Akhara To Hifaztibund	2.30
N8	Adhiwal Chowk To Tanga Adda	1.4
N9	Chungi No. 22 To High School Chowk	1.1
N10	Tanga Adda City To Jora Khu	0.70
N11	Jhang Bazar To Tanga Adda	0.75
N12	Musa Chowk To Khokha Chowk	1.3
N13	Link Chinoit Road Green Belt To Behari Colony Via Bashir Chowk	0.5
N14	Link Chinoit Road Green Belt To Behari Colony Via Riaz Chowk	1.0
N15	Satellite Town Internal Roads	3.0
Total Length		25.7 KM

7.1. Expenditure on street lights

Undermentioned expenditure on the Operation & Maintenance of the existing street lights has been incurred by MC Jhang during the last 5 years. This includes the energy cost, manpower cost and cost of repairs and replacements;

Year	2013-14	2014-15	2015-16	2016-17	2017-18
O&M Expenditures (million Rs)	16.280	13.630	15.700	15.940	23.540

Section-8

Public Private Partnership projects & Collaborative Projects executed by MC

8.1. Planning & Execution of PPP projects

As informed by Chief Officer, no project in the Public Private Partnership Mode & Collaborative Mode has ever been executed by the Municipal Committee or defunct TMA Jhang. As such the key officers and staff have no experience as well as capacity for planning estimation and execution of such projects.

Section-9

Budgetary provisions on development of services infrastructure and O&M Cost

9.1. Development expenditure

The expenditure incurred on the development projects and on operation & maintenance of municipal services from year 2013-14 to 2017-18 is given below;

(All figures in million)

S.No	Description	2013-14	2014-15	2015-16	2016-17	2017-18
A	Expenditure on Development Projects	161.460	318.860	288.420	87.330	289.200
B	Expenditure on O&M of services and revenue generated					
1	Water supply (Exp.)	1.610	1.660	2.130	2.440	1.920
	Revenue earned	...	...	...	...	...
	Subsidy injected	1.610	1.660	2.130	2.440	1.920
2	Sewerage/drainage	50.020	57.310	52.920	39.720	40.630
	Revenue earned	...	...	...	...	...
	Subsidy injected	50.020	57.310	52.920	39.720	40.630
3	Solid waste management	17.090	12.440	14.150	16.970	23.600
	Revenue earned	...	...	...	...	...
	Subsidy injected	17.090	12.440	14.150	16.970	23.600
4	Parks	1.200	2.200	1.760	1.030	1.350
	Revenue earned	...	...	...	...	...
	Subsidy injected	1.200	2.200	1.760	1.030	1.350
5	Slaughter houses	1.340	1.360	1.380	1.411	1.710
	Revenue earned	0.710	0.690	0.670	0.690	1.800
	Subsidy injected	0.630	0.670	0.710	0.721	Nil

6	Street Light	16.280	13.630	15.700	15.940	23.540
	Total Expenditure	87.540	88.600	41.040	77.511	92.750
	Total Revenue generated	0.710	0.690	0.670	0.690	1.800
	Total subsidies injected	86.830	87.910	40.370	76.821	90.950

Section-10 Manpower deployment & shortage

The manpower deployed by MC Jhang in various Municipal Services is given below. MC is experiencing manpower shortage in some of the services.

S.No	Description	Sanctioned Regular strength	Actual Regular deployment	Regular Vacant Slots	Employed on daily basis	Shortage of regular personnel
A	Office manpower					
1	Key officers (BPS-17 & above)	6	3	3	-	3
2	Sub engineers	4	3	1	-	1
3	Support staff (BPS-16 & below)	119	89	30	-	30
	Total office manpower (A)	129	95	34	-	34
B	Municipal services					
1	Water supply	15	14	1	-	1
2	Sewerage	87	51	36	30	36
3	Solid waste management	477	282	195	121	195
4	Parks & Roads	23	21	2	-	2
6	Street lights	8	6	2	-	2
7	Slaughter houses	2	2	-	-	-
	Total municipal services (B)	612	376	236	151	236
	Grand Total (A+B)	741	471	270	151	270

Section-11
Public opinion surveys regarding the municipal service delivery

S. No.	Name of Service	Total persons interviewed	Opinion of the persons interviewed				Average consumer opinion
			Poor (Nos)	Fair (Nos)	Good (Nos)	Excellent (Nos)	
1	Water supply quantity	16	16	0	0	0	Very Poor
2	Water supply quality	16	16	0	0	0	Very Poor
3	Sewerage	16	14	02	0	0	Poor
4	Street sweeping	16	08	08	0	0	Poor
5	Solid waste collection & disposal	16	08	08	0	0	Poor
6	Condition Parks & play grounds	16	16	0	0	0	Very Poor
7	Slaughter house functioning	16	16	0	0	0	Very Poor
8	Street light functioning	16	16	0	0	0	Very Poor
9	General condition of roads	16	16	0	0	0	Very Poor
10	Complaint attending capability	16	14	04	0	0	Poor

Survey of Public general view over service delivery

S.No	Name of person interviewed	Muhallah or colony	Water supply		Sewerage	Street sweeping	Solid waste collection & disposal	Roads	Parks & play grounds	Slaughter houses	Street light	Complaint addressal
			Quantity	Quality								
1	Sohail shah	Satellite Town	Poor	Poor	Fair	Fair	Fair	Poor	Poor	Poor	Poor	Fair
2	Ali raza	Satellite Town	Poor	Poor	Fair	Fair	Fair	Poor	Poor	Poor	Poor	Fair
3	Rana haseeb	Behari Colony	Poor	Poor	Poor	Fair	Fair	Poor	Poor	Poor	Poor	Poor
4	Ali Murtaza	Mohalla Sultan Wala	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Fair
5	Qasim	Basti Sultan Noon	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Fair	Poor
6	Abdulla	Mohalla Chand Wala	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Fair	Fair
7	Ch. Adnan	Mohalla Sultan Wala	Poor	Poor	Poor	Fair	Fair	Poor	Poor	Poor	Poor	Poor
8	Zulqurnain	Mohalla Marzi Pura	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor
9	Saleem	Basti Kal Wali	Poor	Poor	Poor	Fair	Fair	Poor	Poor	Poor	Poor	Poor
10	Umair aslam	Mohalla Babrana	Poor	Poor	Poor	Fair	Fair	Poor	Poor	Poor	Poor	Poor
11	Raja hannan	Mohalla Yousafabad	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor
12	M. shafiq	Basti Noor Pura	Poor	Poor	Poor	Fair	Fair	Poor	Poor	Poor	Poor	Poor
13	Hasan ali	Mohalla Yousafabad	Poor	Poor	Poor	Fair	Fair	Poor	Poor	Poor	Poor	Poor
14	M. Irfan	Mohalla Mai Heer	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor
15	Imran	Shareefan Wala	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor
16	Kashif mahood	Shareefan Wala	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor