

RECORD OF DISCUSSIONS
ON
THE PROJECT FOR WATER SUPPLY, SEWERAGE AND
DRAINAGE MASTER PLAN OF FAISALABAD
IN
THE ISLAMIC REPUBLIC OF PAKISTAN
AGREED UPON BETWEEN
FAISALABAD WATER AND SANITATION AGENCY
AND
JAPAN INTERNATIONAL COOPERATION AGENCY

Lahore, 3 March, 2016



Mr. Yasuhiro Tojo
Chief Representative
JICA Pakistan Office



Mr. Syed Zahid Aziz
Managing Director
Water and Sanitation Agency
Faisalabad Development
Authority



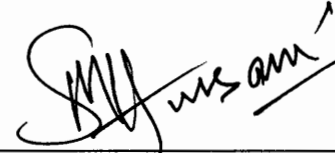
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Mr. Asim Iqbal
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Based on the minutes of meetings on the Detailed Planning Survey on the Project for Updation of Water Supply Sewerage and Drainage Master Plan of Faisalabad City (hereinafter referred to as "the Project") signed on 18 November, 2015 among Water and Sanitation Agency, Faisalabad Development Authority (hereinafter referred to as "WASA Faisalabad"), other authorities concerned of the Islamic Republic of Pakistan and the Japan International Cooperation Agency (hereinafter referred to as "JICA"), JICA held a series of discussions with WASA Faisalabad and relevant organizations to develop a detailed plan of the Project.

Both parties agreed the details of the Project and the main points discussed as described in the Appendix 1 and the Appendix 2 respectively.

Both parties also agreed that WASA Faisalabad, the counterpart to JICA, will be responsible for the implementation of the Project in cooperation with JICA, coordinate with other relevant organizations and ensure that the self-reliant operation of the Project is sustained during and after the implementation period in order to contribute toward social and economic development of the Islamic Republic of Pakistan (hereinafter referred to as "Pakistan").

The Project will be implemented within the framework of the Agreement on Technical Cooperation signed on 30 April, 2005 (hereinafter referred to as "the Agreement") and the Note Verbales exchanged on April 20, 2015 between the Government of Japan (hereinafter referred to as "GOJ") and the Government of Pakistan (hereinafter referred to as "GOP").

Appendix 1: Project Description

Appendix 2: Minutes of Meetings on the Project for Updation of Water Supply Sewerage and Drainage Mater Plan of Faisalabad City

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PROJECT DESCRIPTION

I. BACKGROUND

In the "Punjab Drinking Water Policy" approved in 2011, the Government of Punjab Province (hereinafter referred to as "GOPb") set development vision as "provision of safe drinking water of an adequate quantity at an affordable cost through equitable, efficient and sustainable services to all citizens by 2020" in the province by strengthening the capacity of Water and Sanitation Agencies (WASAs) in urban area as high priority, as well as sustainable access to improved sanitation for all by 2025 described in "National Sanitation Policy" set in 2006. GOJ expressed that assistance for water supply and sanitation especially in urban area would be prioritized in the "Country Assistance Policy for the Islamic Republic of Pakistan (April 2012)".

WASA Faisalabad had formulated its first development master plan (M/P) in cooperation with the Asian Development Bank (ADB) in 1976, and revised it in 1993 under the assistance of the World Bank (WB). However, only the part of investment plan had been implemented because of shortage of the budget and lack of groundwater resources. As the target year of existing M/P was set in 2018, WASA Faisalabad would not have the integrated M/P after 2018.

Faisalabad, the third largest city of Pakistan, has a population of 3.1 million (2013) and average population growth rate is approximately 3.2% (1990-2013). 98% of water source depends on groundwater recharged from irrigation canals and rivers, and pumped up by mainly tube wells around Chenab River and Jhang Branch canal.

Although WASA Faisalabad had been tackling the water resources development under the assistance from foreign development partners including JICA, the amount of existing water sources remain 60% of the estimated demand in 2017. Regardless of this situation, further water resources development have not been remarkably progressed as there are strong concerns for additional development of groundwater while surface water development requires the coordination for the water right.

With regard to sewerage and drainage, presently, a wastewater treatment plant operates in the western area of Faisalabad. Its capacity is very limited. Most of wastewater generated in Faisalabad is directly discharged to the rivers through drains without any treatment. In addition, there are some areas prone to inundation.

In terms of financial aspect, the billing system is not based on the consumption volume but the dimensions of lands which customers have, thus there is no incentive of efficient water use. In addition, low tariff collection ratio and high Non-Revenue Water (NRW) ratio estimated as 33% made WASA Faisalabad difficult to cover the cost for operation and maintenance. WASA Faisalabad is regularly in serious financial deficit even after receiving subsidy from the Government of Punjab Province.

As described, while the rapid population growth made water demand increase, WASA Faisalabad is facing the range of difficulties such as deteriorated infrastructures, insufficient operation and maintenance capacity due to the lack of trained staff, shortage of operation cost due to the low revenue resulting in a serious imbalance between supply and demand of water.

Under these circumstances, to formulate M/P for appropriate service by WASA Faisalabad, GOP submitted the official request for the Technical Cooperation for Development Planning on the Project to GOJ.

II. OUTLINE OF THE PROJECT

1. Title of the Project

Though the requested title of the Project was "The Project for Updation of Water Supply Sewerage and Drainage Master Plan of Faisalabad City", the both sides decided to change it to "The Project for Water Supply, Sewerage and Drainage Master Plan of Faisalabad" to reflect the goal and activities of the Project.

2. Expected Goals which will be attained after implementing the Proposed Plan

- (1) The Master Plan to be formulated in the Project (hereinafter referred to as "the M/P") is authorized as an official development plan of WASA Faisalabad.
- (2) Necessary activities are continuously implemented based on the M/P.

3. Outputs

- (1) To develop the integrated M/P for water supply, sewerage and drainage in Faisalabad
- (2) To enhance the institutional capacity for implementation of the M/P

4. Activities

Basic Study

- (1) Review of the Faisalabad Environmental Infrastructure M/P in 1993
- (2) Collection and analysis of data and information
 - Urban development and land use plan
 - Natural and socio-economic conditions
 - Current situations of water resources and water supply facilities
 - Groundwater potential (including the possibility of deep fresh groundwater)
 - Current situations of sewerage and drainage facilities (including reassessment of pumping needs to avoid multiple pumping, and analysis of ponding areas)
 - Law and regulation, policy, and organization related to water, sewerage and drainage
 - Organization, operation, and financial management of WASA Faisalabad
- (3) Water quality survey (water sources, raw and treated wastewater, industrial wastewater)
- (4) Public awareness survey (socio-economic survey)
- (5) Identification of issues on water supply, sewerage and drainage

Formulation of M/P

A. Water Supply

- (1) Setting of planning strategy and goal of water supply plan
- (2) Delineation of water supply service area
- (3) Planning basis (population, per capita water consumption, non-domestic water supply volume, etc.)
- (4) Water demand projection
- (5) Water sources development plan
- (6) Water supply pipeline plan (raw water transmission, treated water transmission, distribution network)
- (7) Distribution water storage and pumping plan
- (8) Water treatment plant (WTP) plan
- (9) Phased implementation plan
- (10) Project cost estimation
- (11) Economic and financial evaluation
- (12) Strategic environmental assessment
- (13) Project evaluation
- (14) Recommendation of priority project
- (15) Preliminary design for the priority project

B. Sewerage and Drainage

- (1) Setting of planning strategy and goal of sewerage and drainage plan (including integration of pumping systems, separation of wastewater and storm water, and storage of storm water)
- (2) Delineation of sewerage and drainage planning area
- (3) Planning basis (population, per capita wastewater generation, design influent and effluent quality, etc.)
- (4) Trunk sewer plan and preliminary design
- (5) Wastewater treatment plant (WWTP) plan and preliminary design
- (6) Drainage plan and preliminary design
- (7) Phased implementation plan
- (8) Project cost estimation
- (9) Economic and financial evaluation
- (10) Strategic environmental assessment
- (11) Project evaluation
- (12) Recommendation of priority project

C. Institution and Finance

- (1) Organization and management improvement plan
- (2) Finance plan

Pilot Activity for Water Supply

- (1) Planning of pilot activity
- (2) Selection of a pilot activity area
- (3) Hydraulic isolation of the pilot activity area
- (4) Improvement of distribution
- (5) Promotion activity for water meter installation
- (6) Leakage detection and repair work
- (7) Legalization of illegal connections
- (8) Improvement of bill collection
- (9) Training of meter readers
- (10) Evaluation and recommendations

5. Input

(1) Input by JICA

(a) Dispatch of Mission

i) Water Supply and Sewerage M/P

- 1) Team leader / Water supply planner
- 2) Water supply pipeline planner
- 3) Water treatment plant planner
- 4) Hydraulic analysis specialist
- 5) Hydrogeologist
- 6) Sewerage and drainage planner
- 7) Sewer and drain planner
- 8) Wastewater treatment plant planner
- 9) Mechanical and electrical facility planner
- 10) Cost estimator / construction planner
- 11) Organization / management / institution specialist
- 12) Billing collection and customer relations specialist
- 13) Economic and financial specialist
- 14) Environment and social consideration specialist
- 15) GIS database specialist
- 16) Any other Specialists as required

ii) Pilot Activity

- 1) Water supply operation and management
- 2) NRW reduction specialist
- 3) Leakage detection and repair specialist
- 4) Social mobilization specialist
- 5) Any other Specialists as required

Input other than indicated above will be determined through mutual consultations between JICA and WASA Faisalabad during the implementation of the Project, as necessary.

(b) Machinery and Equipment

JICA will provide the machinery and equipment necessary to implement the Project.

(c) Training

Approximately eight (8) persons directly related to the Project directly nominated by WASA Faisalabad and JICA will be trained in Japan and other country.

(2) Input by WASA Faisalabad

WASA Faisalabad will take necessary measures to provide at its own expense:

- (a) Services of WASA Faisalabad's counterpart personnel and administrative personnel as referred to in II-6;
- (b) Suitable office space with necessary equipment;
- (c) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the equipment provided by JICA;
- (d) Information as well as support in obtaining medical service;

- (e) Credentials or identification cards;
- (f) Available data (including maps and photographs) and information related to the Project;
- (g) Running expenses necessary for the implementation of the Project;
- (h) Expenses necessary for transportation within Pakistan of the equipment referred to in II-5 (1) as well as for the installation, operation and maintenance thereof; and
- (i) Necessary facilities to members of the JICA missions for the remittance as well as utilization of the funds introduced into Pakistan from Japan in connection with the implementation of the Project

6. Implementation Structure

The project organization chart is given in the Annex I. The roles and assignments of relevant organizations are as follows:

(1) WASA Faisalabad

(a) Project Director

Managing Director will be responsible for overall administration and implementation of the Project.

(b) Project Manager

Director (Water Resources / Coordination) will be responsible for the day-to-day implementation of the Project.

(2) Project Implementation Unit (PIU)

WASA Faisalabad will create a Project Implementation Unit (PIU) that will implement day-to-day Project activities. During the Project, the members of PIU will undergo On-The-Job-Training from JICA Mission.

(3) JICA Mission

The JICA mission will give necessary technical guidance, advice and recommendations to WASA Faisalabad on any matters pertaining to the implementation of the Project.

(4) Joint Coordinating Committee

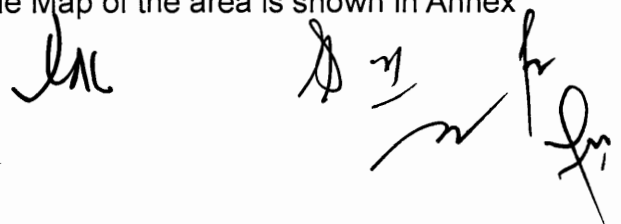
Joint Coordinating Committee (hereinafter referred to as "JCC") will be established in order to review overall progress of the Project, and discuss necessary measures to support the implementation of the M/P as the Government of Punjab Province (hereinafter referred to as "GOPb"). JCC will be held whenever deems it necessary. A list of proposed members of JCC is shown in the Annex II.

(5) Technical Committee

Technical Committee (hereinafter referred to as "TC") will be organized to confirm the progress of formulation of the M/P, discuss the technical matters, and facilitate inter-organizational coordination. TC will be held at least twice a year. A list of proposed members of TC is shown in the Annex II.

7. Project Site(s) and Beneficiaries

The project site is the boundary area of Faisalabad Peri-Urban Structure Plan. Beneficiaries are people living in the area. The Map of the area is shown in Annex III.



8. Duration

The duration of the Project would be thirty six (36) months from the date when the JICA Mission member(s) arrives. The Project will be carried out in accordance with the tentative schedule shown in the Annex IV. The schedule is tentative and subject to change when both parties agree upon any necessity that will arise during the course of the Project.

9. Reports

JICA will prepare and submit the following reports to WASA Faisalabad in English.

- (1) Twenty (20) copies of Inception Report at the commencement of the first work period in Pakistan
- (2) Twenty (20) copies of Progress Report at the end of Basic Survey
- (3) Twenty (20) copies of Interim Report which contains outline of the M/P
- (4) Twenty (20) copies of Progress Report for Pilot Activity for approximately every 6 months after the commencement of Pilot Activity
- (5) Forty (40) copies of Draft Final Report at the end of formulation of the M/P
- (6) Forty (40) copies of compilation of planning criteria which includes planning basis such as a) population, per capita water consumption, non-domestic water supply volume, for water supply, b) population, per capita wastewater generation, design influent and effluent quality, for sewerage and c) rainfall intensity and run-off coefficient for drainage
- (7) Forty (40) copies of Final Report within one (1) month after the receipt of the comments on the Draft Final Report
- (8) Forty (40) copies of Completion Report for Pilot Activity at the time of completion of the Project

10. Environmental and Social Considerations

WASA Faisalabad will abide by 'JICA Guidelines for Environmental and Social Considerations (April, 2010)' in order to ensure that appropriate considerations will be made for the environmental and social impacts of the Project.

11. Management of Safety for Construction Works

For construction works which will be carried out in the Project, WASA Faisalabad and JICA will assure the management of safety in accordance with the "Safety Plan" and "Method Statements of Safety" submitted by contractors based on the Guidance for the Management of Safety for Construction Works in Japanese ODA Projects.

III. UNDERTAKINGS OF WASA FAISALABAD AND GOP

1. WASA Faisalabad and GOP will take necessary measures to:

- (1) ensure that the technologies and knowledge acquired by the Pakistan nationals as a result of Japanese technical cooperation contributes to the economic and social development of Pakistan, and that the knowledge and experience acquired by the personnel of Pakistan from technical training as well as the equipment provided by JICA will be utilized effectively in the implementation of the Project; and
- (2) grant privileges, exemptions and benefits to members of the JICA missions referred to in II-5 above and their families, which are no less favorable than those granted to members of the missions and their families of third countries

or international organizations performing similar missions in Pakistan.

Other privileges, exemptions and benefits will be provided in accordance with the Agreement on Technical Cooperation signed on April 30th, 2005 between GOJ and GOP.

IV. MONITORING AND EVALUATION

JICA will conduct the following evaluations and surveys to verify how the proposed plan is utilized and draw lessons. WASA Faisalabad is required to provide necessary support for them.

1. Ex-post evaluation three (3) years after the project completion, in principle
2. Follow-up surveys on necessity basis

V. PROMOTION OF PUBLIC SUPPORT

For the purpose of promoting support for the Project, WASA Faisalabad will take appropriate measures to make the Project widely known to the people of Pakistan.

VI. MISCONDUCT

If JICA receives information related to suspected corrupt or fraudulent practices in the implementation of the Project, WASA Faisalabad and relevant organizations will provide JICA with such information as JICA may reasonably request, including information related to any concerned official of the government and/or public organizations of the Pakistan.

WASA Faisalabad and relevant organizations will not, unfairly or unfavorably treat the person and/or company which provided the information related to suspected corrupt or fraudulent practices in the implementation of the Project.

VII. MUTUAL CONSULTATION

JICA and WASA Faisalabad will consult each other whenever any major issues arise in the course of Project implementation.

VIII. AMENDMENTS

The record of discussions may be amended by the minutes of meetings between JICA and WASA Faisalabad. The minutes of meetings will be signed by authorized persons of each side who may be different from the signers of the record of discussions.

(End)

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| Annex I | Project Organization Chart |
| Annex II | List of Proposed Members of Joint Coordinating Committee/Technical Committee |
| Annex III | Map of the target area |
| Annex IV | Tentative Schedule |
| Annex V | Terms of Reference for Environmental and Social Considerations |

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Annex I Project Organization Chart

Joint Coordinating Committee Provincial level

Technical Committee Faisalabad level

Explanation ↑ Discussion ↓

Project Director

Managing Director
WASA Faisalabad

Project Implementation Unit *set up in WASA Faisalabad

Project Manager

Director
(Water Resources /
Coordination)

Deputy Director
(Finance)

Deputy Director
(Engineering)

*3 persons

Assistant Director
(GIS)

Assistant Director
(Planning & Design)

Any other staff,
as required

JICA
Contract
JICA Mission

- 1) Formulation of the M/P
- 2) Technical Transfer among PIU

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- M/P
- JICA Mission
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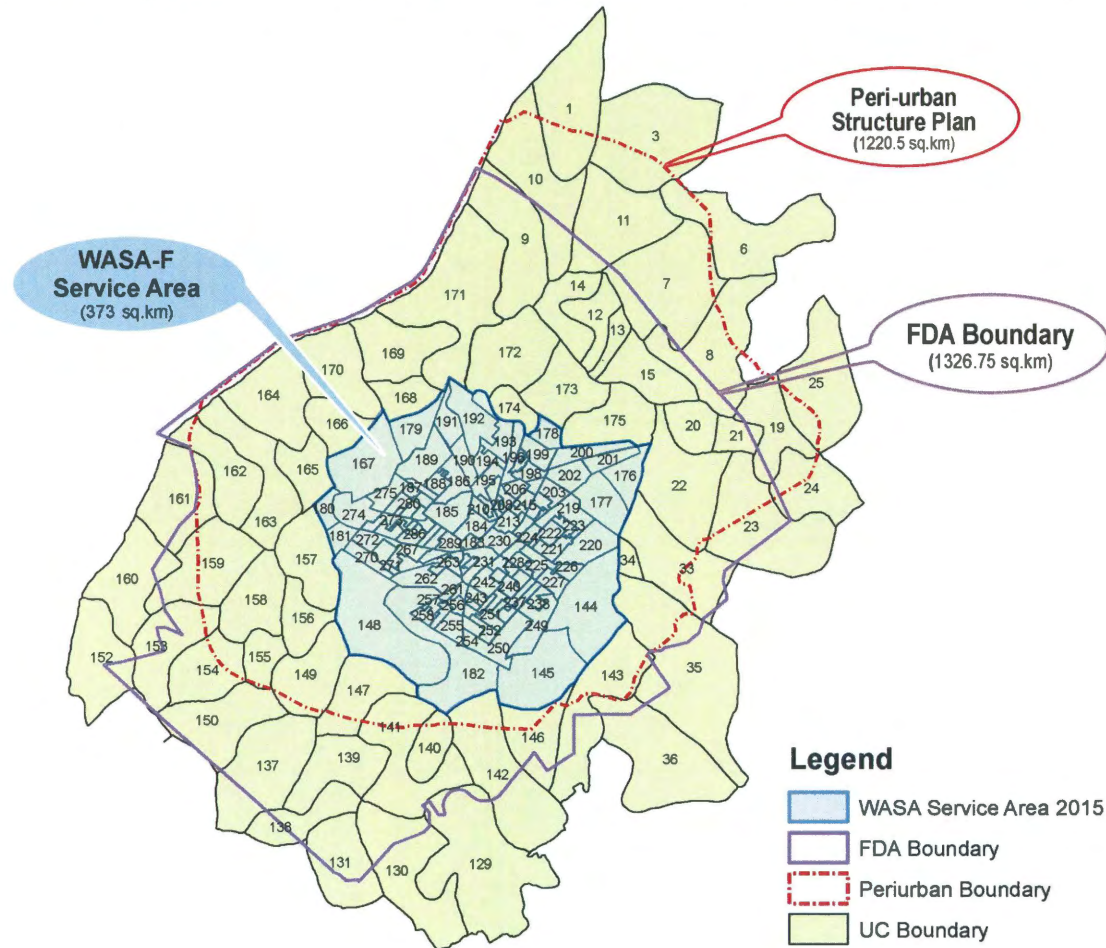
Annex II List of Proposed Members of Joint Coordinating committee/
Technical Committee

| Structure | Function | Member |
|------------------------------|--|--|
| Joint Coordinating Committee | <p>A Joint Coordinating committee (hereinafter referred to as "JCC") will be organized at the provincial level to review overall progress of the Project, and discuss necessary measures to support the implementation of the M/P as GOPb.</p> <p>JCC will meet whenever the necessity arises (at least at the submission of inception report and draft final report) in order to fulfill the following functions:</p> <ol style="list-style-type: none"> 1) To review the progress of the Project; 2) To exchange opinions on major issues that may arise during the implementation of the Project; 3) To coordinate related organizations at the provincial level; 4) To discuss any other issue(s) pertinent to the smooth implementation of the Project. | <ol style="list-style-type: none"> 1) Chairperson: Secretary of Planning and Development of GOPb (P&D) 2) Members of the Pakistan Side: <ol style="list-style-type: none"> a. Secretary Finance of GOPb b. Secretary Irrigation of GOPb c. Secretary, Housing Urban Development and Public Health Engineering of GOPb (HUD/PHED) d. Secretary of Environmental Protection Department e. Mayor of Municipal Corporation, Faisalabad f. District Coordination Officer (DCO), Faisalabad g. Director General, Faisalabad Development Authority (FDA) h. Managing Director, WASA Faisalabad i. CEO, Urban Sector Planning and Management Services Unit Pvt. Ltd (UU) j. Any other official concerned, to be co-opted by GOPb, if necessary 3) Members of the Japanese Side: <ol style="list-style-type: none"> a. Representative of JICA Pakistan Office b. Members of the JICA Missions c. Any other official concerned, to be co-opted by JICA, if necessary |
| Technical Committee | <p>The Technical Committee (hereinafter referred to as "TC") will be organized to confirm the progress of formulation of the M/P, discuss the technical matters, and facilitate inter-organizational coordination. TC will be held at least twice a year.</p> | <ol style="list-style-type: none"> 1) Chairperson: Managing Director, WASA Faisalabad 2) Members of the Pakistan Side: <ol style="list-style-type: none"> a. Senior Chief (Urban Development), P&D b. Representative of HUD&PHED c. Representative of Mayor, Municipal Corporation, Faisalabad d. Representative of DCO (District Coordination Officer), Faisalabad e. Representative of Irrigation Department f. Representative of UU g. Representative of Faisalabad Waste Management Company h. Representative of Environmental Protection Agency i. Any other official concerned, to be co-opted by WASA Faisalabad, if necessary 3) Members of the Japanese Side: <ol style="list-style-type: none"> a. Representative of JICA Pakistan Office b. Members of the JICA Missions c. Any other official concerned, to be co-opted by JICA, if necessary |

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Annex III The Map of the target area

*The target area is "Peri-urban Structure plan" described as line with red dot.
Map Showing WASA Service Area and Peri-urban Structure Plan Boundary



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Annex IV Tentative Schedule

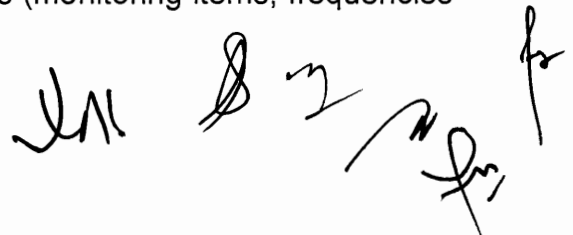
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|------------------------|---------------|---|---|---|---|---|---|----------------------|---|----|----|----|----|----|----|----|----|----|----|----|----|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
| Survey Schedule | ← Basic Study | | | | | | | ← Formulation of M/P | | | | | | | | | | | | | | ← Pilot Activity | | | | | ← | | | | | | | | | | |
| Work in Faisalabad | ■ | | | | | | | ■ | | | | | ■ | | | | ■ | | | | | | | | | | | | | | | | | | | | |
| Inception Report | ▲ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Progress Report | | | | | | | | ▲ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Interim Report | | | | | | | | | | | | | | ▲ | | | | | | | | | | | | | | | | | | | | | | | |
| Draft Final Report | | | | | | | | | | | | | | | | | | | ▲ | | | | | | | | | | | | | | | | | | |
| Final Report | | | | | | | | | | | | | | | | | | | | | ▲ | | | | | | | | | | | | | | | | |
| Work in Japan | ■ | | | | | | ■ | | | | | | | ■ | | | ■ | | | | | | | | | | | | | | | | | | | | |
| Training | | | | | | | ▲ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Workshop | | | | | | | | | ■ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pilot Activity (PA) | | | | ■ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Progress Report (PA) | | | | | | | | | | | ▲ | | | | | | ▲ | | | | | | | | ▲ | | | | | | ▲ | | | | | | |
| Completion Report (PA) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ▲ | |

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Annex V Terms of Reference for Environmental and Social Considerations

The Project should include Terms of Reference (TOR) for Environmental and Social Considerations in line with the JICA Guidelines as follows:

- (1) Review of existing development plans, development projects, studies, and public and private investments;
- (2) Analysis to identify constraints to development, factors of promoting development;
- (3) Analysis of alternatives for achieving the goals of the Project;
- (4) Consideration of contents of developed policy and plans;
- (5) Scoping (clarify extremely important items on environmental and social impacts and its evaluation methods at the time of decision making of the M/P;
- (6) Confirmation of existing environmental and social conditions of the proposed project area in the M/P as a base line data (land use, natural environment, culture and lifestyle of indigenous people and their communities, local economy and socio-cultural environment and others);
- (7) Confirm legal framework and institution of Pakistan on environmental and social considerations, and examine the experiences of SEA study in Pakistan; a) Laws, regulations and standards related to environmental and social considerations (environmental impact assessment, resettlement, public participation, information disclosure and others);
- (8) SEA Study reports conducted in Pakistan, development projects, and other relevant information;
- (9) Gaps between the "JICA Guidelines for Environmental and Social Considerations (April 2010)" and legal framework of Pakistan on environmental and social considerations;
- (10) Outlines of relative agencies and institutions responsible for the implementation of the projects;
- (11) Prediction of likely impacts of proposed projects in the M/P;
- (12) Assessment of likely impacts of the projects above 11) and comparative analysis of alternatives of proposed projects, including "without project" option;
- (13) Examination of the mitigation measures (to be avoided, minimized and compensated);
- (14) Examination of the monitoring methods (monitoring items, frequencies and methods); and
- (15) Support to hold stakeholder meetings.



- (16) Support to hold information disclosure.
- (17) Scoping for the selected prioritized project (including the development of possible alternative analysis, the clarification of important items on environmental and social impacts and its evaluation methods)

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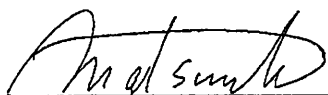
**MINUTES OF MEETINGS
ON
THE DETAILED PLANNING SURVEY
ON
THE PROJECT FOR UPDATION OF WATER SUPPLY SEWERAGE AND
DRAINAGE MASTER PLAN OF FAISALABAD CITY
IN THE ISLAMIC REPUBLIC OF PAKISTAN**

In response to the official request submitted by the Government of the Islamic Republic of Pakistan (hereinafter referred to as "GOP") for "The Project for Updation of Water Supply Sewerage and Drainage Master Plan of Faisalabad City" (hereinafter referred to as "the Project"), the Government of Japan entrusted the preparation of the Project to the Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency implementing the Japanese Government's technical cooperation.

Accordingly, JICA dispatched the Detailed Planning Survey Team (hereinafter referred to as "the Team"), which is headed by Mr. Shigeyuki Matsumoto, Senior Advisor, JICA, and held a series of discussions with Water and Sanitation Agency, Faisalabad Development Authority (hereinafter referred to as "WASA Faisalabad") and other authorities concerned of the Islamic Republic of Pakistan to develop a detailed plan of the Project.

In the course of discussions and field surveys, JICA and the Pakistani authorities concerned (hereinafter referred to as "both sides") confirmed the main items described in the attached sheets.

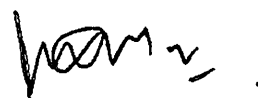
Lahore, 18 November, 2015



Mr. Shigeyuki Matsumoto
Leader
Detailed Planning Survey Team
JICA



Mr. Syed Zahid Aziz
Managing Director
Water and Sanitation Agency
Faisalabad Development
Authority



Mr. Yawar Hussain
Director General
Faisalabad Development
Authority



Mr. Asim Iqbal
Secretary
Housing, Urban Development &
Public Health Engineering
Department,
Government of Punjab



Secretary
Planning & Development
Department
Government of Punjab



Mr. Muhammad Tahir
Deputy Secretary (Japan)
Economic Affairs Division
Government of Pakistan

ATTACHMENT

1. Draft of Record of Discussions

As a result of the discussions, both sides agreed on the contents of the draft of Record of Discussions (R/D) shown in Appendix. After discussion and approval of the JICA Headquarters, the commencement of the Project will be determined by signing of R/D.

The Team explained that the attached R/D is draft and is subject to change in authorization process by the competent authorities of both sides.

2. Title of the Project

Both sides confirmed that the name of the Project would be changed to "The Project for Water Supply, Sewerage and Drainage Master Plan of Faisalabad" subject to the approval of the both governments.

3. Implementing agency

Both sides agreed that WASA Faisalabad would be the implementing agency of the Project. ○

4. Target area

Both sides confirmed that the target area of the M/P would be the same as Peri-Urban Structure Plan boundary area, as this is regarded as the current basis of the urban development in Faisalabad.

5. Target year

Both sides confirmed that the M/P would be 20 years development plan. As the M/P will be developed from 2016 to 2018 through the technical cooperation from JICA, the M/P covers the period from 2018 to 2038.

6. Relationship between the M/P and other development plans.

Both sides confirmed the Master Plan to be formulated in the Project (hereinafter referred to as "the M/P") would include the priority area stipulated in the Peri-Urban Structure Plan which had been formulated by the Government of Punjab Province (hereinafter referred to as "GOPb"). ○

Both sides also confirmed that, as the Project would be implemented in the same time of the discussion for setting up national targets and indicators for Sustainable Development Goals (SDGs), WASA Faisalabad should share necessary information such as the trend of above discussion, influence to the development plan of Faisalabad, etc. Both sides also confirmed that to implement the actions based on the recommendations in the M/P could contribute to achieve the goals and targets of SDGs.

7. Policy for the implementation of the M/P

WASA Faisalabad understood that the survey for the M/P would be conducted jointly by the Pakistani counterparts (hereinafter referred to as "C/P") and the JICA Mission. Therefore, involvement of C/P is essentially important. WASA Faisalabad assured that it would authorize the M/P as own official development plan and implement the necessary actions with own initiative as the responsibility to implement the priority projects and actions to be recommended in the M/P lies with WASA Faisalabad.

Based on the above, both sides confirmed that Managing Director of WASA Faisalabad would initiate the necessary coordination among GOPb for actions according to the M/P.

WASA Faisalabad also explained that the M/P would be officially authorized through the approval of the Governing Body of Faisalabad Development Authority (FDA).

WASA Faisalabad stated that expected financial sources to implement the M/P would be donor financing (JICA, the World Bank, ADB, etc.), PPP and ADP (Annual Development Programme). In addition, its own budget could be increased by improving bill collection efficiency, raising tariff for industrial and commercial customers, shifting to the volumetric tariff system, legalizing illegal connections, requesting the increase of subsidy and receipt of the property tax share, increasing the number of connections, and reducing operation cost. The team explained that financial feasibility would be further considered through the Project.

8. Purpose of the M/P

The purpose of the M/P is to formulate the integrated development plan for water supply, sewerage and drainage in service area of WASA Faisalabad and to clarify the feasible recommendations based on the verification.

To enable the sustainable service to people in Faisalabad City by WASA Faisalabad, both sides confirmed that to create the virtuous cycle between the improvement of service level and the increase in revenue is essentially important.

9. Scope of the Project

Based on the purpose of the M/P, both sides confirmed the scope of the Project would include the analysis of the present situation and capacity assessment, recommendations for improvement of institutional management which would be carried out by WASA Faisalabad, future investment plan including selection of priority projects for water supply, sewerage and drainage.

With regard to the selection of the priority projects, the M/P would cover the information necessary to prepare project proposals to be submitted to GOP or any other investors.



Both sides agreed that the M/P would include the preliminary design of the facilities, cost estimation and implementation plan.

10. Output of preliminary design

A: for water supply

Both sides confirmed the output of preliminary design for water supply would be concept drawings such as general layout of WTP with dimensions, pump arrangement at pumping station, plan of trunk main routes, typical drawing for pipeline section views and pipe bridge (if any), layout and section for OHR(s) and ground reservoir(s), of the facilities selected as priority project(s).

B: for sewerage and drainage

Both sides confirmed the output of preliminary design for sewerage and drainage facilities to be proposed in the M/P would be:

- 1) General plan and profile of trunk sewers,
- 2) General plan and section of main drains,
- 3) General layout plan, schematic hydraulic profile of wastewater and sludge treatment facilities,
- 4) Capacity calculations for determining the size of trunk sewers and main drains,
- 5) Capacity calculations for determining the dimensions of treatment facilities, and
- 6) Capacity calculations for determining the capacity and number of pumps required

11. Water resources development

WASA Faisalabad explained that its basic policy for water resources development was shift from groundwater to surface water by future development of Gogera branch (GB) canal, Jhang Branch (JB) canal, and Rakh branch (RB) canal, while the existing groundwater sources needed to be carefully operated in order not to deplete the groundwater potential and negatively affect the surrounding groundwater use. Future development of groundwater will be supplementary.

The Team stated that it would be necessary to consider the aspects of integrated urban water management, such as demand-side management, water saving, and wastewater reuse. However, especially the financial and technical feasibility should be carefully considered.

12. Groundwater survey

Both sides confirmed that situation of groundwater along the branch canals would be analyzed in order to prevent overexploitation and to identify the potential for further development.

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In addition, WASA Faisalabad requested to investigate arsenic contamination of its well fields by a reliable method, as arsenic is detected in wells. The Team agreed to it.

WASA Faisalabad requested to reconsider the groundwater potential at Aminpur which the existing M/P had specified as the candidate development area. The Team pointed out that the groundwater table in the area was already lowered around 6 to 7 m due to the influence by the pumping at nearby Chenab well fields, and agreed to review the existing studies and plans related to groundwater development in the Project.

13. Canal closure

Both sides confirmed that the canal closure is annually conducted from 27 December to 13 January (18 days) for JB canal and from 13 to 30 January (18 days) for RB canal and GB canal. The canal closure is also conducted at the time of flood and other emergencies.

WASA Faisalabad stated that storage of water at treatment plant and management of water such as rationing and drawing water from other sources are measures to deal with canal closure period. The Team took note of it. Further measures would be considered through the Project.

14. Planning for drainage

Both sides confirmed that the return-period of the rainfall is determined as the design criteria in the M/P in order to avoid excessive investment. The existing ponding areas will be considered as priority areas to be addressed.

15. Industrial wastewater

WASA Faisalabad stated that pretreatment of industrial wastewater before discharging to sewer and drainage is the responsibility of polluters. Regulation of industrial wastewater discharge is the mandate of Environmental Protection Agency of GOPb (EPA). It is necessary for WASA Faisalabad to consider appropriate measures against industrial wastewater discharge, such as monitoring, regulations, guidance to factories, and enforcement of regulations, in cooperation with EPA. Both sides agreed to prepare the recommendations based on the water quality and quantity analysis of industrial wastewater in the M/P, and confirmed that WASA Faisalabad and EPA fully cooperate and coordinate to grasp the present situation of industrial wastewater.

WASA Faisalabad assured that it would coordinate with All Pakistan Textile Processing Mills Association (APTPMA) and Faisalabad Chamber of Commerce and Industries (FCCI) to obtain cooperation from the private sector. Ex-chairmen of both organizations above are members of the Governing Body of FDA.



16. Pilot activity

To verify whether a part of envisioned recommendations are feasible, both sides agreed to conduct the pilot activity through the Project, whose results would be summed up as the Action Plan and attached to the M/P. Although the detailed contents of the pilot activity would be mutually determined after the commencement of the Project, both sides exchanged the opinions that the pilot activity would aim at smooth transition to the volumetric tariff system, improvement of the willingness to pay, and reduction of Non-Revenue Water.

Both sides identified the candidate areas described below, considering the feasibility of hydraulic isolation of the area, manageable number of connections, and the possibility of 24-hour water supply. The pilot area will be decided during the Project.

| Name of Place | Number of Connections | Water Source | Remarks |
|----------------|-----------------------|--|--|
| Madina town | about 3,000 | Terminal Reservoir /Groundwater along RB canal (Expected) | middle income area, the ground reservoir is under construction for operation of overhead reservoir (OHR) |
| Sarfraz colony | about 1,000 | Terminal Reservoir /Ground and surface water along RB canal (Expected) | middle income area, OHR and ground reservoir are already functional |
| Sitara Sapna | about 200 | Terminal Reservoir | high income area |

17. Implementation structure

Both sides confirmed to establish following implementation structure as described in the draft R/D to ensure smooth execution of the Project. Planning and Development (P&D) (at provincial government level) and WASA Faisalabad (at Faisalabad City level) will take necessary procedural action to set up the structure.

WASA Faisalabad and GOPb explained that assignment of enough personnel for Joint Coordinating Committee (JCC) and Technical Committee (TC) during the Project would be secured.

WASA Faisalabad assured that it would also secure the necessary personnel for Project Implementation Unit (PIU) before commencement of the Project.

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| Structure | Function | Member |
|-------------------------------------|--|--|
| <p>Joint Coordinating Committee</p> | <p>A Joint Coordinating Committee (hereinafter referred to as "JCC") will be organized at the provincial level to review overall progress of the Project, and discuss necessary measures to support the implementation of the M/P as GOPb.</p> <p>JCC will meet whenever the necessity arises (at least at the submission of inception report and draft final report) in order to fulfill the following functions:</p> <ol style="list-style-type: none"> 1) To review the progress of the Project; 2) To exchange opinions on major issues that may arise during the implementation of the Project; 3) To coordinate related organizations at the provincial level; 4) To discuss any other issue(s) pertinent to the smooth implementation of the Project. | <ol style="list-style-type: none"> 1) Chairperson: Secretary of Planning and Development of GOPb (P&D) 2) Members of the Pakistan Side: <ol style="list-style-type: none"> a. Secretary Finance of GOPb b. Secretary Irrigation of GOPb c. Secretary, Housing Urban Development and Public Health Engineering of GOPb (HUD/PHED) d. Secretary of Environmental Protection Department e. Mayor of Municipal Corporation, Faisalabad f. District Coordination Officer (DCO), Faisalabad g. Director General, Faisalabad Development Authority (FDA) h. Managing Director, WASA Faisalabad i. CEO, Urban Sector Planning and Management Services Unit Pvt. Ltd (UU) j. Any other official concerned, to be co-opted by GOPb, if necessary 3) Members of the Japanese Side: <ol style="list-style-type: none"> a. Chief Representative of JICA Pakistan Office b. Members of the JICA Missions c. Any other official concerned, to be co-opted by JICA, if necessary |
| <p>Technical Committee</p> | <p>The Technical Committee (hereinafter referred to as "TC") will be organized to confirm the progress of formulation of the M/P, discuss the technical matters, and facilitate inter-organizational coordination. TC will be held at least twice a year.</p> | <ol style="list-style-type: none"> 1) Chairperson: Managing Director, WASA Faisalabad 2) Members of the Pakistan Side: <ol style="list-style-type: none"> a. Senior Chief (Urban Development), P&D b. Representative of HUD&PHED c. Representative of Mayor, Municipal Corporation, Faisalabad d. Representative of DCO (District Coordination Officer), Faisalabad e. Representative of Irrigation Department f. Representative of UU g. Representative of Faisalabad Waste Management Company |

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| Structure | Function | Member |
|-----------------------------------|--|---|
| Technical Committee (Continued) | | h. Representative of Environmental Protection Agency i. Any other official concerned, to be co-opted by WASA Faisalabad, if necessary 3) Members of the Japanese Side: a. Representative of JICA Pakistan Office b. Members of the JICA Missions c. Any other official concerned, to be co-opted by JICA, if necessary |
| Project Implementation Unit (PIU) | Project Implementation Unit (PIU) is a counterpart team to deal with day-to-day project activities. PIU is set up in WASA Faisalabad. | 1) Focal person in charge of PIU: Director (Water Resources / Coordination), WASA Faisalabad 1) Members (Counterparts): a. Deputy Director (Finance) b. Deputy Director (Engineering) *3 persons c. Assistant Director (GIS) d. Assistant Director (Planning & Design) e. Any other staff, as required |
| Project Director | Project Director will be responsible for overall administration and implementation of the Project. | Managing Director, WASA Faisalabad |
| Project Manager | Project Manager will be responsible for the day-to-day implementation of the Project. | Director (Water Resources / Coordination), WASA Faisalabad |

18. Notification of the assignment of members of JCC and TC

Both sides confirmed that P&D would issue the official notification with regard to the assignment of members of JCC and WASA Faisalabad would issue the official notification for TC after signing of R/D and before commencement of the Project.

19. Provision of equipment

Both sides confirmed that JICA would procure the equipment necessary to implement the Project. Equipment for the pilot activity will be determined after deciding its detailed contents. WASA Faisalabad assured that they would prepare and install necessary flow meters, valves, bulk meters, chambers and customer meters.

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20. Dissemination workshops

Both sides agreed that WASA Faisalabad would organize workshops to disseminate and share activities and results of the Project, and to promote full organizational ownership.

21. Training

The Team stated that JICA would provide training in Japan and/or a third country for personnel directly related to the Project who would be directly nominated by WASA Faisalabad and JICA.

22. Undertakings by WASA Faisalabad

WASA Faisalabad agreed on the undertakings, as attached in Appendix of the draft of R/D.

The Team emphasized and WASA Faisalabad assured to provide followings with enough budgets:

- (1) Assignment of counterpart personnel before commencement of the Project.
- (2) Allowance and transportation fees for the Pakistan counterpart personnel.
- (3) Office space and necessary office facilities for JICA Mission including supply of electricity, internet access, air conditioners, etc. in the WASA Faisalabad headquarters before the arrival of JICA Mission.
- (4) Provision of necessary information and inter-organizational coordination for the smooth implementation of the Project
- (5) Providing rooms and spaces necessary for installation and storage of the equipment procured in the Project.
- (6) Operational expenses for customs clearance, storage and domestic transportation for the equipment provided by the Japanese side should be borne by WASA Faisalabad, if necessity arises.
- (7) Salaries, travel cost and daily allowances for SC members and TC members to attend committee meetings should be borne by each organization which committee members belong to.
- (8) Necessary input for the Pilot Activity.
- (9) Submission of the M/P to the Governing Body of FDA for approval

23. TOR of environmental and social considerations

The Project should include Terms of Reference (TOR) for Environmental and Social Considerations in line with the JICA Guidelines as follows:

- (1) Review of existing development plans, development projects, studies, and public and private investments;
- (2) Analysis to identify constraints to development, factors of promoting development;

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- (3) Analysis of alternatives for achieving the goals of the Project;
- (4) Consideration of contents of developed policy and plans;
- (5) Scoping (clarify extremely important items on environmental and social impacts and its evaluation methods at the time of decision making of the M/P;
- (6) Confirmation of existing environmental and social conditions of the proposed project area in the M/P as a base line data (land use, natural environment, culture and lifestyle of indigenous people and their communities, local economy and socio-cultural environment and others);
- (7) Confirm legal framework and institution of Pakistan on environmental and social considerations, and examine the experiences of SEA study in Pakistan; a) Laws, regulations and standards related to environmental and social considerations (environmental impact assessment, resettlement, public participation, information disclosure and others);
- (8) SEA Study reports conducted in Pakistan, development projects, and other relevant information: ○
- (9) Gaps between the "JICA Guidelines for Environmental and Social Considerations (April 2010)" and legal framework of Pakistan on environmental and social considerations;
- (10) Outlines of relative agencies and institutions responsible for the implementation of the projects;
- (11) Prediction of likely impacts of proposed projects in the M/P;
- (12) Assessment of likely impacts of the projects above 11) and comparative analysis of alternatives of proposed projects, including "without project" option;
- (13) Examination of the mitigation measures (to be avoided, minimized and compensated);
- (14) Examination of the monitoring methods (monitoring items, frequencies and methods); and ○
- (15) Support to hold stakeholder meetings.
- (16) Support to hold information disclosure.
- (17) Scoping for the selected prioritized project (including the development of possible alternative analysis, the clarification of important items on environmental and social impacts and its evaluation methods)

(End)

Appendix: Draft Record of Discussion (R/D)

M. J. R. Khan & *M. Fu*

Appendix: Draft Record of Discussion (R/D)

DRAFT
RECORD OF DISCUSSIONS

ON

**THE PROJECT FOR UPDATION OF WATER SUPPLY SEWERAGE
AND DRAINAGE MASTER PLAN OF FAISALABAD CITY**

IN

THE ISLAMIC REPUBLIC OF PAKISTAN

AGREED UPON BETWEEN

FAISALABAD WATER AND SANITATION AGENCY

AND

JAPAN INTERNATIONAL COOPERATION AGENCY

[name of the city], [date]

Chief Representative
JICA Pakistan Office

Managing Director
Water and Sanitation Agency
Faisalabad Development
Authority

Director General
Faisalabad Development
Authority

Secretary
Housing, Urban Development &
Public Health Engineering
Department,
Government of Punjab

Secretary
Planning & Development
Department
Government of Punjab

Joint Secretary (ADB/Japan)
Economic Affairs Division
Islamic Republic of Pakistan

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Based on the minutes of meetings on the Detailed Planning Survey on the Project for Updation of Water Supply Sewerage and Drainage Mater Plan of Faisalabad City (hereinafter referred to as "the Project") signed on 18 November, 2015 among Water and Sanitation Agency, Faisalabad Development Authority (hereinafter referred to as "WASA Faisalabad"), other authorities concerned of the Islamic Republic of Pakistan and the Japan International Cooperation Agency (hereinafter referred to as "JICA"), JICA held a series of discussions with WASA Faisalabad and relevant organizations to develop a detailed plan of the Project.

Both parties agreed the details of the Project and the main points discussed as described in the Appendix 1 and the Appendix 2 respectively.

Both parties also agreed that WASA Faisalabad, the counterpart to JICA, will be responsible for the implementation of the Project in cooperation with JICA, coordinate with other relevant organizations and ensure that the self-reliant operation of the Project is sustained during and after the implementation period in order to contribute toward social and economic development of the Islamic Republic of Pakistan (hereinafter referred to as "Pakistan").

The Project will be implemented within the framework of the Agreement on Technical Cooperation signed on 30 April, 2005 (hereinafter referred to as "the Agreement") and the Note Verbales exchanged on April 20, 2015 between the Government of Japan (hereinafter referred to as "GOJ") and the Government of Pakistan (hereinafter referred to as "GOP").

Appendix 1: Project Description

Appendix 2: Minutes of Meetings on the Project for Updation of Water Supply Sewerage and Drainage Mater Plan of Faisalabad City

PROJECT DESCRIPTION

I. BACKGROUND

In the "Punjab Urban Water and Sanitation Policy" formulated in 2007, the Government of Punjab Province (hereinafter referred to as "GOPb") set development of stable supply of safe drinking water by 2025 to the province by strengthening the capacity of Water and Sanitation Agencies (WASA) as high priority, as well as the improvement of sanitation by formulating sewerage development plan in urban area described in "National Sanitation Policy" set in 2006. GOJ expressed that assistance for water supply and sanitation especially in urban area would be prioritized in the "Country Assistance Policy for the Islamic Republic of Pakistan (April 2012)".

WASA Faisalabad had formulated its first development master plan (M/P) in cooperation with the Asian Development Bank (ADB) in 1976, and revised it in 1993 under the assistance of the World Bank (WB). However, only the part of investment plan had been implemented because of shortage of the budget and lack of groundwater resources. As the target year of existing M/P was set in 2018, WASA Faisalabad would not have the integrated M/P after 2018.

Faisalabad, the third largest city of Pakistan, has a population of 3.1 million (2013) and average population growth rate is approximately 3.2% (1990-2013). 98% of water source depends on groundwater recharged from irrigation canals and rivers, and pumped up by mainly tube wells around Chenab River and Jhang Branch canal.

Although WASA Faisalabad had been tackling the water resources development under the assistance from foreign development partners including JICA, the amount of existing water sources remain 60% of the estimated demand in 2017. Regardless of this situation, further water resources development have not been remarkably progressed as there are strong concerns for additional development of groundwater while surface water development requires the coordination for the water right.

With regard to sewerage and drainage, presently, a wastewater treatment plant operates in the western area of Faisalabad. Its capacity is very limited. Most of wastewater generated in Faisalabad is directly discharged to the rivers through drains without any treatment. In addition, there are some areas prone to inundation.

In terms of financial aspect, the billing system is not based on the consumption volume but the dimensions of lands which customers have, thus there is no incentive of efficient water use. In addition, low tariff collection ratio and high Non-Revenue Water (NRW) ratio estimated as 33% made WASA Faisalabad difficult to cover the cost for operation and maintenance. WASA Faisalabad is regularly in serious financial deficit even after receiving subsidy from the Government of Punjab Province.

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As described, while the rapid population growth made water demand increase, WASA Faisalabad is facing the range of difficulties such as deteriorated infrastructures, insufficient operation and maintenance capacity due to the lack of trained staff, shortage of operation cost due to the low revenue resulting in a serious imbalance between supply and demand of water.

Under these circumstances, to formulate M/P for appropriate service by WASA Faisalabad, GOP submitted the official request for the Technical Cooperation for Development Planning on the Project to GOJ.

II. OUTLINE OF THE PROJECT

1. Title of the Project

Though the requested title of the Project was "The Project for Updation of Water Supply Sewerage and Drainage Master Plan of Faisalabad City", the both sides decided to change it to "The Project for Water Supply, Sewerage and Drainage Master Plan of Faisalabad" to reflect the goal and activities of the Project.

2. Expected Goals which will be attained after implementing the Proposed Plan

- (1) The Master Plan to be formulated in the Project (hereinafter referred to as "the M/P") is authorized as an official development plan of WASA Faisalabad.
- (2) Necessary activities are continuously implemented based on the M/P.

3. Outputs

- (1) To develop the integrated M/P for water supply, sewerage and drainage in Faisalabad
- (2) To enhance the institutional capacity for implementation of the M/P

4. Activities

Basic Study

- (1) Review of the Faisalabad Environmental Infrastructure M/P in 1993
- (2) Collection and analysis of data and information
 - Urban development and land use plan
 - Natural and socio-economic conditions
 - Current situations of water resources and water supply facilities
 - Groundwater potential (including the possibility of deep fresh groundwater)
 - Current situations of sewerage and drainage facilities (including reassessment of pumping needs to avoid multiple pumping, and analysis of ponding areas)
 - Law and regulation, policy, and organization related to water, sewerage and drainage
 - Organization, operation, and financial management of WASA Faisalabad
- (3) Water quality survey (water sources, raw and treated wastewater, industrial wastewater)
- (4) Public awareness survey (socio-economic survey)
- (5) Identification of issues on water supply, sewerage and drainage

Formulation of M/P

A. Water Supply

- (1) Setting of planning strategy and goal of water supply plan
- (2) Delineation of water supply service area
- (3) Planning basis (population, per capita water consumption, non-domestic water supply volume, etc.)
- (4) Water demand projection
- (5) Water sources development plan
- (6) Water supply pipeline plan (raw water transmission, treated water transmission, distribution network)
- (7) Distribution water storage and pumping plan
- (8) Water treatment plant (WTP) plan
- (9) Phased implementation plan
- (10) Project cost estimation
- (11) Economic and financial evaluation
- (12) Environmental and social considerations
- (13) Project evaluation
- (14) Recommendation of priority project
- (15) Preliminary design for the priority project

B. Sewerage and Drainage

- (1) Setting of planning strategy and goal of sewerage and drainage plan (including integration of pumping systems, separation of wastewater and storm water, and storage of storm water)
- (2) Delineation of sewerage and drainage planning area
- (3) Planning basis (population, per capita wastewater generation, design influent and effluent quality, etc.)
- (4) Trunk sewer plan and preliminary design
- (5) Wastewater treatment plant (WWTP) plan and preliminary design
- (6) Drainage plan and preliminary design
- (7) Phased implementation plan
- (8) Project cost estimation
- (9) Economic and financial evaluation
- (10) Environmental and social considerations
- (11) Project evaluation
- (12) Recommendation of priority project

C. Institution and Finance

- (1) Organization and management improvement plan
- (2) Finance plan

Pilot Activity for Water Supply

- (1) Planning of pilot activity
- (2) Selection of a pilot activity area
- (3) Hydraulic isolation of the pilot activity area
- (4) Improvement of distribution
- (5) Promotion activity for water meter installation
- (6) Leakage detection and repair work
- (7) Legalization of illegal connections
- (8) Improvement of bill collection
- (9) Training of meter readers
- (10) Evaluation and recommendations

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5. Input

(1) Input by JICA

(a) Dispatch of Mission

i) Water Supply and Sewerage M/P

- 1) Team leader / Water supply planner
- 2) Water supply pipeline planner
- 3) Water treatment plant planner
- 4) Hydraulic analysis specialist
- 5) Hydrogeologist
- 6) Sewerage and drainage planner
- 7) Sewer and drain planner
- 8) Wastewater treatment plant planner
- 9) Mechanical and electrical facility planner
- 10) Cost estimator / construction planner
- 11) Organization / management / institution specialist
- 12) Billing collection and customer relations specialist
- 13) Economic and financial specialist
- 14) Environment and social consideration specialist
- 15) GIS database specialist
- 16) Any other Specialists as required

ii) Pilot Activity

- 1) Water supply operation and management
- 2) NRW reduction specialist
- 3) Leakage detection and repair specialist
- 4) Social mobilization specialist
- 5) Any other Specialists as required

Input other than indicated above will be determined through mutual consultations between JICA and WASA Faisalabad during the implementation of the Project, as necessary.

(b) Machinery and Equipment

JICA will provide the machinery and equipment necessary to implement the Project.

(c) Training

Approximately eight (8) persons directly related to the Project directly nominated by WASA Faisalabad and JICA will be trained in Japan and other country.

(2) Input by WASA Faisalabad

WASA Faisalabad will take necessary measures to provide at its own expense:

- (a) Services of WASA Faisalabad's counterpart personnel and administrative personnel as referred to in II-6;
- (b) Suitable office space with necessary equipment;
- (c) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the equipment provided by JICA;
- (d) Information as well as support in obtaining medical service;
- (e) Credentials or identification cards;

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- (f) Available data (including maps and photographs) and information related to the Project;
- (g) Running expenses necessary for the implementation of the Project;
- (h) Expenses necessary for transportation within Pakistan of the equipment referred to in II-5 (1) as well as for the installation, operation and maintenance thereof; and
- (i) Necessary facilities to members of the JICA missions for the remittance as well as utilization of the funds introduced into Pakistan from Japan in connection with the implementation of the Project

6. Implementation Structure

The project organization chart is given in the Annex I. The roles and assignments of relevant organizations are as follows:

(1) WASA Faisalabad

(a) Project Director

Managing Director will be responsible for overall administration and implementation of the Project.

(b) Project Manager

Director (Water Resources / Coordination) will be responsible for the day-to-day implementation of the Project.

(2) Project Implementation Unit (PIU)

WASA Faisalabad will create a Project Implementation Unit (PIU) that will implement day-to-day Project activities. During the Project, the members of PIU will undergo On-The-Job-Training from JICA Mission.

(3) JICA Mission

The JICA mission will give necessary technical guidance, advice and recommendations to WASA Faisalabad on any matters pertaining to the implementation of the Project.

(4) Joint Coordinating Committee

Joint Coordinating Committee (hereinafter referred to as "JCC") will be established in order to review overall progress of the Project, and discuss necessary measures to support the implementation of the M/P as the Government of Punjab Province (hereinafter referred to as "GOPb"). JCC will be held whenever deems it necessary. A list of proposed members of JCC is shown in the Annex II.

(5) Technical Committee

Technical Committee (hereinafter referred to as "TC") will be organized to confirm the progress of formulation of the M/P, discuss the technical matters, and facilitate inter-organizational coordination. TC will be held at least twice a year. A list of proposed members of TC is shown in the Annex II.

7. Project Site(s) and Beneficiaries

The project site is the boundary area of Faisalabad Peri-Urban Structure Plan. Beneficiaries are people living in the area. The Map of the area is shown in Annex III.

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8. Duration

The duration of the Project would be thirty six (36) months from the date when the JICA Mission member(s) arrives. The Project will be carried out in accordance with the tentative schedule shown in the Annex IV. The schedule is tentative and subject to change when both parties agree upon any necessity that will arise during the course of the Project.

9. Reports

JICA will prepare and submit the following reports to WASA Faisalabad in English.

- (1) Twenty (20) copies of Inception Report at the commencement of the first work period in Pakistan
- (2) Twenty (20) copies of Progress Report at the end of Basic Survey
- (3) Twenty (20) copies of Interim Report which contains outline of the M/P
- (4) Twenty (20) copies of Progress Report for Pilot Activity for approximately every 6 months after the commencement of Pilot Activity
- (5) Forty (40) copies of Draft Final Report at the end of formulation of the M/P
- (6) Forty (40) copies of compilation of planning criteria which includes planning basis such as a)population, per capita water consumption, non-domestic water supply volume, for water supply, b)population, per capita wastewater generation, design influent and effluent quality, for sewerage and c)rainfall intensity and run-off coefficient for drainage
- (7) Forty (40) copies of Final Report within one (1) month after the receipt of the comments on the Draft Final Report
- (8) Forty (40) copies of Completion Report for Pilot Activity at the time of completion of the Project

10. Environmental and Social Considerations

WASA Faisalabad will abide by 'JICA Guidelines for Environmental and Social Considerations' in order to ensure that appropriate considerations will be made for the environmental and social impacts of the Project.

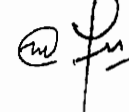
11. Management of Safety for Construction Works

For construction works which will be carried out in the Project, WASA Faisalabad and JICA will assure the management of safety in accordance with the "Safety Plan" and "Method Statements of Safety" submitted by contractors based on the Guidance for the Management of Safety for Construction Works in Japanese ODA Projects.

III. UNDERTAKINGS OF WASA FAISALABAD AND GOP

1. WASA Faisalabad and GOP will take necessary measures to:

- (1) ensure that the technologies and knowledge acquired by the Pakistan nationals as a result of Japanese technical cooperation contributes to the economic and social development of Pakistan, and that the knowledge and experience acquired by the personnel of Pakistan from technical training as well as the equipment provided by JICA will be utilized effectively in the implementation of the Project; and
- (2) grant privileges, exemptions and benefits to members of the JICA missions referred to in II-5 above and their families, which are no less favorable than those granted to members of the missions and their families of third countries or international organizations performing similar missions in Pakistan.

Mirza  

Other privileges, exemptions and benefits will be provided in accordance with the Agreement on Technical Cooperation signed on April 30th, 2005 between GOJ and GOP.

IV. MONITORING AND EVALUATION

JICA will conduct the following evaluations and surveys to verify how the proposed plan is utilized and draw lessons. WASA Faisalabad is required to provide necessary support for them.

1. Ex-post evaluation three (3) years after the project completion, in principle
2. Follow-up surveys on necessity basis

V. PROMOTION OF PUBLIC SUPPORT

For the purpose of promoting support for the Project, WASA Faisalabad will take appropriate measures to make the Project widely known to the people of Pakistan.

VI. Misconduct

If JICA receives information related to suspected corrupt or fraudulent practices in the implementation of the Project, WASA Faisalabad and relevant organizations will provide JICA with such information as JICA may reasonably request, including information related to any concerned official of the government and/or public organizations of the Pakistan.

WASA Faisalabad and relevant organizations will not, unfairly or unfavorably treat the person and/or company which provided the information related to suspected corrupt or fraudulent practices in the implementation of the Project.

VII. MUTUAL CONSULTATION

JICA and WASA Faisalabad will consult each other whenever any major issues arise in the course of Project implementation.

VIII. AMENDMENTS

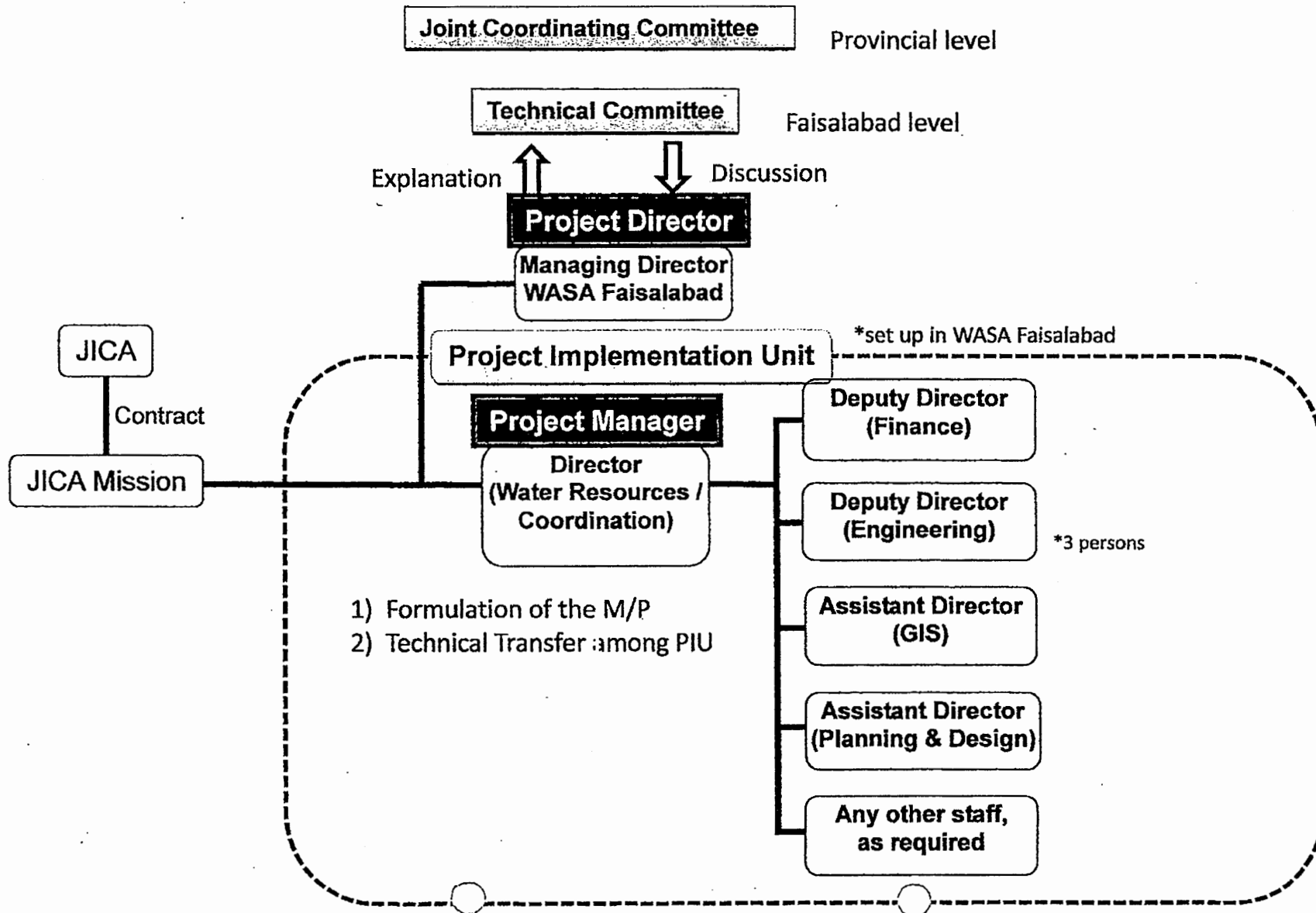
The record of discussions may be amended by the minutes of meetings between JICA and WASA Faisalabad. The minutes of meetings will be signed by authorized persons of each side who may be different from the signers of the record of discussions.

(End)

- Annex I Project Organization Chart
- Annex II List of Proposed Members of Joint Coordinating Committee/Technical Committee
- Annex III Map of the target area
- Annex IV Tentative Schedule

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Annex I Project Organization Chart



Handwritten notes and signatures:
 M. J. Khan
 M. J. Khan

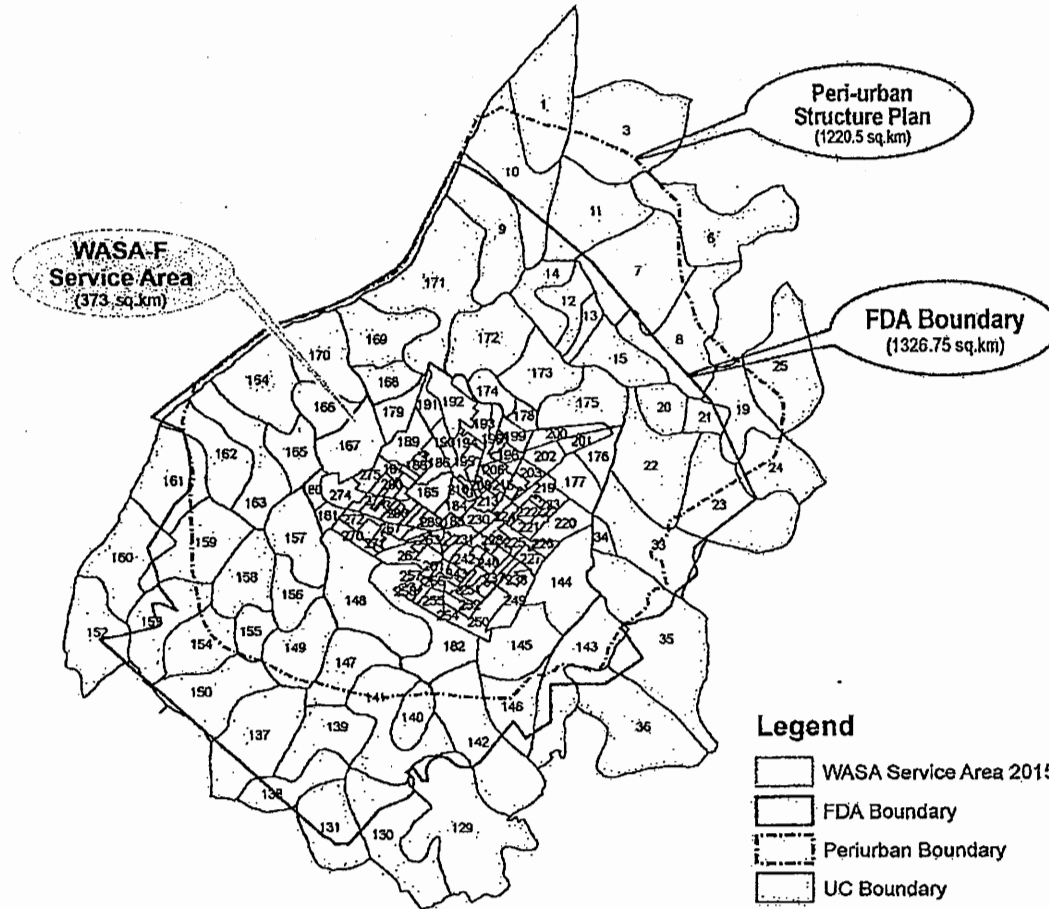
Annex II List of Proposed Members of Joint Coordinating committee/
Technical Committee

| Structure | Function | Member |
|------------------------------|--|--|
| Joint Coordinating Committee | <p>A Joint Coordinating committee (hereinafter referred to as "JCC") will be organized at the provincial level to review overall progress of the Project, and discuss necessary measures to support the implementation of the M/P as GOPb.</p> <p>JCC will meet whenever the necessity arises (at least at the submission of inception report and draft final report) in order to fulfill the following functions:</p> <ol style="list-style-type: none"> 1) To review the progress of the Project; 2) To exchange opinions on major issues that may arise during the implementation of the Project; 3) To coordinate related organizations at the provincial level; 4) To discuss any other issue(s) pertinent to the smooth implementation of the Project. | <ol style="list-style-type: none"> 1) Chairperson: Secretary of Planning and Development of GOPb (P&D) 2) Members of the Pakistan Side: <ol style="list-style-type: none"> a. Secretary Finance of GOPb b. Secretary Irrigation of GOPb c. Secretary, Housing Urban Development and Public Health Engineering of GOPb (HUD/PHED) d. Secretary of Environmental Protection Department e. Mayor of Municipal Corporation, Faisalabad f. District Coordination Officer (DCO), Faisalabad g. Director General, Faisalabad Development Authority (FDA) h. Managing Director, WASA Faisalabad i. CEO, Urban Sector Planning and Management Services Unit Pvt. Ltd (UU) j. Any other official concerned, to be co-opted by GOPb, if necessary 3) Members of the Japanese Side: <ol style="list-style-type: none"> a. Chief Representative of JICA Pakistan Office b. Members of the JICA Missions c. Any other official concerned, to be co-opted by JICA, if necessary |
| Technical Committee | <p>The Technical Committee (hereinafter referred to as "TC") will be organized to confirm the progress of formulation of the M/P, discuss the technical matters, and facilitate inter-organizational coordination. TC will be held at least twice a year.</p> | <ol style="list-style-type: none"> 1) Chairperson: Managing Director, WASA Faisalabad 2) Members of the Pakistan Side: <ol style="list-style-type: none"> a. Senior Chief (Urban Development), P&D b. Representative of HUD&PHED c. Representative of Mayor, Municipal Corporation, Faisalabad d. Representative of DCO (District Coordination Officer), Faisalabad e. Representative of Irrigation Department f. Representative of UU g. Representative of Faisalabad Waste Management Company h. Representative of Environmental Protection Agency i. Any other official concerned, to be co-opted by WASA Faisalabad, if necessary 3) Members of the Japanese Side: <ol style="list-style-type: none"> a. Representative of JICA Pakistan Office b. Members of the JICA Missions c. Any other official concerned, to be co-opted by JICA, if necessary |

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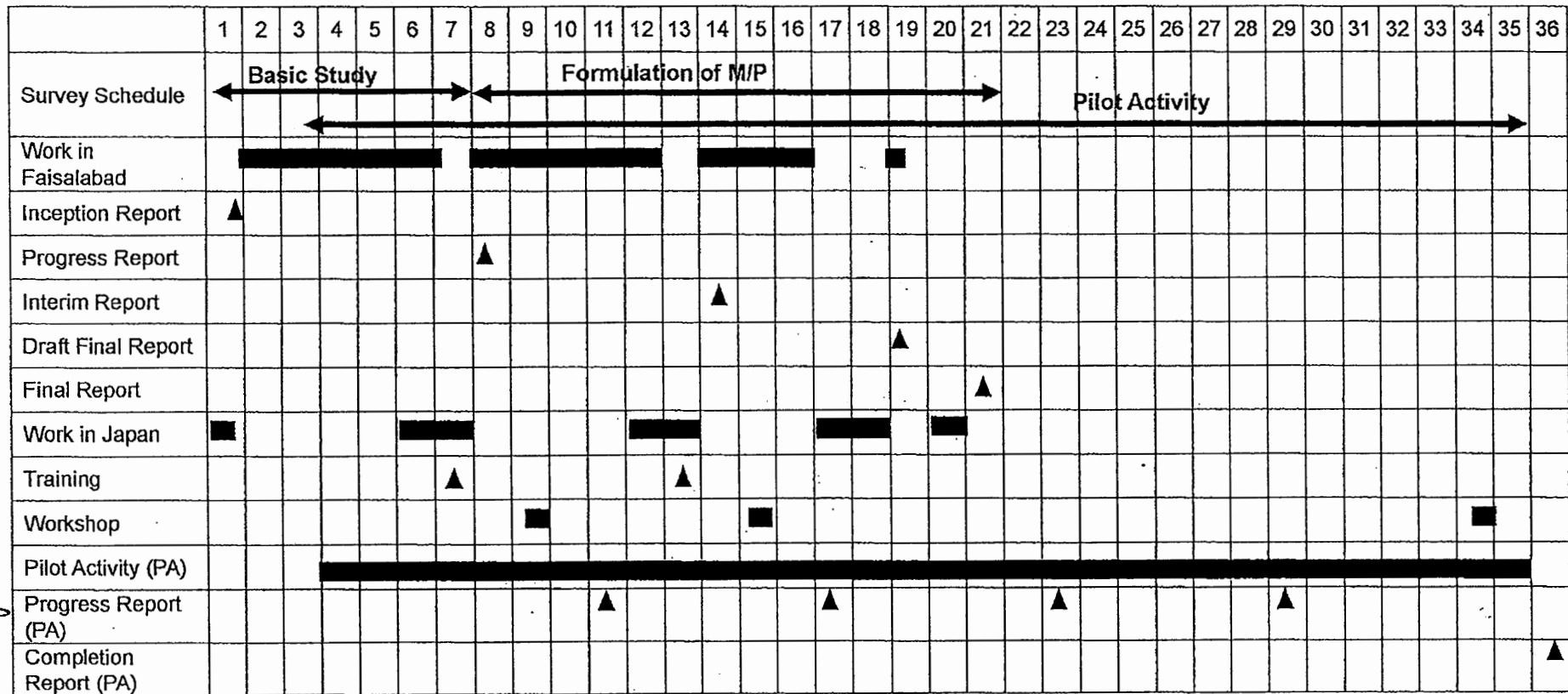
Annex III The Map of the target area

*The target area is "Peri-urban Structure plan" described as line with red dot.
Map Showing WASA Service Area and Peri-urban Structure Plan Boundary



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Annex IV Tentative Schedule



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