

資 料

## 資料 1 調査団員氏名、所属

### 1-1 事業化調査現地調査

名前	担当	所属
清水 勉	団長／総括	独立行政法人国際協力機構 パキスタン事務所 次長
米林 徳人	協力計画	独立行政法人国際協力機構 無償資金協力部 業務第三グループ 水資源・環境チーム
庭野 哲治	業務主任／給水計画	日本テクノ株式会社
簗野 俊一	給水施設設計	日本テクノ株式会社
宮内 浩司	施工計画／積算	日本テクノ株式会社

### 1-2 事業化調査成果概要説明調査

名前	担当	所属	備考
清水 勉	団長／総括	独立行政法人国際協力機構 パキスタン事務所 次長	
米林 徳人	協力計画	独立行政法人国際協力機構 無償資金協力部 業務第三グループ 水資源・環境チーム	治安上の理由により 派遣なし
庭野 哲治	業務主任 ／給水計画	日本テクノ株式会社	治安上の理由により 派遣なし
宮内 浩司	施工計画／積算	日本テクノ株式会社	治安上の理由により 派遣なし

<参考>

第2回基本設計調査第1次現地調査

名前	担当	所属
大村 良樹	総括	独立行政法人国際協力機構 国際協力専門員
佐藤 公平	計画管理	独立行政法人国際協力機構 無償資金協力部 業務第一課
庭野 哲治	業務主任/地下水開発	日本テクノ株式会社
石井 信行	給水計画/施設計画	日本テクノ株式会社
阿部 暁洋	水文/河川計画	日本テクノ株式会社
平 直貴	掘削技術	日本テクノ株式会社
篠野 俊一	施工調達計画/積算	日本テクノ株式会社

第2回基本設計調査第2次現地調査

名前	担当	所属
庭野 哲治	業務主任/地下水開発	日本テクノ株式会社
篠野 俊一	給水計画/施設計画	日本テクノ株式会社
永沼 俊道	掘削技術	日本テクノ株式会社
宮内 浩司	施工調達計画/積算	日本テクノ株式会社

第2回基本設計調査概要書現地説明

名前	担当	所属
蔵方 宏	総括	独立行政法人国際協力機構 無償資金協力部 業務第一課 課長
庭野 哲治	業務主任/地下水開発	日本テクノ株式会社
篠野 俊一	給水計画/施設計画	日本テクノ株式会社

## 資料 2 現地調査行程表

### 2-1 事業化調査現地調査

No.	日付	宿泊 (主に業務主任)	官ベース	業務主任 /給水計画	給水施設設計	施工計画 /積算計画
1	2007. 7. 17		東京→イスラマハート			
2	2007. 7. 18	ラホール	JICA 事務所表敬/打合せ, 在パ日本大使館表敬/打合 イスラマハート→ラホール		同左 イスラマハート→ファイサラハート	
3	2007. 7. 19	ファイサラハート	パシフィック州政府住宅・都市開発, 公衆衛生局, 計画・開発省 (HUD, PHED, P&D), WASA と表敬/協議 ラホール→ファイサラハート		WASA 表敬。関係部局(水資源局・水質試験所)と協議 最終配水ポンプ場運転状況確認	
4	2007. 7. 20	ラホール	WASA とのミッツ案協議, サイト調査 ファイサラハート→ラホール		同左	
5	2007. 7. 21	ファイサラハート	パシフィック州政府 (HUD, PHED, P&D), WASA との合同協議 ミッツ署名 (HUD, PHED, P&D, WASA)		最終ポンプ場運転状況確認, サイト調査	
			ラホール→イスラマハート	ラホール→ファイサラハート		
6	2007. 7. 22	ファイサラハート	調査団内打合せ	資料整理		
7	2007. 7. 23	ファイサラハート	財務・統計省経済局 (EAD) ミッツ協議, 署名 日本大使館報告, JICA 事務所報告	パシフィック州市場価格資料収集 地元建設業者との会見, 事情聴取, 見積り依頼		
8	2007. 7. 24	ファイサラハート	イスラマハート→	在ラホール建設業者の事情聴取, 見積り依頼 パシフィック国産井戸ポンプメーカーとの協議, 見積り依頼		
9	2007. 7. 25	ファイサラハート	→東京	既設水源地井戸群, 計画中継ポンプ場用地の現況確認		
10	2007. 7. 26	ファイサラハート		WASA 各部局との協議, 情報収集(財務・歳入, 計画・開発局等)		
11	2007. 7. 27	ファイサラハート		同上		
12	2007. 7. 28	ファイサラハート		WASA 関係部局と調査団質問書についての協議, 取りまとめ		
13	2007. 7. 29	ファイサラハート		資料整理		
14	2007. 7. 30	ファイサラハート		最終配水ポンプ場運転記録収集		
				市内膜ろ過式浄水機視察(3箇所)	ファイサラハート→イスラマハート	
15	2007. 7. 31	イスラマハート		水源地導水管, 送水管路線状況確認 ファイサラハート→イスラマハート	建設業者訪問, 情報収集, 見積り依頼	
16	2007. 8. 1	カラチ		JICA 事務所報告 イスラマハート→カラチ		
17	2007. 8. 2	カラチ		鋼管メーカー訪問, 協議 輸送会社訪問, 見積り依頼		
18	2007. 8. 3	カラチ		鋼管メーカー製造プラント見学 鋼管メーカー(別会社)と会見, 協議		
				カラチ→		
19	2007. 8. 4	カラチ		→東京	輸送業者訪問, 情報聴取, 見積り依頼	
20	2007. 8. 5	カラチ			資料整理	
21	2007. 8. 6				鋼管メーカー(別会社)連絡, 事情聴取 カラチ→	
22	2007. 8. 7				→東京	

### 2-1 事業化調査成果概要説明調査

No.	日付	宿泊	団長	協力計画	業務主任/給水計画	施工計画/積算
1	2007. 11. 19	ラホール	ミッツ協議	治安上の理由により派遣なし		
2	2007. 11. 20	ラホール	ミッツ協議、調印			

<参考>

第2回基本設計調査第1次現地調査

No.	日付	宿泊 (主に業務主任)	官へース	業務主任 /地下水開発	掘削技術	給水計画 /施設計画	水文 /河川調査	施工調達計画 /積算	
1	2002. 12. 9		東京→イスラマバート						
2	2002. 12. 10	イスラマバート	JICA、大使館、EAD 表敬・打合せ、ホテルへ移動						
3	2002. 12. 11	ファイサラバート	パシフィック州政府表敬、ファイサラバート移動					東京→カチ	
4	2002. 12. 12	ファイサラバート	FDA、WASA 表敬・協議、I/R 説明・協議、再委託業務協議 周辺住民意識調査主導					カチ→ファイサバート	
5	2002. 12. 13	ファイサラバート	FDA、WASA 表敬・協議、サト調査、再委託業務契約					現地市場調査	
6	2002. 12. 14	ファイサラバート	サト調査					現地市場調査	
7	2002. 12. 15	ファイサラバート	団内打合せ					団内打合せ	
8	2002. 12. 16	ファイサラバート	FDA、WASA ミッツ調印				東京→カチ カチ→ファイサラバート	労務関連調査	
9	2002. 12. 17	ファイサラバート	パシフィック州政府ミッツ調印、 イスラマバート移動		水源地調査	サト調査	サト調査	労務関連調査	
10	2002. 12. 18	ファイサラバート	EAD ミッツ署名、JICA、大使館 報告、コンサル:イスラマバート→ファイサ		水源地調査	サト調査	水文/河川調査	現地業者に係る 調査	
11	2002. 12. 19	ファイサラバート	東京着	サト調査	水源地調査	サト調査	水文/河川調査	現地業者調査	
12	2002. 12. 20	ファイサラバート		サト調査	水源地調査	サト調査	水文/河川調査	現地業者調査	
13	2002. 12. 21	ファイサラバート		サト調査	水源地調査	サト調査	水文/河川調査	現地業者調査	
14	2002. 12. 22	ファイサラバート		サト調査	水源地調査	給水現況調査	水文/河川調査	現地業者調査	
15	2002. 12. 23	ファイサラバート		サト調査	水源地調査	給水現況調査	水文/河川調査	建設関連法規調	
16	2002. 12. 24	ファイサラバート		サト調査	水源地調査	給水計画調査	水文/河川調査	建設関連法規調	
17	2002. 12. 25	ファイサラバート		サト調査	水源地調査	給水計画調査	水文/河川調査	施工計画調査	
18	2002. 12. 26	ファイサラバート		水源計画調査	水源地調査	施設計画調査	水文/河川調査	施工計画調査	
19	2002. 12. 27	ファイサラバート		水源計画調査	水源地調査	施設計画調査	水文/河川調査	施工計画調査	
20	2002. 12. 28	ファイサラバート		水源計画調査	水源地調査	施設計画調査	水文/河川調査	施工計画調査	
21	2002. 12. 29	ファイサラバート		資料整理、資料解析					
22	2002. 12. 30	ファイサラバート		水源計画調査	水源地調査	施設計画調査	水文/河川調査	施工計画調査	
23	2002. 12. 31	ファイサラバート		水源計画調査	水源地調査	施設計画調査	水文/河川調査	施工計画調査	
24	2003. 1. 1	ファイサラバート		水源計画調査	水源地調査	ファイサラバート	水文/河川調査	施工計画調査	
25	2003. 1. 2	ファイサラバート		水源計画調査	水源地調査	カチ→東京	水文/河川調査	施工計画調査	
26	2003. 1. 3	ファイサラバート		運営・維持管理調査	水源地調査		ファイサラバート→カチ	施工計画調査	
27	2003. 1. 4	ファイサラバート		運営・維持管理調査	水源地調査		カチ→東京	市内施設調査	
28	2003. 1. 5	ファイサラバート		運営・維持管理調査	水源地調査		市内施設調査		
29	2003. 1. 6	ファイサラバート		運営・維持管理調査	ファイサラバート→カチ		市内施設調査		
30	2003. 1. 7	ファイサラバート		運営・維持管理調査	カチ→東京		市内施設調査		
31	2003. 1. 8	ファイサラバート		運営・維持管理調査			市内施設調査		
32	2003. 1. 9	ファイサラバート		運営・維持管理調査			市内施設調査		
33	2003. 1. 10	ファイサラバート		運営・維持管理調査			市内施設調査		
34	2003. 1. 11	ファイサラバート		運営・維持管理調査			市内施設調査		
35	2003. 1. 12	ファイサラバート		運営・維持管理調査			市内施設調査		
36	2003. 1. 13	ファイサラバート		運営・維持管理調査			市内施設調査		
37	2003. 1. 14	ファイサラバート		給水計画調査			給水計画調査		
38	2003. 1. 15	ファイサラバート		給水計画調査			給水計画調査		
39	2003. 1. 16	ファイサラバート		給水計画調査			給水計画調査		
40	2003. 1. 17	ファイサラバート		給水計画調査			給水計画調査		
41	2003. 1. 18	ファイサラバート		給水計画調査			給水計画調査		
42	2003. 1. 19	ファイサラバート		資料整理、資料解析			資料整理、資料		
43	2003. 1. 20	ファイサラバート		施設計画調査			給水計画調査		
44	2003. 1. 21	ファイサラバート		施設計画調査			給水計画調査		
45	2003. 1. 22	ファイサラバート		施設計画調査			ファイサラバート→カチ		
46	2003. 1. 23	ファイサラバート		施設計画調査			カチ		
47	2003. 1. 24	ファイサラバート		イスラマバート→			カチ→		
48	2003. 1. 25	イスラマバート		JICA、大使館報告			→東京		
49	2003. 1. 26	イスラマバート		イスラマバート→					
50	2003. 1. 27			→東京					

＜参考＞

第2回基本設計調査第2次現地調査

No.	日付	宿泊	業務主任 /地下水開発	給水計画 /施設計画	施工調達計画 /積算	掘削技術
1	2003. 8. 2		東京→			
2	2003. 8. 3	イスラマハート	→イスラマハート			
3	2003. 8. 4	イスラマハート	JICA、大使館表敬			
4	2003. 8. 5	ファイサハラート	ファイサハラート移動、WASA 表敬			
5	2003. 8. 6	ファイサハラート	WASA 協議			
6	2003. 8. 7	ファイサハラート	既存井調査	用地選定調査		
7	2003. 8. 8	ファイサハラート	既存井調査	既存施設調査		
8	2003. 8. 9	ファイサハラート	用地選定調査	既存施設調査		
9	2003. 8. 10	ファイサハラート	用地選定調査	既存施設調査		
10	2003. 8. 11	ファイサハラート	既存施設調査	既存施設調査	東京→	
11	2003. 8. 12	ファイサハラート	既存施設調査	既存施設調査	→ファイサハラート	
12	2003. 8. 13	ファイサハラート	電気探査	既存施設調査	調達/積算調査	
13	2003. 8. 14	ファイサハラート	電気探査	既存施設調査	既存施設調査	
14	2003. 8. 15	ファイサハラート	電気探査	既存施設調査	既存施設調査	
15	2003. 8. 16	ファイサハラート	電気探査/住民調査	既存施設調査	既存施設調査	
16	2003. 8. 17	ファイサハラート	電気探査/住民調査	既存施設調査	既存施設調査	
17	2003. 8. 18	ファイサハラート	電気探査/住民調査	既存施設調査	既存施設調査	
18	2003. 8. 19	ファイサハラート	電気探査/住民調査	既存施設調査	既存施設調査	
19	2003. 8. 20	ファイサハラート	電気探査/住民調査	測量調査	既存施設調査	東京→
20	2003. 8. 21	ファイサハラート	電気探査/住民調査	測量調査	既存施設調査	→ファイサハラート
21	2003. 8. 22	ファイサハラート	既存施設調査	測量調査	既存施設調査	試掘調査準備
22	2003. 8. 23	ファイサハラート	既存施設調査	測量調査	既存施設調査	試掘調査準備
23	2003. 8. 24	ファイサハラート	既存施設調査	測量調査	既存施設調査	試掘調査準備
24	2003. 8. 25	ファイサハラート	測量調査 テクニカルノート提出・協議	ファイサハラート→	調達/積算調査	試掘調査
25	2003. 8. 26	ファイサハラート	測量調査、実施機関協議	→東京	調達/積算調査	試掘調査
26	2003. 8. 27	ファイサハラート	測量調査、実施機関協議 市長現場視察		調達/積算調査	試掘調査
27	2003. 8. 28	ファイサハラート	テクニカルノート署名 イスラマハートへ異動		調達/積算調査	試掘調査
28	2003. 8. 29	イスラマハート	JICA、大使館報告		調達/積算調査	試掘調査
29	2003. 8. 30	ファイサハラート	イスラマハート→		調達/積算調査	試掘調査
30	2003. 8. 31	ファイサハラート	→東京		調達/積算調査	試掘調査
31	2003. 9. 1	ファイサハラート			調達/積算調査	試掘調査
32	2003. 9. 2	ファイサハラート			カチ→	試掘調査
33	2003. 9. 3	ファイサハラート			→東京	試掘調査
34	2003. 9. 4	ファイサハラート				試掘調査
35	2003. 9. 5	ファイサハラート				試掘調査
36	2003. 9. 6	ファイサハラート				試掘調査
37	2003. 9. 7	ファイサハラート				試掘調査
38	2003. 9. 8	ファイサハラート				試掘調査
39	2003. 9. 9	ファイサハラート				試掘調査
40	2003. 9. 10	ファイサハラート				試掘調査
41	2003. 9. 11	ファイサハラート				試掘調査
42	2003. 9. 12	ファイサハラート				実施機関協議
43	2003. 9. 13	ファイサハラート				実施機関協議
44	2003. 9. 14	ファイサハラート				実施機関協議
45	2003. 9. 15	ファイサハラート				ファイサハラート→
46	2003. 9. 16					→東京

<参考>

第2回基本設計調査概要書現地説明

No.	日付	宿泊 (主に業務主任)	官ベース	業務主任 /地下水開発	給水計画 /施設計画
1	2004. 3. 16			東京→カラチ	
2	2004. 3. 17	イスラマハート		→ファイサハラート、WASA 表敬、D/F レポート説明、協議	
3	2004. 3. 18	ファイサハラート		WASA 協議	
4	2004. 3. 19	ファイサハラート		WASA 協議	
5	2004. 3. 20	ファイサハラート		WASA 協議	
6	2004. 3. 21	ファイサハラート	東京→ラホール	ラホールへ移動	
7	2004. 3. 22	イスラマハート	パキスタンの州政府表敬、イスラマハートへ移動、JICA・大使館表敬		
8	2004. 3. 23	ファイサハラート	ファイサハラートへ移動、サイト調査		
9	2004. 3. 24	ラホール	ミッツ協議、ラホールへ移動		
10	2004. 3. 25	イスラマハート	パキスタンの州政府、WASA ミッツ調印、イスラマハートへ移動		
11	2004. 3. 26	ファイサハラート	EAD ミッツ調印、JICA・大使館報告		
			イスラマハート→	ファイサハラートへ移動	
12	2004. 3. 27	ファイサハラート	→東京	WASA 協議	
13	2004. 3. 28			ラホールへ移動、ラホール→	
14	2004. 3. 29			→東京	

### 資料3 相手国関係者リスト

#### 3-1 事業化調査現地調査

(1) 財務・統計省経済局

Mr. Muhammad Saleem Seth                      Joint Secretary (署名者)

(2) パンジャブ州政府計画開発庁

Mr. Shahid Mahmood                      Secretary

(3) パンジャブ州政府住宅・都市開発・公衆衛生局

Mr. Shabbir Ahmad                      Special Secretary

Mr. Shaukat Ali                      Additional Secretary, Technical (署名者)

(4) ファイサラバード市上下水道公社

Mr. Mahood Elahi                      Managing Director (署名者)

Mr. Ijaz Ahmad Randhawa                      Director, Construction-II

(5) 在パキスタン日本国大使館

中西 滋樹                      Second Secretary

(6) 独立行政法人国際協力機構パキスタン事務所

貝原 孝雄                      Resident Representative

清水 勉                      Senior Deputy Resident Representative

深沢 晋作                      Deputy Resident Representative

中矢 剛                      Assistant Resident Representative

Mr. Mahmood A. Jilani                      Deputy Resident Representative

& Chief Programme Officer



## ＜参考＞第 2 回基本設計調査

### (1) 財務・統計省経済局

Mr. Muhammed Ashraf Khan  
Miss Yasmin Masood

Joint Secretary  
Deputy Secretary, Japan Desk (第 1 次)

### (2) パンジャブ州政府計画開発庁

Dr. Shaheen Khan  
Mr. Nazim Riaz  
Mr. Mukhtar Ahmad Chaudry  
Mr. M.H. Malik

Chief Economist  
Chief (ECA)  
Section Chief  
AC., UD/PPH

### (3) パンジャブ州政府住宅・都市開発・公衆衛生局

Mr. Syed Ali Raza Gilani  
Mr. Riaz Ahmed  
Engr. Ch. Safdar Ali Cheema

Minister  
Secretary  
Technical Advisor

### (4) ファイサラバード郡庁

Mr. Chaudhary Zahid Nazir  
Mr. Tahin Hussain  
Mr. Waseen Ajmal Ch.  
  
Mr. Mian Riaz Ahmed  
  
Dr. Tariq Sardar  
Mr. Shoukat Hayat  
Mr. Muhammad Yaqoob Khan  
Mr. Rashid Mohamood Putwary  
Mr. Muhamood Shahid Putwary  
Mr. Rana Ahmad Qanoonoo

Chairman (District Nazim)  
District Coordination Officer  
Executive District Officer  
(Finances & Planning)  
Executive District Officer  
(Works & Services Dept.)  
Senior Administrative Officer  
(Environment Protection Dept.)  
Deputy District Officer (Revenue Dept.)  
(Revenue Dept.)  
(Revenue Dept.)  
(Revenue Dept.)

### (5) ファイサラバード市役所

Mr. Mumtaz Ali Cheema  
Dr. Syed Pervaiz Abbas

Nazim Faisalabad City  
Senior Administration Officer

### (6) ファイサラバード開発庁

Mr. Maqsood Khawaja  
Mr. Safdar Hussain Raja  
Mr. Atta Ullar Khan

Director General (PCS) (第 1 次)  
Director General (第 2 次)  
Director (Environmental Control Dept)

Mr. Farooq Pall	Deputy Director (Estate Management Dept.)
(7) ファイサラバード市上下水道公社	
Lt. Col Engr Syed Chias ud Din	Managing Director (第 1 次)
Mr. Rashid Ahmad Chaudry	Managing Director (第 2 次)
Mr. Abdul Haleem Chaudhry	Deputy Managing Director
Mr. Asmo Ali Chaudhry	Director(Operation &Maintenance)
Mr. Abdul Majid	Director (Water Resources)
Mr. Saleem Ahmad Awan	Director (Planning & Design)
Mr. Mahammed Ashraf	Deputy Director (Planning & Design)
Mr. Shulam Murtaza Buffa	Director (Administration)
Mr. Ali Sajjad Sheikh	Deputy (Water Resources)
(8) 英国開発庁	
Mr. Stephen Young	Infrastructure Adviser, Western Asia, Middle East & North Africa
Mr. Malick Zulfiqar Ahmad	Programme Officer
(9) 在パキスタン日本国大使館	
Mr. Tamotsu Shinozuka	Minister
Mr. Hiromichi Kitada	First Secretary
Mr. Hideo Murata	Second Secretary (第 1 次)
Mr. Takeshi Matsunaga	Head of Economic & Development Section (第 2 次)
Mr. Teruo Kobayashi	Second Secretary (第 2 次)
(10) 独立行政法人国際協力機構パキスタン事務所	
Mr. Nobuyuki Yamamura	Resident Representative
Mr. Yujiro Ishi	Senior Deputy Resident Representative (第 1 次)
Mr. Hidekazu Tanemura	Resident Officer (第 2 次)
Mr. Mahmood A. Jirani	Deputy Resident Representative
Ms. Mitsumi Sachiko	Senior Deputy Resident Representative (第 2 次)
Mr. Makoto Takahashi	Resident Officer (第 2 次)

MINUTES OF DISCUSSIONS  
IMPLEMENTING REVIEW STUDY ON  
“THE PROJECT FOR THE IMPROVEMENT OF WATER SUPPLY SYSTEM  
IN FAISALABAD (REVISED)”  
IN ISLAMIC REPUBLIC OF PAKISTAN

In response to a request from the Government of Islamic Republic of Pakistan (hereinafter referred to as “the Pakistan”), the Government of Japan decided to conduct an Implementing Review Study (hereinafter referred to as “the Study”) on the Project for the Improvement of Water Supply System in Faisalabad (hereinafter referred to as “the Project”) and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as “JICA”).

JICA sent to Pakistan the Implementing Review Study Team (hereinafter referred to as “the Team”), which is headed by Mr. T. SHIMIZU, Senior Deputy Resident Representative, JICA Pakistan Office, and is scheduled to stay in the country from July 18 to August 6 2007.

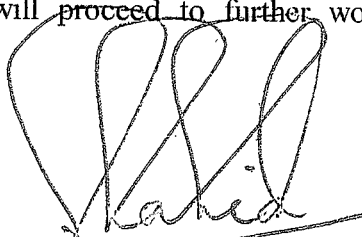
The Team held discussions with the officials concerned of the Government of Pakistan and is conducting a field survey at the study area.

In the course of discussions and field survey, both parties confirmed the main items described in the attached sheets. The Team will proceed to further works and prepare the Implementing Review Study Report.

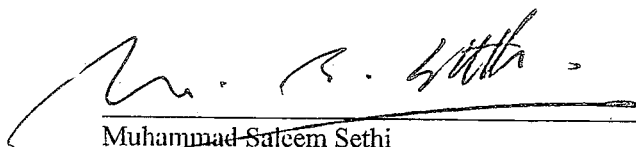
Lahore, July 21, 2007



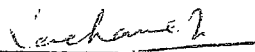
Tsutomu SHIMIZU  
Leader  
Implementing Review Study Team  
Japan International Cooperation Agency



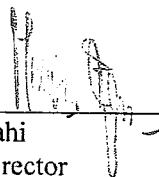
Shahid Mahmood  
Secretary  
Planning and Development Department  
Government of the Punjab



Muhammad Saleem Sethi  
Joint Secretary  
Economic Affairs Division  
Ministry of Economic Affairs & Statistics  
Islamic Republic of Pakistan



Shaukat Ali  
Additional Secretary (Technical)  
Housing, Urban Development and  
Public Health Engineering Department  
Government of the Punjab



Mahboob Elahi  
Managing Director  
Water and Sanitation Agency  
Faisalabad

## ATTACHMENT

### 1. Purpose of the Study:

The purpose of the Study is mainly to review the Project cost estimation, earlier prepared on the basis of the Basic Design Study of the Project (hereinafter referred to as "the B/D Study"), with consideration of current situation of social-economic situation of Pakistan.

### 2. Components of the Project:

The Pakistan side and the Team (hereinafter referred to as "Both sides") confirmed that the design and framework of the Project, such as the Project priority in the national development plan of the Pakistan, purpose, and contents of the Project etc. are same as confirmed in the B/D Study.

Both sides also confirmed that there is and will be no duplication to the Project by the other Donors, Organizations and Agencies.

### 3. Responsible and Implementing Organization:

3-1. The Responsible organization is the Housing, Urban Development and Public Health Engineering Department, Government of the Punjab.

3-2. The Implementing organization is Water and Sanitation Agency (hereinafter referred to as "WASA") and WASA implements the Project, which is a subsidiary of Faisalabad Development Authority (hereinafter referred to as "FDA").

3-3. Organization chart of implementing organization:

The organization chart of WASA is described in Annex-1-1 and FDA is in Annex-1-2.

### 4. Japan's Grant Aid Scheme:

4-1. The Pakistan side understood the Japan's Grant Aid Scheme explained by the Team, as described in Annex-2.

4-2. The Pakistan side will take the necessary measures and allocate necessary budget properly, as described in Annex-2, for smooth implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

4-3. The Team clarifies the necessary measures and budget to be taken care by the Pakistan side, besides the general measures described in Annex-2, by further study.

4-4. The Pakistan side promised to implement the Project properly following to the "Guidelines of the Japanese Grant Aid for General Projects and for Fisheries" mentioned in "the Agreed Minutes" of "the Exchange of Notes" which is agreed upon by both Governments as Diplomatic document if the Project is approved by the Japanese Cabinet. The Guidelines is attached as Annex-3.

### 5. Schedule of the Study:

5-1. The consultant members will proceed to further studies in the Pakistan until 6 August, 2007.

5-2. JICA will prepare the draft report in English and dispatch a mission in order to explain its contents in November 2007 at the earliest.

5-3. In case that the contents of the report are accepted in principle by the Pakistan side, JICA will complete the final report and send it to the Pakistan by around January 2008 at the earliest.

5-4. The Pakistan side understood that the implementation of the Study did not imply and commit the implementation of the Project.

73

5

A-11

14

Incham

7/11

12

6. Exemption of Taxes and Duties:

The Team explained that the Pakistan side should take necessary measures to exempt Value Added Tax, custom duties and any other taxes and fiscal levies in the Pakistan arisen from the Project activities and they will be borne by beneficiary organizations in accordance with the implementation schedule.

The Pakistan side promised to take necessary measures for these taxes and duties exemptions.

7. Prioritization and Selection for the Project:

The Team explained that contents of the Project would be considered by the Government of Japan by evaluating the result of the Study.

Both sides agreed that the contents of the Project might be prioritized, selected and adjusted in accordance with the result of the Study and the budget allocated for the Project.

8. Components implemented by the Pakistan side:

When some components are adjusted from the Project after analyzing the result of the Study, the Team will inform the components to the Pakistan side immediately. In that case, the Pakistan side agreed to consider whether or not the Pakistan side could bear the components, then inform the results to the Team.

9. Other Relevant Issues:

9-1. Change of the Project Title:

If the Project is approved by the Cabinet of Japan, new Exchange of Notes (hereinafter referred to as "E/N") will be signed by both Governments. Then there might be two E/Ns for one same Project with same name, since present E/N for the Project is still effective.

In order to avoid confusion, the Team requested to change the Project title for new E/N.

The Pakistan side suggested not to change the title but to add the word "(Revised)" to the original title since they have to amend all the important documents of the Project which were approved under the original title and it will affect the smooth implementation of the Project.

In this document, new title is provisionally adopted.

9-2. Alternation and Addition to the Project:

Both sides agreed that major alternation and additional component to the Project are not accepted. However these alternation and addition might be considered by the Government of Japan if they are occurred by inevitable reason as well as are essential for the proper function of the Project.

9-3. Influence of the Election:

The Pakistan side confirmed that the election of the Parliament would not influence the priority and the implementation arrangement of the Project.

T.S

8

#12

15

Le-chanel

8

1

9-4. Environmental Impact Assessment (EIA):

The Pakistan side explained that they started the procedure for EIA approval and agreed to submit the relevant documents proving the approval of EIA to the Team through official channel.

Both side agreed that implementation of the Project would be postponed or cancelled if EIA is not completed by December 2007.

9-5. Land Acquisition for the Project Facilities:

The Pakistan side explained that the land has been secured in collaboration with the concerned Departments.

9-6. Procedure for PC-1:

The Team requested that the Pakistan side should complete revision and approval of the PC-1 by December 2007 as it is one of the prerequisites for the Japanese Government to make commitment of grant for the Project.

The Pakistan side explained that the original PC-1 for the Project was already approved by the Government of Pakistan, which fully enables the Government to start the implementation of the Project forthwith. No revision is therefore required at this stage except in case of upward revision (more than 15% of the approved cost of the Project) is necessary due to escalation in costs.

The Pakistan side requested the Team to provide the cost estimates by end of August 2007 to the Government of Punjab for processing of revised PC-1 for its approval by December 2007.

The Team explained that it might be difficult to give the formal cost estimation by end of August. It is only possible to provide cost estimation between November to December 2007 for the revision of the PC-1.

The Pakistan side confirmed that as soon as the Japanese side provides the formal cost estimation, the PC-1 will be revised accordingly and inform to the Japanese Government by official route.

9-7. Operation and Maintenance of Facilities and Equipments:



The Team explained that capability of operation and maintenance is one of the conditions for implementation and approval of the Project. The Team will evaluate the present capability of WASA comparing to the past when the B/D Study was conducted. If the Study indicates the necessity, the Team will propose necessary measures, allocation of additional budget and qualified personnel required for the proper and effective utilization of facilities and equipment.

The Pakistan side agreed to take necessary measures properly according to the proposal and suggestion by the Team.

9-8. Technical Assistance:

Although the technical assistance was not included in the B/D Study, The Team will study and analyze necessity based on the current situation and capacity of WASA.

TS S 3  
A-13 16 Jachan 2



9-9. Fair Implementation of the Project:

The Team explained that some information of the relevant Report should be dealt with carefully until the Tender is implemented, since the information will affect the fair implementation of Tender process.

The Pakistan side understood and promised to do so.

9-10. Arrangements for the Study:

As a response to the request by the Team, The Pakistan side agreed to arrange counterpart personnel for the Study and to provide promptly all the data and information relevant to the Project for the smooth implementation of the Study.

9-11. Safety and Security for the Team:

The Team explained that security measures are indispensable for effective study. The Pakistan side agreed to take any necessary measures to secure the safety of the member of the Team.

9-12. Lesson Learnt by the Past Cooperation by Japanese ODA:

The Team requested to the Pakistan side that outcome of technical transfer and the Grant Aid implemented in the past should be utilized to improve the living condition of the Pakistan people.

The Pakistan side agreed and promised to utilize the lesson learnt from the past cooperation.

- Annex 1 : 1-1. Organization Chart of WASA  
1-2. Organization Chart of FDA  
Annex 2 : The Japan's Grant Aid Scheme  
Annex 3 : Guidelines of the Japanese Grant Aid for General Projects and for Fisheries

End

TS

3

A-14

Dr. Mohamed

17

Signature

**RECEIVED**



ONE POST OF OSD IN BS-20 IS ALSO APPROVED.

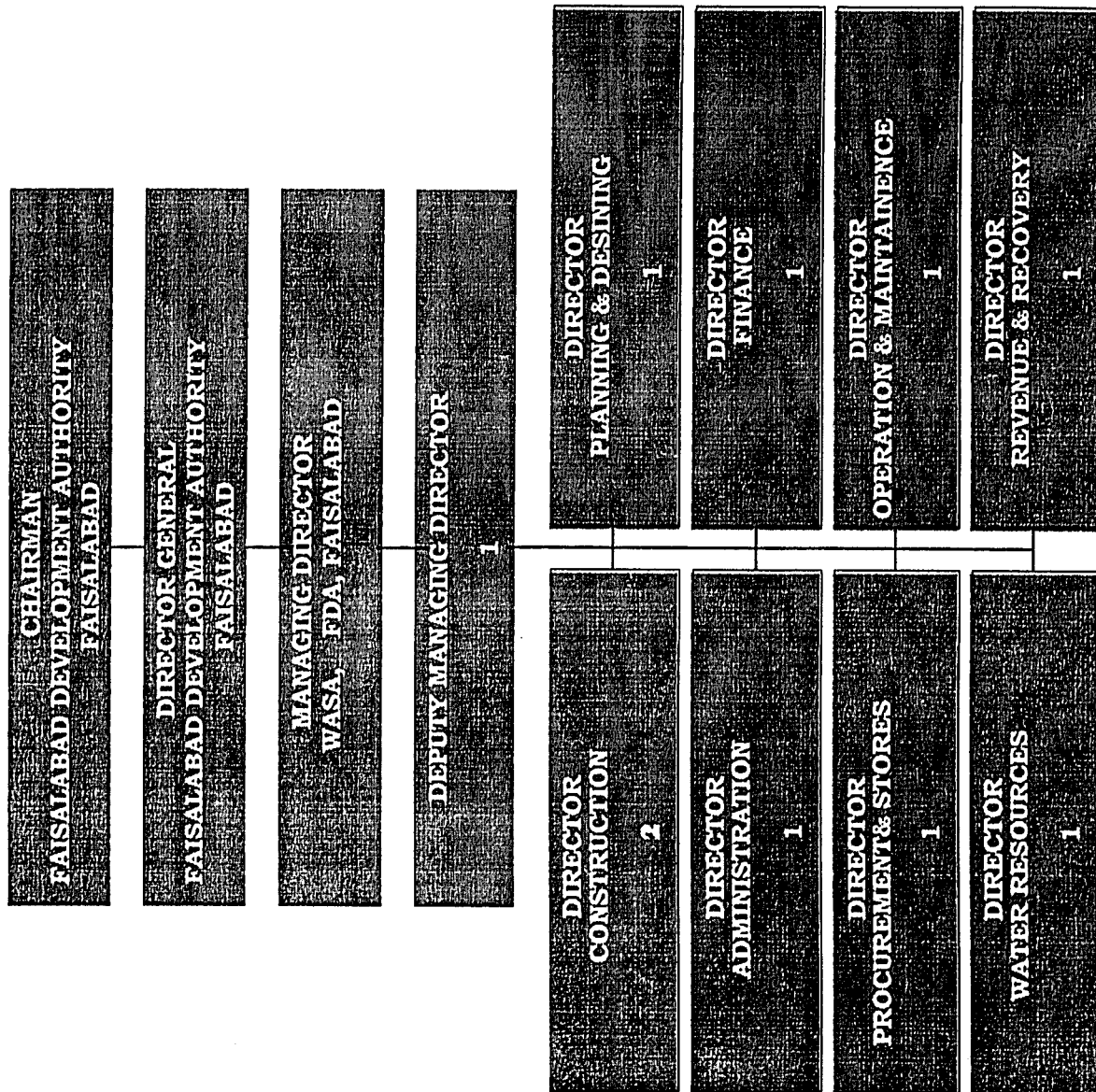
18

Incident 2



# ORGANOGRAM

The Water and Sanitation Agency is under administrative control of Chairman FDA City District Nazim, Secretary HUD&PHE Department, Government of the Punjab and Director General FDA. The Agency is headed by a Managing Director. It has been organized into nine functional groups to carry out its activities. Each functional group called Directorate is headed by Director.



Total Strength = 2047-Nos.

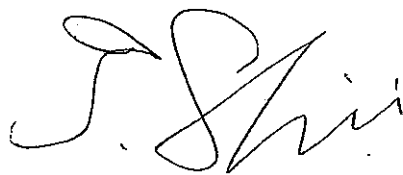
Annex 1-2

MINUTES OF DISCUSSIONS  
IMPLEMENTING REVIEW STUDY ON  
“THE PROJECT FOR IMPROVEMENT OF WATER SUPPLY SYSTEM  
IN FAISALABAD”  
IN ISLAMIC REPUBLIC OF PAKISTAN  
(EXPLANATION OF DRAFT FINAL REPORT)

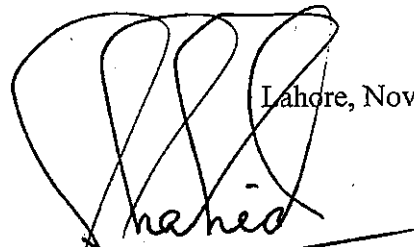
From July to August 2007, the Japan International Cooperation Agency (hereinafter referred to as “JICA”) dispatched the Implementing Review Study Team on the Project for Improvement of Water Supply System in Faisalabad (hereinafter referred to as “the Project”) to Islamic Republic of Pakistan (hereinafter referred to as “the Pakistan”), and through discussions, field survey, and technical assessment of the results, JICA prepared a draft report on this study.

In order to explain and to consult with the Pakistan on the contents of the draft report, JICA dispatched Draft Report Explanation Team (hereinafter referred to as “the Team”) to the Pakistan, which is headed by Mr. Tsutomu SHIMIZU, Senior Deputy Resident Representative, JICA Pakistan Office.

In the course of discussions, both sides confirmed the main items described in the attached sheets.



Tsutomu SHIMIZU  
Leader  
Implementing Review Study Team  
Japan International Cooperation Agency



Lahore, November 19, 2007

Shahid Mahmood  
Secretary  
Planning and Development Department  
Government of the Punjab



Ms. Sabina Qureshi  
Deputy Secretary (ADB/Japan)  
Economic Affairs Division  
Ministry of Economic Affairs & Statistics  
Islamic Republic of Pakistan



Khizer Hayat Gondal  
Secretary  
Housing, Urban Development and  
Public Health Engineering Department  
Government of the Punjab



Mahboob Elahi  
Managing Director  
Water and Sanitation Agency  
Faisalabad

## ATTACHMENT

### 1. Components of the project

The Pakistan side agreed and accepted in principle, the components of the Draft Final Report explained by the Team.

### 2. Japan's Grant Aid Scheme:

2-1) The Pakistan side understood the Japan's Grant Aid Scheme and will take the necessary measures and allocate necessary and sufficient budget for smooth implementation of the Project, as the conditions for the Japanese Grant Aid to be implemented. The Grant Aid Scheme and necessary measures were described in the Annex of the Minutes of Discussions agreed by both sides on 21<sup>st</sup> of July 2007 (hereinafter referred to as "the Previous M/D").

2-2) Measures for some items and matters which are described in "Other Relevant Issues" in this document should also be undertaken timely and properly since these are indispensable to the whole Project Design.

2-3) The Pakistan side understood that conducting the Implementing Review Study (hereinafter referred to as "the Study") did not imply and commit the implementation of the Project.

2-4) Both sides agreed that some components might be excluded in the course of Japanese Cabinet approval even if the conditions are met by the Pakistan side.

2-5) The Pakistan side promised to implement the Project properly following to the "Guidelines of the Japanese Grant Aid for General Projects and for Fisheries" if the Project is approved by the Japanese Cabinet. The Guidelines was attached in the Previous M/D.

### 3. Schedule of the Study:

JICA will complete the Final Report in accordance with the confirmed items in this Minutes of Discussions and send it to the Government of the Pakistan around January 2008 at the earliest.

### 4. Exemption of Taxes and Duties:

The Pakistan side agreed to take necessary measures to exempt Value Added Tax, custom duties and any other taxes and fiscal levies in the Pakistan arisen from the Project activities and they will be borne by beneficiary organizations in accordance with the implementation schedule.

### 5. Responsible and Implementing Organization:

The Pakistan side explained that there is no change in the Organizations which was confirmed in the Previous M/D.

### 6. Title of the Project:

Both sides agreed not to change the title of the Project as "The Project for Improvement of Water Supply System in Faisalabad", in compliance with the request by the Pakistan side.

However final decision for the title will be made when both Governments sign the Exchange of Notes (hereinafter referred to as "E/N") for the Project.

## **7. Project Cost Estimation**

Both sides agreed that the Project Cost Estimation described in Annex 1 should never be duplicated, released or revealed to any third parties before the signing of the all the Contract(s) for the Project.

Both sides also agreed that the Draft Final Report should never be duplicated, released or revealed to any third parties before the Final Report is released.

The Project Cost Estimation in Annex 1 is still under evaluation and it might be altered in the course of Japanese Cabinet approval.

## **8. Components implemented by the Pakistan side:**

As the result of the Study, the Team requested that the Pakistan side should construct the following components and bear the construction cost by the Pakistan side.

- Construction of Three (3) Number of Operator's Quarters

The Team also requested that the Pakistan side should precede the revision of PC-1 for securing the construction cost for above components if these cost could not be covered by or within the cost secured by the Existing PC-1.

The Team explained that obtaining the approval of revision of PC-1, which includes cost of above components, would be prerequisite condition.

The Pakistan side agreed to implement these components and to start the procedure of revision of PC-1.

Besides those components, both sides agreed that component(s) of the Project might be adjusted or excluded in the course of Japanese Cabinet approval in accordance with the result of the Study and the budget allocated for the Project.

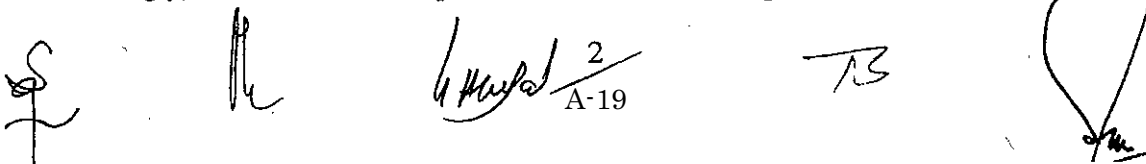
When component(s) are adjusted or excluded from the Project, the Team will inform the component(s) to the Pakistan side by the end of December 2007. In that case, the Pakistan side agreed to consider whether or not the Pakistan side could bear and implement the component(s), then inform the results to the Team. In this case, the schedule of the Project implementation and revision of PC-1 will be reconsidered.

## **9. Revision of the PC-1:**

The Pakistan side explained that revision and approval of the PC-1 might be required since the Project Cost Estimation increased comparing to the previous Cost in the Basic Design Study. Besides, if the Pakistan side should implement component(s) as written in item 8 above in this M/D, it might require the revision of the PC-1.

If so required, the Team strongly requested that the Pakistan side should start the revision of the PC-1 and get approval at the earliest, utilizing the procedure of "Anticipatory Approval", by the end of February 2008 since the Japanese Cabinet, which would deal with the Approval for the Project, should be supposed to be held around between March to April 2008 and the approval for revision of the PC-1 would be one of the important prerequisite conditions for the Approval by Japanese side.

Accordingly, the Pakistan side promised to make every possible effort to get approval and

The bottom of the page features five handwritten signatures or initials. From left to right: a stylized 'S' with a vertical line; a signature that appears to be 'H'; a signature with '2' written above it and 'A-19' written below it; the initials 'TS'; and a large, looped signature.

would inform the progress monthly to JICA Pakistan Office in writing and inform result by around March 2008 through an official channel with an authorized letter.

#### **10. Other Relevant Issues:**

##### **10-1) Altered Design for New Terminal Reservoir**

The Team explained the alteration of the New Terminal Reservoir and its relevant facilities.

The Pakistan side understood and agreed to the alteration.

##### **10-2) Measures to be taken by the Pakistan side:**

The Team clarifies the necessary measures and budget to be taken care by the Pakistan side in the Draft Final Report and Final Report other than the general measures described in the Previous M/D. The Team also makes suggestions for better management and utilization of the Project in these Reports.

The Team particularly pointed out that securing these budgets is indispensable for the effective implementation of the Project although the budget increased more than the one already secured by the Pakistan side in existing PC-1.

The Pakistan side agreed to implement these matters timely and properly.

##### **10-3) Relevant Permissions for the Project:**

The Pakistan side explained that in order to get relevant permissions if necessary, coordination with relevant agencies and the provincial government will be undertaken.

The Team strongly requested the Pakistan side to get permissions if necessary, before the signing of E/N and the Pakistan side agreed.

##### **10-4) Strengthening of Operation & Maintenance:**

According to the result of the Study, the Team requested the Pakistan side to take necessary actions which were proposed in the Draft Final Report such as allocation of adequate budget, qualified personnel and improvement of water revenue system for proper, effective and sustainable operation and maintenance of equipment and facilities.



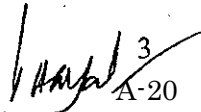


The Team strongly requested that the necessary actions should be taken in time for the construction of the facilities.

The Team particularly pointed out the inefficient water revenue system, which caused insufficient funds of effective operation and maintenance of the facilities and the Pakistan side agreed to improve the system.

The Pakistan side agreed to take necessary measures properly according to the proposal and suggestion by the Team. The Pakistan side also agreed to report to JICA Pakistan Office the progress of these measures in writing periodically.

##### **10-5) Environmental Impact Assessment (EIA)**

The Pakistan side explained the progress of the procedure for EIA approval is in process and EIA report was submitted to Environmental Protection Department for official approval. The Pakistan side agreed to submit the relevant documents proving the approval of EIA to the Team through official channel.

As agreed in the Previous M/D, the implementation of the Project would be postponed or cancelled if EIA approval is not completed by the end of December 2007.

**10-6) Land Acquisitions for the Project Facilities:**

The Pakistan side will submit the relevant documents proving that the lands for the Project have been secured in collaboration with the concerned Departments by the end of December 2007.

The No Objection Certificate for the transfer of the land for pumping stations issued by the District Officer (Revenue) Faisalabad is shown in Annex 2.

**10-7) Changes of Circumstances:**

As confirmed in the Previous M/D, there is no change of circumstances around for the implementation of the Project such as the priority and arrangement of the Project.

In case there were major changes of the circumstances which might influence the Project implementation, such as economic situation, security situation etc., the Pakistan side would inform the Team as soon as the changes are recognized.

The Pakistan side agreed that in case there were changes which might give negative impact to the Project, the Pakistan side would make every effort and take measures to mitigate the negative influences to the Project.

**10-8) Public Relations of the Project:**

The Pakistan side assured to do public relations for the Project affirmatively in order for the Pakistan citizens to understand that the Project is assisted by Japanese Official Assistance Development.

**10-9) Safety and Security for the Team:**

The Team explained that security measures are indispensable for effective implementation of the Project. The Pakistan side agreed to take any necessary measures to secure the safety of the member of the Project.

**10-10) Lessons Learnt by the Past Cooperation by Japanese ODA:**

The Team requested to the Pakistan side that outcome of Assistance of the Technical Transfer and the Grant Aid implemented in the past should be utilized to improve the living condition of the Pakistan people.

The Pakistan side agreed and assured to utilize the lessons learnt from the past cooperation.

Annex 1 : The Project Cost Estimation

Annex 2 : Document regarding Land Acquisition

End

A-21

# Annex 1

## 1-1: The Project Cost Estimation

Division	Aomunt (Japanese million yen)					Total
	Phase 1	Phase 2				
	Single fiscal year matter (2004)	B-type Government bond matter				
		Term-1 (2008)	Term-2 (2009)	Term-3 (2010)	Sub-Total	
Construction costs	496.7	435.9	1,917.9	1,917.7	4,271.5	4,768.2
Machine / Material procurement costs	4.8	—	—	—	—	4.8
Management fee for dsign and supervision	206.9	22.8	74.8	74.8	172.4	379.3
Total	708.4	458.7	1,992.7	1,992.5	4,443.9	5,152.3

## 1-2: Cost to be borne by the Pakistani side

	Description	Basic Design Study		Implementation Review Study	
		Million Rs	Million yen (approx.) 1Rs=JY2.19	Million Rs	Million yen (approx.) 1Rs=JY2.15
1.	Primary power supply	35.83	78.47	80.00	172.00
2.	Land acquisition	10.94	23.96	10.94	23.52
3.	Site clearance	0.90	1.97	0.90	1.94
4.	Road construction	101.69	222.70	80.00	172.00
5.	Installation of Enclosures	6.12	13.40	8.00	17.20
6.	Procurement of Equipment in pump station	11.44	25.05	8.00	17.20
7.	Site Preparation of premises for the booster pump station	6.12	13.40	6.00	12.90
8.	Project Supervision	48.00	105.12	48.00	103.20
9.	Vehicles for supervision	5.50	12.05	6.00	12.90
10.	Construction of residence	21.46	47.00	30.00	64.50
11.	Public relations	2.50	5.45	2.50	5.38
12.	Compensation for residence	—	—	60.00	129.00
13.	Banking commission	—	—	36.47	78.41
14.	Others	—	—	15.00	32.25
15.	Construction of three (3) Operator's Quarters, etc.	—	—	12.22	26.27
	Total	250.50	548.57	404.03	868.67
	Balance			+153.53	+320.10

The Cost to be borne by the Pakistani side increased about 210 million Rs (441 million JY) from Cost to be borne by the Pakistani side in Basic Design Study.

From:

The District Officer (Revenue),  
Faisalabad.

To:

The Project Director/D.C-II,  
WASA/FDA, Faisalabad.

No: 275-1/DDO(C)/Acctt(C)-15

Dated: 01-3-06

Subject:

TRANSFER OF LAND OF CHAK NO.49/JB TO WASA/FDA -  
IMPROVEMENT OF WATR SUPPLY PROJCT FOR FAISALABAD.

Memorandum

Kindly refer to your letter No.782/DC-II/WASA/05 dated 12.9.2005 on the above cited subject.

2. This office has no objection for transfer of land measuring 40-kanals 16-marlas comprising . killa Nos.3,5/2,6,7/1,15,16,25 of Sqr. No.13 situated in Chak No.49/JB Tehsil Sadar Faisalabad subject to payment of price.

3. You are requested to move the case to Board of Revenue, Punjab Lahore for the purpose.

% District Officer (Revenue),  
Faisalabad.

No: 276-1/DDO(C)/Acctt(C)

Dated: 01-3-06

A copy is forwarded for information to the:-

1. District Coordination Officer Faisalabad with reference to his letter No.3(22)/District Coordination Officer, Faisalabad/SG/2005/5128 dated 25.5.2005.
2. Executive District Officer (Revenue) Faisalabad with reference to his letter No.2830/EDOR/CA/MD-180 dated 16.9.2005.
3. Deputy District Officer (Revenue) Sadar Faisalabad.

% District Officer (Revenue),  
Faisalabad.



**Minutes of Discussions**  
**The Basic Design Study on**  
**The Project for Improvement of Water Supply in Faisalabad**  
**in Islamic Republic of Pakistan**

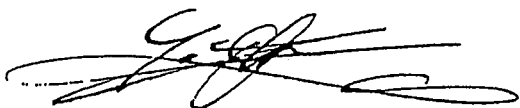
In response to the request from the Government of Islamic Republic of Pakistan (hereinafter referred to as 'Pakistan'), the Government of Japan decided to conduct a Basic Design Study on the Project for Improvement of Water Supply in Faisalabad (hereinafter referred to as "the Project"), and entrusted the study to Japan International Cooperation Agency (hereinafter referred to as 'JICA').

JICA sent to Pakistan the Basic Design Study Team (hereinafter referred to as 'the Team'), which was headed by Mr. Yoshiki OMURA, Senior Advisor, Institution for International Cooperation, JICA, and was scheduled to stay in the country from December 9th to 18th, 2002.

The Team held a series of discussions with the concerned officials of the Government of Pakistan and conducted a field survey in the study area.

In the course of discussions and field survey, both parties confirmed the main items described on the attached sheets. The Team will proceed to further work and prepare the Basic Design Study Report.

Lahore, December 17th, 2002



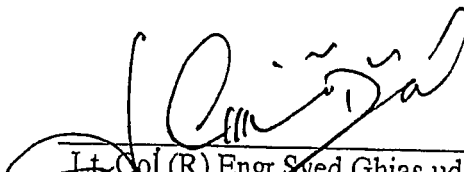
Mr. Yoshiki OMURA  
Leader  
Basic Design Study Team  
Japan International Cooperation Agency



Mr. Riaz Ahmed  
Secretary  
Housing, Urban Development &  
Public Health Engineering Department  
Government of Punjab



Mr. Muhammad Ashraf Khan  
Joint Secretary  
Economic Affairs Division  
Ministry of Economic Affairs & Statistics  
Government of Pakistan



Lt. Col (R) Engr Syed Ghias ud din  
Managing Director  
Water and Sanitation Agency  
(WASA/FDA), Faisalabad

## ATTACHMENT

### 1. Objective of the Project

The objective of the Project is to improve the water supply services in Faisalabad in order to supply safe and sufficient water for the residents.

### 2. Responsible and Implementing Organization

Water and Sanitation Agency (WASA/FDA), Faisalabad

### 3. Site of the Project

The Project site is as shown in Annex-1 (page 4).

### 4. Items requested by the Government of Pakistan

After discussions with the Team, the items described in Annex-2 (Page 5) were finally requested by Pakistani side. JICA will assess the appropriateness of the request in engineering, social and financial terms and will report the findings to the Government of Japan.

### 5. Japan's Grant Aid Programme

Pakistani side has understood the system and characteristics of Japan's Grant Aid Programme as described by the Team shown in Annex-3 (Page 6).

### 6. Necessary measures to be taken by the Pakistani side

Pakistani side will take the necessary measures, as described in Annex-4 (Page 10), for smooth implementation of the Project on condition that the Japanese Grant Aid is extended.

### 7. Further Schedule of the Study

- a. The consultant members of the Team will proceed with further studies in Pakistani until January 16th, 2003.
- b. JICA will prepare the Draft Basic Design Study Report in English and dispatch a mission in order to explain its contents around May 2003.

### 8. Other relevant issues


The Pakistani side and the Team have confirmed the following points:

- a. The Pakistani side will obtain necessary consent in writing from inhabitants in and around the proposed well field to be developed under the Project.

- b. The budget required for the land acquisition for the facilities in the Project including the tubewells, the collector main, the transmission main, and electric power supply will be allocated and executed by the time of the explanation of Draft Final Report. The Pakistani side will present the related documents of budgetary arrangements to the Draft Final Report Team.
- c. The proposed booster pumping station is located inside the premises of the existing inline booster pumping station.
- d. The proposed terminal reservoir and related distribution pumping facilities are located inside the existing terminal reservoir premises.
- e. Pakistani side understood that as a prerequisite condition to providing Japan's grand aid program, the facilities to be constructed under the Project should be fully utilized without idling once commissioned.
- f. The water supply facilities to be constructed by the Project shall properly be operated and maintained with necessary financial input to be generated by appropriate water tariff collection.
- g. Pakistani side explained that a Federal government approval (PC-1) was prerequisite to project implementation and that PC-1 shall be prepared and approval would be obtained within three months after receipt of Draft Final Report including information needed to prepare the said project document.
- h. Pakistani side agreed to take a legal clearance for environmental protection from the Environmental Protection Authority/Department.

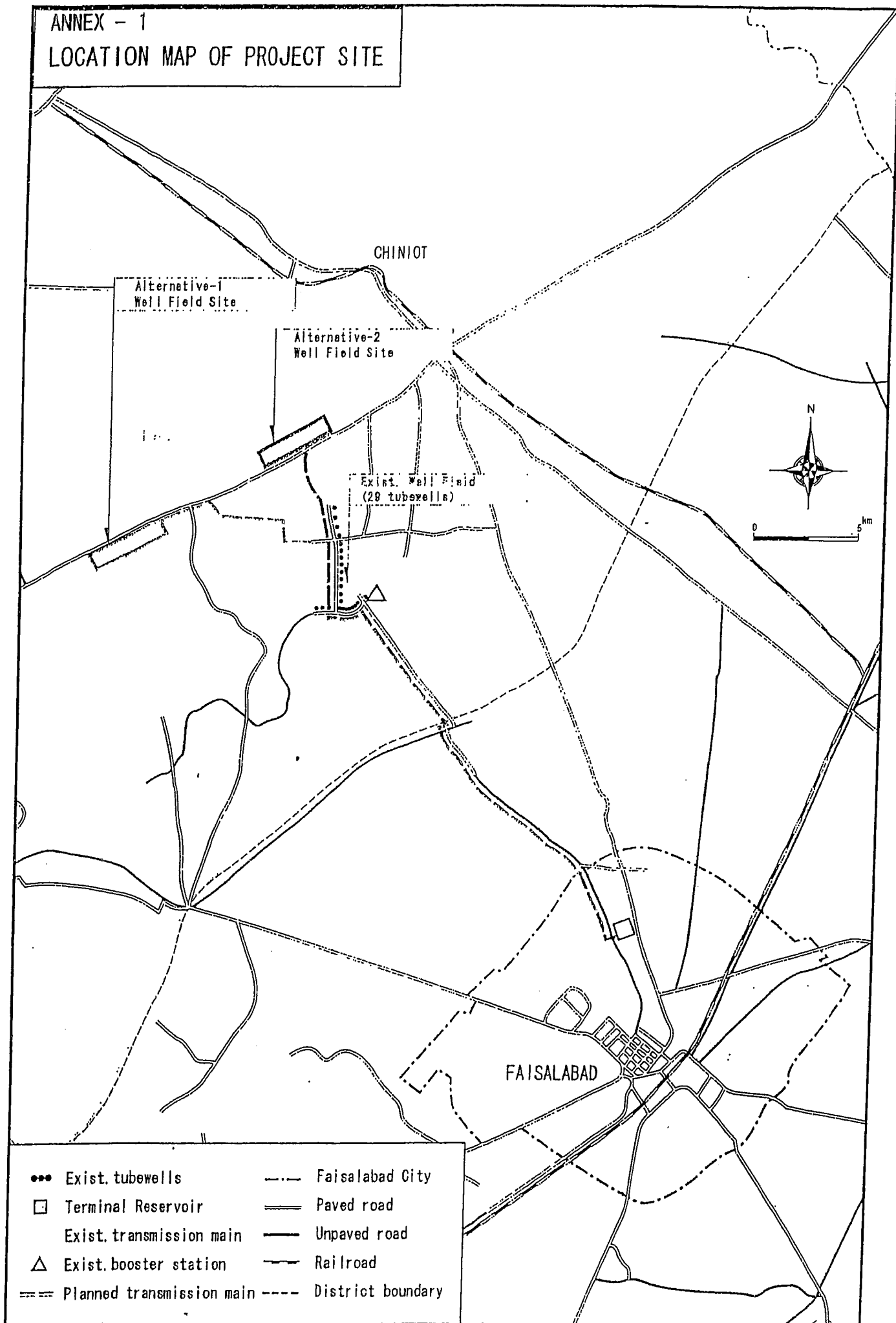


i



# ANNEX - 1

## LOCATION MAP OF PROJECT SITE



## **Annex-2 List of Requested Items**

Construction of new tube wells along the Chenab river area and a transmission system as followed;

1. Tubewells along the Chenab river area (12NOS)
2. Collector main
3. Transmission Main
4. Booster Pumping Station
5. Terminal Reservoir (including pumping facility)

Handwritten signatures and initials at the bottom right of the page.

## Annex III

### JAPAN'S GRANT AID SCHEME

#### 1. Grant Aid Procedures

(1) Japan's Grant Aid Program is executed through the following procedures.

Application	(Request made by a recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of Implementation	(The Notes exchanged between the Governments of Japan and the recipient country)

(2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Program, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

#### 2. Basic Design Study

##### (1) Contents of the Study

The aim of the Basic Design Study (hereinafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Japanese Government. The contents of the Study are as follows:

- 1) Confirmation of the background, objectives, and benefits of the requested project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.

- 2) Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.
- 3) Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- 4) Preparation of a basic design of the Project.
- 5) Estimation of costs of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

## (2) Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consultant firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA.

The consulting firm(s) used for the Study is (are) recommended by JICA to the recipient country to also work in the Project's implementation after the Exchange of Notes, in order to maintain technical consistency.

## 3. Japan's Grant Aid Scheme

### (1) Grant Aid

The Grant Aid Program provides a recipient country with non-reimbursable funds to procure facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.

### (2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc. are confirmed.

- (3) "The period of the Grant Aid" means the one fiscal year which the Cabinet

approves the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and a final payment to them must be completed.

However in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year by mutual agreement between the two Governments.

- (4) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However the prime contractors, namely, consulting, contracting and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

- (5) Necessity of "Verification"

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

- (6) Undertakings required of the Government of the Recipient Country

In the implementation of the Grant Aid project, the recipient country is required to undertake such necessary measures as the following:

- 1) To secure land necessary for the sites of the Project, and to clear, level and reclaim the land prior to commencement of the construction.
- 2) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites.
- 3) To secure buildings prior to the procurement in case the installation of the equipment.
- 4) To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid.
- 5) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts.
- 6) To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.



7) Proper Use

The recipient country is required to maintain and use the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

8) Re-export

The products purchased under the Grant Aid should not be re-exported from the recipient country.

9) Banking Arrangement (B/A)

(a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the verified contracts.

(b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an authorization to pay issued by the Government of the recipient country or its designated authority.

## Annex-IV

MAJOR UNDERTAKING TO BE TAKEN BY EACH GOVERNMENT

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	To secure land		●
2	To clear, level and reclaim sites and to prepare access roads thereto when needed		●
3	To construct gates and fences in and around sites		●
4	To bear the following commissions to a bank of Japan for the banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
5	To ensure prompt unloading and customs clearance at port of disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan to the recipient country	●	
	2) Tax exemption and custom clearance of the products at the port of disembarkation		●
	3) Internal transportation from the port of disembarkation to the project site	●	
6	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		●
7	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contract		●
8	To maintain and use properly and effectively the facilities, constructed and equipment provided under the Grant Aid		●
9	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for construction of the facilities		●

Date: August 29, 2003

**TECHNICAL NOTE  
FOR  
THE BASIC DESIGN STUDY  
FOR THE PROJECT FOR IMPROVEMENT OF WATER SUPPLY  
IN FAISALABAD, PAKISTAN**

The Basic Design Study for the Project for Improvement of Water Supply in Faisalabad has been underway since August 2, 2003. At the final stage of its field survey, the Water and Sanitation Authority, Faisalabad (WASA), the executing agency of the project, and the study team dispatched by the Japan International Cooperation Agency (JICA), discussed on the results of the study up to date as well as proposals by the executing agency, concentrating on the major project components as follows:

- (1) Development groundwater sources for augmentation of water supply for the city
- (2) Planning for new water supply facilities
- (3) Improvement of existing water system in the city
- (4) Proposal for procurement of equipment for operation and maintenance of the water system

The team continues the survey up to September 10, 2003, and the results will be examined in detail at home for reporting in draft by the team to the executing agency to be scheduled in November 2003.

(1) **Groundwater sources development**

- 1) The groundwater production for augmentation of water sources targeted by the project is 91,000 m<sup>3</sup>/day.
- 2) All the tubewells are planned to be installed in the land owned by the Government along the Jhang Branch Canal on its eastern side falling in the jurisdiction of the Faisalabad district, within an area extending from RD230 to RD270 (40,000 ft = approximately 12 km) along the canal.
- 3) The proposed land has already been secured by WASA through the notification of the District Government, Faisalabad under Section-4 of the Land Acquisition Act 1894.
- 4) WASA has completed its own pumping test of an existing tubewell in the planned area during

the survey by the team, and will further proceed to the execution of seepage test of the canal by the end of the survey, All the data and information obtained through these tests will be provided to the study team for its analysis of the hydrogeological features of the project area for finalizing the design for the feasibility of groundwater development for the project.

- 5) The results of the pumping test by WASA and the previous studies by international and local consultants/agencies indicate that the production of one tubewell in this area is estimated to be 2 - 3 cusec (=200-300m<sup>3</sup>/hr). The exact size will be decided after the test drilling program is completed by the study team, together with a proposal for the required number of tubewells as well as the layout of group tubewells across the planned site that could minimize the influence of operation of the targeted production.
- 6) The location of the site for groundwater development is shown at Annex 1 (attached).

## *(2) Planning of new water facilities*

- 1) Planned water facilities are composed of the following items:
  - a. Tubewells along the Jhang Branch Canal
  - b. New intermediate pumping station with a reservoir
  - c. Transmission main (about 12.5 km)
  - d. New terminal reservoir and pumping station in the city
- 2) Among the planned facilities, the study team proposed to use the existing transmission main of 1,500mm in diameter running through the project site from the existing inline booster pump station, collecting the production from the existing 29 tubewells in the Chenab wellfield, since that line can accommodate the targeted production of 91,000 m<sup>3</sup>/day under the project.
- 3) WASA explained that this proposal will deprive it from the full utilization of the water production capacity of existing wellfield and its extension thereof and that the operation and maintenance cost will increase enormously due to extra electricity consumption. WASA is willing to agree to this proposal on the condition if it is technically and economically more feasible than the plan for installation of a new independent transmission line from the new intermediate pump station. WASA has requested for in-depth study on the technical and economical feasibility of both plans using full capacity of existing wellfield and prevailing electricity rates.
- 4) A new intermediate pumping station with a reservoir is planned to be in the land owned by the Government BAWA road in front of NEWAN rest house, along which the existing transmission main from the existing inline booster pump station is installed.

- 5) Among the basic design elements of water supply planning, WASA proposed to adopt the design capacity of existing tubewells in the Chenab wellfield totaling 11600m<sup>3</sup>/hour as well as the future extension of the existing wellfield. To this proposal, the study team responded to the effect that the data of the past operation records be provided to the team for employing a practically available production rate, taking into account ongoing drawdown of these wells affecting the surrounding areas. The data has since been provided and all the basic design elements will be further examined in detail by the study team for the formation of an appropriate new system, and the capacities of new facilities will be proposed, based upon the analyses of these factors.
- 6) For reference, the schematic diagram of two planned systems is shown in Annex 2. The location of a site for a new intermediate pump station is shown in Annex 3.

### ***(3) Improvement of existing water supply system in the city***

- 1) In order to ensure maximum effect by the implementation of the project, the study team carried out the survey to contribute to the improvement of WASA's existing water system in the city faced with non-uniform water distribution particularly in the east zone accounting for nearly one third of the whole city jurisdiction, which has been getting less water supply and as such facing acute shortage.
- 2) WASA suggested independent water supply line from terminal pump station to Jhal Khanuana water works with a new pump station and water storage there. As a result of the survey, fundamental improvement has proven to require huge investment. However, the following measures have been agreed to have an effect in improvement, though partially, of the existing system.
  - a. Construction of a new reservoir and pumping station in the extended Jhal Khanuana Head Water Works located in the central area of the east zone.
  - b. Improvement of water supply through augmentation of water flow into the east zone of the city by adding new section(s) of pipe line.
- 3) The proposed plans for additional new sections are as follows:
  - a. Plan(a) A section of pipe from Node No. 5 to a new reservoir proposed at Jhal Khanuana HWW. (Section -A, approx. 3.5 km) plus a section of pipe from the planned terminal reservoir to the bifurcation point of existing 1600mm arterial main into 1200mm and 1400mm lines

(Section C, approx. 2.5 km)

- b. Plan (b) A section of pipe , Section- A, plus a section of pipe from Outlet No.2 to Outlet No.5(Section- B, approx. 4 km).

Among these plans, WASA has put the first priority on Plan (a).

- 4) The effects of the respective measures for reinforcement of arterial mains will be examined in detail for possible implementation under the project.
- 5) WASA underscored the necessity of employing an optimum size(s) of additional trunk lines effective for a long term use, in view of the specific characteristics of the arterial mains essential for water distribution.
- 6) The necessity of improvement of the existing terminal reservoir was also discussed for the effective distribution of water transmitted from the existing and new tubewells, since the lower half of the existing reservoir remains unused since its inception due to the characteristics of existing pumps. The measure proposed by the team is to connect the existing reservoir to a new terminal reservoir with a pipe so that the new pumps to be installed under the project can undertake pumping from this inactive lower half of the existing reservoir. As a result of the discussion, a planned pipe will be connected to either the suction header line to the existing pumps or the inflow bypass line from the inline booster pump station.
- 7) The locations of additional facilities and sections are shown in Annex 4.

#### ***(4) List of equipment for maintenance and operation proposed by WASA***

- 1) The following list shows the items of equipment for operation and maintenance of the project proposed by WASA during the meeting:
  - a. For tubewells along the Jhang Branch Canal and other facilities under this project.
    - Service rig for tubewells and borehole inspection TV camera.
    - Mobile workshop with repair/rehabilitation tools for equipment and pipeline
    - Telemetry system for collecting and recording data from scattered tubewell stations and booster pump stations.
    - Voice Communication system for connection between tubewells ,maintenance crew , intermediate booster station, terminal pump station and Jhal Khanuana Head Water Works and

WASA Head Quarters.

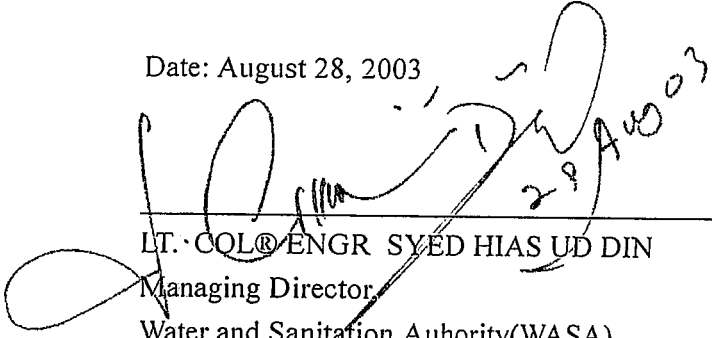
- ☐ Maintenance Vehicle- a Double-cabin pick-up truck (for tubewell maintenance and transportation of staff and materials.)
- ☐ Water quality testing kits/equipment for Na, SO<sub>4</sub>, NH<sub>3</sub>, NO<sub>2</sub>, NO<sub>3</sub>, Mn, Fe, Ar, F, Hg, Cd, Pb. Residual Chlorine.
- ☐ GPS meter

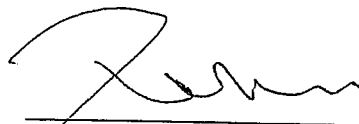
b. For pipeline service

- ☐ Electronic leakage detection equipment
- ☐ Pump monitoring and testing kits.
- ☐ Water meters for consumers in connection with planned tariff reform
- ☐ Tapping drilling units for service connections (1/2" to 3" in size)

2) The details of requested equipment will further be examined by the study team and reported to the Government of Japan.

Date: August 28, 2003

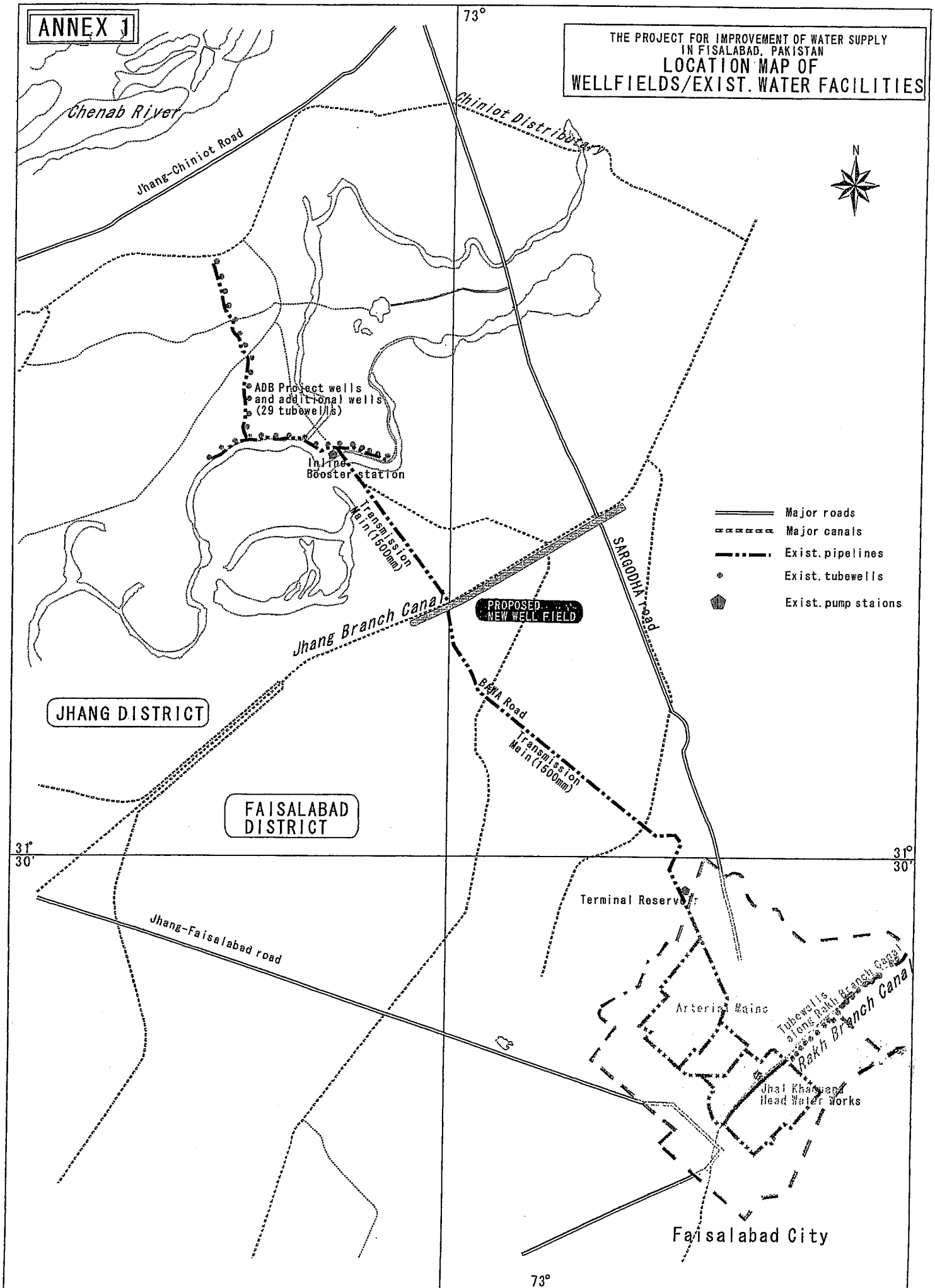
  
LT. COL. ENGR SYED HIAS UD DIN  
Managing Director,  
Water and Sanitation Authority (WASA)  
FDA, Faisalabad

  
T. NIWANO, Chief Consultant  
JICA Basic Design Study Team  
for the Project

# ANNEX 1

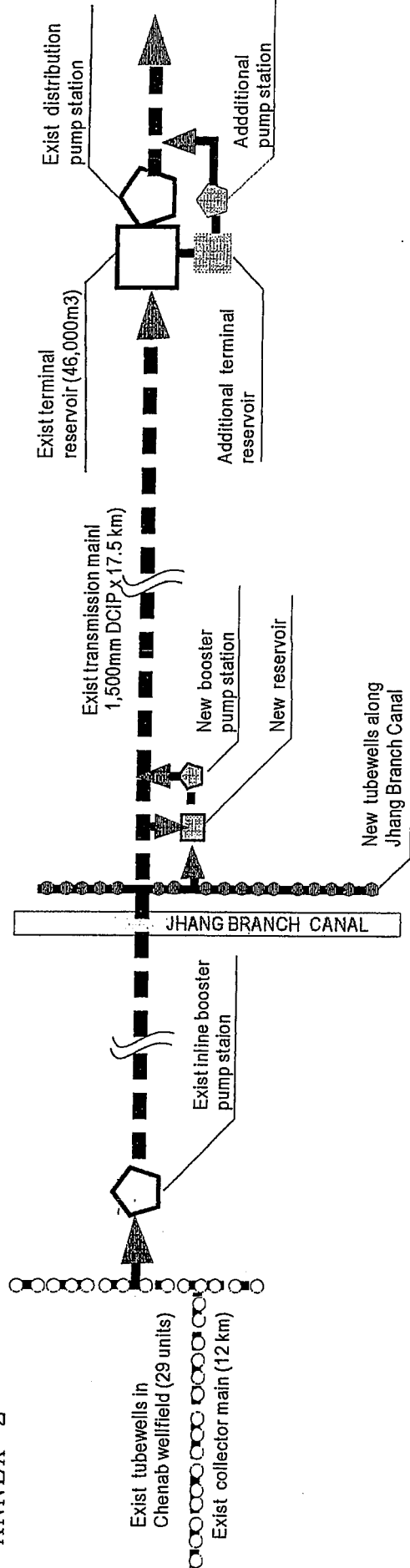
73°

## THE PROJECT FOR IMPROVEMENT OF WATER SUPPLY IN Faisalabad, PAKISTAN LOCATION MAP OF WELLFIELDS/EXIST. WATER FACILITIES

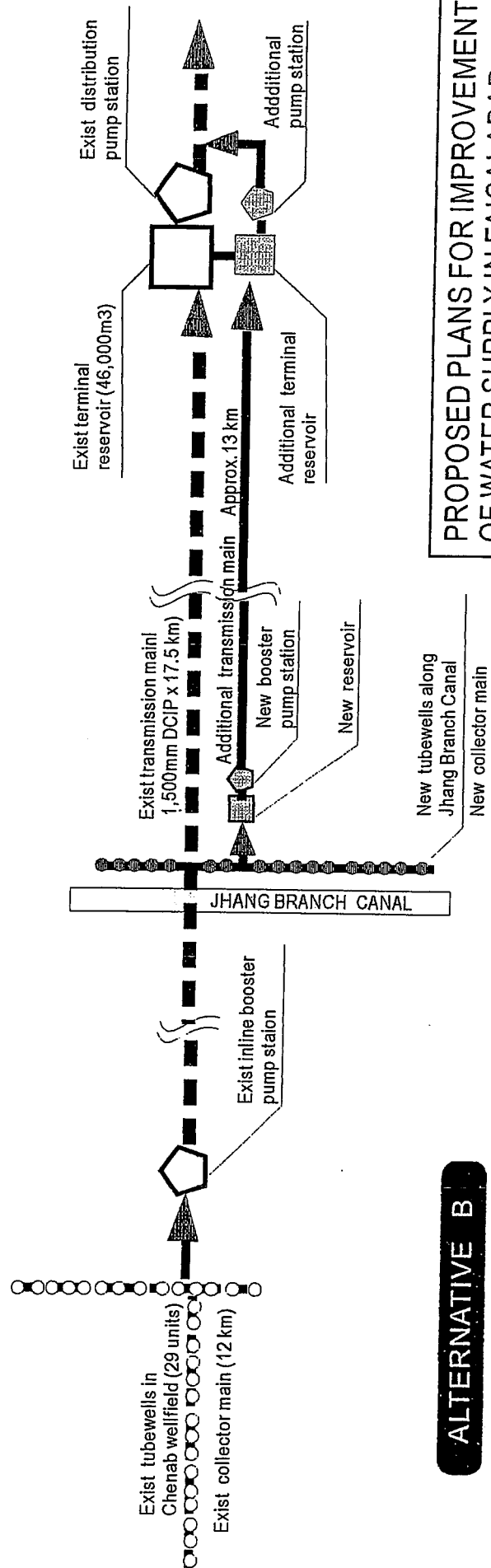




# ANNEX-2



## ALTERNATIVE A



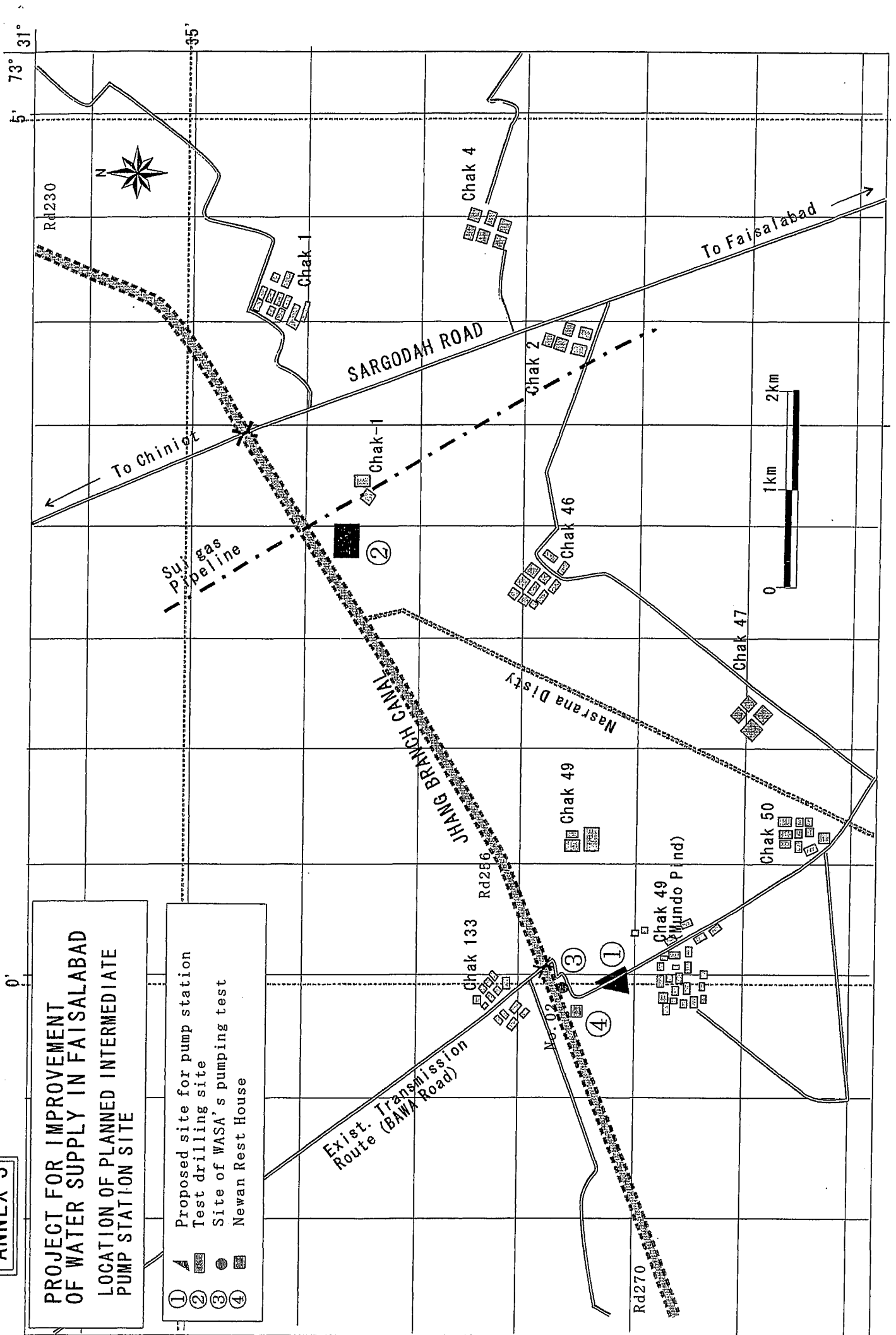
## ALTERNATIVE B

### PROPOSED PLANS FOR IMPROVEMENT OF WATER SUPPLY IN FAISALABAD

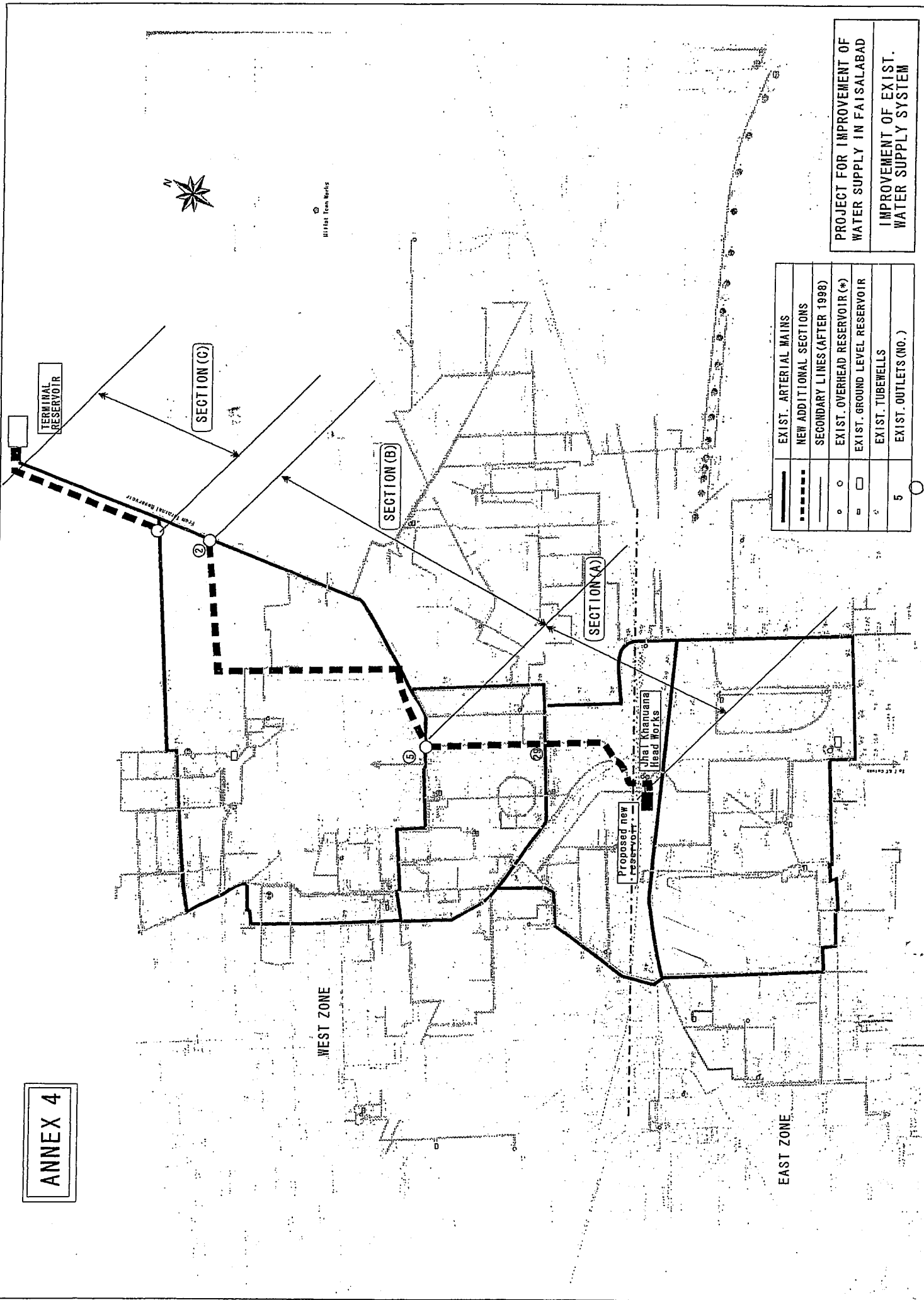
# ANNEX 3

## PROJECT FOR IMPROVEMENT OF WATER SUPPLY IN FAISALABAD LOCATION OF PLANNED INTERMEDIATE PUMP STATION SITE

- ① Proposed site for pump station
- ② Test drilling site
- ③ Site of WASA's pumping test
- ④ Newan Rest House



# ANNEX 4



PROJECT FOR IMPROVEMENT OF  
WATER SUPPLY IN FAISALABAD

IMPROVEMENT OF EXIST.  
WATER SUPPLY SYSTEM

EXIST. ARTERIAL MAINS	—
NEW ADDITIONAL SECTIONS	- - - -
SECONDARY LINES (AFTER 1998)	.....
EXIST. OVERHEAD RESERVOIR (*)	○
EXIST. GROUND LEVEL RESERVOIR	□
EXIST. TUBEWELLS	●
EXIST. OUTLETS (NO.)	5 ○

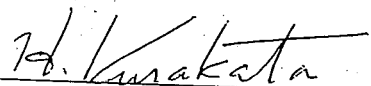
Minutes of Discussions  
The Basic Design Study on  
The Project for Improvement of Water Supply in Faisalabad  
in Islamic Republic of Pakistan  
(Explanation on Draft Final Report)

In December 2002, Japan International Cooperation Agency (hereinafter referred to as 'JICA') dispatched a Basic Design Study Team on the Project for Improvement of Water Supply in Faisalabad (hereinafter referred to as "the Project") to the Islamic Republic of Pakistan (hereinafter referred to as 'Pakistan'), and through discussions, field survey, and technical examination of the results in Japan, JICA prepared a draft final report of the study.

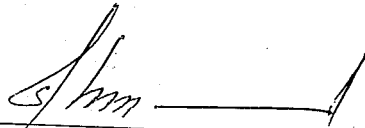
In order to explain and to consult with the Pakistan side on the contents of the draft final report, JICA sent to Pakistan the Draft Final Report Explanation Team (hereinafter referred to as 'the Team'), which was headed by Mr. Hiroshi Kurakata, Director, First Project Management Division, Grant Aid Management Department, JICA, and was scheduled to stay in the country from Mar. 16th to Mar. 28th, 2004.

As a result of discussion, both sides confirmed the main items described on the attached sheets.

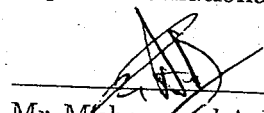
Lahore, March 25th, 2004




Mr. Hiroshi Kurakata  
Leader  
Basic Design Study Team  
Japan International Cooperation Agency



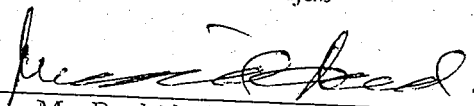
Mr. Sohail Ahmad  
Secretary  
Planning & Development Board  
Government of Punjab



Mr. Muhammad Ashraf Khan  
Joint Secretary  
Economic Affairs Division  
Ministry of Economic Affairs & Statistics  
Government of Pakistan



Mr. Riaz Ahmed  
Secretary  
Housing, Urban Development &  
Public Health Engineering Department  
Government of Punjab



Mr. Rashid Ahmad Chaudhry  
Managing Director  
Water and Sanitation Agency  
(WASA/FDA), Faisalabad

## ATTACHMENT

### 1. Components of the Project

The Pakistan side agreed and accepted in principle the components of the draft final report explained by the Team.

### 2. Japan's Grant Aid scheme

The Pakistan side understood the Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Pakistan as explained by the Team and described in **Annex-III** and **Annex-IV** of the Minutes of Discussions signed by both sides on December 17th, 2002.

### 3. Schedule of the Study

The Team was informed of the revision of tariff system by WASA in March 2004.

The Team confirmed that JICA would complete the final report with employing a new tariff for its financial analysis and send it to Pakistan side by May 2004.

### 4. Other relevant issues

Both sides confirmed the importance of the following items in order to realize the Project smoothly and effectively.

#### (1) Information disclosure and public meeting


The Team requested the Pakistan side to disclose the information about the impact of the Project clearly through the public meeting with the participation of the residents who might be affected by the Project. The Pakistan side will take necessary measures to mitigate the impacts including appropriate compensatory development package up to the extent of Rs.50 million, which would be provided to upgrade the infrastructure system and to subsidize the installation/improvement of the tubewells in the affected area.

And also the Pakistan side confirmed to provide an undertaking in this regard to the Japanese side until 10th April 2004.

#### (2) Preparation of PCI

For the earlier approval of this project by the Government of Japan, it is a prerequisite for the Pakistan side to secure the approval of PCI by the related agencies of the central government.

The Pakistan side confirmed to inform the Japanese side of its progress and the results on each of the following stages and whenever it would be deemed necessary:



- 1) WASA's submittal of PC1 form to the Punjab government
- 2) Approval of the Punjab government (PDWP)
- 3) CDWP
- 4) ECNEC

The Pakistan side also confirmed to take necessary steps to promote the procedure of approval, targeting its finalization by the end of June 2004.

(3) Environmental Impact Assessment

The Pakistani side explained to undertake the procedures required for environmental protection in compliance with the related regulations of Pakistan during the detailed design stage after the implementation agreement between the governments of Pakistan and Japan.

(4) Plan for Phasing of the Project

Both side agreed that the implementation of the Project would be planned to divide into the following two phases:


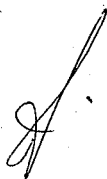
- 1) Phase 1      Improvement of existing distribution system (reinforcement of existing network with supplementary sections to arterial mains)
- 2) Phase 2      Construction of facilities for water source, collection, transmission and distribution (construction of tubewells, collector main, booster pump station, transmission main and terminal reservoir)

(5) Requirement for Personnel for Operation and Maintenance of Facilities

WASA will formulate an appropriate plan for recruitment, allocation and training of personnel for operation and maintenance of facilities to be constructed under the Project.

(6) Improvement of Existing Distribution Network

For the purpose of ensuring the maximum effect of increased water supply through the Project, WASA confirmed to carry out the improvement and rehabilitation of existing distribution network, particularly from secondary distribution lines to house connections.



(7) Monitoring System

WASA agreed to establish an appropriate monitoring system of water level in the planned wellfield to check the influence of the Project as well as water quality with reference to the proposal of the Japanese side.

(8) Grading and leveling of Land

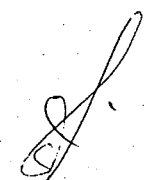
The Pakistani side confirmed to secure the land and to level the sites for the tubewells, the booster pump station and the terminal reservoir, prior to commencement of work on condition that Grant Aid is extended.

(9) Financial Improvement

With the implementation of the project, WASA agreed to take effective measures to secure sound financial status through the improvement of billing, tariff collection and acquisition of new clients.

(10) Tax Exemption

The Pakistan side confirmed to bear all the taxes including customs duties, the Value Added Tax (VAT) related to the Project.

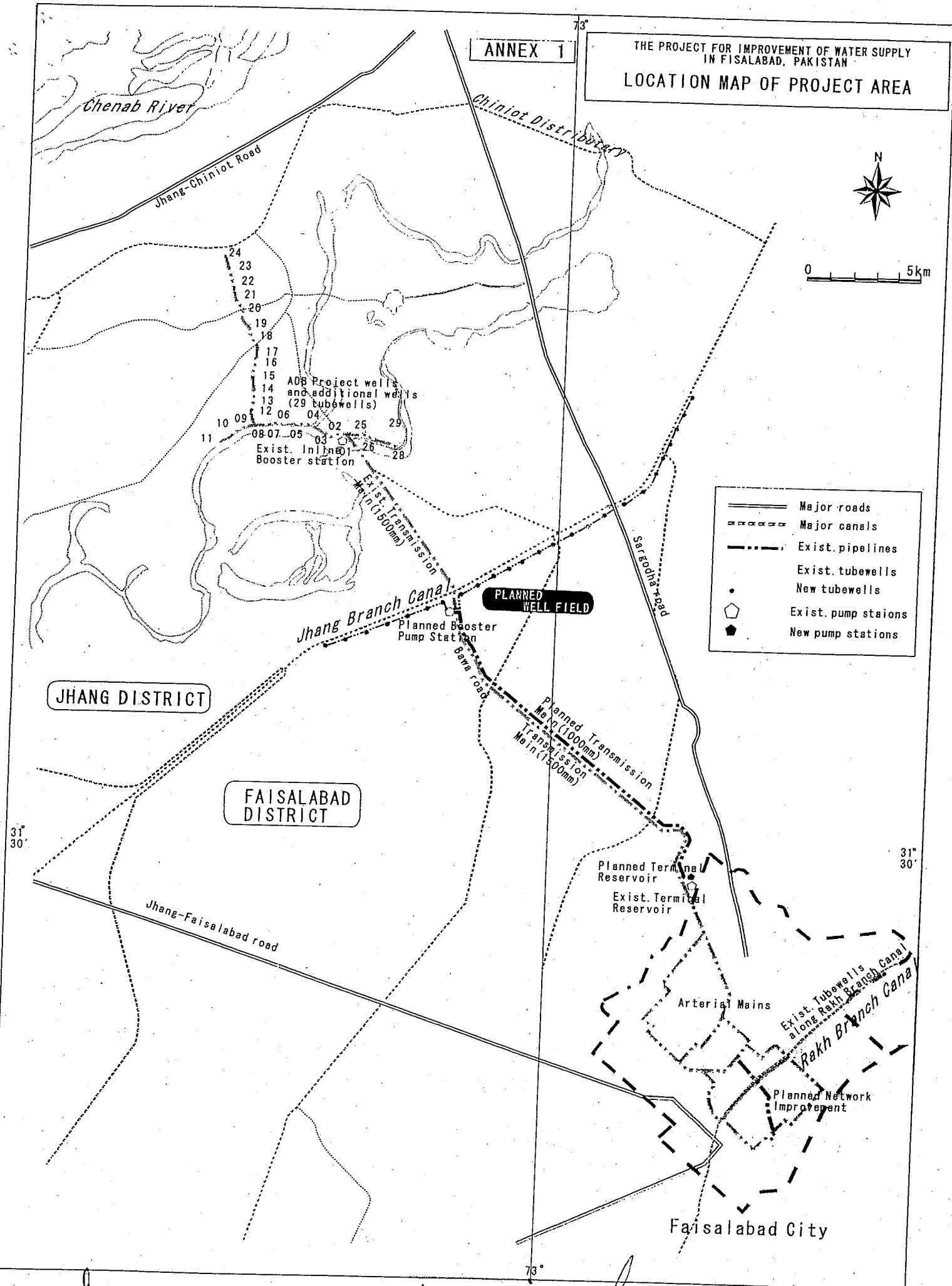


ANNEX 1

THE PROJECT FOR IMPROVEMENT OF WATER SUPPLY  
IN Faisalabad, PAKISTAN  
LOCATION MAP OF PROJECT AREA



0 5km





## ANNEX II

### LIST OF PLANNED FACILITIES

1. Water Source Facilities
  - a. Tubewells 25 Nos.
  - b. Pumps for tubewells 25 Nos.
  - c. Tubewell stations 25 Nos.
2. Collecting facilities
  - a. Collector mains 14,400m
3. Transmission facilities
  - a. Booster pump station 1 No.
  - b. Intermediate reservoir 1 No.
  - c. Chlorinator 1 No.
  - d. Transmission main 13,000 m
4. Distribution facilities
  - a. Terminal reservoir 1 No.
  - b. Terminal pump station 1 No.
5. Improvement of existing network
  - a. Installation of supplementary sections to existing network 6,000 m

## Japan's Grant Aid Scheme

### 1. Grant Aid Procedures

- 1) Japan's Grant Aid Program is executed through the following procedures.

Application (Request made by a recipient country)

Study (Basic Design Study conducted by JICA)

Appraisal & Approval (Appraisal by the Government of Japan  
and Approval by Cabinet)

Determination of Implementation (The Notes exchanged between the Governments of  
Japan and the recipient country)

- 2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using (a) Japanese consulting firm(s).


Thirdly, the Government of Japan appraises the Project to see whether or not it is suitable for Japan's Grant Aid Program, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the Project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.



A-1



## 2. Basic Design Study

### 1) Contents of the Study

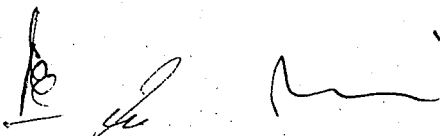
The aim of the Basic Design Study (hereafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Japanese Government. The contents of the Study are as follows:

- a) Confirmation of the background, objectives, and benefits of the requested Project and also institutional capacity of agencies concerned of the recipient country necessary for Project's implementation.
- b) Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.
- c) Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- d) Preparation of a basic design of the Project.
- e) Estimation of costs of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

### 2) Selection of Consultants



A-2

A-50



For smooth implementation of the Study, JICA uses (a) registered consultant firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA.

The consultant firm(s) used for the Study is(are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchanges of Notes, in order to maintain technical consistency.

### 3. Japan's Grant Aid Scheme

#### 1) Grant Aid

The Grant Aid Program provides a recipient country with non-reimbursable funds to procure facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.

#### 2) Exchange of Notes (E/N)

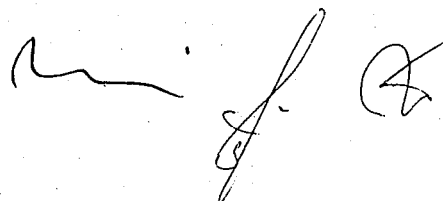
Japan's Grant Aid is extended in accordance with the Notes exchanged by the Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc. are confirmed.

- 3) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and a final payment to them must be completed.

However in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year by mutual agreement between the two Governments.



A-3



A-51

- 4) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased. When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However the prime contractors, namely, consulting, contracting and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)


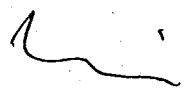

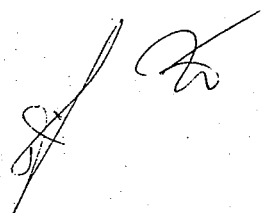
5) Necessity of the "Verification"

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

6) Undertakings required of the Government of the Recipient Country

In the implementation of the Grant Aid project, the recipient country is required to undertake such necessary measures as the following:

- (1) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction.
- (2) To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities in and around the sites.
- (3) To secure buildings prior to the procurement in case the installation of the equipment.
- (4) To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid.

- (5) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts.
- (6) To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.
- (7) Proper Use  
The recipient country is required to maintain and use facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.
- (8) Re-export  
The products purchased under the Grant Aid should not be re-exported from the recipient country.
- (9) Banking Arrangement (B/A)
- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the verified contracts.
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an authorization to pay issued by the Government of the recipient country or its designated authority.

# ANNEX-IV

## Major Undertakings to be taken by Each Government

NO	Items	To be covered by Grant Aid	To be covered by Recipient side
1	To secure land		●
2	To clear, level and reclaim the site when needed		●
3	To construct gates and fences in and around the site		●
4	To construct the parking lot	●	
5	To construct roads		●
1)	Within the site	●	
2)	Outside the site		●
6	To construct the building	●	
7	To provide facilities for the distribution of electricity and other incidental facilities		
1)	Electricity		
a.	The distributing line to the site		●
b.	The drop wiring and internal wiring within the site	●	
c.	The main circuit breaker and transformer	●	
2)	Furniture and Equipment		
a.	General furniture		●
b.	Project equipment	●	
8	To bear the following commissions to a bank of Japan for the banking		
1)	Advising commission of A/P		●
2)	Payment commission		●
9	To ensure prompt unloading and customs clearance at the port of		
1)	Marine(Air) transportation of the products from Japan to the recipient country	●	
2)	Tax exemption and customs clearance of the products at the port of disembarkation		●
3)	Internal transportation from the port of disembarkation to the project	●	
10	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		●
11	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contract		●
12	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid		●
13	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for construction of the facilities as well as for the transportation and installation of the equipment		●

## 資料 5 事業化調査概要表

<b>1. 案件名</b>
パキスタン・イスラム共和国 ファイサラバード上水道整備計画
<b>2. 要請の背景(協力の必要性・位置付け)</b>
<p>(1) 本計画対象地域のファイサラバードは 2007 年推定人口 260 万人で、全国第 3 位の規模にあるが、本調査結果では 55%程度の普及率に過ぎない。</p> <p>(2) 本計画対象地域ファイサラバード市の上下水道整備は、1976 年から ADB の支援が開始され、上水道施設は 1992 年同機関の財政支援によりフェーズ 1 が完成し、以降今日まで同施設を主体とし「上下水道公社」(WASA)が給水サービスを実施してきたが、今日まで実質的な増設が行われていないため、現在深刻な給水量の不足に直面している。世銀による改訂マスタープランに基づき、1996 年我が国に同フェーズの一環を構成する整備計画に対し無償資金協力が要請された。</p> <p>(3) 同要請に対し、1997 年事前調査が実施され、給水量 91,000m<sup>3</sup>/日の増強を目的とする新規水源開発計画が合意された。翌 1998 年基本設計調査が開始されたが、調査途中、同年パ国が断行した核実験に対する国際的な経済制裁に我が国も同調し、本調査を含む経済協力は中止となった。</p> <p>(4) 2001 年経済制裁解除後、パ政府は本計画を優先プロジェクトとして再要請し、2002 年から基本設計調査が実施された。調査の結果、給水量の不足、普及率の低迷、時間制限給水(一日最大 6 時間)、市内の 1/3 の地域で水圧不足による給水不良など、給水サービスが劣悪化し、特に不足する給水量の増強が急務となっていることが判明した。</p> <p>(5) 本計画による協力は、我が国の無償資金協力事業として実施する妥当性があるとされ、2004 年に第 1 期として、ファイサラバード市内配管増強に係る E/N が締結され、2006 年に完工した。2005 年に第 2 期として、上水道施設建設(水源井、導水管、中継ポンプ場、配水ポンプ場、送水管)にかかる E/N が締結されたが、原油価格の高騰、「パ」国で発生した大地震による物価、人件費高騰により入札不調となり、工事が実施されなかった。</p> <p>(7) 「パ」国政府は 2005 年良質の飲料水を全国民に提供するための指針として、「国家飲料水政策」(National Drinking Water Policy)を公布した。同政策は、給水普及目標を、中期開発政策とミレニアム開発目標に基づき、2015 年までに全国民の 93%とすると規定している。これを受けて、パンジャブ州政府計画・開発省は、州政府による水道セクター体制整備として、2006 年「都市部における上下水道改善のロードマップ」を策定し、政策実行を進めている。この政策実施に資するため、ファイサラバード市において、上水道施設整備を行うことは、「パ」国政府が掲げる上位目標に寄与するものである。</p>
<b>3. プロジェクト全体計画概要</b>
<p>※ 下線部：本無償資金協力で直接関係する成果、活動及び投入</p> <p><b>(1) プロジェクト全体計画の目標（裨益対象の範囲及び規模）</b>  ファイサラバード市の給水サービスが改善される  *対象の範囲および規模。</p>



- ① ファイサラバード市の 168 万人（60%）に対し、130ℓ/人/日の平均給水量が確保される。
- ② 1 日 3 回最大で 6 時間程度の時間制限給水が、継続的な給水(24 時間)に改善される。
- ③ 市人口の 1/3 を占める東部地区に対する少ない配水が改善される。

## (2) プロジェクト全体計画の成果

- ① 水源・取水施設が整備される。
- ② 取水施設からの導水・送水・配水施設が整備される。
- ③ 既存配水幹線の補強により配水システムが改善される。

## (3) プロジェクト全体計画の主要活動

- ア. プロジェクト運営のための人員を配置する。
- イ. 水源・取水・導水・送水・配水施設を建設する。
- ウ. 市内の配水管を補強・整備する。(実施機関負担分を含む)
- エ. 施設の運営維持管理機材を調達する。
- オ. 新規施設の技術者・操業要員に対し運転・維持管理に必要な技術訓練を実施する。

## (4) 投入（インプット）

- ア 日本側(=本案件)：無償資金協力 44.44 億円
- イ 相手国側
  - 1) プロジェクト実施に必要な人員(施設要員)
  - 2) 建設資機材
  - 3) 施設の運営・維持管理に係る経費

## (5) 実施体制

実施機関：ファイサラバード市上下水道公社（WASA）  
 主管官庁：パンジャブ州政府住宅・都市開発・公衆衛生省

## 4. 無償資金協力案件の内容

### (1) サイト

ファイサラバード市(パンジャブ州)

### (2) 概要

ファイサラバード市において、水源・取水施設、導水施設、送水施設、最終配水池の建設

### (3) 相手国側負担事項

- ① 建設用地の確保、整地
- ② 工事用仮設道路の建設
- ③ 一次側電力工事
- ④ 施設防護柵・門扉等建設

⑤ ポンプ場内設備・備品の確保

**(4) 概算事業費**

概算事業費：53.13 億円（無償資金協力：44.44 億円、「パ」国側負担：8.69 億円）

**(5) 工期**

詳細設計・入札期間を含め、約 32 ヶ月

**5. 外部要因リスク（プロジェクト全体計画の目標の達成に関するもの）**

- (1) 地下水の補給にかかわる自然条件と直接の補給源となる用水路が現状と大きく変化しない。
- (2) 周辺農村環境が大きく変化し(生活排水の増大、工場の進出等)水源地の地下水水質を悪化させるような事態とならない。
- (3) 社会情勢の変化等に伴う急激な人口の増減が生じない。

**6. 過去の類似案件からの教訓の活用**

特になし。

**7. プロジェクト全体計画の事後評価に係る提案**

**(1) プロジェクト全体計画の目標達成を示す成果指標**

	現状(2007 年)	計画目標年次（2010 年）
給水人口の増加	143 万人	168 万人
一人一日平均給水量 の増加	100ℓ／人／日	130 ℓ／人／日
市内配水状況の改善	市人口 1/3 を占める東部地区に対する不均等な配水状況	東部地区に対して 130 ℓ／人／日の配水が行なわれる。
給水時間の増加	1 日 3 回 計 6 時間給水	24 時間給水

**(2) その他の成果指標**

特になし

**(3) 評価のタイミング**

2010 年（本計画にかかる施設建設完工以降）

## 資料 6 入手資料リスト

番号	名称	形態 図書・ビデオ・地図・写真等	オリジナル ・コピー	発行機関	発行年
1	Pakistan Economic Survey 2006-07	Digital File	A4 300p オリジナル	Ministry of Finance	2007
2	Punjab 州 Market Rates (MRS rates) by the Punjab Government 2007 Oct-Dec 2007 Jul-Sep 2007 Apr-Jun 2007 Jan-Mar 2006 Oct-Dec 2006 Jul-Sep 2006 Apr-Jun 2006 Jan-Mar 2005 Jan - Dec (Monthly)	Digital File	A4 200p/each オリジナル	パンジャブ政府	2007 2007 2007 2007 2006 2006 2006 2006 2005
3	Yearly Inflation Rate (1991 - 2006)	Digital File	オリジナル	Federal Bureau of Statistics	2006
4	Population sizes and Growth of Major Cities	Digital File	オリジナル	Population Census Organization	
5	Options for Improving the Water Supply and Sanitation Services in Urban Cities	図書	A4, 38 p コピー	The World Bank	
6	Road Map for Improving the Water Supply and Sanitation Services in Urban Cities (Draft, 2006)	図書	コピー	The Urban Unit of P&D Board	2006
7	National Drinking Water Policy (2005)	図書	コピー	パキスタン政府	2005
8	National Sanitation Policy (2006)	図書	コピー	Ministry of Environment	2006
9	National Environmental Quality Standards for Municipal, and Liquid Industrial Effluents	図書	コピー	The Ministry of Environment, Local Government and Rural Development	
10	Review of IEE and EIA regulations, 2000	図書	コピー	Pakistan Environmental Protection Agency	2000
11	Annual Budget Estimates (2005-2006)	図書	コピー	WASA Faisalabad	2005
12	Annual Budget Estimates (2006-2007)	図書	コピー	WASA Faisalabad	2006
13	Annual Budget Estimates (2007-2008)	図書	コピー	WASA Faisalabad	2007
14	Organization Chart of WASA Faisalabad	図書	コピー	WASA Faisalabad	
15	Staff List of Directorates of WASA	図書	コピー	WASA Faisalabad	
16	Balance Sheet, WASA, 2006	図書	コピー	WASA Faisalabad	2006
17	Tariff Revision Notice (Punjab Gazette, 2006 Dec.)	図書	コピー	WASA Faisalabad	2007
18	Progress Report of Compensation Projects by WASA	図書	コピー	WASA Faisalabad	
19	Certificate of Land Trade From District Government to WASA Faisalabad	図書	コピー	WASA Faisalabad	
20	Record of Distribution from Terminal Reservoir, WASA (2006 to 2007 July)	図書	コピー	WASA Faisalabad	2007
21	Record of Tubewell Water Level at Tubewell stations (1992 to July 2007)	図書	コピー	WASA Faisalabad	2007
22	Water Quality Data of WASA Water Sources	図書	コピー	WASA Faisalabad	
23	Map of Faisalabad Divided into 4 Town, 2005	地図	A2 コピー	WASA Faisalabad	2005
24	Map of Faisalabad City, 1"=2700"	地図	A2 コピー	WASA Faisalabad	
25	Layout of WASA Water Facilities(No scale)	図面	A1 コピー	WASA Faisalabad	
26	Map of City Distribution System, (1/10,000)	地図	A0 コピー	WASA Faisalabad	