

Attachment

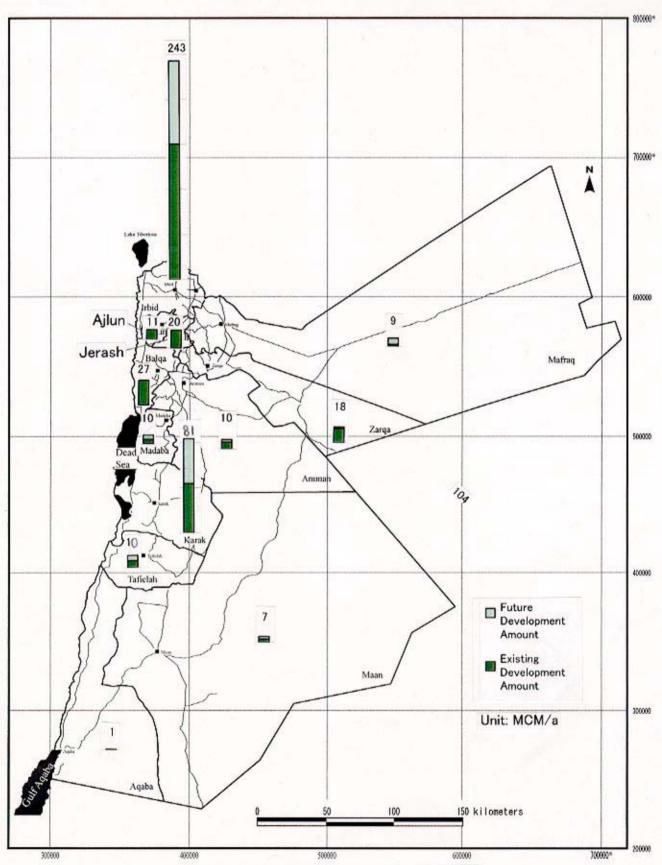
List of Contents

	Page
Summary of Economic and Financial Analysis for Pre-Feasibility Study	1
Developable Amount of Surface Water by 2020	2
Present Abstraction (1998) and Safe Yield of the Renewable Groundwater	3
Distribution of the Assumed Potential of the Fossil Fresh Groundwater	4
Distribution of the Assumed Potential of the Brackish Groundwater	5
Distribution of the Assumed Treated Wastewater Volume by Target Year (Sn-1)	6
Planned Water Allocation to the Governorate in 2020	7
List of Water Projects (1), Short Term 2001-2005	8
List of Water Projects (2), Short Term 2001-2005	9
List of Water Projects (3), Short Term 2001-2005	10
List of Water Projects (4), Mid Term 2006-2010	11
List of Water Projects (5), Mid Term 2006-2010	12
List of Water Projects (6), Long Term 2011-2020	13
List of Water Projects (7), Conceptual Stage	14
Location of Water Projects, (Short Term 2001-2005)	15
Location of Water Projects, (Mid Term 2006-2010)	16
Location of Water Projects, (Long Term 2011-2020)	17
Location of Water Projects, (Others)	18

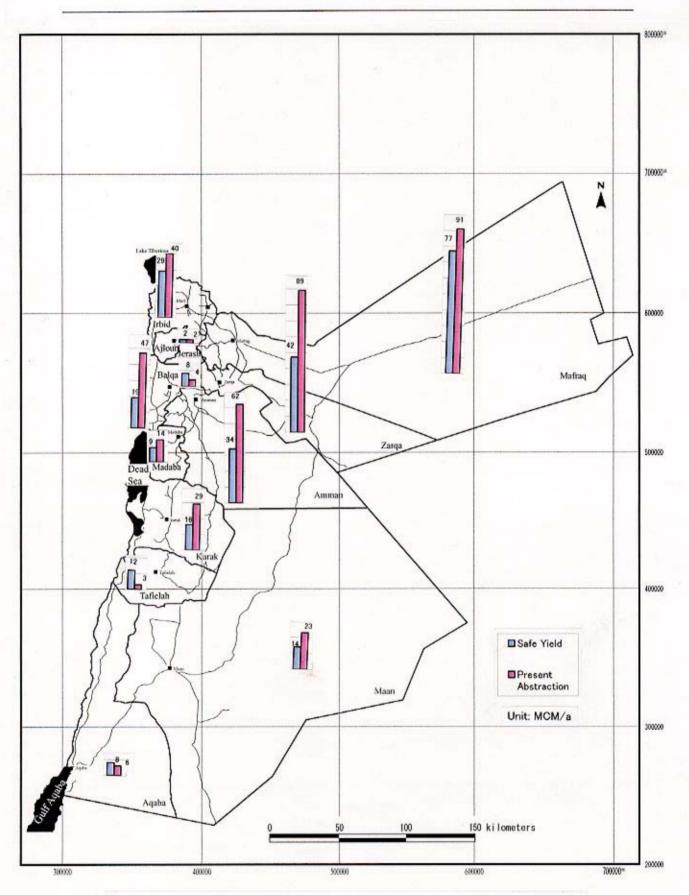
The Study on Water Resources Management in The Hashemite Kingdom of Jordan Final report/Summary Report

Summary of Economic and Financial Analysis for Pre-Feasibility Study

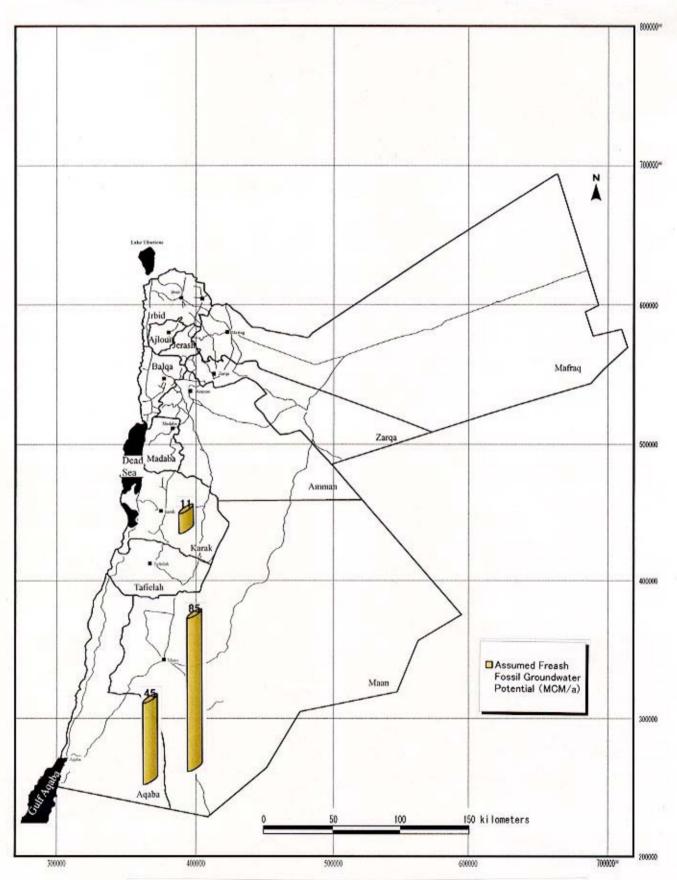
Project	Investment Cost	Ö & M Cost	Major Pre-Conditions	Financia	ıl Analysis	Economic Analysis	Manageria	l Indices	Economic/Financial Evaluation
	(Unit:JD)	(Unit JD/a)	(Common to All Projects)	FIRR(%)	Unit Water/Waste-	EIRR(%)	Profit/	Profit/Working	APPENDING OF EARLESTING AF PARTICULAR AND PROPERTY OF THE PARTICULAR AND PROPERTY OF THE PARTICULAR AND PARTICU
	The 2nd figures	The 2nd figs.	Discount Rate: Financial=5%,	` '	water Price (fils/m²)	,	Revenues (%)	Capital (%)	
	are in US\$.	are in USS.	Economic=10%		<u> </u>			1 1 1 1 1 1	
		[Interest Rate of Loans: 4%						
Wastewater Reuse	Ĭ		Treated wastewater tariff will be raised			<u>-</u>		-	
			to 48 fils/m³.					l	
Ma'an	373,428	9,918	7	4.1	44	7.4			Both FIRR and EIRR are acceptable as a social project. The unit treated wastewater price is cheap
	\$533,468	\$14,169	1						compared with other sources. Therefore, the project is judged to be feasible.
Abu Nuseir	227,068	1		12.0	21	19.1			FIRR and EIRR are more or less two times higher than the discount rates. The unit treated wastewater
	\$324,383	\$6,180							price is less than half the set one. Therefore, the project is highly feasible.
Fuhis	141,680	4,000	1	12.6	20	18.7			FIRR and EIRR are more or less two times higher than the discount rates. The unit treated wastewater
	\$202,400	\$5,714	<u> </u>		<u>. </u>				price is less than half the set one. Therefore, the project is highly feasible.
Tafielah	434,275	5,080	·	0.4	69	8.9			FIRR is positive, and EIRR is acceptable as a social project. The unit treated wastewater price is cheap
<u> </u>	\$ 620,393	\$7,257							compared with other sources. Therefore, the project is judged to be feasible.
Total	1,176,451	23,324		6.4	35	12.2	21.9	21.4	FIRR & EIRR surpass the discount rates. The unit treated wastewater price is lower than the set one.
	\$1,680,644	\$33,320							Managerial indices are more than twice the standard levels. Therefore, the project is sufficiently feasible.
Wastewater Treatment	l l	-	Sewerage tariff will be raised to 469			·			
Plant Extention			fils/m³.						
Ma'an	3,176,413	42,000	f I	5.3	420	4.5	14.1	11.4	FIRR clears the discount rate, and EIRR is acceptable as a social project. The unit wastewater price is
	\$4,537,733	\$60,000] [_					lower than the set one. Managerial indices are above the standards. Hence, the project is feasible.
WadiZarqa	124,488,650	7,369,000	1	7.4	363	6.5	24.3	21.6	FIRR is substantially above the discount rate, and EIRR is acceptable as a social project. The unit waste-
	\$177,840,929	\$10,527,143							water price is considerably below the set one. Managerial indices are more than twice the standards.
									Therefore, the project is sufficiently feasible.
National Water Control	13,379,940		UFW reduction rate: 1% (physical:	10.0	479	13.0	24.9	10.7	FIRR is twice the discount rate, and EIRR is by 30% above the OCC. The unit wastewater price is
System	\$19,114,200		0.5%, administrative: 0.5%)						drastically below the set one. Managerial indices are clearly above the standard levels.
		1	Municipal and industrial water tariffs	_					Therefore, the project is sufficiently feasible.
			will be raised to 407 fils/m ³ and 1,194						
			fils/m³ respectively. Compound water						
Maria Salari Maria			tariff will be raised to 530 fils/m.						
Municipal Water Network Rehabilitation			Municipal water tariff will be raised to						· · · · · · · · · · · · · · · · · · ·
South Amman	4,243,399	40.076	351 fils/m³ (in Amman Governorate 491						· · · · · · · · · · · · · · · · · · ·
South Allangin	\$6,061,999		fils/m ³). Compound water tariff will be raised to	-0.7	899	3.8		ì	FIRR is negative, and EIRR is low. The unit water price is very high. Therefore, the project is not
Madaha	864,531	3,417							judged to be feasible.
.viauaua	\$1,235,044	\$4,881	382 tils/m .	20.4	111	49.5			Both FIRR and EIRR are several times above the discount rates. The unit water price is less than half
Karak	734,682	2,824	ļ.					ļ	the set level. Therefore, the project is highly feasible.
A SALAL GAR.	\$1.049,546	2,824 \$4.034		13.1	181	28.8			Both FIRR and EIRR are 2 to 3 times above the discount rates. The unit water price is markedly below
Tafielah	1,050,491	4,152	ļ .				_		the set level. Therefore, the project is very much feasible.
· minimi	\$1,500,701	\$5,931		5.4	331	15.7			FIRR is above the discount rate, and EIRR is more than 50% higher than the OCC. The unit water
Ma'an	952,416	10,764		9.8	3.00				price is within the set one. Therefore, the project is sufficiently feasible.
	\$1,360,594	\$15,377		9.8	249	23.2			Both FIRR and EIRR are more or less twice above the discount rates. The unit water price is substantially
Total	7,845,519	71,032	ļ -	6.3	334				lower than the set one. Therefore, the project is very much feasible.
	\$11,207,884	\$101,473		0.5	334	17.2	25.7	19.4	FIRR & EIRR are clearly above the discount rates. The unit water price is considerably below the set
"			Includes Wehda Dam project cost.			 _			one. Managerial indices are more or less twice the standards. Therefore, the project is sufficiently feasible.
n(44, 11, 11, 11, 11, 11, 11, 11, 11, 11,	58,312,200	4,182,714	Municipal water tariff will be raised to	4.5	356	20.3	12.7	7.6	FIRR is near the discount rate, and EIRR is more than twice the OCC. The unit water price is equivalent
Wehda-Irbid Water Supply	\$83,303,143	\$5,975,306	351 fils/m ² .				(2003-2030 a	average)	to the set one. Managerial indices approach the standards. Therfore, judged to be feasible enough.



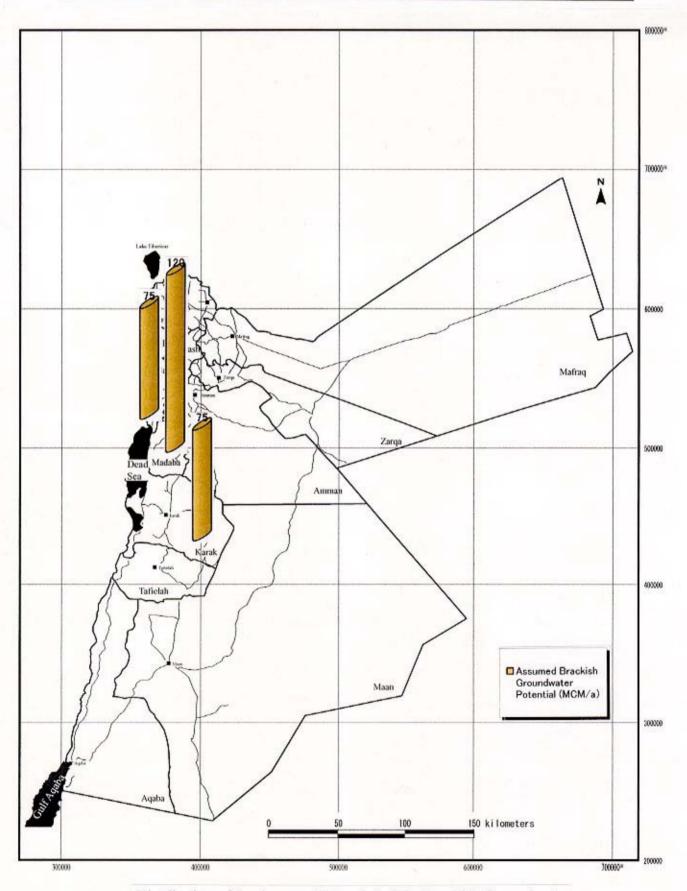
Developable Amount of Surface Water by 2020



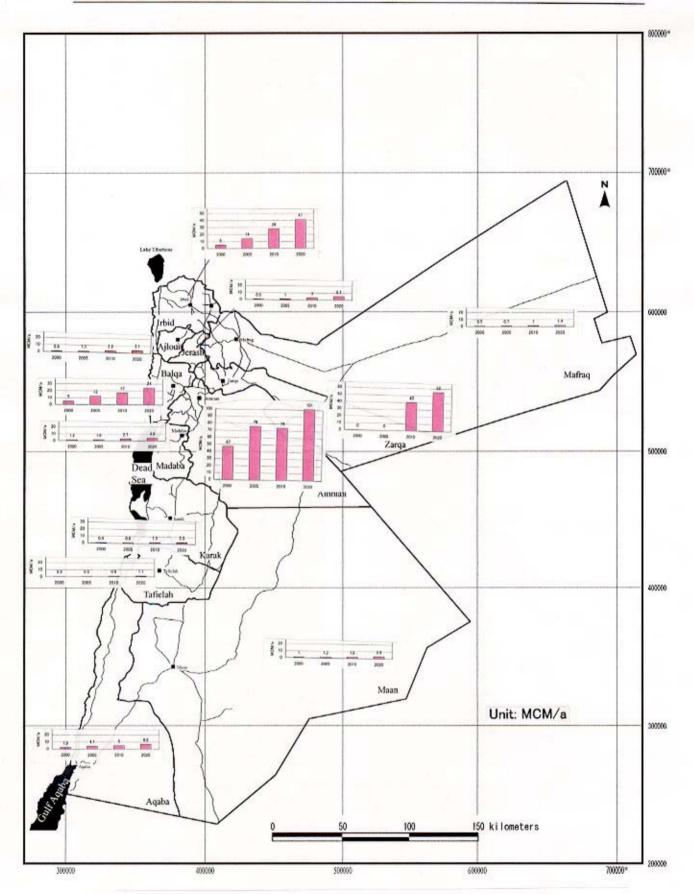
Present Abstraction (1998) and Safe Yield of the Renewable Groundwater



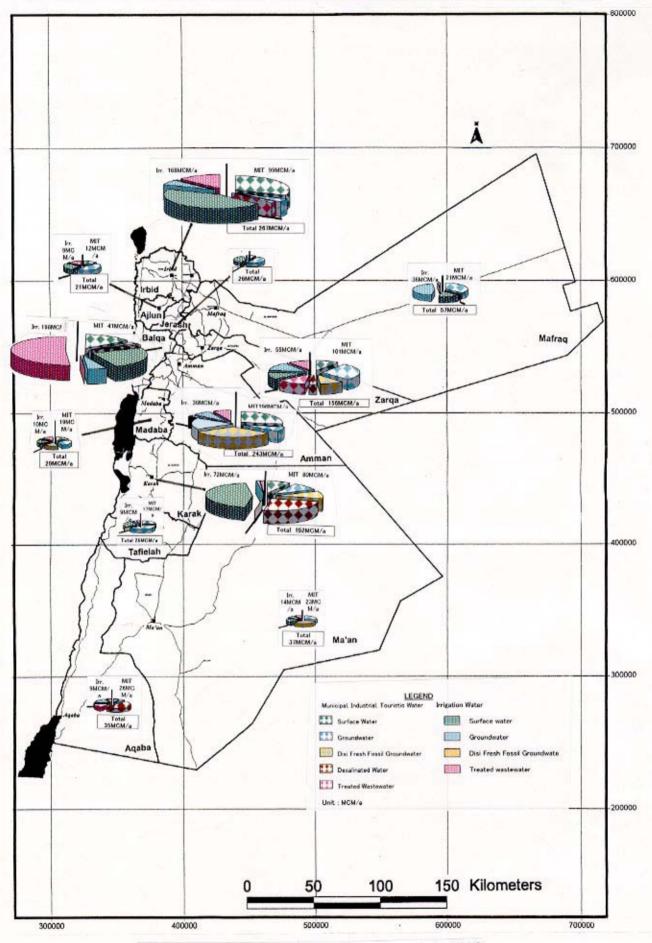
Distribution of the Assumed Potential of the Fossil Fresh Groundwater



Distribution of the Assumed Potential of the Brackish Groundwater



Distribution of the Assumed Treated Wastewater Volume by Target Year (Sn-1)



Planned Water Allocation to the Governorate in 2020

			List of Water Project	s in Sho	rt Terr	n (2000	to 2005)	(Ī)						N	lots : Pro	ieots enck	osed by thick line are selected for pre-F/S
Gand. Project für e-F/S	Tile No. of lovest. Program	. attached	Project	Status	Gomp? Yeer	Dev. Arroum (MCM/a)	Project Cost (Million v2)	Invest (JD/cum	Project Description	Finance	Study	Technical Viability	Economic Visitility	Environ. Viability	Pol'tical	Total Ranking	For other
			Groundwater & Sea Water Desali. Projects									1					-
	21		Wadi Mousa Water Supply	or going	2000	6.6	9.0	1.4	Renewable grounewater coordination is introduced in these opment and water conveyonal iron Judich will field to Wed Mouse for the township at Petra.	RFW, Frence. 2 USAID HMJ Tendering	0/0	i .			<u> </u>		Removable groundwater development should be argent and temperary for the Teachier seconds the abstraction was expended, the safe visiblinithis area.
	24		Lajoun Wells (Nonrenewable Fresh Fossil Groundwater Dev. At Karak)	ւո-գութ	2001	11	10.0	0.:	Supplying of Irselt Tossi Rem GV from A Lagaury to America of Karak, Drilling 5 seep wells of 1000m, Franceission sipplying of 43%m	HKU, Tender Dae, under prepuration	D/D	Ţ-·					Three deep wals were diffied interests in Jagon has been from Stoundwater quality is collaborationally
	67		Corridor Water Supply Project	on going	2001	10	100	1.0	Groundwater Dev. of Basel: An. from 15 Corners wells of Bed in Zama Gov. in code: Le miligate somes switzs shortage in Greeter Amnson.	HKU, F/S dyne	3.5			_			Insignification should be unjusticated temporary sevel comer for Armen error because the startmetion has expected the safe stell in this area.
	22		Community Infrastructure Project	an-going	8002	1	0.0	2.0	to sounds demostic voter to 28 order settements (Ammer 18 Parqa 4, Possifa 5, Agaba 1) and 10 per luctual settements using green-lucy-	LIKU, WE, tendering	DVC						
	25		Wadi Zarqa Ma'in, Zara spring Project	unde: penning	2003	40	70.0	1.8	to utilize the vioter of sames, and side wide in Zera/Main area for virigation and tourism in 2V, and Denveyance to Greater Annobalance	іззапінкі	F/S cogning		 :				F/S is an iguing by USAID. Cost extimation was reviewed in this Study.
	5.8		Desatination at Aqaba	under setsimi	2004	ង	27.3	5.5	Sea weter cesalination for donexi is includirily and touristic perpeau in Agaba	F/s composing	F/S mgang					•	
		G.	Brackish Groundwater Development for El Lajoun Oil Shale Project at Karak, Phase 1	not incl. in Envisu Prigu	2005	3	not clarified		Eurobian ier i of Brackish groundwater in Deep Sandstond Agrifiers, (R/D and K)	Private Sector	under Study			_	-		ander study by MAC
		(47	Groundwater Development for Electric Power Stations in Zarqa Gov.	ngt inol. in Inost Prg	2005	1	no: clarified		Removable groundwater development from AT/B2 aquifor for electric power stations	Private Sector	F/G			_			
			Groundwater Development for Industrial & Info-Technical Park near Ramtha	cut incl.in Imat. Pm	2005	7.5	not clarified		Rendwalte grundwater development für rejugtnes	Pilisate Sactor	F/S						It is recommended that the renewable promotester should be substituted by the inhine year resources
	27		Dead Sea Water Infrastructure	careelise in Invsthg	2003		7.0	ys	to convey CM from flowing wells at Kefrein to Sumon writer (ne prepare of transation	HKU, DAD deno	0/0		į				
	29		Jafer and Shittia	censelve in Invol. Frg	2003	18	8.0	as	Foreworld groundwitter development from A7/D2 aguife, for Sindle Phosphale Grossory	Sector, D/D pone	D/D						It is recommended that the renewable groundwater should be substituted by the filther water recourses
	(7) ecopolical		Groundwater Reduction Program I	meter planning	2005	-£G	18.9	-0.4	Reduction of renewable group evater shat out for in the U shap This is a servered in Amount 2 rate East 1923, and other investigating USAID's action of mind AZB and outsiders like. The projects for highly Prighton Addisory Schools [IAS], We'ld suymout, asstraction shroyating and others.	rctsecured	Action Pismidsha Sy USAIT Pri Addin Pri			!	;		Concelled in few Pro Bird LSA(D MRD) has done unconstraint we study in Ammer/Zerga Basin and formulating measures. USA extrained the spall arbitry to the other areas.
<u> </u>			Groundwater and Sea Water Desail. Pr	rojects To	otal	38.1	Nate : C	belleare	Projects in the Investment Program are not included as t	ne Fotal					·		· · · · · · · · · · · · · · · · · · ·
Cent. Project for p=F/S	File No. of Invest. Program (No. attached Ev JICA	Surface water Projects	Status	Congl. Year	Day, Ammunt (RON/e)	Project Cost (Million (ID)	Diwist (JD/mim)	Froject Description	Finance	Study	Tentrical Vlability	Beandinic Viability	Environ. V ablity	Politics: Mebility	Lotal Racking	- Romarks
	14		Wala Dam	611-60 UZ	2002	10	22.0	2.2	Construction of demici 45m in height at Multi Keein For rectivings to A7782 squiller by impounding the floodwater	070 done		ĺ			ļ		,_
	13	İ	Mujib Dam	67797.68	200?	35	47.0	1.3	Construction of their of 62mm relight at Multi Sasin Fin social serior flavors industrial from agricultural hoods in the S. Chera				ĺ	ĺ			
	15		Tannur Dam	amiests	2003	!6	21.7	1.4	Construction of own of \$0± in height of Wedi Hasa for appping for serious or a needs in the So, th Grons by impaunding the fourthwest	D/D cone		,					
	20		Wadi Araba Development Project	under planning	2004	4	12.0		Rehability ion of 18Km extension project and Wast Arability name of station for payers of 6000 numbers are good treat.	cone	ט∕ט						
	26		Feedan Dam	exacyc.	2004	6	8.4			not secured							
	62		Wehda Dam Desalination Conveyor to Urban Jordan	under parring	2005	108	151 û	14	Potaci geriatal bin is 8 Mage Visite	Arab F. HKu, D/O done	ļ						
	(23)		50 + 10 MCM/a), Peace Project	Jude- Namin,	20059	27	100.0		SOMONUs owner from Jarae, to the impair areas	not tepyred. Smaeli side on gajna ont securer					_	<u> </u>	60 GS(brosert Alphy Hiller HO)=27
	sancelled	1	Sakeb Municipality	onnosteadin Invest Eng	2001	3	4.0		supplemented by technics and rein water studies	F/S done	i			į			
			Surface water Projects Tota	ı		239j		Note: G	ambelled Projects in the [hvestment Program are not incl 	iuded in the T	otal						ı

For the ranking criteria, refer to Table 10:1-1

	glect for of Invest attached Wastewater Projects Status Comp Amount (Visco Invest Description Finance Study Technical Economic Broisin, Political Total																
Cand. Project for p.F/S	of Invest		Wastewater Projects	Status	Sampl Year				Project Description	Finance	Study	Technical Viability	Economic Viability	1	1		Remarks
	44		Irbid Stage I, Phase 1 (Wadi Arab TP and Wadi Hassan TP)	onrexing	2000	4.6 by 2005	43.0	5.2	Genetropison of TP at Wood Araba, Wed Heavan	кем нед	D/D	 -		 	-		Wad Arch IF in a been constructed in 1999, W. Areh TT Cepe., 7./MCN/a, W. Senger TP Cape., O.S. Tossi Cap
	3/		On-going Rehabilitation Various Cities (Wastewater Treatment Project)	orngoing	2000	(5)	30.0	6.0	Renabilitation and construction of asswer infrastructure (course) of venous cross Remain Jorga Nation, Irvin, Ajirun Jorgah, Bales. Karak	·BB. HAADA	DD/D		Ī	" -			In Stage ! . 8 3MGM/ n.
	50		Wadi Mousa Wastewater Project	ar going	2000	0.7 by 2005	19.6	14.0	Approx. 85Km of washessher collection receiper; approx. 22.5Km conveyance system TP of 3400m5/day, for 4 towns and amyl containties in Petra	USAID D/D done	D/D				•	<u>-</u>	Design Production Operaty in Stage 1 : 1.4MCM/s
	39		Ain Gazel Pre-Traetment Plant and Conveyer	en-going	2051	0	45.0		Wastewater conveyor of 32,585m, Turnel of 4 /aKm, Upgreding of pro-treatment works	KFW HKU DV3	0.0						11811
	59		Madaba TP Upgrade and Expansion, Phase 1	unrter perring	2003	0.5 by 2005	6	6	Construction of TP of 700(m3/day	Karea D/D dene	0/0				·		Dissertly of Upgraving in Stage 1 : 1442kU ₄ . Existing Cheedity : 12NCM/e. Total increased Caperity by 2003 22MCM/e.
	57		Upgrading Mafraq TP	o outing Tuber	2003	0.2 by 2005	5.5	5.5	Construction of TP, remove program	USAID, HKU F/S store	F/8		 I				Design Production Capacity : 1.0MCM/s
	6 U		Ramtha TP Upgrade & Expansion, Phase	rebru genneig	2003	0.7 by 2005	6.0	3.0	Construction of collection networks	France, HKJ, D/D Sans	ā.10					•	Cepecity of Epyrating in State 1 : 9MQM/a. Existing Cupucity : 0,7MCM/a. Total non-seed Capacity by 2009 7 7KOW/a.
	51		Na'ur and Adjacent Areas Wastewater Project	;ander planning	2003	- Он Бу 2005	18.0	9.0		tale, 0/() One	D/D				·]		Design Production Capacity : 2.0MOM/L
	40		South Amman Wastewater Project Phasel : Jiza - Tathiya (Al Jeza Phase 1)	onder onder	2003	1.8 oy 2005	11.0	6.5		Italia, PKJ, Low Income Areas Programs	D/D						Donly: Production Capacity in Phase 1 . 2.04004/a
	55	į	Dead Sea Wastewater Infrastructure (Dead Sea Lest Coast)	nuger.	20 0 3	0.6 by 2005	7.0.	5.6	Construction of TP of 4960m3/dey, refuse notwork for lendecape irrigation (gardening)	USAID.D/1 done	D/D		 	-		·-	Design, Proube Jan Capaçi, y ; 7,2MGM/a
Au	54		Aqaba Wastewater Project (Central)	artist skerning	2004	7.0 by 2005	12	94	Ektomoker of 1P, main, triank Inskaland colleution rectives, Figures progress	∪SAID, G/D acre	D/D	<u>-</u>			-		Dosign Production Capacity : 5,0MGM/c, Existing Production Capacity : 1,9MGM/c, Total Production Occuping: 6EMGM/c
ļ	53		Community Infrastructure Wastewater Project	muder planning	2004	(1)	10.0	10.0	Construction of the world zon TP for the refugee camps in Jordan Including public education at Taibien, Warka, Gazo, Arini Al-Muftj and El-Southhalh	MOLEAU dane	D/D	<u>-</u>		i	i		Cipulity: ommow/a
	52		Jordan Valley Community Waste Management Project	neder parring	2004 —-	(1)	2.0		Construction of anytheoped community (P. Re was propriet) involvement of private exempt	CIDA, HKJ, B/D cene	E/3		[<u> </u>
	64		Upgrading Kufranja and Ajfun TP, Phase 1	ranter Sesma	2004	1.3 hy 2005	120	6.0	Consurantion of territorium, on networks, TP, Installation of TSE discussional and/or remote hydrom. The Project Anna covers all proces within patch rands of the Yernous Ft and the Jurish R.	not seemed, under alludy	F75 Hader Saudy		-				F/S is angaing by KTW, Design Production Coperty in Phase I: 20MOM/a Existing Production Coperity : 0.8MOM/a. Total Production Capacity sy 2,0%;
	38		Upgrading and Expansion of As-Samra TP. Phase 1	under planning	2005	5 by 2005	105.0	3.5	Le provide more résolute proditiont facilitées for Arrango - Za ja ares up to year 2015. As Sattis (P to so operated by BOT system 5MOM/a will be repeat.) Il a sjointe of TP	Private Sector, USAT, D/D	9/0			-			Capacity of regarding in Stage 1: SEMCM/p. Existing Capacity: 46MCM/p. Turk Increased Capacity by 2905 - 250 mg SIMCM/p.
*	58		Upgrading Ma'an TP	exama.	2004	instaced below	6.0	4.C	Genstrucian of TP collection system pumping station, Rause program waso included.	vat secured		5	4	5	5	19	F/S has net been leane. Dissign Production Capacity 1.5MCM/a. Detailing Fraction to Deposity: 0.5MCM/a Tetal Production Deposits to 2004; 2.0MCM/a.
*	(58)		Treated Wastewater Reuse Scheme of Ma'an	proposed by JICA	2004	0.6 by 2005	0.06	0.1	Receip program of created wascawater in the leadingy of the TP for migration.	nv. recored	not yet	5	4	4	3	18	F/S has not Leen Juve Taxxign Production Catacity: 1.5%CM/a, Existing Production Capacity: 0.5MCM/a, Tatal Production Galesia by 2004: 2.0MCM/a
i	50		Upgrading Tafila TP	under exemin.	2005	in W6	6.0	\$.0	arsgram is not included.	i = xkpured						- 1	Own-fity of Sewage is usual Design Freduction Departity . 1/JWCM/s. Existing Production Reports 203MCM/s. Tetal Production Conseilly by 2004 - 1/JWCM/s.
	49	HI.	Sakeb Wastewater System (Jerash West)	evanor,	2005	C.9 by 2005	16.0		istock in the Invest. Fig. in 1997	almast strane(: (tely)	0/0		T				New Construction Design Precised on Carwellon 9.4MCM./a
		(23) W2	Construction of Dair Alla Treatment Plant	pet incl. in Invet. Prog. 1	2005	1.8 by 2005	25.4	9. 4	rrigation, implemented in 2 phases, the east verticen in left column thouse shears a work	not scored 178 dans	F/S					1	to be implemented in the Phases, Final Efficient Amonett. In 7020 - AMOMA, Theoliginestment Gest : 23.8481410, Efficient serving in Phase : 13MUMA, level-ment Gest of
<u> </u>		(26)	Aqaba South Coast TP, Phase 1 Treated Wastewater Reuse Scheme of	notinet in Invar Prog.	2003	0.2 by 2005	1.40	3.40	Reuse for injection in Smilkern Joseph Valley through KTD, Zarga	USAID	F/S			_,		į.	to be implemented in two Phocos, TP opposity in Phase 1 (2003) 104 NOV/s. Final Enturnt American in 5020 - (ISMOV/s, Tatel Invastment Cost 1, 2,/Mil UD
		(3)	As-Samura TP in Jordan Valley Treated Wastewater Reuse Scheme of	France: w USACO	2006	10 by 2005	2.0	0.2	seuse fair regarding is a meet proton valley through KTP, Zanga Sien land SAC, SMCM/sy will be reuted in the interfacy of TP. Rouse program of treated wastewater in the lectinity of thy TP for		orrigating ty USAIN					i	Existing House by 1988 H. JV (48MCM/a, Futuric Hause including Cargo TP in JV by 2024 (129MCM/a, Saudy ig Octoping to USAID (AED)
*		(1)	Abu-Nusier TP	Proposed by UCA	2004	0.6 by 2008	0.0b	0.1	Robust amogram of treated wastewater in the locality of this TV for injulies.	li	nn: ਪੁਜ	5	4	4	5	18	Heuse Emport SMCM/9 by 2020
*	-	(5)	Fuhis TP	Proposed by UICA	2004	0.6 hy 2005	13.01	a.uzji	Reuse program of pication weak-water in the skinity of the IP for			5	5	د	5	19 :	House amount : I.CVOV /4 by 2020, TA will be expanded by 2010
*		(15)	Tafila TP Treated Wastewater Reuse Scheme of	Proposes by UCA		05 5y 2005	0.1	0.2	source program of free full sourcements in the picinity of the TP for			5	3	4	£	17	Bouse area or 10MCM/a by 2000
*			Wadi Essir TP Total Additional Effluent Including increa	Proposed by ECA		0.3 by 2005 112 by	0.01	0.04	ights.	TO DECIMAL	ot yet	5	5	4	£ .	19	Repair amount : C.9MCM/a by 2020. TP will soll be improved by 2020.
			from the Existing TPs during 1998		Jent	2005											

For the ranking criteria, refer to Table 10 (+1)

	for ef livest attached Rehabilitation & Conveyance Projects Status Continued Project Status Continued P																
Cand. Project for p=F/S	of limest		Rehabilitation & Conveyance Projects	Status	Compl. Year	Dev Amouni (MCM/x)	Project Cast (Million JD)		Project Description	Finance	Study	Technical Viability	Economic Viability	1	1		Paraula.
	5		On-going Rehabilitation - Zarqa Governorate	or gains	2001	not clanfied	(35.0)		Rehabilitation and expulsion of water supply system in Nun of Zarga, Busevilla, Hechemical Science, and Sanetar Fedugae Comp	not secured (Jopan)	070	<u> </u>] -	
	71		Tabaqat Fahil - Irbid	ica-guing	2001	not clarified	18		Water солиулпов	Him	D/D		<u> </u>				
	32		Dier Alla - Zai Amman II (Conveying of Peace Water)	annesing	2002	(45)	65.0	(1.4)	to increase the scheme supply eagainty from 45k40M/s to 90MQM/s. Water source is from Posce Water	JIDA, SKV). D/O done	D/D	ſ			 -		
	70		KAG Siphon Upgrading	uneer examin.	2002	(20)	3.5	(0.18)	Upgrading of spinon system of the King Aboulle Canal	por secured	F/G	ļ <u> </u>		· ·	-		-
	35		Rehabilitation of Southern Ghors Irrigation Stage I	under exemina	2003	(45)	(9.0)	(0.2)	Rehabilitation of Water Supuly Apalem for Prigation of 4880D dunantias	nat secured, F/S dans	-/B			_		<u> </u>	
	3/6		Rehabilitation of Hishan-Kafrein Irrigation Project	under plannik <u>e</u>	2003	(11)	(5.0)	(0.45)	development of W. Histan by constructing storage techty	WG, HKJ	T/S suum		_	<u> </u>	<u> </u>		
	68		Dead Sea Water Treatment Plant	under planning	2003	not clanfied	100		Construction of water treatment plant of 18MCM/a for touristic protests in the East Coast of Dead Sou, now water will be subplied from Muilbland Wala Reservans	Private Skolor	M/P: F/S to so done Private Suc					į	
	11)		Amman Municipal Water Network Restructuring Phase 1	J:⊏ _s oing	2004	(18)	(126.0)	(7.0)	Owered rehabilization of water supply system in Ammon for water load reduction	Majusain, eta, Kawanansa, U/U dana	240		_		<u>-</u>		
	11	j	Mujib Weir Conveyor and Southern Ghors Infrastructure	inder planning	2004	(55)	67.2	(1.2)	Culizador, of losse and flood flow of Wast Mujb Wast Wate & Hose res the purpose of touristic reusibial and agricultural		D/D		· - ·				
	34		Jordan Rift Valley Improvement Project	under evaner.	2005	not c.arified	35.0		tal specify means, and actions for maximization of recurs from sustainable development of URV	F/S and yet	F/8 scen		_		 -		Study projest
ļ 	(33) canost ed		Amman Municipal Water Network Rehabilitation II	sanda led in ; Imost, Pr <u>a</u>	2001	(t)	329	(32)	lo reduce physical water loss to loss than 1:74 by the rehabilitation of the distribution network system	not secured, F/S done	D/D		-				-
			Rehabilitation & Conveyance Proje	ols Total		(194)	Note : C	Cancelled F	Projects in the Investment Program are not included in the	ho Total							· · · · · · · · · · · · · · · · · · ·
Cand. Project for p=F/S	File No of Invest Program		Technical & Private Sector Management Projects	Status	Campt, Year	Dev. Amburo (MCMze)	Project Coar (Nillier JD)	hvest. (JD/eum)	Project Description	finance	Study	Technical Viability	Economie Viagnity	Envison. Viebbily	Political Viability	Total Ranking	Remarks
	0		The Governorate Support Section (GS)	ni Katé	2002	0	9.2		earner in Ammen Water and Wastewater Micragement, Contract and ONS (Operations Management Support) Project to office Governments	GTZ, (P))	9/0			İ	······		
	4		Planning and Management Unit (PMU)	urder planning	2003	0	4.0		Establishing of qualifier Flynning & Management Unit has appropriate unlimation of funds no sessiony event nution with consist and and implementation of remobility for programs	દા '	F/S						
	ŷ		Animan Water and Wastewater Management Contract	ornanies.	2005	U	23.0		A performance-based management contract with private seaker for the provision of water and weatewater services in All man	ij3AĬĎ I	E/G						,
<u> </u>			Technical & Private Sector Management	Projects	Total	D							1		·		<u> </u>
Jané Projection p=7/8	His No al Nossal Prograta	iy JGA	Monitoring Project	Státus	Сочр. Үвэг	Dev. Amouro (MCM/s)	Project Guar (Million JD)	invest (JD/sum)	Project Description	finance	Study	Factorical Viability	Eporome Viability	Znviran, Vishi(ty	Political Viability	Eccal Ranking	Femarks
*			National Control System Integrating Surface and Groundwater Phase 1	Proposed by JIGA	2005	D	8.4		Construction of notion wide monitoring and control system of the Mater Track Line, Price 1 Selars completion of Dist A is an Water 1 Conveyer (6.	rv. studed	not yet	2	3	ā	5	17	Centralized controls is essent at for the water resources, management
]	M2	Surface Water Quality Monitoring System	Proposed by USAID	2005	D	not clarifi≘d	1	Comprovance values maker menitoring wystem pracused in WAIC Project (Gransed by IISAED) of Johnson menaleted in 1996	[done					•	rofer to "Water Maniboling System Adequa toy,1995, WWINGE
		- 1	Groundwater Quality Monitoring System	Proposed by ISATO	2005		rot _clarified		Project (finance: by USAID) which was command in 1955	mat secured	dore .						refer to "Water Manifering Syxtem Adwy ency 1995. (WOIDP)
			mprovement of Monitoring Equipment for Water Pollution Protection	on-going ay alCA	2003	o	4.4	- 1			B/D done by JPSA					i	Basic design has been disriptotic; in 2000 by JCA.

For the ranking criteria, refer to Table 10.1–1

			List of Water Project	ts in Mid	Term	(2006 to	o 2010) (j)									
	File No or of Inves Program	L attache	110000	Status	Gempl. Year	Dec. Accom (MON/s)	Freject Cost Mitian JUS	Invest (20/cum	Project Description	Finance	Study	Terforica Visbility	Economic Viability	Environ.	Falitical	Total	osed by thick line are solocted for pre T/8 Remarks
			Groundwater and Brackish Groundwater Desalination Projects	r] "	Į			 	<u> </u>	 	 -	 -	1	<u> </u>
	6		Disi Amman Water Conveyer	UniAr planning	2006	100	437,5	4.4	Supplying an average of 100MCMVs of Fresh fossil GM from Disince America, a distance of more Dwar 300Km, BOT doc. Prepared	BOD on Liby: and [ren. D/]			-	 -			
*	17		Deep Groundwater Investigation	umler overin	2006	5	19.0	8.6	Development of non-precoditive Remarquiter system in the Northern who of Jordan	nol secured	not yet	3	3	3	4	13	not applicable because it is almost Shady Project
		G1°	Brackish Groundwater Development for El Lajoun Oil Shale Project at Karak, Phase II	not Inc., in Groset Pre	2010	11	not clarified		Development of brookish groundwater in Deby Buildstone Aguiters (R/D and N)	Private Sector	under Eludy	<u> </u>	-		 	<u> </u>	order study by MW;
	(7) concelle	4	Groundwater Reduction Program II	under physing	2010)32	12.0	-0.4	be imites united in Armanizance Basin (AZB) and other areas taking USASD a settler plan for AZB into consideration. The project a include brigation Advisory Services (IAS), Welle buy out.	not sequited	Actives Plan 4 / 20 by USAID for AAU in		_	-		 - -	Cancellad in Two Pro, But, USAED (ARD) has cone comprehensive cody in Ammen/Aeros Busin and formulating Hease/Sea 800A examined, the applicability to the other press.
*	(31) canceller	r.	Miscellaneous Small Projects - Supply Expansion	gatcelled in Great, Pr _d .	2010	10	1100	11.9	Construction of new water resources (wells, and upgrade of the existing ones in order to meet the inprecising water demand through Jordan	por ell secureri	not yet	3	2	2	3	10	As the project is nation wide scale, it is not applicable for F/S.
	,	,	Groundwater Projects Tota	al		84	Note : t	Cancelled	Projects in the Investment Program are not included in D	he Total		· -	<u> </u>	L	<u> </u>	<u> </u>	<u></u>
Cand. Project is p+F/S	File No. of Invest Program	attacher	Surface Water Projects	Status	Sompl, Year	Dev. Arabura (MOM/s)	Project Goal (Million 55)	Invest (JB/cum)	Project Description	Finance	Study	Technical Viability	Feationis Viability	Erwron Visidily	Political V4sbillty	lotal Ranking	Remarks
*	18		Smail Dams (ibn Hamad, Karak, Meddien)	under examin	209A	9	13.0	1.4	is maximize the use of the floodwater in the estorments from ϕ the construction of storage Arcoherge amelicany in the Eastern Highwads	not secured F/S not yet	net yet	2	4	4	4	14	It is not easy economically and rechnically
	(fi5) cancelles		Storage on Jordan river and Side Wadis (Peace Project)	carpolled set to be re outmined	20199	30	700	20	Construction of storage system on the dordan River, size topols, conveyor system, increasing the efficiency of KAC, to be done by 3019 into acceptated 1. Fewer Wester	not speined. Under study	F/S uncer Study	i		<u> </u>			This project is cannected in the Investment Program of in 2010 End to implementation chould be examined as if he Mid Term Project.
			Surface Water Projects Tob	al		39	Nota . C	encelled F	Projects in the Investment Program are not included in th	he Total	i <u>.</u>			Ш		<u> </u>	
Cand Project to p=F/S	File No. of Invest. Program		Rehabilitation & Conveyance Projects	Stutus	Compl. Year	Gev. Amount. (MCM/a)	Fragest Cost (Million JS)	(JD/cum)	Project Description	Finance	Study	Tuzimical Viability	Economie Visbility	Environ. Vicbility	Foifical Viability	Tota!	Romarks
	12	Ĺ.	Wadi Al Arab - Irbid Municipal Water Supply	under #E\$MIT	2006	(20)	27.0	(1.4)	Reallocation of water of 20MCM/a from Mukhwika Mell Fig.c.b. Helio	ren cocured	F/E	~	-	·ļ			substituted by where project
*	69		Al Wahda Dam Water Supply Project/Irbid	under etami.	2000	(20)	27.0	(1.4)	Our veyance of wyser inch "Wahde Dann to Innid with 3800m271. treveniumb alant franchiscien pompe of 580m in head and 2950m27h. In capacity, 27Km thenomission line, мантуейть от 110,000m5	nst seeured	rat yet	5	4	4	5	18	Hydraulic angles and done. His tim when Supply has not done you.
*	30	ļ	Miscellaneus Small Projects, Network Expansion	under express	2010	not clarified	(25)		Suncerection of now water networks throughous, of jurdan in order in news the moreosing water demand	not scoured, to be HKU and	not vet	3	2		3	FI	As the project is indion wide space, it is not applicable for F/S.
*		Cı	Disi Amman Water Conveyer Branch to Ma'an and Madaba	Proposed by JIGA	2010	(29)	5.8	(0.3)	Operation of transmission twin pump states and reservoir	o <u>thers</u> Not secured	not yet	4	5	4	2	15	
	<u>. </u>		Rehabilitation & Conveyance Proje	cts Total		(69)	'	·			——	l		1			
Project for	File Ka c#Savest Progress		Technical & Private Sector Management Projects	Stetus	Compl :		Project (lost) (Million JD)	levesL WD/cum)	Project Description	Finance	Stady			Erwinon. Viebūty	Palical Visbility	Total Bank ne	Remarks ;
	ī		Water Feasibility, Design and Assessment Studies	ლი-ცი ო ვ	2008		34.0	Ī	to present technical, equipmed, and environmental F/S, D/O and Fonder Doc, for the water system and instruction	:'SAT), KRN, FIP	IVB !	-+					<u> </u>
*	(8) partaciled		Municipal Water Networks Rehabilitation (Several Cities)	cancelled in anoth Pry	2009	(35)	238.0	(8.8)	Peduction of physical loaned in the network in the lowers and office Kerak, soficials, Melda, Medaba & South Ammers, Replacement and chabitile for of weight systems components and sectoral measurement of mana, delighed	NO. segured	not yet	5	3	4	5	1.7	Cellublitation has been completed it some of major entes, Irb di Zeros, Rameha, Solt, Nofrog and some parts of Amoren
*	(2) cancelled		Wastewater Feasibility, Design and Assessment Studies	cancelled in Javas Frg	2010	o	14.0			rol secured	tel get	3	2	4	3	12	As the protect is netion wise scale, if it and applicable for 5/8.
			Technical & Private Sector Management I	Projects 1	otal +	0	Noto : Ga	ncelled P	rojekts in the Investment Program are not included in the	e atai		- !				'`_ `	
Cand. Project for p-F/S	Fac No. of Invior	ay JICA	Monitoring Project	Status	Compl. D	ev. America ((MCM/a)		livest	Project Description					Environ. Viability	Politica Vishiby	Total Benking	Remarks
*			National Control System Integrating Surface and Groundwater Phase 2	Proposed by JICA	8008	0	18.2	, I	Construction of ration wide exertering and control system of the introduction of Dia Assession of Chief Assession on Service (C)	ot secured. In ol stuffed	ož ya:	4	3 ;		5		Paulua i santrole la essential for the weter resources i saragement

For the ranking criteria, refer to Table 10.1-1

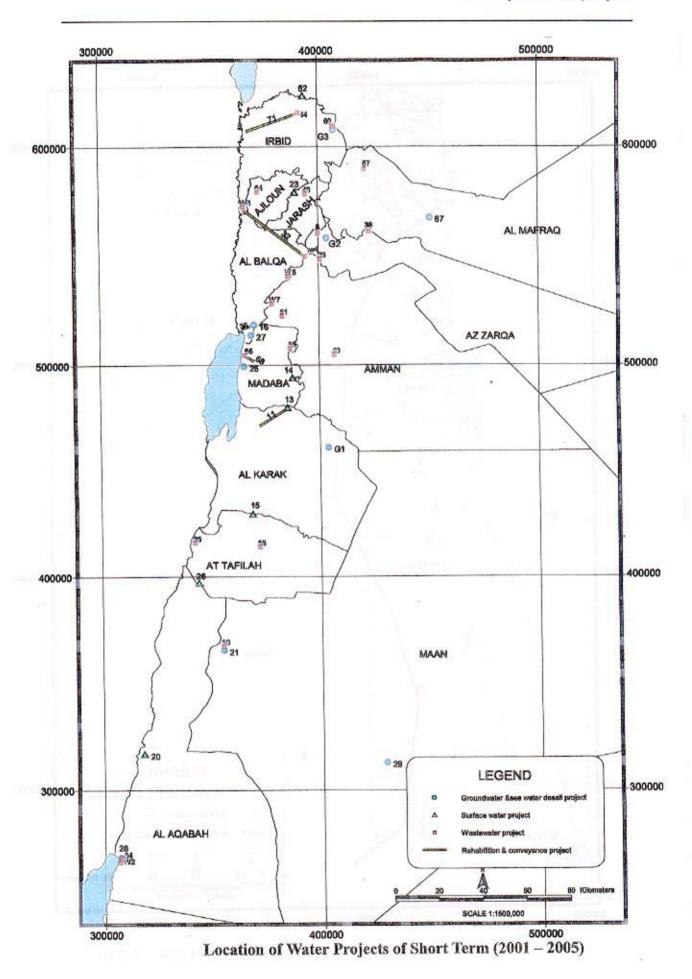
	involve Project Description Finance Study Format																
Cand. Project Ax p−F/S	of broost	L		Status	Compl. Year	Add Effor Gaps (MCM/s)		Invest (JD/com)	Project Description	Finance	Study	fechnical Visbility	companie Viability				∃emarks
	45		Irbid Stage II (Wadi Shallala TP) Phase 1	conter presering	2006	4.8 by 2010	48.0	8.7	Bulleing the interceptors and notworks for 3 Wilages, Construction of Weal Shalata 1P. Treated sewage will be reused in JV	KFW, HKJ), F/3 done	.r/s						Capacity of Upgrading in Stage 1 : 5.5MCM/a
	56		Upgrading and Expansion of Karak Treatment Plant	uneer parring	2007	0.5 by 2010	6.0	6.0	Construction of $I^{\mathbf{u}}$, collection system, pumping station and variate arguments	KEW, HKJ, F: S & D/D will at est accor	D/D soon	' "					Cowcity of Cognising 11 DMOM/9. Existing Capabity 5 0.4MDM/9. Total Capacity by 2007 : 1,4MOM/6
	41		South Amman Wastewater Project Phasel : Stage 2 (North Queen Alia Airport Treatment Plant)	under examin.	2308	0.8 by 201 0	44.2	6.4	TP including reliuse system for Prigation	not secured Ur Dicare	D/U	i		-			Gepec ty of Treatment Plant: 1NOM/a
	43		Mazar, Mu'ta and Aldaniya Wastewater Projects (Al Mazar Al Shamali)	rebni. dimore	2008	1.1 5y 2010	29.7	14.4		not securee, F/S ⊌H te <u>eor</u> e,secn	F/S soon					Γ"	Capporty of Treatment Plant : 7.5 to 2.0MGM/u
	43		Jordan Valley Sanitation - South Shunah and Ghor Nimerine (Shuna South)	,nder examr.	2008	1.6 by 2010	24.7	10.7	Construction of sevens, TP at South Shore's Olige Ningring and remose system	natisecured, D/D dono	D/D		_				Capacity of Treatment Plant : 25MGM/a
	51		Abu-Nusier WWTP Upgrade & Expansion	ander examir.	2008	1.0 by 2010	2.8	1.9		not severed. D/D dane	0/0			_			Capabity of Treatment Plant 1.6MUM/a, 178 for re-use is not wet, Invoca & Opportion ocetians low
	42		Jordan Valley Sanitation - North Shunah (North Jordan Valley) Phase 1	order meserir.	2009	3.6 by 2010	40.0	10.0	apata s	ant setured. D/D done	D/D						Capacity of Treatment Plant in Phase 5 : 409/04/2
	40-		South Amman Wastewater Project Phasel : Jiza - Talbiya (Al Jeza, Phase 2)	urcer phonics	2010	0.7 by 2010	8_3	5.5	Expansion of extection networks and TP, Re-use program	Bala, hKJ, Low (noone Areasa	טעט						Design Production Coparity in Phase 2 11,5MCM/a. Investment Cost of Prase 2 18,8MH JD besed on unit least in Physic 1
	48		Miscellaneus Small Projects (Wastewater Project)	under 825min	5010	toar beifinalo	440		Construction of now most equal metworks, conveyor fines, house competions within the while Jordan	not sectales, D/D done	ס∕ים						
		W8 (4)	Extension of Baga Treatment Plant	not installed. Trop.	2006	2.9 bv 2010	22.1	3.2	Construction of 79, Networks, Plactice (New/Senrage	nct secured	F/5						New TP Capacity: 7MCM/A. Existing Capacity: GMCM/a, Total Canneity by 2006; 12MCM/s, Total Investment Capacit 22.1MP UD
*		W9 (5)	Extension of Fuhis Treatment Plant	not heat few. Prog	2010	0.3 by 2010	not clarified		Construetion of TP, Networks	net secured		4	3	4 j	3	14	New TP Capacity : 0.540 N/c. Existing Capacity . 0.6MGM/a Total Capacity by 2010 : 1.3MUM/a Total Investment Cost 221MH 30
			Expansion of Jerash (East) Treatment Plant	not incl. Inv. Prog.	2010	0.7 by 2010	10.3	4.9	Construction of RP and Mateories, to be renoral in JV	nat secured	Report	j			İ		New TP Catacity: 2MCM/a Existing Capacity 0.7MGM/a Total Deposity by 2010 : 2.7MCM/a Tetal University Cost: 10.0MH JD:
		W11 (14)	Expansion of Salt Treatment Plant	eat noil Sry. Prog	2010	0.9 by 2010	12.1	8.1	Genetraction of TP, Netherres	not scource	Report						New TP Capacity: 15MCM/a Existing Capacity: 2.5MCM/a, Total Capacity by 2010 : 4MCM/w TeLs Investment Cost : 12.1MR LD
		(25)	Construction of Kofur Asad Treatment Plant	not incl. h Invest. Pro	2010	3.0 by 2010	38.2	8.9	irriget any to be continued until 2000	578 dane	F/S						Investment Cost : 12.1MB, LD Now TP Capporty : 1.3MCMAs by 2007, Foat Investment Cost : 382MB, BD
*		(34)	Construction of Wadi Zarga Treatment Plant (without re-use scheme)	not inal, in Invst. Prg.	2009	40 by 2010	60	1.1	KTR and to be remarked in LV, SMOM/b will be reused in the vicinity of ID. Explainships in two shapes. Press 2 will be implemented	not secured		5	4	5	4		New TP Capacity: SSMCM/4 by 2003, Investment God in about 62MH UD, Reuse scheme of charge washewy entry under claimfrie by USAID.
		(35)	Construction of Mazar, Muta, Adaniya Treatment Plants	anting, in Invat. Prg.	2005	0.8 by 2010	10.3	8.6	Convenience of new TP, collection System	nul secured	invest Dane]				New 7P Gabbelty : I.2MCN/a by 2009, [longs ment Cost : IC.3MIII LD
		(3)	Treated Wastewater Reuse Scheme of As-Samura and Zarga TPs in Jordan	Proposed by USAID	2010	35 Бу 2 010	7.0	0.2	River and KAG, 1/IMCM/4 will be neused in the vicinity of both TPs in the Liciand tree		amgoing by JSA2D						Eliebing Reuse by 1836 in JV - 45VGM/4, Future Reuse from Ad-Samure and Zerge TPs, + JV 19, 5020 + 183MGM/9, Samin is amproving to URATO (450)
*		(1)	Treated Wastewater Reuse Scheme of Abu-Nusier Treatment Plant	Processorby - JICA .	2010	0.4 By 2010	0.04	0.1	Review program of treated wastewater in the vicinity of the all for edigition		not vet	5	4	4	5	18	Reuse avidu t. 15MGM/a by 2020
*		_(5) j	Treated Wastewater Reuse Scheme of Fuhis Treatment Plant	Programa by JSQA	2010	0.3 by 2010	0.01	0.02	Found program of treated magnessator in the vicinity of the IP to: missilien			5	5	4	ű	19	Reuse arround: P.ZMUMVa by 2020. TP will be expended by 2010
*	581		Ma'an Treatment Plant	Proposed by JECA	2010	0.3 by 2010 ,	0.03	0.1	Figure program of freshed sentencer in the vigority of the TP for regular			ត	3	4	5	17	Reuse enicant : 1.9MOM/G by 2023
*		(15)	Tafila Treatment Plant	Frepased by JIGA	2010	0.4 by 2010	0.11	0.2	Reuse program of traveled restanctor in the industry of the TP for regulation.			5	3	4	5	17	Reuse amount : 1,340N/a by 2120
*			Wadi Essir Treatment Plant	Proposed by JICA	2040	C.2 by 2010	0.01	0.04	House program of tracked weakowstan in the sisting of the TP for highton	not separac	nul ye.	ь	. 5	4	5	19	Peppe amount: JUNGNA by 2020 17 will not be expensed by 2020
			Total Additional Effluent including increa from the Existing Treatment PI		uent	85 by 20!0											

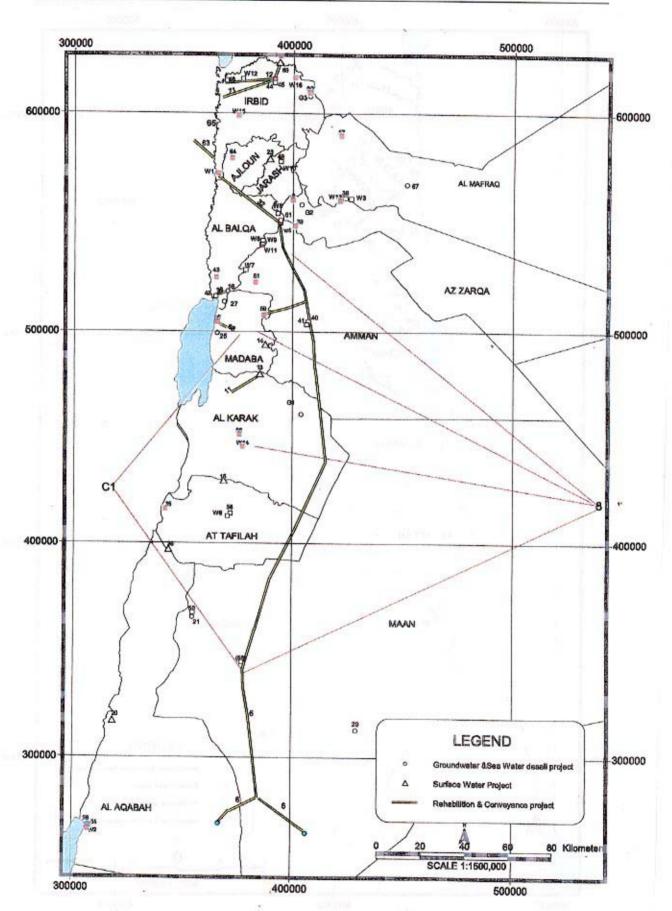
For the ranking criteria, refer to Table 10.1~1

	tor of hivest, statched Project Status Samuel December - New Project Cost Status Samuel December - New Project Cost New Pro																
Gand Project for p=f/3		attached	Project	Status					Project Description	Finance	Study				Postical Viebility	Total Renking	Remarks
			Groundwater & Sea Water Desali. Projects									!					
*	28		Desalination at Agaba (Long Term)	Proposed by JICA	2014	12	66	5 5 5	Sea weter des Minadonfoi correstat incust ist and Lucistin garpose in Agaba	e not sepured	not yet	. 4	2	3	- 5	13	Cost is evaluated in this Shiely
	G		Production Increase of Disi Amman Water Conveyer	under slanning	2020	25	not clarified		Supplying an additional 25MCM/s of figure forcili GW from Digitio Admany a distance of more than 200Km ROT doc, prepared	BOT or Leye and Iran, U/U done		ĺ	-			<u> </u>	Additional Gurveyer callof \$5MQM/a
	16		Hisban and Kafrein Desalination Plant	under examir.	2015	9	18.9	2.1	for conestic curces in Gracter Arman Area and Lourism in Dead Sea, to be conveyed to Arman through existing ripeline of Zero/Valin Project	not secured	F/S done by vIGA				·····		Development smallert and cost estimation has been reviewed and gradular in the Master Plan
		GI"	Brackish Groundwater Development for El Lajoun Oil Shale Project at Karak, Phase III, IV	not met in 37982 Proj	2020	25	not clarified		Development of brackish groundwater in Deep Canastone Aguifers. IRID and Ki	Private Scalar	on Ger Study						upler shirt, by NWT
	(?) parcelled	!	Groundwater Reduction Program III	under planning	2023	-63	25.0	-0.4	Reduction of removable greenessater abstraction in the Up and To be implemented in American Region Design VAEB and other areas Lating USADDs action belon for ASP moderated after. The projects include impation Arthropy Services (IAS), Wells Suy-out	ı	Action Plan Ayay By UBAID Ren AZB in Display						Generalise in unv. Pro. Sec. USAID (ARD) has done congrehensive study in Arvitan/Zerija Budinia st formulating measures. JICA examined the conflicibility to jibs other areas.
			Groundwater and Sea Water Desali. P	rojects To	otal	-4			_	•	······································	•					
Cand. Project for p=6/S	File No. of Silvest. Program	attached	Surface Water Projects	Status	Campi : Year	Cev. Amount (MGM/n)	Project Gost (Million (D)	Invest. (JD/com)	Project Description	Finance	Study	Technical Viebility	Egonomés Vizbility	Environ. Viability	Political Viability	Total Renking	Remarks
	(13) canceled	1	Water Harvesting, Sadia Region	conceiled out ; to be rem evanised	2015?	15	20.3	1.2	to identify practical techniques for Artificial Rochargo impounding the fornizates at by dykes in Bada region	USAID, F/S done, partly D/D done	0713						This project is connected in the fromtenest Program up to 2010. But its implantary given should be examined as two Larne Term Projects.
Cend. Project for p=F/S	File No. of lavest. Frogram	attached	Wastewater Projects	31alus 	Gornel. Year	Add, Effu. Caps. (MCM/s)	Freject Cost (Million 40)	Invest (JD/cum)		Finance	Study	Technical Vlability	Economic Visbli jy	Environ. Viablity	Political Viability	Total Ranking	Remurks
<u></u>	64'		Upgrading Kufranja and Ajlun WWTP, Phase 2	enter Antiger	2016	0.9 by 2020	3.0	6.3	Expension of exacting ITP measing the servage arround up to was 2000	rk-t ascured	F/S Under Study						F/3 in ongoing by KFW. Design Productas: Suspectsy in Phase 2: 0.5MCM/a. Existing Production Capacity : 2.8MCM/a. Total Production Capacity by 9504 :
	59'		Madaba WWTP Upgrade and Expansion, Phase 2	evantor under	2013	1.7 by 2 02 0 ,	12.0	6.0	Extantion of existing TP meeting the service undership to year 2020	not secured	173					<u> </u>	Capacity of Caryeding in Stage 1 2MCM/a. Existing Capacity (32MCM/a. Tata Increased Capacity by 2010 1 42MCM/a
	60'		Ramtha WWTP Upgrade & Expansion, Phase 2	under examp.	20:3	1.1 by 2005	3.0	3.0	Expansion of existing TP meeting the sewage amount up on year 2020	nct secured	F/5						Case(By all Joynathy in Flave 7, IMCM/9, Existing Case(By 12,IMCM/4, Total increment Capacity by 2013). 3.7MCM/9
	44		irbid Stage I, Phase 2 (Wadi Arab TP and Wadi Hassan TP)	under examin	2011	4.6 by 2020	2 5 .5	5.2	12020	nat secured	F/S				:		Wadi And TP Excension - 45MCM15, Wadi Hoosen Hepansina - 8,4MGM7a, Existing Cascety : 8,3MCM7a Total Casanity by 2011 : 10,2MGM7a
	42"		Jordan Valley Sanitation - North Shunah (North Jordan Valley) Phase 2	under examp.	2016	: 1 by 2020	10.9	100		'01 secured	5/8						Capacity of Upgracing in Province 2 : 1MCM/a. Existing Capacity 4MCM/4. This line researc Capacity by 2016 : 5MCM/4.
	45'		Irbid Stage II (Wadi Shallala TP) Phase 2	uroer ex; r io,	2017	1.7 by 2020	8.7	8.7	Expension of existing TP needing the sewage amount up to year 2020	not sceared	F/5						Departry of Tipgrading in Phase 2 : TMUM/a, Easting Departity : 5.5MCM/a Total increased Capacity by SDIS : 5.5MCM/a
		(22)	Construction of Dair Abi Said Treatment Plant	ret inci ir Prest, Pre <u>st</u>	2012	1.B by 2020	15.3	8.7	3030	nct seemed	İ		_	_			Cascelly of TP LEMISM/c
		(23)	Expansion od Dair Alla Treatment Plant	and indicing in Just Frag	2017	0.9 by 2020	8.4	84	Espansion of existing IT's eeting the sewage amount in to year 2028	not degured, F/S deno		į					Additions expension of careous in Press 2 - IMCM/s. Linkly Departity - IMGN/s. Total Generaty by 2017 : 4MCM/s.
!		(31)	Construction of Torra Treatment Plant	not ind. in Invot. Proje	2012	1.8 by 2020	19.1		onograe	not 600,/res	F/8	ŀ					Design Production Gasselly (\$MOM/s), Total Investment Coot : 16.1 Mill 22
		W3 (3)	As-Samura and Zarga TPs in Jordan	Prepored by: USAE:	2020	31 by 2020	6.2	0.2	River and KAO, 15k Ok/s will be reused in the sichirty of both TPs. In The Utland area.	ro. secured	Ey USALD						Existing Reads by 1908 in UV : 46MCMzw, Fictory George from Asi Serouse and Zeropi TPx in UV by 2026 - 120MCMZw, Study Surveyons he HSAID (ARD)
*		(1)	Treated Wastewater Reuse Scheme of Abu-Nusier TP	Prepased by JPSA	2020	0.3 by 2020	0.03	0.1	Figure program of treated mastewater \hat{a} the vicinity of J κ TF for injection		[5	4	4	5	18	Project resound: 1.5MOM/4 by 2090
*			Treated Wastewater Reuse Scheme of Fuhis TP	-repased by JIC/s	2020	C.3 by 2020	0.01		Rewar program of trained woodpyctor in the weinity of the TT for intigetion.	i		5	5	4	5		Reuse amount : 1.kMCM/a by 2020 FP will be expended by 2010
*	58"		I reated Wastewater Reuse Scheme of Ma'an TP	Proposed by JIBA	2020	0.6 by 2020	0.06	9.1	Peuse program of treated wastewater in the Jinini y of the TP for inigation.	_		5	3	4	5	17	Seuse amount : LSMCM/w by 2020
*		(15)	Treated Wastewater Reuse Scheme of Tafila TP	Proposed to of04	2020	0.3 by 2020	0.0		Reuse program or treated wastewater in the theirity of the TP for impution.		not edi	5	3	4	5	17	Rease anound 1.3MCM/wiey 2020
*	- 1		Wadi Essir TP	Processed by aICA		0.2 hy 2020 :	001	3.04	Reads program, of thoulad was assessed in the visitity of the TP to errigotion.	тр! зесьтес	no ye.	ē	5	4	5	19	Reuse syon the 0,9MDM/a by 2020. TP will not be extended by 2028.
			Total Additional Effluent Including increa	se of Eff		65 By 2020			7								
Project for a	Hillia Mir of Invest Program	AOIU ye	Rehabilitation & Conveyance Projects	Status	Compl. (Year	Dav. Amound (MOM/k)	Project Cost (Misson JD)	Investi (JD/cum)	Project Description	Finance	Sticy	Tecimical Vehliry	Eponomis Vishility	Erwiren. Vizbillty	Political Visbility	Total : Panking	Reinarks
*		ا ""	Upgrading of Inter-Governorates Transfer Line Phase 1	JECA	2014	(18)	11.5	(0.7)	Construction of transmission and plant potential and reservoir		not yet	4	4	4	2	14	i
* [Upgrading of Inter-Governorates Transfer Line Phase 2	^{co} ropused by JICA	2019	(82)	3.08	(1.0)	came as above	not secured	not yet	4	4	ا ا	2	14	
			Rehabilitation & Conveyance Proje	cts Total	į	(100)						For the r	anking er	itoria, ref	er to Tabl	e 10.1-1	V

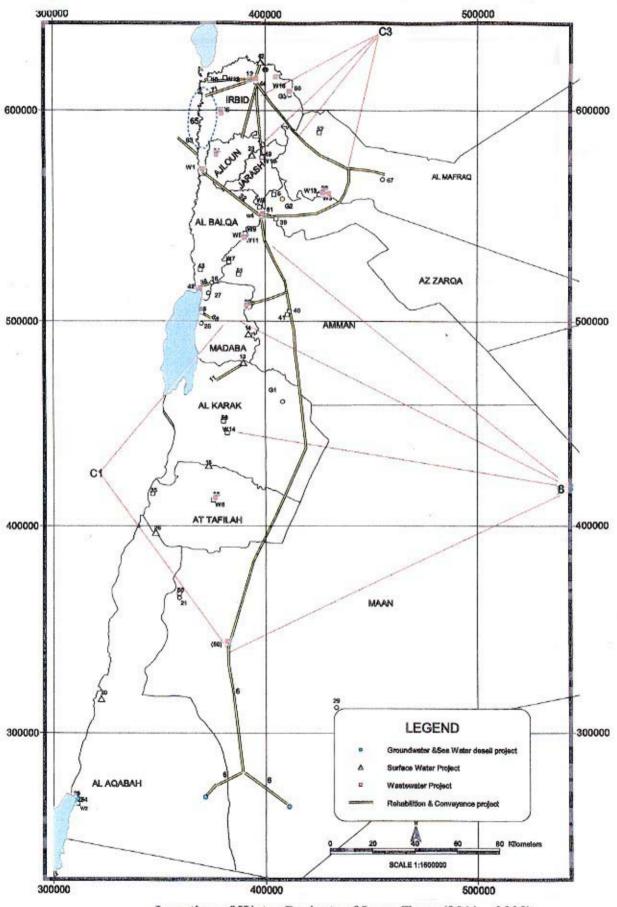
	act for of Invest, attached Groundwater Projects Status Year (MOM/2) Order of Description Finance Stady Validit																
		attached	Groundwater Projects	· Status	Guanpi Year		Project Cod (VillandD)		Project Description	Finance	Study				Political Viability	Total Ranking	Remarks
		1 01	Brackish Groundwater Development in Jordan Valley Floor	to be examined			:		Partly implemented by private familia. This scheme inslutes abscherging trunk cond of the grain to the Doad Sec.	Private acator, F/S act yet	nat yet	3	3	2	4	12	Private sectors are implementing the desclination projects by their own expenses. Chancomental impacts should be examined and excessed.
		O2	Brackish Groundwater Development in the North Wadi Araba	to be exercised					Brackish groundwater development from the Atavial Aquifor in the rented and to Jarael in the North Wast Araba for Impation	nct secored	i ul yet	3	3	2	1	9	Brackish groundwater is directly used for imagation of fruits, but almost unknown
		1 0.3	Brackish Groundwater Development in the South Wadi Araba	to be examined		<u> </u>			Bruskish groundwater development from the Aluxiel Aquifor in the verted land to Israel in the South Wed. Arebairor Imageson.	net excuréd		4	3	2	: 1	10	Brackish groundwater is directly used for invigation of fruits, but almost unknown
_		04	Deep Groundwater Development in Wadi Araba Area	Pr≊iminary otoóy	2005?	6?			Poplishten or seep horzenewsbie groundweter and/or shallow groundwater for imigation projectity tilter genice Dept	out een uwd under sardy	Hydran godfogical Sunary	2	3	3	4	12	Survey is our going by MMI
		05	Groundwater Development in Musaitbeh Well Fleid	Preliminary study		8			Groundwater development from AT/B2 aquifer in the Dead Sea Basin, numerical simulation has been done	not secured. GW energais dans	Numerical enelysis dooc	1	4	1	4	-0	It is recommended that this scheme should be re- considered because the obstraction has exceeded the safe yield in this basin.
		06	Disi-Aqaba Hydro-powered RO Desalination Scheme	. corsept		16	58.3	3.6	Canceyored of bruchish groundwater abstracted from Knight and Kurnish Aq, Frem Dist to Aqaba, Destilladen of bruchish greun dinater by the electricity to be upon itsylight or puternise energy hadroness Stational Association (1997).	set wanted, sixe	consest	2	8	3	4	12	Potential and quality of brackter GN, in the Naveim shade be startified prior to prif /S or comprehensive study should be core in full scale F/S.
Gand. Project for p=F/S	File No. of Invest. Program	No attacked by JICA	Sea Water Development Projects	Status	Compl. Year	Day, Ameur. (NGN/s)	Project Cost (Mi3lan JD)	Invest (uD/cum)	Project Description	Firence	Study	Technical Visbility	Economic Vability	Environ. Yabiity	Political Viability	Total Hanking	Remarks
		07	The Red Sea-Dead Sea Canal Project (RSDSC)	Preliminary study		 851	3600.0	4.1	Conveyance of see water from Red See to Dead See 1 180Kin, pumping station; 60mb/see Seawater Deadlination using hydroxudicity susisted RO, Deadlinated water trunc riturion line : names.	not secured, ir/S not yet	on one x	2	3	2	2	9	Infatoral Economia Convitted of Jorgan, largel and UN provided concepts, major contribution to supply water to Jordan Brief and PAL to restore the Deed See Sevel
		08	Aqaba Hybrid Sea Water Pumped-Storage Scheme with Hydro-powered RO Desalination	eenoept.		† 0 0	410.0	4.1	Pumping up conwitter in the reservoir located in Jeland using the electricity in GT-peak. Seawater desafration oxing hydrostationly assisted RD, Decainated mater transmission free	inct scenred idea	izwicz4:	2	з	3	3	11	It becomes coractive when regional electricity supply network will be realized and ample surplus power supply at might will be occurring
	-	OS	Development of Deep Sea Water	penpept					Unvoluement of seep see water including much numeral which will be obtained in the process of the thornal heat exchange of the discount water	not secured idea	tgameş	1	2	3	3	Э	investigation and study not yet
Gand Project for p=f/S	File No of Inyect. .*rcgran	No attached ty JIGA	Regional Water Projects	Status	Сотр. Үваг	Dev. Amount (MEM/a)	Project Cost (Mill on JU)	insast (JD/cum)	Project Description	Finance	Shudy	Technical Viskuty	Economic Visiolity	Sewiron. Viaccity	Palited Veality	Total Racking	Remarks
		เกาก	Water Conveyonce from Turky by Tunker or Huge Water Bag or Tanker	concept					Province gradient from turky and conveyance by talkers in baga to the failer farsed, transmission line from Haife ± Dior Allu PS	Севи	спікічрі	2	2	4	2	10	Multi-lateral project with Jordan, Turky and Israe
		011	Water Conveyonce from Turky by Pipe Line	ocroept					Purchasing of weter florm turky and conveyonce by rigidity through Serian terribories	ides	concept	2	2	1	. 2	10	Multi-laters, project with Jorden, it unly and Syka
[! 		Water Conveyonce from Euphrates River in Iraq by Pipe Line (from Al-Qaim Post)	concept		180		<u>-</u>		lidea	corospt	7	2	3	2	9	Byr allocal project with deciden and heap
		013	Mediterranean-Dead Sea Canal Hydropower and Sea Water Desalination Project	Prejim rary etrity		100	4° (). ()	41	direugh Open Cans, and Tunnel Cunduit; 100Km pumping eterion, Segwither Decalination using hydrostatically assisted RD, Jesal nated water transmission link	ich secured, stody done by fornel	corcept	2	2	2	1	7	Multi-lateral project with Jondan, leasel and PA
		014	Arab Diversion	oa varilod					Conveyance from Hashabari River in Lebanon and Banizs River in Bulan Tidigida to Yannosk River through Yuzhe Oondút, planned paroke 1984	ratisenmed :	akolisimad	ı	1	1	1	4	abelished project in 1960'

For the ranking priterio, refer to Table 10.1-1





Location of Water Projects of Mid Term (2006 - 2010)



Location of Water Projects of Long Term (2011 - 2020)

