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資料 1. 調査団員・氏名

1-1 基本設計調査団

	氏名	担当	所属
1.	美馬 巨人	総括	独立行政法人国際協力機構 無償資金協力部 業務第3グループ長
2.	津村 和光	業務主任／灌漑計画・灌漑施設設計	株式会社三祐コンサルタンツ 海外事業部 技術部第2課 課長
3.	駒田 文彦	営農計画／水管理計画 ／維持管理計画	株式会社三祐コンサルタンツ 海外事業部 技術部 技術顧問
4.	成川 正則	積算／調達／施工計画	株式会社三祐コンサルタンツ 海外事業部 技術部 技術顧問
5.	丸野 佑介	業務調整／水管理組合強化	株式会社三祐コンサルタンツ 海外事業部 技術部第2課

1-2 基本設計概要説明調査団

	氏名	担当	所属
1.	上條 哲也	総括	独立行政法人国際協力機構 東ティモール駐在員事務所 主席駐在員
2.	大矢 丈之	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3グループ
3.	津村 和光	業務主任／灌漑計画・灌漑施設設計	株式会社三祐コンサルタンツ 海外事業部 技術部第2課 課長

資料 2. 調査行程

2-1 基本設計調査時

日数	曜日	総括 (JICA) 美馬 巨人 (ミマ キョジン)	業務主任/灌漑計画・ 灌漑施設設計:津村 和光 (ツムラ カズミツ)	営農計画/水管理計画 /維持管理計画:駒田 文彦 (コマダ フミヒコ)	業務調整/水管理組合強化 :丸野 佑介 (マルノ ユウスケ)	積算/調達/施工計画 :成川 正則 (ナルカワ マサノリ)	
3月1日	火		1. 成田(16:00)発(JL729)→デンバ サール(22:25)着	関空(14:40)発(JL713)→デンバ サール(20:35)着	成田発(JL729)→デンバサール着		
3月2日	水		2. デンバサール(09:10)発(MZ848)→ディリ(12:00)着 JICA東ティモール駐在員事務所、在東ティモール日本大使館表敬				
3月3日	木		3. 灌漑・水管理課長(IWMD) インセプション事前説明等	現地再委託 (地形測量、地質調 査)、備人調査(ワークショッ プ、ベースライン調査)準備			
3月4日	金		4. プロジェクト背景、 目的の確認、 現地再委託準備	運営維持管理調査、 備人調査準備	現地再委託、備人調査(ワーク ショップ、ベースライン調査)準 備		
3月5日	土		5. 要請内容の妥当性の確認、 援助情勢調査、 現地再委託準備	運営維持管理調査、 備人調査準備	現地再委託、備人調査(ワーク ショップ、ベースライン調査)準 備		
3月6日	日		6. 収集資料整理・分析	成田(16:00)発(JL729)→デンバ サール(22:25)着			
3月7日	月		7. 現地再委託入札、現地再委託承認作業、備人調査準備、現地再委託承認、契約作業	2. デンバサール発(MZ848)→ディリ着、			
3月8日	火		8. 要請内容の妥当性の確認、 援助情勢調査、 現地再委託承認、契約作業	営農計画関連資料収集、 現地再委託承認、契約作業	現地再委託承認、契約作業		3. 現地再委託入札、現地再委託承 認作業、備人調査準備、現地再 委託承認、契約作業
3月9日	水		1. 成田発(JL729)→デンバサール着	9. 要請内容の妥当性の確認、 援助情勢調査	移動 (ディリ→マリアナ) サイト状況調査		4. 移動 (ディリ→マリアナ) サイト状況調査
3月10日	木		2. デンバサール発(MZ848)→ディリ 着 JICA東ティモール(田辺専門家と 打合)、大使館表敬(大使)	10. JICA東ティモール (田辺専門家と打合)、 大使館表敬(大使)	サイト状況調査		ベースラインサーベイ
3月11日	金	3. 農業・林業・水産省表敬(MAFF副 大臣)、 IWMDインセプション説明・協議 (渡邊援助調整専門家打合) (財務計画省副大臣表敬訪問)	11. 農業・林業・水産省表敬(MAFF 副大臣)、 IWMDインセプション説明・協議 (渡邊援助調整専門家打合) (財務計画省副大臣表敬訪問)	サイト状況調査	ベースラインサーベイ	6. 施工計画調査	
3月12日	土	4. 移動 (ディリ→マリアナ) 現地視察	12. 移動 (ディリ→マリアナ) 現地視察	サイト状況調査	ベースラインサーベイ	7. 施工計画調査	
3月13日	日	5. 団内打合せ 移動 (マリアナ→ディリ)	13. 団内打合せ 移動 (マリアナ→ディリ)	団内打合せ	8. 団内打合せ 移動 (マリアナ→ディリ)		
3月14日	月	6. ミニッツ協議	14. ミニッツ協議	ベースラインサーベイ	9. ミニッツ協議		
3月15日	火	7. ミニッツ署名 (MAFF副大臣) JICA東ティモール、大使館報告 (財務計画省副大臣のミニッツ 署名)	15. ミニッツ署名 (MAFF副大臣) JICA東ティモール、大使館報告 (財務計画省副大臣のミニッツ 署名)	JICA東ティモール、大使館報告	ベースラインサーベイ	10. JICA事務所、大使館報告	
3月16日	水	8. ディリ(12:45)発(MZ849)→デンバ サール(13:40)着、デンバサール (23:55)発 (JL720)	16. 移動 (ディリ→マリアナ)、サイト状況調査	ワークショップの準備	11. 移動 (ディリ→マリアナ)、 サイト状況調査		
3月17日	木	9. →成田 (07:35) 着	17. ワークショップの開催	12. ワークショップの開催			
3月18日	金		18. 施設計画調査	営農計画調査	ベースラインサーベイ	13. 用地取得・営農支障に伴う各種 補償の確認	
3月19日	土		19. 施設計画調査	営農計画調査	ベースラインサーベイ	14. 用地取得・営農支障に伴う各種 補償の確認	
3月20日	日		20. 収集資料整理・分析	15. 移動 (マリアナ→ディリ)			
3月21日	月		21. 環境社会配慮調査等 施設計画調査	営農計画、水管理組合強化にか かる調査	水管理組合強化にかかる調査	16. 積算・調達関連調査	
3月22日	火		22. 環境社会配慮調査等 施設計画調査	運営維持管理計画調査	水管理組合強化にかかる調査	17. 積算・調達関連調査	
3月23日	水		23. 施設計画調査	移動 (マリアナ→ディリ) 現地調査結果報告書作成	水管理組合強化にかかる調査	18. 積算・調達関連調査	
3月24日	木		24. 移動 (マリアナ→ディリ) 現地調査結果報告書作成	運営維持管理体制調査	移動 (マリアナ→ディリ) 現地調査結果報告書作成	19. 積算・調達関連調査	
3月25日	金		25. 現地調査結果報告書作成	20. 現地調査結果報告書作成			
3月26日	土		26. 現地調査結果報告書作成	21. 現地調査結果報告書作成			
3月27日	日		27. 現地調査結果報告書作成	22. 現地調査結果報告書作成			
3月28日	月	28. I WMD打合せ JICA東ティモール、大使館、関係機関へ報告、 現地調査結果報告書作成	23. JICA東ティモール、大使館、関 係機関へ報告、ディリ発 (MZ849)→デンバサール着、デ ンバサール発 (JL720)				
3月29日	火	29. ディリ(12:45)発(MZ849)→デンバサール(13:40)着、 デンバサール (23:55) 発 (JL720)	24. →成田着				
3月30日	水	30. →成田 (07:35) 着					

2-2 基本設計概要調査時

日数	曜日	総括：JICA東ティモール駐在員事務所 主席駐在員 上條 哲也 (カミジョウ テツヤ)	計画管理 (JICA) 大矢 丈之 (オオヤ タケユキ)	業務主任/灌漑計画・ 灌漑施設設計：津村 和光 (ツムラ カズミツ)
1月8日	日		1. 成田(15:55)発(JL729) →デンバサール(22:25)着	1. 成田(15:55)発(JL729) →デンバサール(22:25)着
1月9日	月	1. JICA東ティモール駐在員事務所、 在東ティモール日本大使館表敬	2. デンバサール(09:10)発(MZ8480) →ディリ(12:00)着 JICA東ティモール駐在員事務所打合せ、 在東ティモール日本大使館表敬	2. デンバサール(09:10)発(MZ8480) →ディリ(12:00)着 JICA東ティモール駐在員事務所打合せ、 在東ティモール日本大使館表敬
1月10日	火	2. 灌漑・水管理部長(IWMD)打合せ 移動 (ディリ→マリアナ) 現地視察 移動 (マリアナ→ディリ)	3. 灌漑・水管理部長(IWMD)打合せ 移動 (ディリ→マリアナ) 現地視察 移動 (マリアナ→ディリ)	3. 灌漑・水管理部長(IWMD)打合せ 移動 (ディリ→マリアナ) 現地視察 移動 (マリアナ→ディリ)
1月11日	水	3. 灌漑・水管理部長(IWMD) DBD説明・協議、ミニッツ協議等 環境開発審査担当当局打合せ	4. 灌漑・水管理部長(IWMD) DBD説明・協議、ミニッツ協議等 環境開発審査担当当局打合せ	4. 灌漑・水管理部長(IWMD) DBD説明・協議、ミニッツ協議等 環境開発審査担当当局打合せ
1月12日	木	4. 財務計画省表敬、ミニッツ説明 農業・林業・水産省表敬(MAFF大臣、専門家)、 ミニッツ説明	5. 財務計画省表敬、ミニッツ説明 農業・林業・水産省表敬(MAFF大臣、専門家)、 ミニッツ説明	5. 財務計画省表敬、ミニッツ説明 農業・林業・水産省表敬(MAFF大臣、専門家)、 ミニッツ説明
1月13日	金	5. ミニッツ協議・署名 JICA事務所報告 在東ティモール日本大使館報告	6. ミニッツ協議・署名 JICA事務所報告 在東ティモール日本大使館報告	6. ミニッツ協議・署名 JICA事務所報告 在東ティモール日本大使館報告 移動 (ディリ→マリアナ)
1月14日	土		7. ディリ(12:45)発(MZ8490)→デンバサール (13:40)着、デンバサール (23:25) 発 (JL726)	7. ワークショップ開催 移動 (マリアナ→ディリ)
1月15日	日		8. →成田 (07:05) 着	8. ディリ(12:45)発(MZ8490)→デンバサール (13:40)着、デンバサール (23:25) 発 (JL726)
1月16日	月			9. →成田 (07:05) 着

資料 3. 関係者（面会者）リスト

No.	名 前	所 属
Ministry of Agriculture, Forestry and Fisheries (MAFF) 農業・林業・水産省		
1.	Mr. Francisco de Sa Benevides	Vice-Minister
2.	Mr. Cesar Jose da Cruz	Secretario Permanente（農業総局長）
3.	Mr. Ir. Deolino da Silva	Director of Agriculture and Livestock
4.	境 忍	Irrigation and WUA advisor
5.	Mr. Adrelfredo	District Irrigation Officer of Region III
6.	Mr. Arcanjo da Silva	Agriculture Policy Planning
Ministry of Planning and Finance 計画財務省		
1.	Ms. Aicha Bassarewan	Vice-Minister
2.	Mr. Eusebio Jeronimo	Director of Planning and External Assistance Management Division
3.	渡邊 健	Advisor, National Directorate for Planning and External Assistance Coordination Division
Irrigation and Water Management Division (IWMD) 灌漑・水管理課		
1.	Mr. Florindo Barreto	Director of Irrigation and Water Management Division
2.	Mr. Martinho L. Soares	Head of Irrigation Planning
3.	Mr. Agostinho S. Guterres	Sector Beans and Root Crop, Crop Production, RDTL
4.	Mr. Pedro Vital	District Irrigation Officer, Manatuto
5.	Mr. James Oliver Oduic	Irrigation Adviser
6.	田辺 立美	Advisor for Irrigation and Water User Association
7.	Ms. Joki Van Brick	Water User's Association Advisor
Secretary State for Environment Coordination, Territorial Ordering and Physical Development (SSECTOPD) 環境審査担当局		
1.	Mr. Carlos Ximenes	Director of National Directorate Environment
2.	Mr. Vasco Leitao	Advisor of EIA and Pollution Control
ボボナロ県農林水産省事務所		
1.	Mr. Eugenio Borges	District Agriculture Coordinator (DAC), Bobonaro
2.	Mr. Alfredo Soares	District Irrigation Officer (DIO), Bobonaro
3.	Mr. Celestino Henrigue	District Irrigation Officer (DIO), Bobonaro
4.	Mr. Rui Manuel Lasi	Local Consultant for WUA Bobonaro
5.	Mr. Carlos Soares Araujo	Guard Forestry
6.	Mr. Guilherme Da Costa	District Livestock Officer

ボボナロ県知事事務所 Bobonaro District Administration Office	
1.	Leonel de Jesus Carvalho District Administrator (DA), Bobonaro
2.	Arcanjo R. Tilman District Development Officer (DDO), Bobonaro
3.	Mr. Semedu Lacu Costa Infrastructure
マリアナ Sub-District Administration Office	
1.	Mr. Domingos Martins Administrator Sub-District Maliana
2.	Mr. Alcino Pires Government Local Officer
3.	Mr. Aligio Moniz Community Development Officer (CDO)
ボボナロ県水・衛生サービス事務所	
1.	Mr. Guilhormino da Cruz Manager, Water and Sanitation Services
2.	Mr. Alcino Pires Government Local Officer
NGO, World Vision	
1.	Chris Walsh Food Security Officer
2.	Cesar Bautista Operation Manager
3.	Venacio Ximenes Agriculture Coordinator
4.	Nuno Tolentio Fish program coordinator
5.	Fernando Cardoso ANCP Supervisor
6.	Helder Dos Santos ADP (Area Development Program)
7.	Olga Sacdanha ANCP (Australian NGO Corporation program)
8.	Dos Santos マリアナ事務所
在東ティモール日本大使館	
1.	旭 英昭 大使(基本設計現地調査時)
2.	和田 明範 参事官(基本設計現地調査時)
3.	小泉 崇 参事官(基本設計概要説明調査時)
4.	野澤 佳奈子 二等書記官
JICA東ティモール駐在員事務所	
1.	田中 俊昭(基本設計現地調査時) 主席駐在員
2.	上條 哲也(基本設計概要説明時) 主席駐在員
3.	木村 真嘉 企画調整員(農業農村開発担当)
4.	倉岡 由紀 企画調整員
5.	Jong Robin Program Officer
マナトゥト県稲作灌漑プロジェクト	
1.	榑 道彦 チーフアドバイザー
2.	渡辺 直人 専門家

資料 4. 東ティモール国の社会・経済状況(国別基本情報抜粋)

	指標項目	1993年	2001年	2002年	2003年	2003年の 地域 平均値	
社 会 指 標 等	国土面積(14,600km ²)	15	15	15	15	n.a.	
	人口(百万人)	0.811	0.790	0.832	0.877	1.854.631	
	人口増加率(%)	3.0	1.4	5.2	5.3	0.8	
	出世時平均余命(歳)	n.a.	n.a.	62	62	70	
	妊産婦死亡率(/10万人)	n.a.	n.a.	n.a.	n.a.	116(2000)	
	乳児死亡率(/1,000人)	n.a.	n.a.	n.a.	87.0	32.2	
	一人当たりカロリー摂取量(kcal/1日)*1	2,692	2,833	2,806	n.a.	2,696(2002)	
	初等教育総就学率 (男)(%)	n.a.	n.a.	n.a.	n.a.	n.a.	
	(女)(%)	n.a.	n.a.	n.a.	n.a.	n.a.	
	中等教育総就学率 (男)(%)	n.a.	n.a.	n.a.	n.a.	n.a.	
	(女)(%)	n.a.	n.a.	n.a.	n.a.	n.a.	
	高等教育総就学率(%)	n.a.	12.0	n.a.	n.a.	n.a.	
	成人識字率(15歳以上の人口の内%)	n.a.	n.a.	n.a.	n.a.	n.a.	
	絶対的貧困水準(1日1\$以下の人口比%)	n.a.	n.a.	n.a.	n.a.	n.a.	
	失業率(%)	n.a.	n.a.	n.a.	n.a.	n.a.	
	経 済 指 標	GDP(百万USDドル)	n.a.	387	381	341	2,032,633
		一人当たりGNI(USDドル)	n.a.	480	480	460	1,070
実質GDP成長率(%)		n.a.	15.0	3.0	-3.0	8.1	
産業構造(対GDP比%)							
農業		n.a.	26.3	n.a.	n.a.	14.4	
工業		n.a.	18.1	n.a.	n.a.	49.3	
サービス業		n.a.	55.6	n.a.	n.a.	36.3	
産業別成長率(%)							
農業		n.a.	-2.3	n.a.	n.a.	-2.3	
工業		n.a.	9.5	n.a.	n.a.	11.1	
サービス業		n.a.	n.a.	n.a.	n.a.	6.4	
消費者物価上昇率(インフレ%)		n.a.	n.a.	n.a.	n.a.	n.a.	
財政収支(対GDP比%)		n.a.	n.a.	n.a.	n.a.	n.a.	
輸出成長率(金額%)		n.a.	n.a.	n.a.	n.a.	17.6	
輸入成長率(金額%)		n.a.	n.a.	n.a.	n.a.	17.1	
経常収支(対GDP比%)		n.a.	n.a.	n.a.	n.a.	n.a.	
外国直接投資純流入額(百万ドル)		n.a.	n.a.	n.a.	n.a.	59,612	
総資本形成率(対GDP比%)		n.a.	25.0	n.a.	n.a.	37.8	
貯蓄率(対GDP比%)		n.a.	-47.0	n.a.	n.a.	41.3	
対外債務残高(対GNI比%)		n.a.	n.a.	n.a.	n.a.	4.6	
DSR(対外債務返済比率%)	n.a.	n.a.	n.a.	n.a.	10.5		
外貨準備高(対輸入月比%)	n.a.	n.a.	n.a.	n.a.	9.2		
名目対ドル為替レート*2 (通貨単位US\$)	n.a.	n.a.	n.a.	n.a.	n.a.		
政 治 指 標 *3	政治体制:共和制 憲法2002年3月22日採択 元首:大統領。シャナナ・グズマン(Xanana GUSMAO)。任期5年。2002年5月20日就任 議会:1院制。88議席。任期5年						

出典 2005 World Development Indicators World Bank Onlineおよび書籍

*1 FAO Food Balance Sheets 2005年5月 FAO Homepage

*2 The World Factbook 2003 CIA Homepage

*3 世界年鑑 2005 共同通信社

注 ●()に示されている数値は調査年を示す

●「人口」、「GDP」及び「外国直接投資純流入額」の「2003年の地域平均値」においては、地域の総数を示す

●「妊産婦死亡率」の「2003年の地域平均値」においては、WHO・ユニセフの調整済データを示す

●地域は東アジア・大洋州。ただし「一人当たりカロリー摂取量」における地域はアジア広域

政府歳入・歳出〔東ティモール〕

	2000年 (百万US\$)	2001年 (百万US\$)	2002年 Est. (百万US\$)	2002年 対GDP比*
歳入	27.1	31.3	44.1	11.6%
国内歳入	14.1	20.5	17.4	4.6%
租税収入	12.2	18.1	15.5	4.1%
非税収入	1.9	2.4	1.9	0.5%
石油/ガス歳入	13.1	10.8	26.7	7.0%
歳出	51.3	52.6	70.6	18.6%
経常歳出	29.6	41.1	58.2	15.4%
資本歳出	21.7	11.5	12.4	3.3%
財政収支	-24.2	-21.3	-26.5	-7.0%

歳出内訳〔東ティモール〕

	2000年 (百万US\$)	2001年 (百万US\$)	2002年 Est. (百万US\$)	2002年 対GDP比*
歳出	51.3	55.1	70.6	18.6%
一般サービス	19.4	12.3	12.0	3.2%
国防	0.6	4.0	4.9	1.3%
公安	5.6	6.6	9.8	2.6%
経済	11.0	13.3	16.4	4.3%
環境保全	0.0	0.0	0.1	0.0%
住宅・生活関連施設	1.4	1.9	1.9	0.5%
保健・医療	3.1	5.0	7.4	2.0%
レクリエーション・文化	0.1	0.2	0.5	0.1%
教育	10.1	11.7	17.1	4.5%
社会保障	0.0	0.0	0.4	0.1%

会計年度は7月～6月

*: GDPの出典はThe World Economic Outlook 2004 IMF Homepage

出典 IMF Country Report No. 03/228 July 2003

JICAの東ティモール技術協力

通貨単位	1999年度	2000年度	2001年度	2002年度	2003年度	累計
億円	-	10.70	5.83	5.00	5.25	26.78
百万ドル	-	9.93	4.80	3.99	4.53	

注: 年の区切りは日本の会計年度(4月～3月)、また対ドル換算レートはOECD Homepageによる

出典: 国際協力機構年報 2004 国際協力機構

対東ティモールODA実績

《我が国》

(支出純額、単位: 百万ドル)

暦年	政府貸付等	無償資金協力	技術協力	合計
1999年	-	-	-	-
2000年	-	29.07	-	29.07
2001年	-	0.33	8.60	8.93
2002年	-	0.81	4.93	5.74
2003年	-	3.31	5.62	8.93
累計	-	33.52	19.57	53.09

《DAC諸国・国際機関》

(支出純額、単位: 百万ドル)

暦年	1位	2位	3位	4位	5位	うち 日本	合計
2000年	オーストラリア 82.4	ポルトガル 52.6	日本 29.1	英国 16.4	ベルギー 7.2	29.1	212.3
2001年	ポルトガル 58.0	オーストラリア 37.3	日本 8.9	英国 8.7	ベルギー 7.3	8.9	153.9
2002年	ポルトガル 75.9	オーストラリア 37.5	米国 27.5	英国 10.6	ルウエー 7.8	5.7	187.0

暦年	1位	2位	3位	4位	5位	うち 日本	合計
2000年	CEC 17.5	UNICEF 0.7	UNFPA 0.3	UNDP 0.3	WFP 0.2	1.6	20.6
2001年	CEC 27.5	UNHCR 8.4	UNICEF 1.6	UNDP 1.5	UNTA 0.6	1.1	40.7
2002年	CEC 21.2	UNHCR 4.2	UNDP 2.2	UNFPA 1.4	UNICEF 0.9	1.5	31.4

注: 年の区切りは1月～12月の暦年。DAC集計ベース

出典: ODA国別データブック2004 外務省

資料 5. 討議議事録 (M/D)

5-1 基本設計現地調査時..... A5-2

5-2 基本設計概要説明時..... A5-14

MINUTES OF DISCUSSION
ON
THE BASIC DESIGN STUDY
ON
THE PROJECT FOR REHABILITATION AND IMPROVEMENT
OF
MALIANA I IRRIGATION SYSTEM
IN
THE DEMOCRATIC REPUBLIC OF TIMOR-LESTE

Based on the requests by the Government of the Democratic Republic of Timor-Leste (hereinafter referred to as "Timor-Leste"), the Government of Japan decided to conduct a Basic Design Study on the Project for Rehabilitation and Improvement of Maliana I Irrigation System (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA")

JICA sent to Timor-Leste the Basic Design Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Kyojin MIMA, Group Director of Project Management Group II, Grant Aid Management Department, JICA and is scheduled to stay in the country from March 2 to March 29, 2005.

The Team held a series of discussion with the officials concerned of the Government of Timor-Leste and conducted a field survey at the study area. In the course of discussion and field survey, both sides confirmed the main items as described on the attached sheets. The Team will proceed to further works and report the findings to the Government of Japan.

Dili, March 15, 2005



Mr. Kyojin MIMA

Leader

Basic Design Study Team

Japan International Cooperation Agency



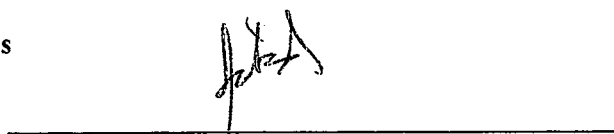
Mr. Francisco de Sá Benevides

Vice-Minister

Ministry of Agriculture, Forestry and Fisheries

Democratic Republic of Timor-Leste

Witness



Ms. Aicha Bassarewan

Vice-Minister

Ministry of Planning and Finance

Democratic Republic of Timor-Leste

ATTACHMENT

1. Objective

The objective of the Project is to distribute stable irrigation water to the Maliana I Irrigation area through rehabilitating Maliana I intake weir and irrigation canals and constructing related facilities.

2. Project Site

The Project site is located about 150 km western from Dili in Maliana sub-district of Bobonaro district as shown in Annex-1.

3. Responsible and Implementation Agency

Irrigation and Water Management Division (hereinafter referred to as "IWMD") of Agriculture and Livestock Department (hereinafter referred to as "ALD") of Ministry of Agriculture, Forestry and Fisheries (hereinafter referred to as "MAFF") is responsible for the administration and implementation of the Project. The organization charts of MAFF and IWMD are shown in Annex-2 and Annex-3 respectively

4. Components requested by Timor-Leste side

After discussion with the Team, Timor-Leste side explained the revised requested components (including technical supports) described in Annex-4. Main items of the Japan's Grant Aid requested by Timor-Leste side were confirmed as follows. JICA will assess the appropriateness of the request and will report the finding to the Government of Japan. The final components of the Project will be decided after the Basic Design Study (hereinafter referred to as "the Study").

(1) Rehabilitation

- 1) Raising the existing weir crest by appropriate height and attaching sand sluiceway, if necessary,
- 2) Grouting of the foundation of the existing weir,
- 3) Raising of the abutments training walls upstream of the crest with reinforced concrete,
- 4) Repairs on the concrete of the existing intake and sedimentation basin,
- 5) De-silting of the existing canals,
- 6) Repair canal lining and structure,
- 7) Rehabilitation of retaining walls for aqueduct bridge.

(2) New construction

- 1) Installation of new gates for intake, sluice outlet of sediment basin and canal intake,
- 2) Installation of steel slide gates at the division structure of Maliana I main canal and other offtake structures,
- 3) Construction and extension of the Ramaskora secondary canal,
- 4) Extension of the Ritabou secondary canal,
- 5) Construction of meeting place for the Water Users' Association (WUA),
- 6) Construction of the water guards house,
- 7) Construction of a storage shed,

8) Construction of a drying floor.

(3) Others

Strengthening of the WUA.

5. Japan's Grant Aid System

- (1) The government of Timor-Leste has understood the system of Japan's Grant Aid explained by the Team as described in Annex-5.
- (2) The Timor-Leste side will take necessary measures described in Annex-6 for smooth implementation of the Project on condition that the Grant Aid Assistance by the Government of Japan is extended to the Project.

6. Schedule of the Study

- (1) The Team will proceed to further studies in Timor-Leste until March 29, 2005.
- (2) JICA will prepare a draft report in English and dispatch a mission in order to explain its contents around June 2005. The draft report will be sent to the Timor-Leste side one(1) week before the mission is dispatched.
- (3) In the case that the contents of the report are accepted in principle by the Timor-Leste side, JICA will complete the final report and send it to Timor-Leste by the end of August 2005.

7. Other Relevant Issues

- (1) Both sides confirmed the title of the Project such as "the Project for Rehabilitation and Improvement of Maliana I Irrigation System" instead of "the Project for Maliana I Irrigation Rehabilitation".
- (2) Both sides confirmed the Project was identified for one of the priority projects described as "*Improve cropping efficiency under irrigation*" in the "Table 1: Priority Ranking of Proposed New Programs for the Agricultural and Livestock Sector" of the clause, namely; Program Priorities and Intersectoral Linkages of the Chapter IV "KEY PROGRAMS FOR THE MEDIEM TERM" of Part A of "AGRICULTURE, FORESTRY AND FISHERIES PRIORITIES AND PROPOSED SECTOR INVESTMENT PROGRAM" issued in 2005.
- (3) The Team explained the importance of security for the persons concerned with the Project in order to implement the Basic Design Study and the Project. The Timor-Leste side understood that and expressed to take necessary measures for the subsequent studies.
- (4) The Timor-Leste side requested to involve additional area with about 150 ha for target irrigation area under the Project, located at downstream of Ritabaou secondary canal with length of about 1.7 km by extending the said secondary canal and also Ramaskora irrigation canal with length of about 1.6 km.

The Team expressed that the target irrigation area should be decided by analyzing relevant data and information through the Study, such as availability of water source in the Bulobo river and present cropping pattern, and by examining the alternatives of height and material of raising Maliana I intake weir with attaching sand sluice gate and so on.

And the Timor-Leste side understood the above situations.

JA

JP

(5) Both sides confirmed benefits under the Project as follows;

- To distribute stable irrigation water to the Maliana I Irrigation area in rainy season,
- To extend the Maliana I Irrigation area in dry season.

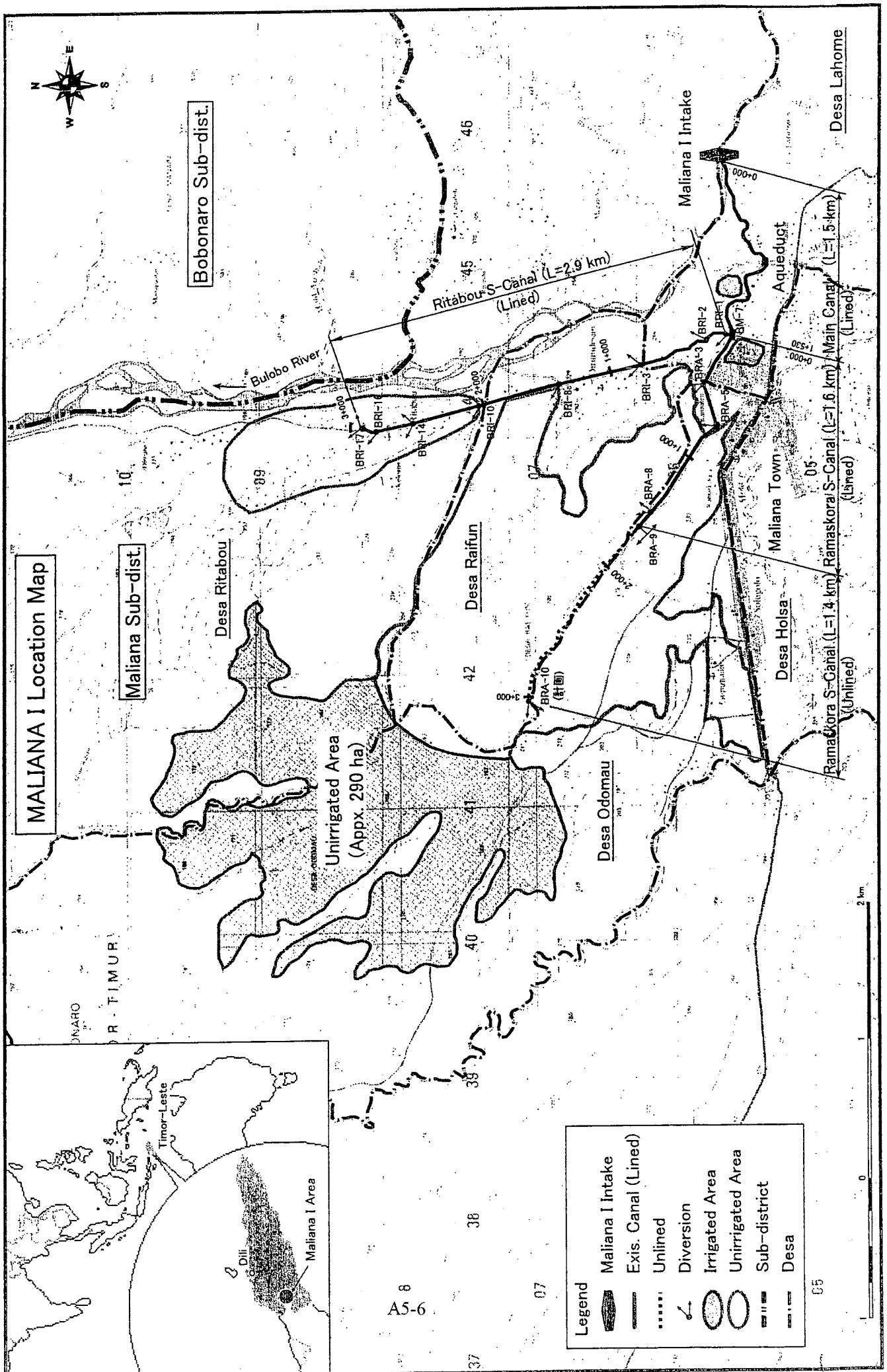
And both sides identified the tentative irrigation areas and target beneficiaries as follows;

Name of Village	Irrigation Area (ha)	Number of Household (HH)
1) Lahomea	35	18
2) Raifun	230	115
3) Ritabou	290	145
4) Odomau	325	162
5) Holsa	20	10
Total	900	450

Remarks: Numbers of HH are estimated by average land landholding of 2 ha/HH.

Both sides, furthermore, agreed that actual benefits and target beneficiaries in rainy season and dry season respectively would be examined by the Study in consideration with the above Clause (4).

- (6) MAFF agreed to confirm present status on activation of the Environmental laws in Timor-Leste and necessary procedure of conducting the Environmental Impact Assessment (EIA), and also to have responsibility to conduct EIA by December 2005, if necessary.
- (7) Both sides confirmed the necessary lands for acquisition for expanding width of main canal and extending secondary canals and so on in the Project area, would be identified by the end of the Study. And the Timor-Leste side agreed to hand basic agreement of land acquisition with beneficiaries to the Team by the end of May 2005.
- (8) The Team emphasized that the importance of constructing tertiary canals and field canals to assure more effective use of irrigation water under the Project which were not included in the components of the request by the Timor-Leste side. The Timor-Leste side agreed to undertake to construct the said canals.
- (9) The both sides confirmed that soft component for establishing and strengthening water users' association for sustainability of the Project would be proposed during the Study, if necessary. And the Timor-Leste side agreed to make efforts for providing their staff for necessary arrangements, if the soft component would be proposed.
- (10) After discussing at the Project site, the both sides confirmed beneficiaries from intake located at right bank of Maliana I weir are not under the Project.
- (11) After discussing at the Project site, the Timor-Leste side agreed to confirm schedule of rehabilitation and its proposed capacity of water supply facility, taking water from main canal of the Project with Ministry of Transport, Communication and Public Works (MTCPW) by the end of March.
- (12) After discussing at the Project site, the Timor-Leste side agreed to take necessary actions to reduce water leakage from the aqueduct bridge by temporary measure during water closure.
- (13) Both sides confirmed that the approval of the Project would be depended on the decision by the Government of Japan.



MALIANA I Location Map

Bobonaro Sub-dist.

Maliana Sub-dist.

Desa Ritabou

Unirrigated Area (Appx. 290 ha)

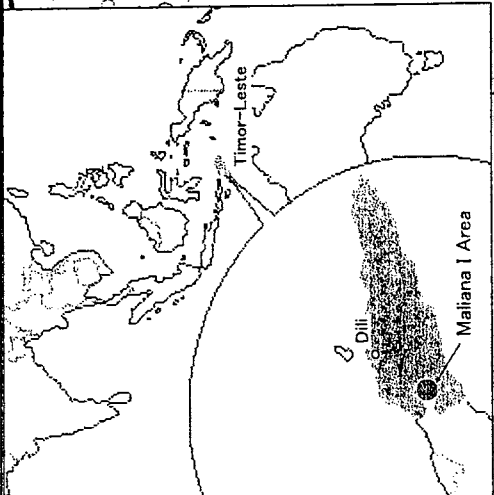
Desa Raifun

Desa Odomau

Desa Holsa

Maliana Town

Desa Lahome



Legend

- Maliana I Intake
- Exis. Canal (Lined)
- Unlined
- Diversion
- Irrigated Area
- Unirrigated Area
- Sub-district
- Desa

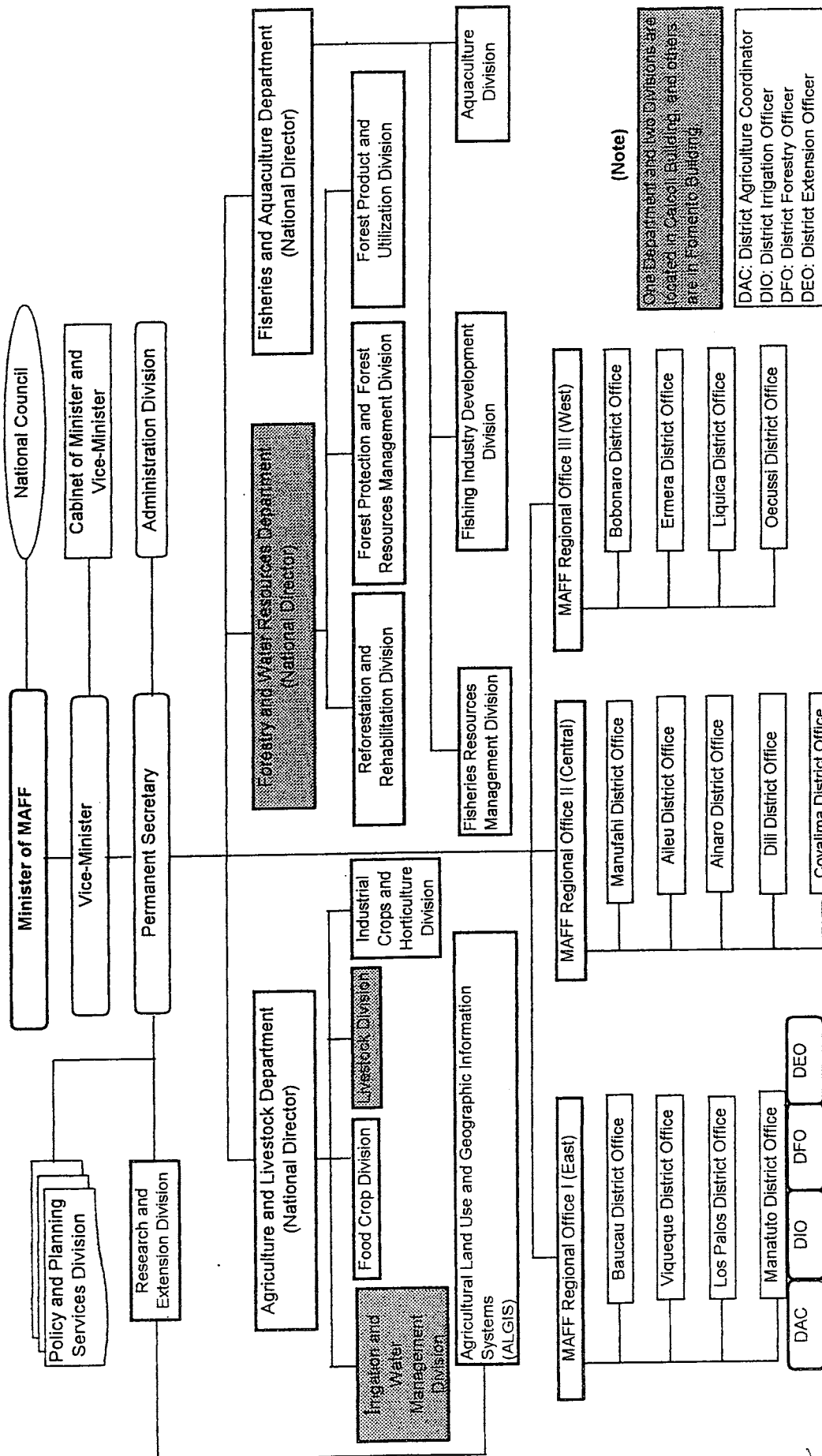
A5-6

07

05

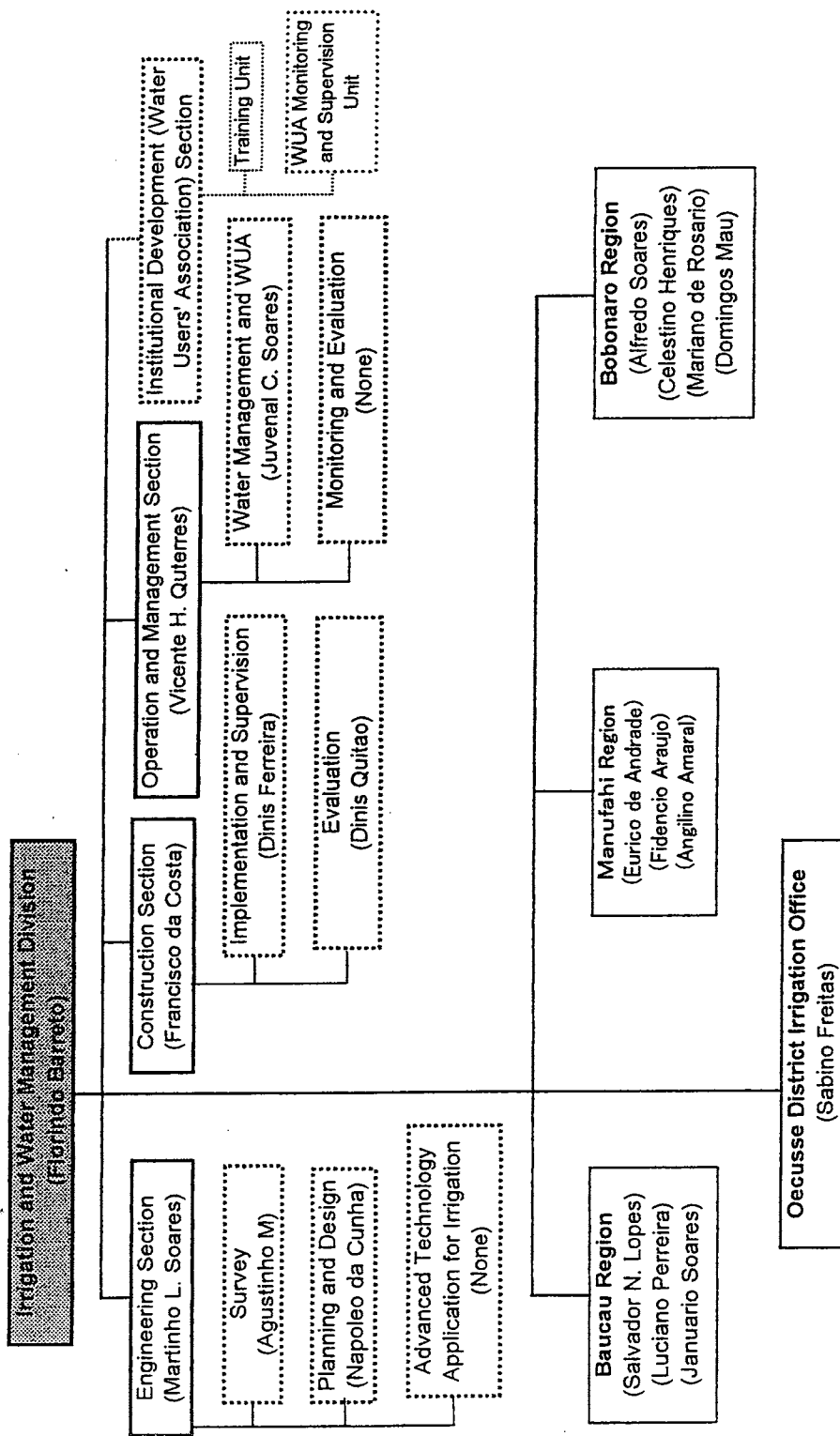


Annex-2 Present Organization Structure of Ministry of Agriculture, Forestry and Fisheries
(As of January 2005)



(See note on the left)

Annex-3 Organization Structure of Irrigation and Water Management Division, MAFF
(As of January 2005)



Note: The functions and deployment of the staff of the section and sub-sections shown with dot lines may subject to change.

[Handwritten signatures]

Revised Items from the Original Components Request by the Government of Timor-Leste

(Remarks: Underlines are showing the revised items)

Original Requested Components	Revised Requested Components
1. Rehabilitation	
1) To raise the existing weir crest by 0.7 m by anchoring a capping of concrete with steel plates armoured to the downstream face of the weir,	1) Raising the existing weir crest by <u>appropriate height and attaching sand sluiceway, if necessary.</u>
2) Grouting of the foundation of the existing weir,	2) Grouting of the foundation of the existing weir,
3) Raising of the abutments training walls upstream of the crest with reinforced concrete,	3) Raising of the abutments training walls upstream of the crest with reinforced concrete,
4) Repairs on the concrete of the existing intake and sedimentation basin,	4) Repairs on the concrete of the existing intake and sedimentation basin,
5) De-silting of the existing canals,	5) De-silting of the existing canals,
6) Repair canal lining and structure.	6) Repair canal lining and structure,
7) -	7) <u>Rehabilitation of retaining walls for aqueduct bridge.</u>
2. New Construction	
1) Instillation of new gates for the sluice outlet and canal intake,	1) Installation of new gates for <u>intake</u> , sluice outlet of sediment basin and canal intake,
2) Instillation of steel slide gates at the division structure of Maliana I main canal and other offtake structures,	2) Installation of steel slide gates at the division structure of Maliana I main canal and other offtake structures,
3) Construction of the Ramaskora secondary canal,	3) Construction <u>and extension</u> of the Ramaskora secondary canal,
4) -	4) <u>Extension of the Ritabou secondary canal,</u>
5) Construction of meeting place for the water users association (WUA),	5) Construction of meeting place for the water users association (WUA),
6) Construction of the water guards house,	6) Construction of the water guards house,
7) Construction of a storage shed,	7) Construction of a storage shed,
8) Construction of a drying floor.	8) Construction of a drying floor.
3. Others	
1) Strengthening of the WUA.	1) Strengthening of the WUA.

Japan's Grant Aid

The Grant Aid scheme provides a recipient country with non-reimbursable funds to procure the 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. The Grant Aid is not supplied through the donation of materials as such.

1. Grant Aid Procedures

Japan's Grant Aid Scheme 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)

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 the 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.

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Scheme, 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 (E/N) signed by the Governments of Japan and recipient country.

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

- 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,
- Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view,
- Confirmation of items agreed upon by both parties concerning the basic concept of the Project,
- Preparation of a Basic Design of the Project,
- Estimation of cost 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 registered consulting firms. JICA selects firms based on proposals submitted by interested firms. The firms selected carry out a Basic Design Study and writes reports, based upon terms of reference set by JICA.

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

3. Japan's Grant Aid Scheme

(1) Exchange of Notes (E/N)

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

- (2) "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 consulting firm and (a) contractor(s) and final payment to them must be completed.

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

- (3) 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 constructing 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.)

(4) Necessary of "Verification"

The Government of recipient country or its designated authority will concluded 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.

(5) Undertakings required to 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:

- a) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction,
- b) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,

- c) To secure buildings prior to the procurement in case the installation of the equipment,
- d) 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,
- e) 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,
- f) 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.

(6) "Proper Use"

The recipient country is required to operate and maintain 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.

(7) "Re-export"

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

(8) Banking Arrangements (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 (A/P) issued by the Government of the recipient country or its designated authority.

(9) Authorization to Pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions to the Bank.

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 side 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, water supply, drainage 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) Water Supply		
	a. The city water distribution main to the site		●
	b. The supply system within the site (receiving and elevated tanks)	●	
	3) Drainage		
	a. The city drainage main (from storm sewer and other to the site)		●
	b. The drainage system (for toilet sewer, ordinary waste, storm drainage and others) within the site	●	
	4) Telephone System		
	a. The telephone trunk line to the main distribution frame/panel (MDF) of the building		●
	b. The MDF and the extension after the frame/panel	●	
	5) Furniture and Equipment		
	a. General furniture		●
	b. Project equipment	●	
8	To bear the following commissions to the Japanese bank for banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
9	To ensure unloading and customs clearance at port disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan the recipient	●	
	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	●	
10	To accord Japanese nationals, whose service 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		●
13	To bear all the expenses, other than those to be borne by the Grant, necessary for construction of the facilities as well as for the transportation and installation of the equipment		●

(B/A: Banking Arrangement, A/P: Authorization to pay)

MINUTES OF DISCUSSION
ON
THE BASIC DESIGN STUDY
ON
PROJECT FOR THE REHABILITATION AND IMPROVEMENT OF MALIANA I IRRIGATION
SYSTEM
IN
THE DEMOCRATIC REPUBLIC OF TIMOR-LESTE
(EXPLANATION ON DRAFT REPORT)

In March 2005, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Basic Design Study Team on Project for the Rehabilitation and Improvement of Maliana I Irrigation System (hereinafter referred to as "the Project") to the Democratic Republic of Timor-Leste (hereinafter referred to as "Timor-Leste"), and through discussion, field survey, and technical examination of the results in Japan, JICA prepared a draft report of the study.

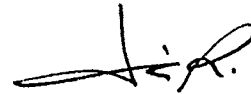
In order to explain and to consult Timor-Leste on the components of the draft report, JICA sent to Timor-Leste the Draft Report Explanation Team (hereinafter referred to as "the Team"), which was headed by Mr. Tetsuya KAMIJO, Resident Representative, JICA Timor-Leste Office and was scheduled to stay in the country from 9th to 14th January, 2006.

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

Dili, January 13, 2006



Mr. Tetsuya KAMIJO
Resident Representative
Japan International Cooperation Agency
Timor-Leste Office



Mr. Francisco de Sa Benevides
Vice Minister
Ministry of Agriculture, Forestry and Fisheries
Democratic Republic of Timor-Leste

Witness



Mrs. Aicha Bassarewan
Vice-Minister
Ministry of Planning and Finance
Democratic Republic of Timor-Leste

ATTACHMENT

1. Explanation of the Draft Final Report

The Team explained the draft final report to Ministry of Agriculture, Forestry and Fisheries (hereinafter referred to as "MAFF"), and MAFF agreed and accepted them in principle. However, MAFF commented that the Team would reconsider a possibility of construction of a storage shed and a drying floor to include in the basic design of the Project. The Team told MAFF to convey their comments to concerned Ministries after return to Japan.

2. Japan's Grant Aid Scheme

The Government of Timor-Leste understood the Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Timor-Leste as explained by the Basic Design Study Team and described in Annex-5 and Annex-6 of Minutes of Discussion, dated on 15th of March, 2005.

3. Project Site

The Project site is located in about 150km west of Dili, Maliana sub-district of Bobonaro district, as shown in Annex- I .

4. Further Schedule of the Study

- (1) The consultant will proceed with further studies in Timor-Leste until January 15, 2006.
- (2) JICA will complete the final report taking a result of the last study in account and send it to the Government of Timor-Leste by the end of March 2006.

5. OTHER RELEVANT ISSUES

5-1. Launch of Water Users' Association

Water Users' Association (hereinafter referred to as "WUA") for Maliana I has not been established yet, and at the present, MAFF is conducting the identification and confirmation of beneficiary farmers. The Team emphasized that the establishment of WUA was very crucial for the launch of the Project, because WUA would be responsible for operation and maintenance (O/M) of Maliana I facilities. MAFF explained that WUA for Maliana I would be established by the end of March 2006 with their responsibility.

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5-2. Operation and Maintenance

MAFF explained that MAFF would assist 70% of O/M cost of the irrigation facilities for the first five years (1st – 5th) after the establishment of WUA, and 30% for the second five years, (6th – 10th). After 10 years, WUA will take full responsibility for O/M, but MAFF will assist WUA by conducting periodical monitoring and taking care of major repairs, such as severe damage to intake facility.

5-3. Technical Assistance

The Team explained that technical assistance was included as soft component of the Project, to strengthen WUA to properly conduct water management and O/M.

5-4. Obligations of Timor-Leste Side

Both sides confirmed that the items mentioned below were conducted by the Government of Timor-Leste with its own expenses before and during the implementation of the Project. They are:

- (1) Construction of Tertiary canals;
- (2) Land for widening canal section and necessary working space for construction of canals;
- (3) Land for temporary access road to Maliana I headworks, and to Aqueduct;
- (4) Land for concrete batcher plant, stock yard, and diversion canal at Maliana I headworks;
- (5) Land for WUA O/M facilities;
- (6) Tax exemption; and
- (7) Items for implementation of soft component listed as Annex- II .

5-5. Process of Environmental Assessment

MAFF submitted the Development Proposal Application of the Project to Secretary of State for Environment Coordination, Territorial Ordering and Physical Development (hereinafter referred to as "SSECTOPD") and the proposal is under the process of screening. SSECTOPD told the Team that they would inform a result of review in screening to MAFF by 18th January and MAFF is requested to prepare Environmental Management Plan and submit it to SSECTOPD for their approval.

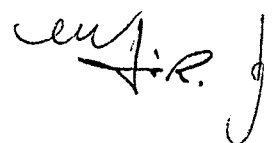
5-6. Security Issues

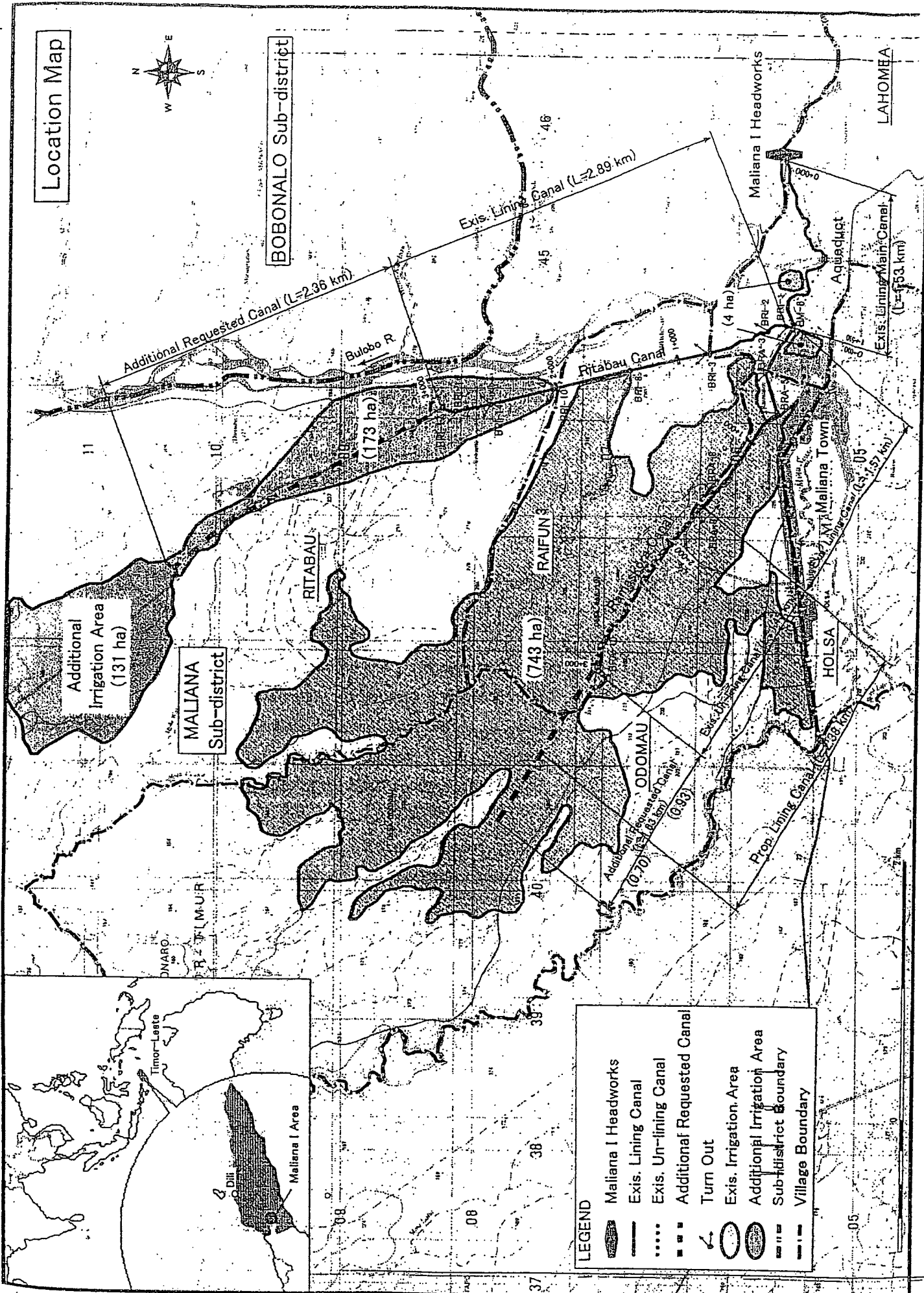
The Team explained the importance of security for the persons concerned during

implementation of the Project. MAFF agreed to take necessary measures for the security of the persons concerned.

Annex- I Project Site Map

Annex- II Items undertaken by MAFF for implementation of soft component

A handwritten signature in black ink, appearing to be 'A.R.' with a flourish at the end.



Handwritten signature

**Items to be undertaken by MAFF/Irrigation and Water Management Division (IWMD) for
executing Soft Component Plan**

(1) Items to be undertaken immediately are:

- 1) To prepare a list of beneficiaries;
- 2) To launch Working Group for WUA election, which consists of village chairmen, District Agricultural Coordinator, District Irrigation Officer, local consultant, staff of Maliana sub-district office, and representative of ASC, and other necessary persons;
- 3) To elect WUA Board members (President, Vice-president, Accountant and Secretary); and
- 4) To identify 22 Group leaders from beneficiaries.

(2) Items to be undertaken by the detailed design stage are:

- 1) To appoint a gate keeper other than an existing Marino; and
- 2) To allocate WUA advisor of IWMD during executing soft component plan when necessary.

(3) Items to be undertaken by and during the construction stage are:

- 1) To ensure beneficiaries to provide land for tertiary canals and O/M facilities building, including WUA meeting room;
- 2) To ensure beneficiaries to construct tertiary canals of 12 km length;
- 3) To supply necessary equipment such as white board, chair, table, rack and so on for the O/M facility building; and
- 4) To allocate budget for necessary expense of the above.

資料 6. 事業事前計画表（基本設計時）

1. 協力対象事業名
東ティモール民主共和国 マリアナ I 灌漑施設改修計画
2. 我が国が援助することの必要性・妥当性
(1) 我が国が当該国に対し援助することの必要性・妥当性 我が国は、東ティモールの安定と発展はアジア太平洋地域の安定と平和のために極めて重要であるとの認識の下、これまで同国における平和の定着・国造りへの取り組みに対して積極的に協力してきた。他ドナーの献身的な支援も功を奏して、徐々に治安は落ち着き、2005年6月にはPKF完全撤退するに至った。一方、東ティモール国政府は、国家開発計画（2002年策定）で、①国・地域全体および全分野における貧困削減、②全国民を対象とした保健・教育・福利改善を促進するための公平かつ持続可能な経済成長、の2つの開発目標を掲げており、我が国も①人材育成、②インフラ整備、③農業を重点3分野として支援を行っていくとともに、④平和構築への更なる支援として、東ティモールにおける和解努力や元兵士の社会復帰への取り組みに対して支援を行うことを表明している。
(2) 当該プロジェクトを実施することの必要性・妥当性 東ティモール国の農林水産セクターは、全労働人口の70%以上が同分野に従事し、対GNP比の26%（2001年）を占めており、国の産業の根幹を成し、経済・社会的に大きな役割を担っている。他方、主食であるコメの食料自給率は60%程度に留まっており、輸入必要量は年間25,500トン超と算定されている。このような状況下、東ティモール国政府は、農林水産セクターの開発目標に、「食糧安全保障と食料自給率の向上」を第一優先に掲げている。また、全人口の80%が農村部で生活し、貧困世帯の85%が農村部に居住していると言われ、東ティモール国の「貧困削減」、「持続可能な経済成長」を達成する上で、同セクターを支援することは、東ティモール全体に経済発展に寄与すると期待されている。
3. 協力対象事業の目的等（プロジェクト目標）
マリアナ I 取水施設の固定堰嵩上げ部分が1992年に発生した洪水により流失しており、その流失した嵩上げ部を復旧し、効率的な取水を可能とするとともに、灌漑水路を改善することにより、農業用水を末端灌漑地区まで安定的に配分することを目的としている。
4. 協力対象事業の内容
(1) 対象地域 東ティモール国ボボナロ県マリアナ準県（Sub-district）マリアナ I 地区
(2) アウトプット プロジェクト対象地区の農業用水の分配が安定的に行われる。
(3) インプット 【日本側】
① 取水施設：固定堰嵩上げ部0.7mの復旧、土砂吐の新設、取水口ゲートの新設、左右護岸壁、水路取水工施設の改修
② 幹線水路：練石積ライニング1,527m 拡幅・改修、付帯構造物25箇所の改修、水路橋護岸擁壁の改修
③ ラマスコラ2次水路：既設練石積ライニング1,570mの改修、既存土水路2,375mの練石

積ライニング化、付帯構造物 48 箇所の改修

- ④ リタバウ 2 次水路：既設練石積ライニング 2,890m の改修、既存土水路 2,360m の練石積ライニング化、付帯構造物 79 箇所の改修
- ⑤ 管理施設：水門管理棟 19m²、維持管理施設棟 68m² の建設
- ⑥ ソフトコンポーネント計画：水管理指導専門家：2.3 MM、
組織運営専門家 2.0 MM

【東ティモール側】

- ・ 水管理組合の設立、ゲート操作人の確保
- ・ ソフトコンポーネント計画における要員確保
- ・ 水路の拡幅用地（約 0.15ha）、管理施設の土地収用、
- ・ 取水堰改修仮廻し水路、水路護岸改修工事用地の借用
- ・ 受益者の労働負担による 3 次水路約 12 km の建設
- ・ 水管理組合が行う運営・維持管理への補助金拠出

(4) 総事業費

概算事業費 5.80 億円（日本側負担分 5.78 億円、東ティモール側負担分 0.02 億円）

(5) スケジュール

【日本側による施設建設】詳細設計、ソフトコンポーネント期間を含め 18.5 ヶ月の工期予定

(6) 実施体制

主管官庁：計画財務省（MPF）

実施機関：農林水産省（MAFF）、灌漑・水管理局（IWMD）

5. プロジェクトの成果

(1) プロジェクトの裨益対象の範囲および規模

マリアナ I 灌漑地区受益者：約 1,500 世帯、約 7,800 人

(2) 事業の目的（プロジェクト目標）を示す成果指標

	2005 年（現在）	2009 年（事業実施後）	成果指標：雨期の最大 取水可能量の増加
農業用水取 水可能量	0.88 m ³ /秒	1.37 m ³ /秒	0.49 m ³ /秒

(3) その他の成果指標

ソフトコンポーネント計画を実施することによる成果：

- (ア) 取水施設の土砂吐、取水口、沈砂池および水路取水工ゲートの操作熟度
- (イ) 新設される 3 次水路（約 12km）の通水距離

6. 外部要因リスク

- ・ 確率年 100 年を越す大洪水などが発生する

7. 今後の評価計画

(1) 事後評価に用いる成果指標

- ① 雨期の最大取水可能量、② 3 次水路の通水距離

(2) 評価のタイミング

ソフトコンポーネントの達成目標年の 2012 年以降

資料 7. 入手資料リスト

No.	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	The Survey & Mapping of Irrigation Areas, Contract No. Gds/301 Survey Report for Maliana 1 & 2 Irrigation Schemes	プリント、 CD-R	コピー	MAFF, ARSC Meihang (Group) Industry Development Ltd., China MAFF Working Group	2005年
2	Analysis of Timor Lorosa'e Household Survey for Ministry of Agriculture, Fisheries, Forestry (Draft)	レポート	コピー	Indonesia - Australia Development Cooperation, AusAID	2002年
3	Bobonaro Area Rural Development Project An Assessment of Agricultural Development Potential in East Timor	レポート	コピー		
4	Topo Graphical Map, Indonesia, 1:25,000 (全10枚)	地図	オリジナル	Bakosurtanal Dilaksanakan Oleh	1993年
5	Topo Graphical Map, Indonesia, 1:50,000 (全2枚)	地図	オリジナル	Army Topographic Support Establishment	1999年
6	Timor Leste Map Atlas	地図	オリジナル	Agriculture Land Use & Geographic Information System information to support MAFF AusAID	2003年
7	Agricultural Statistics 2000	レポート	オリジナル	Ministry of Agriculture, Republic of Indonesia	2000年
8	The Agricultural Rehabilitation Project East Timor - Heavily Damaged Schemes - ARP II Rehabilitation of Maliana I Irrigation Scheme Design Report, Main Report, Annex A, Annex B	レポート	コピー	MAFF SMEC International PTY LTD	2003年
9	Feasibility Study of Seical Up, Maliana 1, Uatolari 1 and Caraulun Irrigation Schemes, Feasibility Study Report	レポート	コピー	MAFF SMEC International PTY LTD	2002年
10	Strategy for Irrigation and Water Management in East Timor	レポート	コピー	Agriculture Department UNTAET	2000年
11	Policy and Strategic Framework	レポート	コピー	MAFF	2004年
12	東ティモール国家開発計画(National Development Plan)要約	レポート	コピー	JICA 東ティモール駐在員事務所	2002年
13	East Timor National Development Plan (12. Agriculture, Fisheries and Forestry 部分の抜粋コピー)	レポート	一部コピー	Planning Commission, Dili	2002年
14	Project implementation Outline Participatory on-farm development of rice- and maize-based cropping system in Baucau, Viqueque, and Manatuto	プリント	コピー	MAFF	2004年

15	Crop Production Division Annual Report 2002-2003	レポート	コピー	MAFF	不明	不明
16	Rice Policy in East Timor	プリント	コピー	不明	2001年	2001年
17	Bobonaro Area Rural Development Project An Assessment of Agricultural Development Potential in East Timor (Draft)	レポート	コピー	Indonesia - Australia Development Cooperation, AusAID	1999年	1999年
18	Bobonaro District Development Plan 2002-2003	CD	電子ファイル	ETPA/UNTAET, Administration	District	2002年
19	Profile Distrito Bobonaro (bahasa)	CD	電子ファイル	Administração Bobonaro	Civil Distrito	2002年
20	Urgent Irrigation Rehabilitation Project (Manatuto Irrigation System Phase I) Summary, Vol. I, Vol. II	レポート	オリジナル	UNOPS, Sanyu Consultants Inc., NIA Consult Inc., Pertconsult Int'l	NIA	2000年
21	Urgent Irrigation Rehabilitation Project (Manatuto Irrigation System Phase II) Concept Design Report, Vol. I, Vol. II	レポート	オリジナル	UNOPS, Sanyu Consultants Inc., NIA Consult Inc., Pertconsult Int'l	NIA	2001年
22	Urgent Irrigation Rehabilitation Project Organizing Farmers for Repair, Rehabilitation, and Operation and Maintenance (O&M) of Manatuto Irrigation System	レポート	オリジナル	UNOPS, Sanyu Consultants Inc., NIA Consult Inc., Pertconsult Int'l	NIA	2001年
23	Improved Operation and Maintenance (O&M) Manual Water Users Association - Lacro Irrigation System, Manatuto Sub-District, Manatuto District, East Timor	レポート	オリジナル	UNOPS, Sanyu Consultants Inc., NIA Consult Inc., Pertconsult Int'l	NIA	2003年
24	Combined Sources Budget 2002-2003, Republica Democratica de Timor Leste, Documento Orcamental No.3	レポート	コピー	Ministry of Planning and Finance		2002年
25	Combined Sources Budget 2003-2004, The Democratic Republic of East Timor, Budget Paper No.2	レポート	コピー	Ministry of Planning and Finance		2004年
26	Operation and Maintenance of Rehabilitated Irrigation Scheme, Vol. I, Vol. II	レポート	コピー	MAFF		2005年
27	Environmental Requirements for Development Proposals Guideline No.1-8	レポート	コピー	Ministerio do Desenvolvimento e Ambiente		不明
28	Act of the Republic of Indonesia, Number 23 of 1997, Regarding Environmental Management	書籍	コピー	Republic of Indonesia		1997年
29	Regulation No. 1999/1 on the Authority of the Transitional Administration in East Timor	プリント	コピー	UN Transitional Administration in East Timor (UNTAET)		1999年
30	Statutes of the "Akadiruaoan" Water Users Association Caraulun Irrigation System, Same Sub-District, Manufahi District - Timor Leste	プリント	コピー	MAFF		2005年
31	Priorities and Proposed Sector Investment Program	レポート	コピー	MAFF		2004年
32	FAO/WFP and Food Supply Assessment Mission to Timor-Leste, Special Report	レポート	コピー	FAO/WFP		2003年

資料 8. その他の資料・情報

8-1	基本設計現地調査時開催のワークショップメモランダム.....	A8-2
8-2	土地収用にかかる住民基本合意レター.....	A8-9
8-3	基本設計概要説明時開催のワークショップメモランダム.....	A8-11
8-4	現況水路の諸元.....	A8-20
8-5	現況水路の通水能力.....	A8-21
8-6	計画水路施設調書.....	A8-24
8-7	用水計算.....	A8-30
8-8	流入土砂防止工の検討.....	A8-35
8-9	固定堰、土砂吐および護岸擁壁工の設計.....	A8-38
8-10	水路取水工の設計.....	A8-46
8-11	年度別運営維持管理費および水利費徴収額の収支計算.....	A8-53

Memorandum of the Workshop

On the Basic Design Study

On the Rehabilitation and Improvement of Maliana I Irrigation System

Date : March 17 2005

Location : District Administration Office, Bobonaro

Participants : Attached List

1. Opening by District Administrator, Leonel De Jesus Carvalho

He liked to thank everyone for attending. He liked to thank the government of Japan for thinking and caring about the people of Maliana I.

The Maliana I area has not yet reached its maximum potential production. This project will help the families live a better life with full production. At present, families work very hard in the fields and carrying water. It is hoped that this project will assist in relieving this burden.

If we think 3 years into the future, what work and productivity could we be achieving. How can we change our practices from relying solely on rainfall?

We need to create a community that can continue to develop into a strong and developed country. This will take time and many phases of development.

The Portuguese began building the irrigation system and the Indonesians continued to rehabilitate the system, and still the water did not reach all farmers. This project aims at providing an efficient and complete irrigation system, so we can grow crops all year round.

Today, we need to talk about how we are going to distribute the water equally. The project will need people, materials and money, if it is to succeed.

This is not a project to help *individuals*, to make money out of the construction phase → this project is to repair the irrigation system and extend the system so that *all* people can benefit → YOUR lives, not anyone else.

So I ask: → are you ready to participate? → are you, the community leaders, ready to contribute?

When development begins, we need to make the most of our opportunities.

2. Director of Irrigation, Martinho Soares (IWMD)

If we are going to build a 2-meter wide canal through government and individual people's land, Who is responsible?

If we are the people who benefit from the irrigation water, shouldn't we be the people who contribute to the construction? We CAN do this, we WANT to do this, this is our life. The fields need water to produce, so when will we start?

3. Questions from the Village Chiefs of the 5 villages

1) If a 2 meter canal is going to be built wider than the existing canal close to houses and roads, we will need to consult the communities → how will we do this process?

2) One Chefe Suco offered his village for expansion of the irrigation system

3) Can we really make a irrigation system that will help dryland farmers in the dry season? → Will there be enough water in the river?

→ How will the water be shared / distributed equally?

4) If you use workers in the construction phase, please use people from within the communities, not outside.

If all resources are being put in to the Maliana 1 how will this effect other irrigation development in other areas like downstream or Maliana 2

5) After the new construction, who has the maintenance responsibilities?

We need to involve the community in the design process.

4. Response to Questions by Martinho Soares (IWMD) and Alfredo Soares(DIO, Bobonaro)

If the water is not reaching you yet, we need to analyze why? The consultants have the data on the water load in the river, their design will share out only the available water in the river.

Regarding : work on the construction, the village chiefs will be consulted first, but jobs will be allocated according to skill levels required.

5. Mr. Kazumitsu Tsumura (JICA Team)

The water levels allocated to farmers will possibly increase, and the system can be expanded → but we can not make any promises.

We need to develop a system of agriculture to meet the water supply in the dry season, we may not ALL be able to have fully irrigated rice paddies in the dry season, so we will need a system of rotation that has different crops being allocated different amounts of water.

During construction, the project will be asking for a contribution of assistance of work from the communities. Japan's contribution will be the contracted engineers and managers (they may need manpower with paid work, but no promises).

It is important to explain that it will be the responsibility of the WUA and the community to construct the secondary and tertiary canals; this project is about the primary canals.

6. Martinho Soares (IWMD) adds,

A Water Storage dam is not part of this program, and will need to be considered in a separate program. It will be difficult to build water storage here in Maliana I due to geography and soil types.

Japan has worked in other areas of Timor-Leste like Manatutu. This is high quality work requiring highly skilled workers. They still did use some local workers.

Question to the audience : if the internationals assist by extending the canal → Can you use the water?

There are 3 components to the project

- 1) Rehabilitation of the Indonesian built canal
- 2) Construction of new extension of canals
- 3) Formation of WUA

7. Questions from the Audience

Q: Regarding the 2km extension of the Ramaskora canal, we believe that there is enough water, but there needs to be a very good strategy for distributing the water through tertiary canals. Now, the water does not reach these farmers at all.

Q: Many people have tried to repair the canal to his 20ha area at Dirou – but they still do not get water. States that he needs more secondary channels if the potential paddy is to be established.

Q: We need to form strong WUA to control water use but importantly, we need people to follow the regulations.

Asked if the government had plans to extend the irrigation to all of the Maliana I floodplain.

8. Response from Alfredo Soares (DIO, Bobonaro)

The most important point is that there is a need for the 'WHOLE' community to participate in WUA, and not to be greedy with water.

There will be an assessment of the current infrastructure and water supply before the design is started. The community and government will be asked to participate in the design process.

Strict need to control the irrigation canal gates so that the distribution of water is fair for all. If we are wasting water or losing water we need to discuss solutions quickly. This is because people at the ends of the tertiary canals will be effected the most. This is why it is so important that representatives of all of the areas are members of the WUA.

There may be scope for assistance in rehabilitating secondary canals, but importantly it is the responsibility of the communities to build the tertiary canals.

9. Questions from the Audience

Q: A point was raised about workers and who pays them to construct or rehabilitate tertiary canals.

Q: From Raifun, Before you start anything you should see how much water is here in the dry season, you need to make your assessments based on the least stream flow.

You will need to discuss the project with all the community in its design, particularly the timing of the rehabilitation and construction so that we can minimize the effect on agricultural calendar and production losses.

Q: From Ritabou, water is not reaching everyone now. Will all the water in the river 'really' meet our needs, even with a new rehabilitated system.

10. Response from Alfredo Soares (DIO, Bobonaro)

The potential of the river 'can' irrigate all the area, it just needs rehabilitation. This project will rehabilitate the main and secondary canals but we will need the government to rehabilitate the tertiary canals if we are all to benefit from the irrigation water.

11. Questions from the Audience

Q : There is a need for water daily (washing, drinking, cooking...), so when the construction is taking place, are you planning to open the canal at night time for us to collect water for domestic use.

12. Response from Alfredo Soares (DIO, Bobonaro)

The distribution system is not good now. The main canal needs to be wider, it needs to be kept clean and it needs to be better. It is up to YOU, THE COMMUNITY to make the tertiary canals a success so that all can get irrigation water.

Regarding the maintenance and operation of secondary and tertiary canals, we need to make good plans for their locations; we need to resolve problems by talking with the community leaders, the government and the WUA.

We need to listen and respect each other. We need to work together → do not lose this opportunity.

Water will stop when Rehabilitation/ construction takes place. We need to plan around this in the implementation. The community, government and Japan need to discuss how we will resolve the no domestic water issue.

13. Mr. Kazumitsu Tsumura (JICA Team)

Regarding, the amount of water people will be able to access: there will not be enough water for everyone to be dry season fully irrigated rice farmers. Instead, their needs to be a 'controlled' system of agriculture the uses the water to its maximum potential. There will need to be a rotation of crops and of areas to control the water requirements.

If we can 'share' the water, all farmers will be able to rotate rice/maize/ vegetables/ cassava then we will all get the benefit of the dry season irrigation.

14. Questions from the Audience

Q: You must take in to account 'culture' if this project is to succeed. For instance animal farmers, dryland farmers, fruit growers have different needs but can still affect the project's success. The chief of Odomau stated that past irrigation projects did not succeed because the engineers did not consult with the 'culture'. To succeed the project needs to hold a ceremony to request the 'water god's' permission to use the irrigation water. This will ensure all community members understand that the water is now in the 'water god's' control (this will be more powerful than the regulations in the government or WUA), and should be respected.

15. Closing from District Administrator

- Respects paid.
- We need to listen and learn from people with much more knowledge and experience than us. They will make this project work, they will make the system high quality → this will be all to help you → you need to comprehend this, you will be asked to participate and contribute. **DO NOT CAUSE PROBLEMS**, such as 'that is my sand or rocks!'
- In 2007 you will get the benefits, be patient
- Many investors have come to help Timor-Leste but the community must open its heart and gratefully receive the assistance → then you will be able to develop yourselves. Do not lie to or deceive donors, have some self respect and develop yourselves, you don't need to wait for donors. The DA says he has some self respect and could not lie or beg to donors.
- Thank you very much for today and the opportunity you are giving. Thanks to all attending the workshop and safe journeys home. Now let's go to work and with God's help we will succeed.

**LIST OF PARTICIPANT FOR WORKSOP
THURDAY,DATE 17 MARCH 2005**

NO	DATE	NAME	ADDRES	POSITION	SIGN
1	17/3/2005	Luis de Oliveira	Ritaqbou	Chefe Aldeia	
2		Jacinto Dau Bere	Holsa	Chefe Aldeia	
3		Alberto A.Fernandes	Raifun	Chefe Suco	
4		Domingos Lopes	Raifun	Concelho suco	
5		Manuel Lacasuri	Raifun	Farmer	
6		Vasco P.M.Soares	Raifun	Farmer	
7		Baltasar Fernandes	Raifun	Farmer	
8		Hilario Lopes	Raifun	Farmer	
9		Bento Pereira Maya	Raifun	Farmer	
10		Alfredo Lelobere	Raifun	Farmer	
11		Venancia da Cruz	Odomau	Concelho suco	
12		Ines de Jesus	Odomau	Concelho suco	
13		Agustinha Soi Loe	Ritabou	Farmer	
14		Antonio da Cruz	Odomau	Farmer	
15		Ano	Odomau	Farmer	
16		Alexandrino Timotiu Soares	Ritabou	Farmer	
17		Guilhermino da Cruz	Ritabou	Farmer	
18		Domingos Moniz	Ritabou	Chefe Aldeia	
19		ijac Martins	Ritabou	Farmer	
20		Carlito da Cunha	Ritabou	Farmer	
21		Joaquim Maubere	Ritabou	Farmer	
22		Adriano Moniz	Ritabou	Farmer	
23		Martinho Moniz	Ritabou	Farmer	
24		Domingos Soares	Ritabou	Farmer	
25		Josa Soares	Lahomea	Chefe Aldeia	
26		Sipriano da Cruz	Lahomea	Farmer	
27		Apolinario Barros	Lahomea	Concelho suco	
28		Alcino Pires	Lahomea	Farmer	
29		Baptista Pires	Lahomea	Chefe Aldeia	
30		Domingos Lopes	Raifun	Concelho suco	
31		Cosme Soares	Raifun	Chefe Aldeia	
32		Antonio Santa Cruz	Holsa	Chefe Suco	
33		Camilio Gomes	Holsa	Concelho suco	
34		Fernando Pires	Raifun	Farmer	
35		Martinho Bilimau	Lahomea	Chefe Suco	
36		Tohmas C.Lopes	Raifun	Farmer	
37		Alfredo Miniz da Costa	Cailaco	Adm.Sub.Dist	
38		Domingos Martins	Maliana	Adm.Sub.Dist	
39		Carlos Credos	Bobonaro	Adm.Sub.Dist	
40		Alfredo Soares	Maliana	DAO	
41		Agusto Soares	Ritabou	Farmer	
42		Mateus Gomes	Ritabou	Farmer	
43		Fernando Credos	Maliana	Staf WVI	
44		Fernando santos	Maliana	Staf WVI	
45		Moises Lopes	Odomau	Farmer	

**LIST OF PARTICIPANT FOR WORKSOP
THURDAY,DATE 17 MARCH 2005**

NO	DATE	NAME	ADDRES	POSITION	SIGN
46	17/3/2005	Abel Pereira	Ritabou	Chefe Suco	
47		Carlito da Cunha	Ritabou	Farmer	
48		Tohmas C.Lopes	Raifun	Farmer	
49		Maubili	Lahomea	Farmer	
50		Aniceto Maubuti	Lahomea	Chefe Aldeia	
51		Carla Credos	Maliana	Farmer	
52		Salomao da Cruz	Maliana	Chefe Suco	
53		Jose Soares	Lahomea	DLO	
54		Semedu da Costa	Maliana	Infrastructure	
55		Aleixo Soares	Lahomea	DLO	
56		Natalino Lelobili	Raifun	Farmer	
57		Artur Soares	Raifun	Farmer	
58		Celestinho Henrique	Maliana	District Irg.Ofc.	
59		Fonciano de Fatima	Odomau	Farmer	
60		Justinho Guterres	Holsa	Farmer	
61		Tohmas Laculoi	Lahomea	P3A	
62		Dinis da Costa	Lahomea	RCM	
63		Victor Pires Sousa	Odomau	Manager ASC	
64		Tome dos Santos	Ritabou	Concelho suco	
65		Jose Mali	Ritabou	Farmer	
66		Marcal Amaral	Lahomea	Farmer	
67		Nuno Tolentino	Maliana	WVI Staf	
68		Mario Amaral	Lahomea	Farmer	
69		Paulo da Costa	Holsa	Farmer	
70		Jose da Costa	Raifun	Farmer	
71		Fumihiko Komada	SCI	Staff	
72		Masanari Narukawa	SCI	Staff	
73		Yusuke Maruno	SCI	Staff	
74		Kazumitsu Tsumura	SCI	Staff	
75		Chris Walsh	Maliana	WVI Staf	
76		Leonel Jesus Carvalho	Maliana	Adm.District	
77		Martinho Soares	Dili	Irigation	
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REPÚBLICA DEMOCRÁTICA DE TIMOR LESTE
ADMINISTRAÇÃO PÚBLICA DISTRITO DE
BOBONARO

ACORDO UZA RAI HO BUAT SELUK-SELUK TAN BA PROJETO
REHABILITASAUN, HO HADIA SISTEMA IRIGASAUN MALIANA I

Ohin dia 17 de Marco 2005, ami lori Comunidade/ Benefisiaris ba natar uza be sistema irigasaun Maliana I, Sub-Distrito Maliana Distrito Bobonaro tomak, hodi koncorda/ oferece uza rai ho asset seluk tan ba projecto Rehabilitasaun ho hadia sistema irigasaun Maliana I.

- 1) Administrador Distrito Bobonaro: Leonel de Jesus Carvalho
- 2) Administrador Sub Distrito Maliana: Domingos Martins
- 3) Chefe Dezenvolvimento Distrito Bobonaro: Arcanjo R. Tilman
- 4) Chefe Rai e Propriedade Distrito Bobonaro: Carlos A. Cardoso
- 5) Chefe Sucu Lahomea: Martinho Bili Mau
- 6) Chefe Sucu Odomau: Salamão da Cruz
- 7) Chefe Sucu Holsa: Antonio Santa Cruz
- 8) Chefe Sucu Raifun: Alberto Fernandes
- 9) Chefe Sucu Ritabou: Abel P. Maureso

Acordo nee ami halo ho laran Kaman, no aban bain rua ami la husu Compensasaun ba rai ho asset seluk-seluk tan nebe mak projeto Rehabilitasaun ho hadia sistema Irigasaun Maliana I ne'e kona ba.

Maka nee deit Obrigado.

(LETTER HEAD OF BOBONARO DISTRICT ADMINISTRATION)

Memorandum of Understanding
for
Maliana I Irrigation Rehabilitation

Today, March the 17th 2005, the beneficiaries/ community for Maliana I Irrigation Scheme accept to allow their land and other facilities to be used for Maliana I Rehabilitation

- | | |
|--|--------------------------|
| 1) District Administrator, Bobonaro: | Leonel de Jesus Carvalho |
| 2) Sub-district Administrator of Maliana: | Domingos Matins |
| 3) District Development Officer, Bobonaro: | Arcanjo R. Tilman |
| 4) District Land Property, Bibonaro: | Carlos A. Cardoso |
| 5) Chief of Village, Lahomea: | Matinho Bili Mau |
| 6) Chief of Village, Odomau: | Salamao da Cruz |
| 7) Chief of Village, Holsa: | Antonio Santa Cruz |
| 8) Chief of Village, Raifun: | Alberto Fernandes |
| 9) Chief of Village, Ritabou: | Abel P. Maureso |

This agreement is done by the community who has agree that there will be no objection for land and any other facilities in the future.

Thanks.