

Annex - 9 Economic and Financial Evaluation

The details on project components and its cost, and the assumptions considered in the economic and financial evaluation are listed the following pages.

Table A-9.1 Physical Life of Building and Equipment of HFMA Project (Model zones 1 & 2)

	Financial Cost	Physical Year	Depreciation	Unit: SI\$ Main.
(A) Satellite	\$1,116,700		\$72,147	\$18,544
Building-1	\$450,000	25	\$18,000	\$9,000
Building-2	\$110,000	25	\$4,400	\$2,200
Ice storage-1	\$129,500	15	\$8,633	\$2,590
Ice storage-2	\$48,200	15	\$3,213	\$964
Water tank				
600 gal.	\$14,400	10	\$1,440	\$144
Radio	\$324,600	10	\$32,460	\$3,246
Esky	\$40,000	10	\$4,000	\$400
(B) Tulagi Base	\$2,205,800		\$122,887	\$36,821
Shore work/jetty	\$990,000	25	\$39,600	\$9,900
Building	\$630,000	25	\$25,200	\$12,600
Cold/Ice storage	\$328,300	15	\$21,887	\$6,566
Truck crane	\$87,500	5	\$17,500	\$4,375
Carrier boat				
Hull	\$75,000	15	\$5,000	\$750
Engine	\$42,000	5	\$8,400	\$2,100
Water tank				
2000 gal.	\$6,000	10	\$600	\$60
Radio	\$27,000	10	\$2,700	\$270
Esky	\$20,000	10	\$2,000	\$200
(C) Honiara Base	\$3,718,600		\$198,913	\$64,568
Fish market	\$618,000	25	\$24,720	\$6,180
Building (service)	\$1,785,250	25	\$71,410	\$17,853
Cold storage	\$304,000	15	\$20,267	\$15,200
Ice making/storage	\$282,000	15	\$18,800	\$14,100
Hand lifter	\$10,800	10	\$1,080	\$540
Pellet	\$3,000	3	\$1,000	\$300
Truck	\$81,000	5	\$16,200	\$4,050
Esky	\$40,000	10	\$4,000	\$400
Radio	\$54,000	10	\$5,400	\$540
Transport boat	\$540,550	15	\$36,037	\$5,406
Total (A+B+C)	\$7,041,100		\$393,947	\$119,933

Remarks: HCM leases building/facilities to HFMA.

Table A-9.2 Financial and Economic Cost of HFMA Project (Model Zones 1 & 2)

Unit: SI\$

	Financial Cost	Economic Cost
(A) Satellite	\$1,116,700	\$949,195
Building-1	\$450,000	\$382,500
Building-2	\$110,000	\$93,500
Ice storage-1	\$129,500	\$110,075
Ice storage-2	\$48,200	\$40,970
Water tank		
600 gal.	\$14,400	\$12,240
Radio	\$324,600	\$275,910
Esky	\$40,000	\$34,000
(B) Tulagi Base	\$2,205,800	\$1,874,930
Shore work/jetty	\$990,000	\$841,500
Building	\$630,000	\$535,500
Cold/Ice storage	\$328,300	\$279,055
Truck crane	\$87,500	\$74,375
Carrier boat		
Hull	\$75,000	\$63,750
Engine	\$42,000	\$35,700
Water tank		
2000 gal.	\$6,000	\$5,100
Radio	\$27,000	\$22,950
Esky	\$20,000	\$17,000
(C) Honiara Base	\$3,718,600	\$3,160,810
Fish market	\$618,000	\$525,300
Building (service)	\$1,785,250	\$1,517,463
Cold storage	\$304,000	\$258,400
Ice making/storage	\$282,000	\$239,700
Hand lifter	\$10,800	\$9,180
Pellet	\$3,000	\$2,550
Truck	\$81,000	\$68,850
Esky	\$40,000	\$34,000
Radio	\$54,000	\$45,900
Transport boat	\$540,550	\$459,468
Total (A+B+C)	\$7,041,100	\$5,984,935
Contingency (20%)	\$1,408,220	\$1,196,987
Wharf (1/3)	\$2,000,000	\$1,700,000
Total	\$10,449,320	\$8,881,922

Remarks: 1) One third of wharf construction cost (SI\$6 million) included.

2) Conversion factor of 0.85 is applied for economic cost, and this factor this factor is generally used by international agencies for the South Pacific Countries.

Table A-9.3 Re-investment cost & O/M cost of HFMA (Model Zones 1 & 2)

							Unit: SI\$
	Re-investment	Salary/wages	Utilities	Fuel	Main	Others	Total (O/M)
1995		\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
1996		\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
1997	\$3,000	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
1998	\$0	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
1999	\$210,500	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2000	\$3,000	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2001	\$0	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2002	\$0	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2003	\$3,000	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2004	\$747,300	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2005	\$0	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2006	\$3,000	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2007	\$0	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2008	\$0	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2009	\$1,921,050	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2010	\$0	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2011	\$0	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2012	\$3,000	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2013	\$0	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2014	\$747,300	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2015	\$3,000	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2016	\$0	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2017	\$0	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2018	\$3,000	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007
2019	\$0	\$182,880	\$71,380	\$48,238	\$119,933	\$36,576	\$459,007

Salvage value of SI\$837,583 included.

Table A-9.4 Economic Evaluation of HFMA Project (Model Zones 1 & 2)

					Unit: SI\$
Year	Investment Cost	O/M Cost	Benefit	Net Benefit	
1994	8,881,922		0	(8,881,922)	
1995		441,000	1,047,893	606,893	
1996		441,000	1,085,904	644,904	
1997	2,550	441,000	1,123,915	680,365	
1998		441,000	1,161,927	720,927	
1999	178,925	441,000	1,199,938	580,013	
2000	2,550	441,000	1,237,949	794,399	
2001		441,000	1,328,179	887,179	
2002		441,000	1,418,408	977,408	
2003	2,550	441,000	1,508,638	1,065,088	
2004	635,205	441,000	1,598,867	522,662	
2005		441,000	1,689,097	1,248,097	
2006	2,550	441,000	1,779,327	1,335,777	
2007		441,000	1,869,556	1,428,556	
2008		441,000	1,959,786	1,518,786	
2009	1,632,893	441,000	2,050,015	(23,878)	
2010		441,000	2,140,245	1,699,245	
2011		441,000	2,140,245	1,699,245	
2012	2,550	441,000	2,140,245	1,696,695	
2013		441,000	2,140,245	1,699,245	
2014	635,205	441,000	2,140,245	1,064,040	
2015	2,550	441,000	2,140,245	1,696,695	
2016		441,000	2,140,245	1,699,245	
2017		441,000	2,140,245	1,699,245	
2018	2,550	441,000	2,140,245	1,696,695	
2019		441,000	2,852,191	2,411,191	

Remarks: 1) Approximately one third of the wharf construction cost is included.

2) Salvage value is included in the benefit at the end of year 25.

EIRR= 9.67%

Table A-9.5 Physical Life of Building and Equipment of HCM (Model Zone 1)

	Financial Cost	Physical Year	Unit: SI\$ Depreciation
Market hall			
Building	\$4,750,000	25	\$190,000
Service facilities	\$1,785,250	25	\$71,410
Market service facilities	\$1,890,000	25	\$75,600
External work	\$2,300,000	25	\$92,000
M & E work			
Freshwater supply	\$100,000	15	\$6,667
Rainwater discharge	\$150,000	15	\$10,000
Waste water treat.	\$75,000	15	\$5,000
Seawater intake	\$70,000	15	\$4,667
Fire Extinguishers	\$10,000	5	\$2,000
Sub-total	\$11,130,250		\$457,343
Honiara Base (Leased to HFMA)			
Fish market	\$618,000	25	\$24,720
Building (service)	\$1,785,250	25	\$71,410
Cold storage	\$304,000	15	\$20,267
Ice making/storage	\$282,000	15	\$18,800
Hand lifter	\$10,800	10	\$1,080
Pellet	\$3,000	3	\$1,000
Truck	\$81,000	5	\$16,200
Esky	\$40,000	10	\$4,000
Radio	\$54,000	10	\$5,400
Transport vessel	\$540,550	15	\$36,037
Sub-total	\$3,178,050		\$162,877
Total	\$14,308,300		\$620,220

Remarks: 1) Total cost excludes the cost of transport vessel.

2) Transport vessel will be owned and operated by HFMA.

Table A-9.6 Financial and Economic Cost of HCM (Model Zone 1)

	Financial Cost	Unit: SI\$ Economic Cost
Market hall		
Building	\$4,750,000	\$4,037,500
Service facilities	\$1,785,250	\$1,517,463
Market service facilities	\$1,890,000	\$1,606,500
External work	\$2,300,000	\$1,955,000
M & E work		
Freshwater supply	\$100,000	\$85,000
Rainwater discharge	\$150,000	\$127,500
Waste water treat.	\$75,000	\$63,750
Seawater intake	\$70,000	\$59,500
Fire Extinguishers	\$10,000	\$8,500
Sub-total	\$11,130,250	\$9,460,713
Honiara Base (Leased to HFMA)		
Fish market	\$618,000	\$525,300
Building (service)	\$1,785,250	\$1,517,463
Cold storage	\$304,000	\$258,400
Ice making/storage	\$282,000	\$239,700
Hand lifter	\$10,800	\$9,180
Pellet	\$3,000	\$2,550
Truck	\$81,000	\$68,850
Esky	\$40,000	\$34,000
Radio	\$54,000	\$45,900
Transport boat	\$540,550	\$459,468
Sub-total	\$3,178,050	\$2,701,343
Total	\$14,308,300	\$12,162,055
Contingency (20%)	\$2,861,660	\$2,432,411
Wharf	\$6,000,000	\$5,100,000
Grand Total	\$23,169,960	\$19,694,466

Remarks: 1) Total cost excludes the cost of transport boat.

2) Conversion factor of 0.85 is applied for economic cost, and this factor is generally used by international agencies for the South Pacific Countries.

Source: Economic factor provided by MOF.

Table A-9.7 Reinvestment cost & O/M cost of HCM

Unit: SI\$

Year	Re-investment	Salary/wages	Utilities	Maintenance	Total (O/M)
1995		\$25,000	\$49,500	\$239,502	\$314,002
1996		\$25,000	\$49,500	\$239,502	\$314,002
1997	\$2,550	\$25,000	\$49,500	\$239,502	\$314,002
1998	\$0	\$25,000	\$49,500	\$239,502	\$314,002
1999	\$77,350	\$25,000	\$49,500	\$239,502	\$314,002
2000	\$2,550	\$25,000	\$49,500	\$239,502	\$314,002
2001	\$0	\$25,000	\$49,500	\$239,502	\$314,002
2002	\$0	\$25,000	\$49,500	\$239,502	\$314,002
2003	\$2,550	\$25,000	\$49,500	\$239,502	\$314,002
2004	\$166,430	\$25,000	\$49,500	\$239,502	\$314,002
2005	\$0	\$25,000	\$49,500	\$239,502	\$314,002
2006	\$2,550	\$25,000	\$49,500	\$239,502	\$314,002
2007	\$0	\$25,000	\$49,500	\$239,502	\$314,002
2008	\$0	\$25,000	\$49,500	\$239,502	\$314,002
2009	\$913,750	\$25,000	\$49,500	\$239,502	\$314,002
2010	\$0	\$25,000	\$49,500	\$239,502	\$314,002
2011	\$0	\$25,000	\$49,500	\$239,502	\$314,002
2012	\$2,550	\$25,000	\$49,500	\$239,502	\$314,002
2013	\$0	\$25,000	\$49,500	\$239,502	\$314,002
2014	\$166,430	\$25,000	\$49,500	\$239,502	\$314,002
2015	\$2,550	\$25,000	\$49,500	\$239,502	\$314,002
2016	\$0	\$25,000	\$49,500	\$239,502	\$314,002
2017	\$0	\$25,000	\$49,500	\$239,502	\$314,002
2018	\$2,550	\$25,000	\$49,500	\$239,502	\$314,002
2019	\$0	\$25,000	\$49,500	\$239,502	\$314,002

Salvage value SI\$2,872,490 is included.

Table A-9.8 Economic Evaluation of HCM Project

Unit: SI\$

Year	Investment Cost	O/M Cost	Benefit	Net Benefit
1994	19,694,466		0	(19,694,466)
1995		314,000	1,218,616	904,616
1996		314,000	1,272,695	958,695
1997	2,550	314,000	1,326,774	1,010,224
1998		314,000	1,380,854	1,066,854
1999	77,350	314,000	1,434,933	1,043,583
2000	2,550	314,000	1,489,012	1,172,462
2001		314,000	1,586,781	1,272,781
2002		314,000	1,684,365	1,370,365
2003	2,550	314,000	1,781,950	1,465,400
2004	166,430	314,000	1,879,534	1,399,104
2005		314,000	1,977,118	1,663,118
2006	2,550	314,000	2,074,703	1,758,153
2007		314,000	2,172,287	1,858,287
2008		314,000	2,269,871	1,955,871
2009	913,750	314,000	2,367,456	1,139,706
2010		314,000	2,464,855	2,150,855
2011		314,000	2,464,855	2,150,855
2012	2,550	314,000	2,464,855	2,148,305
2013		314,000	2,464,855	2,150,855
2014	166,430	314,000	2,464,855	1,984,425
2015	2,550	314,000	2,464,855	2,148,305
2016		314,000	2,464,855	2,150,855
2017		314,000	2,464,855	2,150,855
2018	2,550	314,000	2,464,855	2,148,305
2019		314,000	5,337,345	5,023,345

Remarks: 1) The wharf construction cost is included.

2) Salvage value of SI\$2,872,490 is included.

EIRR= 5.93%

Table A-9.9 Physical Life of Building and Equipment of WPFMA Project (Model Zone 3)

					Unit: S/\$
		Financial Cost	Physical	Depreciation	Main.
		Unit cost	Total	Year	
(A) Satellites					
Buildings	\$83,200	\$499,200	25	\$19,968	\$9,984
Ice storage	\$18,100	\$108,600	15	\$7,240	\$2,172
Water tank					
600 gal.	\$2,400	\$14,400	10	\$1,440	\$144
Radio	\$27,000	\$108,000	10	\$10,800	\$1,080
Esky	\$1,100	\$110,000	10	\$11,000	\$1,100
Sub-total		\$840,200		\$50,448	\$14,480
(B) Noro Base					
Building	\$377,055	\$377,055	25	\$15,082	\$7,541
Cold/Ice storage	\$350,000	\$350,000	15	\$23,333	\$7,000
Truck crane	\$87,500	\$87,500	5	\$17,500	\$4,375
Truck	\$85,000	\$85,000	5	\$17,000	\$4,250
Water tank					
2000 gal.	\$6,000	\$6,000	10	\$600	\$60
Radio	\$27,000	\$27,000	10	\$2,700	\$270
Esky	\$1,050	\$157,500	10	\$15,750	\$1,575
Sub-total		\$1,090,055		\$91,966	\$25,071
Contingency (10%)		\$193,026			
Total		\$2,123,281		\$142,414	\$39,551
Transport boat	\$540,550	\$1,081,100	15	\$72,073	\$10,811
TOTAL		\$3,204,381		\$214,487	\$50,362

Remarks: 1) Transport boats will be introduced in the year 2000.

2) Buildings and equipment will be introduced in 1998.

3) Initial operation will commence with existing transport vessel (Kurao).

Table A-9.10 Reinvestment cost & O/M cost of WPFMA (Model Zone 3)

						Unit: S/\$
	Re-investment	Salary/wages	Utilities	Maintenance	Others	Total (O/M)
1995		\$66,000	\$21,312	\$15,000	\$19,578	\$121,890
1996		\$66,000	\$21,312	\$15,000	\$19,578	\$121,890
1997		\$66,000	\$21,312	\$15,000	\$19,578	\$121,890
1998	\$1,804,788	\$66,000	\$21,312	\$33,618	\$19,578	\$140,508
1999		\$66,000	\$21,312	\$33,618	\$19,578	\$140,508
2000	\$918,935	\$66,000	\$21,312	\$42,808	\$19,578	\$149,698
2001		\$66,000	\$21,312	\$42,808	\$20,600	\$150,720
2002	\$146,625	\$66,000	\$21,312	\$42,808	\$21,622	\$151,742
2003		\$66,000	\$21,312	\$42,808	\$22,644	\$152,764
2004		\$66,000	\$21,312	\$42,808	\$23,666	\$153,786
2005		\$66,000	\$21,312	\$42,808	\$24,688	\$154,808
2006		\$66,000	\$21,312	\$42,808	\$25,710	\$155,830
2007	\$506,090	\$66,000	\$21,312	\$42,808	\$26,732	\$156,852
2008		\$66,000	\$21,312	\$42,808	\$27,754	\$157,874
2009		\$66,000	\$21,312	\$42,808	\$28,776	\$158,896
2010		\$66,000	\$21,312	\$42,808	\$29,798	\$159,918
2011		\$66,000	\$21,312	\$42,808	\$29,798	\$159,918
2012	\$1,363,060	\$66,000	\$21,312	\$42,808	\$29,798	\$159,918
2013		\$66,000	\$21,312	\$42,808	\$29,798	\$159,918
2014		\$66,000	\$21,312	\$42,808	\$29,798	\$159,918
2015	\$918,935	\$66,000	\$21,312	\$42,808	\$29,798	\$159,918
2016		\$66,000	\$21,312	\$42,808	\$29,798	\$159,918
2017	\$506,090	\$66,000	\$21,312	\$42,808	\$29,798	\$159,918
2018		\$66,000	\$21,312	\$42,808	\$29,798	\$159,918
2019		\$66,000	\$21,312	\$42,808	\$29,798	\$159,918
2020		\$66,000	\$21,312	\$42,808	\$29,798	\$159,918
2021		\$66,000	\$21,312	\$42,808	\$29,798	\$159,918

Table A-9.11 Economic Evaluation of WPFMA Project (Model Zone 3)

Unit: SI\$				
Year	Investment Cost	O/M Cost	Benefit	Net Benefit
1994			0	0
1995		\$128,490	\$121,900	(\$6,590)
1996		\$135,741	\$141,584	\$5,843
1997		\$142,992	\$161,268	\$18,276
1998	\$1,640,717	\$150,243	\$180,952	(\$1,610,008)
1999		\$157,494	\$200,636	\$43,142
2000		\$164,745	\$220,320	\$55,575
2001	\$918,935	\$166,364	\$239,505	(\$845,794)
2002		\$167,983	\$258,690	\$90,707
2003	\$172,500	\$169,602	\$277,875	(\$64,227)
2004		\$171,221	\$297,060	\$125,839
2005		\$172,840	\$316,245	\$143,405
2006		\$174,459	\$335,430	\$160,971
2007		\$176,078	\$354,615	\$178,537
2008	\$595,400	\$177,697	\$373,800	(\$399,297)
2009		\$179,316	\$392,985	\$213,669
2010		\$180,935	\$412,170	\$231,235
2011		\$180,935	\$412,170	\$231,235
2012		\$180,935	\$412,170	\$231,235
2013	\$172,500	\$180,935	\$412,170	\$58,735
2014		\$180,935	\$412,170	\$231,235
2015		\$180,935	\$412,170	\$231,235
2016		\$180,935	\$412,170	\$231,235
2017		\$180,935	\$412,170	\$231,235
2018	\$595,400	\$180,935	\$412,170	(\$364,165)
2019		\$180,935	\$412,170	\$231,235
2020		\$180,935	\$412,170	\$231,235
2021		\$180,935	\$412,170	\$231,235
2022		\$180,935	\$412,170	\$231,235

Salvage value of SI\$1,014,047 is included.

EIRR= 0.95%

Table A-9.12 Maintenance Cost of Facilities in Rennell Development Project

Unit: SI\$			
	Financial Cost	%	Main.
Fisheries Development Plan			
Road improvement	\$1,215,000	1	\$12,150
Unloading barge station	\$981,837	1	\$9,818
Plumbing work	\$48,600	3	\$1,458
Equipment	\$334,120	5	\$16,706
Freshwater intake system	\$270,000	5	\$13,500
Training equipment	\$89,000	5	\$4,450
Solar powered equipment	\$162,000	10	\$16,200
Community Assistance Plan			
MCAC Building	\$1,347,600	1	\$13,476
MCAC Solar Powered facilities	\$649,540	10	\$64,954
Water intake system & tank	\$438,150	5	\$21,908
Equipment	\$297,300	5	\$14,865
Trailer tractor	\$415,200	5	\$20,760
Total	\$6,248,347		\$210,245

Table A-9.13 Summary of Estimated Economic Benefits

HFMA project (Model Zones 1 & 2)

	Unit: S1\$		
	1995	2000	2010
Time cost saving			
- Increase catch	\$780,000	\$904,000	\$1,560,000
- Consumer	\$56,908	\$83,688	\$108,203
Fuel saving			
- Collection/transport	\$73,022	\$90,411	\$195,774
- Storage/transport	\$2,189	\$2,530	\$4,378
Value added	\$135,774	\$157,320	\$271,890
	\$1,047,893	\$1,237,949	\$2,140,245

HCM project (Model Zone 1)

	Unit: S1\$		
	1995	2000	2010
Time cost saving			
- Increase catch	\$780,000	\$904,000	\$1,560,000
- Consumer (Fish)	\$56,908	\$83,688	\$108,203
- Consumer (General)	\$170,723	\$251,063	\$324,610
Fuel saving			
- Collection/transport	\$73,022	\$90,411	\$195,774
- Storage/transport	\$2,189	\$2,530	\$4,378
Value added	\$135,774	\$157,320	\$271,890
	\$1,218,616	\$1,489,012	\$2,464,855

Table A-9.14 Increase of Catch And Benefits Through Time Saving

	Number of boat trips per week	Time saved by 2 persons per boat trip in a week (man-days)	Increase fish catch (MT)		Total benefit (SI\$)
			Week	Annual	
1995	25	200	3	156	\$780,000
2000	29	232	3	181	\$904,800
2010	50	400	6	312	\$1,560,000

Remarks: 1) Time saving of two persons per boat trip refers to 4 days of saving per week with the fish collection and transport by HFMA to Honiara.
 2) Normally two persons a boat travel to Honiara to sell fish.
 3) Average fish catch per trip/person is 15 kg.

Table A-9.15 Time Saving by Fresh Fish Purchasers at HCM

	Number of Households in Honiara	Weekly Visits to HCM for General Purchase (2 times a week)	Annual Visits	Time saved (man-days)	Benefit (SI\$)
1995	5,253	10,506	546,312	5,691	\$56,908
2000	7,725	15,450	803,400	8,369	\$83,688
2010	9,988	19,976	1,038,752	10,820	\$108,203

Remarks: 1) Number of household estimated based on estimated Honiara population of 1992, 2000 and 2010 and household size of 6.5 person/house.
 2) It is assumed that a member of the household visits at least two times a week for general purchase.
 3) A consumer visiting market to purchase fresh fish experience time loss in terms of moving, sorting and selecting from one esky to another due to congestion of access ways caused by haphazard and unsystematic manner of arrangement of eskies.
 4) With project, the consumer is assumed to save at least 5 minutes per visit to purchase fresh fish.
 5) Salary/wages of SI\$10/man-day was applied.

Table A-9.16 Time Saving by General Consumers of HCM

	Number of Households in Honiara	Weekly Visits to HCM for General Purchase (3 times a week)	Annual Visits	Time saved (man-days)	Benefit (SI\$)
1995	5,253	15,759	819,468	17,072	\$170,723
2000	7,725	23,175	1,205,100	25,106	\$251,063
2010	9,988	29,964	1,558,128	32,461	\$324,610

Remarks: 1) Number of household estimated based on estimated Honiara population of 1992, 2000 and 2010 and household size of 6.5 person/house.
 2) It is assumed that a member of the household visits at least three times a week for general purchase.
 3) A consumer spends at least 30 minutes in the market and experience time loss in terms of moving haphazardly and unsystematic manner due to congestion of access ways.
 4) With project, the consumer is assumed to save at least 10 minutes per visit by using the planned access ways for vehicles and people.
 5) Salary/wages of SI\$10/man-day was applied.

Table A-9.17 Estimated Fuel Consumption (Model Zones 1 & 2)

a) Without Proj Fuel consumed on a round trip from Village to Honiara

	Round Trip (miles)	Fuel consumption Per Round Trip (liters)
Oleu. -> Hon. -> Tul -> Olue.	75	57
Soso -> Hon. -> Tul -> Soso	84	63
Vura -> Hon. -> Tul -> Vura	102	77
Humba -> Hon. -> Tul -> Humba	66	50
Peula -> Hon. -> Tul -> Peula	80	60
Tul -> Hon -> Tul	52	40

Remarks: 1) Boat engine; 25 HP with speed of 12 knots.

2) Fuel consumption (diesel); 9 liters/hour

b) With Project Fuel consumed using carrier boats by HFMA

	Round Trip (miles)	Fuel consumption Per Round Trip (liters)
Oleu. <-> Tul	34	36
Soso <-> Tul	40	21
Vura <-> Tul	52	28
Humba <-> Tul	24	13
Peula <-> Tul	40	21
Tul <-> Hon (Transport vessel)	52	68

Remarks: 1) Boat engine; 42 HP with speed of 10 knots.

1) Transport vessel (Tul <-> Hon): Boat engine; 42 HP & speed 10 knots.
Fuel consumption (diesel); 13 liters/hour2) Carrier boats: Boat engine; 25 HP & speed 12 knots.
Fuel consumption; 9 liters/hour

c) Estimated Number of Trips in 1995, 2000 & 2010

	Number of Boat Trips/Week			Number of Boat Trips/Year		
	1995	2000	2010	1995	2000	2010
Oleu. -> Hon. -> Tul -> Olue.	18	20	38	936	1040	1976
Soso -> Hon. -> Tul -> Soso	4	5	9	208	260	468
Vura -> Hon. -> Tul -> Vura	2	3	5	104	156	260
Humba -> Hon. -> Tul -> Humba	3	4	7	156	208	364
Peula -> Hon. -> Tul -> Peula	2	2	3	104	104	156
Tul -> Hon -> Tul	5	5	10	260	260	520

	Number of Boat Trips/Week			Number of Boat Trips/Year		
	1995	2000	2010	1995	2000	2010
Oleu. <-> Tul	2	2	2	104	104	104
Soso <-> Tul	2	2	2	104	104	104
Vura <-> Tul	2	2	2	104	104	104
Humba <-> Tul	2	2	2	104	104	104
Peula <-> Tul	2	2	2	104	104	104

d) Estimated Fuel Consumption in 1995, 2000 & 2010

	Without Project			With Project		
	Annual Fuel Consumption (liters)			Annual Fuel Consumption (liters)		
	1995	2000	2010	1995	2000	2010
Oleu. -> Hon. -> Tul -> Olue.	53,352	59,280	112,632	3,744	3,744	3,744
Soso -> Hon. -> Tul -> Soso	13,104	16,380	29,484	1,248	1,248	1,248
Vura -> Hon. -> Tul -> Vura	8,008	12,012	20,020	2,912	2,912	2,912
Humba -> Hon. -> Tul -> Humba	7,800	10,400	18,200	1,352	1,352	1,352
Peula -> Hon. -> Tul -> Peula	6,240	6,240	9,360	2,184	2,184	2,184
Tul -> Hon -> Tul	10,400	10,400	20,800	21,080	21,080	21,080
Total	98,904	114,712	210,496	32,520	32,520	32,520
Fuel saved with project (liters)				66,384	82,192	177,976
Fuel cost (SI\$) at SI\$1.10/liter				\$73,022	\$90,411	\$195,774

Table A-9.18 Estimated Total Flow of Fresh Fish to Honiara (1995, 2000 & 2010)

	Choiseul	Western	Central	Isabel	Malaita	Guadacanal	Total
1995	38	2	258	82	12	43	435
2000	44	4	299	95	14	48	504
2010	66	4	560	144	23	64	861

Table A-9.19 Fuel Saving Through Use of Storage at HCM

	Fresh Fish Volume Flow to Honiara (mt)	Handling Volume of Fresh Fish at HCM (mt)	Storage Volume of Fresh Fish (mt)	No. of Eskies Stored	Fuel Saved (liters)	Total benefit (SI\$)
1995	435	397	199	1990	1990	\$2,189
2000	504	460	230	2300	2300	\$2,530
2010	861	795	398	3980	3980	\$4,378

Remarks: 1) Handling volume at HCM excludes fresh fish from Choiseul as VDA does the marketing.

2) Approximately 50 percent of eskies with unsold fresh fish are transported on an average of 3 km away from HCM for storage at friend's or relative's house. A distance of 6 km is covered per esky/trip using taxi or van.

3) Fuel consumption for a distance of 6 km is about one liter.

4) With project, eskies with unsold fresh fish can be stored in the storage provided at HCM.

5) Price of gasoline is SI\$1.10/liter.

Table A-9.20 Value Added From Export of Fresh Fish

	Fresh Fish Volume Flow to Honiara (mt)	Handling Volume of Fresh Fish at HCM (mt)	Product Weight (mt)	Exportable Volume (mt)	Increase benefit (SI\$/kg)	Total benefit (SI\$)
1995	435	397	357	36	\$3.80	\$135,774
2000	504	460	414	41	\$3.80	\$157,320
2010	861	795	716	72	\$3.80	\$271,890

Remarks: 1) Handling volume excludes fresh fish from Choiseul as VDA does the marketing.

2) Product weight (90 percent of whole weight) excludes guts and gill.

3) Exportable quantity of fresh fish is estimated at 10 percent of product weight.

4) Increase benefit is cif price minus sales price to exporter (SI\$9.80-SI\$6.00 = SI\$3.80)

5) Calculation of Cif price (SI\$/kg):

Market price (Brisbane) SI\$13.20/kg

Deduct Freight SI\$2.40/kg

Deduct processing/packing SI\$1.00/kg

Cif price SI\$9.80/kg

6) Sales price to exporters is SI\$6.00/kg.

7) Market price of whole fresh fish in Brisbane is A\$6.00/kg (SI13.20/g).

Table A-9.21 Revenue and Expenditure of HFMA Project by Cases (1/4)

Case-1

				Unit: SI\$	
				2000	2010
Fish purchase (mt)				414	716
Florida Is.				227	423
Other source				187	293
Ice sales (mt)				64	64
Revenue				\$3,127,745	\$5,400,245
1) Fish Marketing				\$3,118,500	\$5,391,000
Local sales					
Grade-A				\$637,500	\$1,096,500
Grade-B				\$2,235,000	\$3,862,500
Exporters				\$246,000	\$432,000
2) Ice				\$9,245	\$9,245
Expenditure	Honiara	Tulagi	Satelite		
	\$216,643	\$0	\$0	\$2,286,643	\$3,796,643
Fixed	\$216,643	\$0	\$0	\$216,643	\$216,643
1) Salary/wages	\$89,280	\$0	\$0	\$89,280	\$89,280
2) Utility	\$50,880	\$0	\$0	\$50,880	\$50,880
3) Maintenance	\$58,623	\$0	\$0	\$58,623	\$58,623
4) General expense	\$17,860	\$0	\$0	\$17,860	\$17,860
				\$0	\$0
Variable	\$0	\$0	\$0	\$2,070,000	\$3,580,000
1) Fish purchase				\$2,070,000	\$3,580,000
2) Fuel	\$0	\$0	\$0	\$0	\$0
Profit/Loss Bef. Depreciation				\$841,102	\$1,603,602
Depreciation	\$157,477	\$0	\$0	\$157,477	\$157,477
Profit/Loss Aft. Depreciation				\$683,625	\$1,446,125

Remarks: 1) Fishermen transport fish to Honiara using own FRP boats (Case-1)
 2) HFMA purchase the fish from fishermen at SI\$5.00/kg at Honiara.
 3) Transport vessel not introduced yet.
 4) Tulagi base not introduced.
 5) Ice sales at \$6.50 per tray (45kg).

Table A-9.21 Revenue and Expenditure of HFMA Project by Cases (2/4)

Case-2

				Unit: SI\$	
				2000	2010
Fish purchase (mt)				414	716
Florida Is.				227	423
Other source				187	293
Ice sales (mt)				64	64
Revenue				\$3,127,745	\$5,400,245
1) Fish Marketing				\$3,118,500	\$5,391,000
Local sales					
Grade-A				\$637,500	\$1,096,500
Grade-B				\$2,235,000	\$3,862,500
Exporters				\$246,000	\$432,000
2) Ice				\$9,245	\$9,245
Expenditure	Honiara	Tulagi	Satellite		
	\$216,643	\$0	\$3,570	\$2,290,213	\$3,800,213
Fixed	\$216,643	\$0	\$3,570	\$220,213	\$220,213
1) Salary/wages	\$89,280	\$0	\$0	\$89,280	\$89,280
2) Utility	\$50,880	\$0	\$0	\$50,880	\$50,880
3) Maintenance	\$58,623	\$0	\$3,570	\$62,193	\$62,193
4) General expense	\$17,860	\$0	\$0	\$17,860	\$17,860
				\$0	\$0
Variable	\$0	\$0	\$0	\$2,070,000	\$3,580,000
1) Fish purchase				\$2,070,000	\$3,580,000
2) Fuel	\$0	\$0	\$0	\$0	\$0
Profit/Loss Bef. Depreciation				\$837,532	\$1,600,032
5) Depreciation	\$157,477	\$0	\$16,040	\$173,517	\$173,517
Profit/Loss Aft. Depreciation				\$664,015	\$1,426,515

Remarks: 1) Fishermen transport fish to Honiara using own Agency's leased boats (Case-2).
 2) HFMA purchase the fish from fishermen at SI\$5.00/kg at Honiara.
 3) Transport vessel not introduced yet.
 4) Tulagi base not introduced.
 5) Ice sales at \$6.50 per tray (45kg).

Table A-9.21 Revenue and Expenditure of HFMA Project by Cases (3/4)

Case-3

	Unit: SI\$				
	2000	2010			
Fish purchase (mt)	414	716			
Florida Is.	227	423			
Other source	187	293			
Ice sales (mt)	64	64			
Passengers	313	313			
Cargo (mt)	157	157			
Revenue	\$3,171,565	\$5,444,065			
1) Fish Marketing	\$3,118,500	\$5,391,000			
Local sales					
Grade-A	\$637,500	\$1,096,500			
Grade-B	\$2,235,000	\$3,862,500			
Exporters	\$246,000	\$432,000			
2) Ice	\$9,245	\$9,245			
3) Passengers	\$31,300	\$31,300			
4) Cargo	\$12,520	\$12,520			
	Honiara	Tulagi	Satelite		
Expenditure	\$270,188	\$124,677	\$3,570	\$2,218,735	\$3,513,135
Fixed	\$241,988	\$124,677	\$3,570	\$370,235	\$370,235
1) Salary/wages	\$103,680	\$57,600	\$0	\$161,280	\$161,280
2) Utility	\$50,880	\$20,500	\$0	\$71,380	\$71,380
3) Maintenance	\$66,728	\$35,057	\$3,570	\$105,355	\$105,355
4) General expense	\$20,700	\$11,520	\$0	\$32,220	\$32,220
Variable	\$28,200	\$0	\$0	\$1,848,500	\$3,142,900
1) Fish purchase				\$1,820,300	\$3,114,700
2) Fuel	\$28,200	\$0	\$0	\$28,200	\$28,200
Profit/Loss Bef. Depreciation				\$952,830	\$1,930,930
5) Depreciation	\$198,913	\$109,487	\$16,040	\$324,440	\$324,440
Profit/Loss Aft. Depreciation				\$628,390	\$1,606,490

Remarks: 1) Fishermen transport fish to Tulagi Base using own Agency's leased boats (Case-3).
 2) HFMA purchase the fish from fishermen at SI\$3.90/kg at Tulagi Base and SI\$5.00/kg at Honiara.
 3) Transport vessel transports esky from Tulagi to Honiara.
 4) Ice sales at SI\$6.50 per tray (45kg).
 5) Five passengers one way trip at SI\$10 a person.
 6) About 0.5 mt of cargo from Honiara to Tulagi at SI\$80/mt.

Table A-9.21 Revenue and Expenditure of HFMA Project by Cases (4/4)

Case-4

				Unit: SI\$	
				2000	2010
Fish purchase (mt)				414	716
Florida Is.				227	423
Other source				187	293
Ice sales (mt)				64	64
Passengers				313	313
Cargo (mt)				157	157
Revenue				\$3,171,565	\$5,444,065
1) Fish Marketing				\$3,118,500	\$5,391,000
Local sales					
Grade-A				\$637,500	\$1,096,500
Grade-B				\$2,235,000	\$3,862,500
Exporters				\$246,000	\$432,000
2) Ice				\$9,245	\$9,245
2) Passengers				\$31,300	\$31,300
3) Cargo				\$12,520	\$12,520
Expenditure	Honiara	Tulagi	Satelite		
	\$270,188	\$195,541	\$31,528	\$1,987,357	\$3,007,357
Fixed	\$241,988	\$153,441	\$31,528	\$426,957	\$426,957
1) Salary/wages	\$103,680	\$79,200	\$0	\$182,880	\$182,880
2) Utility	\$50,880	\$20,500	\$0	\$71,380	\$71,380
3) Maintenance	\$66,728	\$37,901	\$31,528	\$136,157	\$136,157
4) General expense	\$20,700	\$15,840	\$0	\$36,540	\$36,540
Variable	\$28,200	\$42,100	\$0	\$1,560,400	\$2,580,400
1) Fish purchase				\$1,502,500	\$2,522,500
2) Fuel	\$28,200	\$29,700	\$0	\$57,900	\$57,900
Profit/Loss Bef. Depreciation				\$1,184,208	\$2,436,708
5) Depreciation	\$198,913	\$122,887	\$72,147	\$393,947	\$393,947
Profit/Loss Aft. Depreciation				\$790,261	\$2,042,761

Remarks: 1) Agency purchase fish at satellites using carrier vessels and stores at Tulagi base (Case-4).
 2) HFMA purchase the fish from fishermen at SI\$2.50/kg at Satellite and SI\$5.00/kg at Honiara.
 3) Transport vessel transports the collected fish from Tulagi to Honiara.
 4) Ice sales at SI\$6.50 per tray (45kg).
 5) Five passengers one way trip at SI\$10 a person.
 6) About 0.5 mt of cargo from Honiara to Tulagi at SI\$80/mt.

Table A-9.22 Revenue and Expenditure Under Full and Partial Purchase (2000 & 2010)

Unit: SI\$

	2000		2010	
	Full Purchase	80% Purchase	Full Purchase	80% Purchase
Revenue	\$3,171,565	\$2,547,865	\$5,444,065	\$4,020,265
1) Fish Marketing	\$3,118,500	\$2,494,800	\$5,391,000	\$3,967,200
Local sales				
Grade-A	\$637,500	\$510,000	\$1,096,500	\$877,200
Grade-B	\$2,235,000	\$1,788,000	\$3,862,500	\$3,090,000
Exporters	\$246,000	\$196,800	\$432,000	\$345,600
2) Ice	\$9,245	\$9,245	\$9,245	\$9,245
3) Passengers	\$31,300	\$31,300	\$31,300	\$31,300
4) Cargo	\$12,520	\$12,520	\$12,520	\$12,520
Expenditure	\$1,987,357	\$1,686,857	\$3,007,357	\$2,502,857
Fixed	\$426,957	\$426,957	\$426,957	\$426,957
1) Salary/wages	\$182,880	\$182,880	\$182,880	\$182,880
Tulagi Base	\$79,200	\$79,200	\$79,200	\$79,200
Honiara Base	\$103,680	\$103,680	\$103,680	\$103,680
2) Utility	\$71,380	\$71,380	\$71,380	\$71,380
Tulagi Base	\$20,500	\$20,500	\$20,500	\$20,500
Honiara Base	\$50,880	\$50,880	\$50,880	\$50,880
3) Maintenance	\$136,157	\$136,157	\$136,157	\$136,157
Tulagi Base	\$37,901	\$37,901	\$37,901	\$37,901
Honiara Base	\$66,728	\$66,728	\$66,728	\$66,728
Satellite Base	\$31,528	\$31,528	\$31,528	\$31,528
4) General expense	\$36,540	\$36,540	\$36,540	\$36,540
Tulagi Base	\$15,840	\$15,840	\$15,840	\$15,840
Honiara Base	\$20,700	\$20,700	\$20,700	\$20,700
Variable	\$1,560,400	\$1,259,900	\$2,580,400	\$2,075,900
1) Fuel	\$57,900	\$57,900	\$57,900	\$57,900
Tulagi Base	\$29,700	\$29,700	\$29,700	\$29,700
Honiara Base	\$28,200	\$28,200	\$28,200	\$28,200
2) Fish Purchase	\$1,502,500	\$1,202,000	\$2,522,500	\$2,018,000
Profit/Loss Bef. Depreciation	\$1,184,208	\$861,008	\$2,436,708	\$1,517,408
5) Depreciation	\$393,947	\$393,947	\$393,947	\$393,947
Tulagi Base	\$122,887	\$122,887	\$122,887	\$122,887
Honiara Base	\$198,913	\$198,913	\$198,913	\$198,913
Satellite Base	\$72,147	\$72,147	\$72,147	\$72,147
Profit/Loss Aft. Depreciation	\$790,261	\$467,061	\$2,042,761	\$1,123,461

Remarks: 1) Full purchase indicates purchase of planned volume of fish of 414 mt in 2000 and 716 mt in 2010

2) 80% purchase refers HFMA purchases 80 percent of the planned volume and the rest marketed by the fisherme

Table A-9.23 Revenue and Expenditure of WPFMA Project (model Zone 3)

	Unit: SI\$		
	1995	2000	2010
Revenue	\$196,446	\$442,266	\$833,106
1) Fish Marketing			
Local	\$192,000	\$348,000	\$660,000
Export	\$0	\$89,820	\$164,670
2) Passengers	\$2,496	\$2,496	\$4,736
3) Cargo	\$1,950	\$1,950	\$3,700
Expenditure	\$193,770	\$292,922	\$414,502
Fixed	\$108,912	\$155,024	\$160,304
1) Salary/wages	\$66,000	\$66,000	\$70,800
2) Utility	\$21,312	\$21,312	\$21,312
3) Maintenance	\$15,000	\$61,112	\$61,112
4) General expense	\$6,600	\$6,600	\$7,080
Variable	\$84,858	\$137,898	\$254,198
1) Fuel	\$19,578	\$19,578	\$29,798
2) Fish Purchase	\$65,280	\$118,320	\$224,400
Profit/Loss Bef. Depreciation	\$2,676	\$149,344	\$418,604
Depreciation	\$0	\$214,487	\$214,487
Profit/Loss Aft. Depreciation	\$2,676	(\$65,143)	\$204,117

Remarks: 1) In 1995, there will no new facilities and Kualao will be used.

2) In 2000, two new boats will be introduced and new facilities will be constructed.

3) In 2000, WPFMA will export grade A fish.

Table A-9.24 Estimated Revenue From Fresh Fish Sales by HFMA (Model Zones 1 & 2)

	1995		2000		2010	
	Q'ty (mt)	Value (SI\$)	Q'ty (mt)	Value (SI\$)	Q'ty (mt)	Value (SI\$)
Purchase						
- Florida Islands	195	\$487,500	227	\$567,500	423	\$1,057,500
- Other sources	162	\$810,000	187	\$935,000	293	\$1,465,000
sub-total	357	\$1,297,500	414	\$1,502,500	716	\$2,522,500
Sales						
- Local sales	321		373		644	
Grade-A	64	\$545,700	75	\$634,100	129	\$1,094,800
Grade-B	257	\$1,926,000	298	\$2,238,000	515	\$3,864,000
- Exporters	36	\$216,000	41	\$246,000	72	\$432,000
sub-total	357	\$2,687,700	414	\$3,118,100	716	\$5,390,800
Revenue		\$1,390,200		\$1,615,600		\$2,868,300

Remarks: 1) Quantity refer to product weight.
 2) Sales of exportable quantity to exporters is estimated at 10 percent of fish handled by HFMA.
 3) Purchase price of SI\$2.50/kg was applied for fish purchased at the satellites.
 4) Purchase price of SI\$5.00/kg was applied for fish from other sources in Honiara.
 5) Sale prices of SI\$8.50/kg for Grade-A and SI\$7.50/kg for Grade-B were applied for local sale
 6) Sale prices of SI\$6.00/kg for exporters was applied.

Table A-9.25 Total Revenue Earning by HFMA (Model Zones 1 & 2)

			Unit: SI\$
	1995	2000	2010
Fish sales	\$1,390,200	\$1,615,600	\$2,868,300
Passengers	\$31,300	\$31,300	\$31,300
Cargo	\$12,520	\$12,520	\$12,520
Ice sales	\$9,245	\$9,245	\$9,245
	\$1,443,265	\$1,668,665	\$2,921,365

Remarks: 1) Revenue from passengers based on 10 persons/round trip on transport boat between Honiara and Tulagi, for 313 trips a year at SI\$10.00/person/one way.
 2) Revenue from cargo based on allowable cargo of 0.5 MT per return trip from Honiara to Tulagi for 313 trips a year at SI\$80/MT.
 3) Revenue from ice based on local sales of about 64 MT (1422 trays at 45kg/tray) of ice at SI\$6.50 per tray.

Table A-9.26 Income Statement and Cash Flow of the HFMA Project (1/2)

	0	1	2	3	4	5	6	7	8	9	10	11	12
Unit: S\$													
I. Income Statement	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
A. Revenue	2,740,765	2,826,845	2,912,925	2,999,005	3,171,165	3,398,435	3,625,705	3,852,975	4,080,245	4,307,515	4,534,785	4,762,055	
Basic Facilities													
1) Fish sales	2,687,700	2,773,780	2,859,860	2,945,940	3,118,100	3,345,370	3,572,640	3,799,910	4,027,180	4,254,450	4,481,720	4,708,990	
2) Ice	9,245	9,245	9,245	9,245	9,245	9,245	9,245	9,245	9,245	9,245	9,245	9,245	
3) Passengers	31,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300	
4) Cargo	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	
5) Salvage value													
B. Expense	2,150,447	2,191,447	2,232,447	2,273,447	2,355,447	2,457,447	2,559,447	2,661,447	2,763,447	2,865,447	2,967,447	3,069,447	
1) O/M	459,000	459,000	459,000	459,000	459,000	459,000	459,000	459,000	459,000	459,000	459,000	459,000	
2) Fish purchase	1,297,500	1,338,500	1,379,500	1,420,500	1,502,500	1,604,500	1,706,500	1,808,500	1,910,500	2,012,500	2,114,500	2,216,500	
3) Depreciation	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	
C. Income before Depr.	0	984,265	1,029,345	1,074,425	1,119,505	1,209,665	1,334,935	1,460,205	1,585,475	1,710,745	1,836,015	1,961,285	2,086,555
D. Net Income	0	590,318	635,398	680,478	725,558	815,718	940,988	1,066,258	1,191,528	1,316,798	1,442,068	1,567,338	1,692,608
II. A. Sources of Funds	10,449,320	984,265	1,029,345	1,074,425	1,119,505	1,209,665	1,334,935	1,460,205	1,585,475	1,710,745	1,836,015	1,961,285	2,086,555
1) Govt.	10,449,320												
2) Depreciation		393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947
3) Net income	0	590,318	635,398	680,478	725,558	815,718	940,988	1,066,258	1,191,528	1,316,798	1,442,068	1,567,338	1,692,608
B. Uses of Funds	10,449,320	0	0	3,000	0	210,500	3,000	0	0	3,000	747,300	0	3,000
1) Construction	10,449,320												
Wharf	2,000,000												
Market/others	8,449,320												
2) Reinvestment				3,000		210,500	3,000			3,000	747,300		3,000
C. Net cash flow	0	984,265	1,029,345	1,071,425	1,119,505	999,165	1,331,935	1,460,205	1,585,475	1,707,745	1,088,715	1,961,285	2,083,555

Remarks: Assumption HFMA owns the fisheries related facilities in the Honiara Central Market.

Table A-9.26 Income Statement and Cash Flow of the HFMA Project (2/2)

													Unit: S\$
I. Income Statement	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
A. Revenue	4,989,325	5,216,595	5,443,865	5,443,865	5,443,865	5,443,865	5,443,865	5,443,865	5,443,865	5,443,865	5,443,865	5,443,865	6,281,448
Basic Facilities													
1) Fish sales	4,936,260	5,163,530	5,390,800	5,390,800	5,390,800	5,390,800	5,390,800	5,390,800	5,390,800	5,390,800	5,390,800	5,390,800	5,390,800
2) Ice	9,245	9,245	9,245	9,245	9,245	9,245	9,245	9,245	9,245	9,245	9,245	9,245	9,245
3) Passengers	31,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300
4) Cargo	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520	12,520
5) Salvage value													837,583
B. Expense	3,171,447	3,273,447	3,375,447	3,375,447	3,375,447	3,375,447	3,375,447	3,375,447	3,375,447	3,375,447	3,375,447	3,375,447	3,375,447
1) O/M	459,000	459,000	459,000	459,000	459,000	459,000	459,000	459,000	459,000	459,000	459,000	459,000	459,000
2) Fish purchase	2,318,500	2,420,500	2,522,500	2,522,500	2,522,500	2,522,500	2,522,500	2,522,500	2,522,500	2,522,500	2,522,500	2,522,500	2,522,500
3) Depreciation	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947
C. Income before Depre.	2,211,825	2,337,095	2,462,365	2,462,365	2,462,365	2,462,365	2,462,365	2,462,365	2,462,365	2,462,365	2,462,365	2,462,365	2,299,948
D. Net Income	1,817,878	1,943,148	2,068,418	2,068,418	2,068,418	2,068,418	2,068,418	2,068,418	2,068,418	2,068,418	2,068,418	2,068,418	2,906,001
II. A. Sources of Funds	2,211,825	2,337,095	2,462,365	2,462,365	2,462,365	2,462,365	2,462,365	2,462,365	2,462,365	2,462,365	2,462,365	2,462,365	3,299,948
1) Govt.													
2) Depreciation	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947	393,947
3) Net income	1,817,878	1,943,148	2,068,418	2,068,418	2,068,418	2,068,418	2,068,418	2,068,418	2,068,418	2,068,418	2,068,418	2,068,418	2,906,001
B. Uses of Funds	0	0	1,921,050	0	0	0	0	0	3,000	0	0	0	0
1) Construction													
Wharf													
Market/other													
2) Reinvestment			1,921,050			3,000		747,300	3,000				3,000
C. Net cash flow	2,211,825	2,337,095	541,315	2,462,365	2,462,365	2,459,365	2,462,365	1,715,065	2,459,365	2,462,365	2,462,365	2,459,365	3,299,948

Remarks: Assumption HFMA

Table A-9.27 Financial Evaluation of the HFMA Project

				Unit: S/\$
	Investment	Re-invest	Income before Depreciation	Net Benefit
1995	10,449,320	0	0	-10,449,320
1996		0	984,265	984,265
1997		0	1,029,345	1,029,345
1998		3,000	1,074,425	1,071,425
1999		0	1,119,505	1,119,505
2000		210,500	1,209,665	999,165
2001		3,000	1,334,935	1,331,935
2002		0	1,460,205	1,460,205
2003		0	1,585,475	1,585,475
2004		3,000	1,710,745	1,707,745
2005		747,300	1,836,015	1,088,715
2006		0	1,961,285	1,961,285
2007		3,000	2,086,555	2,083,555
2008		0	2,211,825	2,211,825
2009		0	2,337,095	2,337,095
2010		1,921,050	2,462,365	541,315
2011		0	2,462,365	2,462,365
2012		0	2,462,365	2,462,365
2013		3,000	2,462,365	2,459,365
2014		0	2,462,365	2,462,365
2015		747,300	2,462,365	1,715,065
2016		3,000	2,462,365	2,459,365
2017		0	2,462,365	2,462,365
2018		0	2,462,365	2,462,365
2019		3,000	2,462,365	2,459,365
2020		0	3,299,948	3,299,948

FIRR= 13.01%

Annex - 10 Environmental Impact Assessment

Table A-10.1 Model Zone 1 - Honiara Environmental Considerations

PROJECT COMPONENT: Rehabilitation of Honiara Central Market.

AREA DESCRIPTION: Coastal flat land with sea front. Existing market and jetty on site.

DEVELOPMENT TYPE: Infrastructure, marketing and distribution system

TYPE OF ENVIRONMENTAL EFFECT:

Items	Existing Conditions	Environmental Effect Of Development	Recommended Protection Measures	No Significant Effect	Significant Effect		
					Small	Moderate	Major
Infra-structure Consideration:							
Waterfront users	Only fishermen are using the beach at the market to unload their eskies. The rocky beach makes unloading difficult especially with a full esky.	The provision of a sloping ramp will help in the unloading process.	Careful design to facilitate use by fishermen			•	
Power supply / transmission	Adequate	None	Nil	•			
Water quality & quantity	Inadequate standpipe	Provision for more standpipes	Nil		•		
Infra-structure	<ul style="list-style-type: none"> Poor management of traffic flow resulting in congestion in the market area. Car park and petty trader are mingled in the same area. Inadequate space & shelter for petty sellers to display goods. Inadequate storage for eskies and commodities 	<ul style="list-style-type: none"> New access route and paved parking area will rationalise traffic flow & reduce dust pollution. Separate area for parking and trading. Shaded area and storage facilities to be incorporated in the market design to maintain the quality of the commodities. 	<ul style="list-style-type: none"> Proper planning & coordination with the planners of the new highway required to improve flow & access. Careful design for ease of use Careful design & consideration of future requirements and use 				<ul style="list-style-type: none"> • • •

Table A-10.1 Model Zone 1 - Honiara Environmental Considerations (cont')

Items	Existing Conditions	Environmental Effect Of Development	Recommended Protection Measures	No Significant Effect	Significant Effect		
					Small	Moderate	Major
Site filling hazards /erosion	Land is flat and shows no sign of erosion. Sand bottom beach with possible sand migration depending on seasonal sea / wind conditions.	Beach development will need to consider the possible change of existing coastal sedimentary process.	Natural condition survey of the beach area to be conducted and monitoring of the beach areas to detect shoreline changes if any.			•	
Waste water treatment	No treatment of the waste water of the market.	Provision of treatment facilities will ensure acceptable level of market waste discharge.	Treatment to be provided with longer outfall to increase dispersion rate and removal of waste water from beach area.			•	
Community Consideration: Labour supply, including skilled labour	Sufficient	The operation and maintenance of the market will not create many more job opportunities.	Present market management setup of HMA & market operation may be modified in the medium term.		•		
Need for resettlement	Not applicable. Land is leased to HMA.	None		•			
Land uses	Present zoning is for market.	No change in land use or zoning.		•			
Traditional fishing rights	Not applicable	None		•			
Economic and social structure	Typical market with cash transaction	No change		•			
Tourism	Market is near centre of town and does attract a few tourist	New market facilities will create a favorable impression on tourist visiting.			•		

Table .A-10.1 Model Zone 1 - Honiara Environmental Considerations (cont')

Items	Existing Conditions	Environmental Effect Of Development	Recommended Protection Measures	No Significant Effect	Significant Effect		
					Small	Moderate	Major
Marketing /Economic Consideration: Remoteness from marketing / needs for freezer storage	Vegetables and fruits are mainly from Guadalcanal with fish mainly from Nggela. No storage facilities for vegetables & fruits, fish stored with ice in eskies.	Provision of storage facilities for these commodities will maintain the quality for sale the next day.	Careful planning & consideration of use		•		
Factories / Industries	Butcher shop & shops selling food and drinks	New facilities will improve the hygiene	Careful design & consideration of requirements		•		
Other Consideration: Availability of fishery resources	Fish sold in market are mainly from outside Guadalcanal	Volume and fishing method will not adversely affect fish resources in those areas.	Monitoring of fish resources at fishing areas.		•		
Related Projects effects	<ul style="list-style-type: none"> • New highway • Honiara Town Development Plans • SIPA Development Plans • BEC's RFEP 	<ul style="list-style-type: none"> • Access, drainage, other roadside services will be affected. • Future zoning & land use classification. • Jetty usage and sea traffic control. • Marketing / distribution of fish 	<ul style="list-style-type: none"> • Careful planning / coordination to offset / minimise problems • Careful planning • Proper coordination • Proper coordination 			•	•
Pollution	<ul style="list-style-type: none"> • Waste water discharged directly to sea without treatment. • Rubbish piled up in exposed area • Dust from unpaved areas 	<ul style="list-style-type: none"> • Treatment of waste water to be incorporated in the design of the land facilities. • Proper rubbish bins in designated areas to be provided. • Area to be shaded and paved. 	<ul style="list-style-type: none"> • Careful design • Proper planning • Proper planning 		•	•	•

Table A-10.2 Model Zone 2 - Florida Islands Environmental Considerations

PROJECT COMPONENT:

Provision of fish collection vessel,
intermediate collection point at Tulaghi,
satellites in villages

AREA DESCRIPTION:

Tulaghi: Limited coastal flat land fronting
the sea. Existing facilities on site
may need to be demolished/
relocated.

DEVELOPMENT TYPE:

Improvement of marketing and distribution
system

TYPE OF ENVIRONMENTAL EFFECT:

a) Proposed Collection Point At Tulaghi

Items	Existing Conditions	Environmental Effect Of Development	Recommended Protection Measures	No Significant Effect	Significant Effect		
					Small	Mod- erate	Major
Infra- structure Considera- tion:							
Waterfront users	Proposed site presently unused.	Provide a collection point for the fishermen that is easily accessible in all sea conditions.	Careful design to facilitate use by fishermen.			•	
Power supply / transmission	Adequate	None	Nil	•			
Water quality & quantity	Inadequate mains supply	Independent water supply to be found/ provided for the cleaning & sorting operations.	Water supply should be safeguarded against possible contamination.		•		
Infra- structure	Existing road & facilities to be improved	Increased amenities and usage of the site	Proper planning & coordination with Provincial Planners			•	
Site filling hazards /erosion	None	Not Applicable	Nil	•			
Waste water treatment	None	Septic tank and proper discharge of waste water to be provided	Careful design		•		

Table A-10.2 Model Zone 2 - Florida Islands Environmental Considerations (cont')

Items	Existing Conditions	Environmental Effect Of Development	Recommended Protection Measures	No Significant Effect	Significant Effect		
					Small	Moderate	Major
Community Consideration:							
Labour supply, including skilled labour	Sufficient	None	Nil	•			
Need for resettlement	Not applicable.	None	Nil	•			
Land uses	Previously part of STL base	No change in land use	Nil	•			
Traditional fishing rights	Not applicable	None	Nil	•			
Economic and social structure	Fish marketing and distribution already being practised	Encourage the fishermen to use Tulaghi as collection centre to market & distribute fish	Proper management setup of the collection centre, and careful planning & consideration of the needs of the fishermen & community			•	
Tourism	Not applicable	None	Nil	•			
Marketing /Economic Consideration:							
Remoteness from marketing / needs for freezer storage	No facilities for marketing or storage of fish	Target is fresh fish to Honiara & local market. Ice to be used instead of freezing.	Regular shipping schedule to ensure prompt & reliable service.			•	
Factories / Industries	No fresh fish related industries	None in Tulaghi in the short term. Fresh fish related industries may develop in the medium/long term	Nil		•		
Other Consideration:							
Availability of fishery resources	Not applicable	None	Nil	•			

Table A-10.2 Model Zone 2 - Florida Islands Environmental Considerations (cont')

Items	Existing Conditions	Environmental Effect Of Development	Recommended Protection Measures	No Significant Effect	Significant Effect		
					Small	Moderate	Major
Related Projects effects	<ul style="list-style-type: none"> NFD Prov. Govnm Development Plan 	<ul style="list-style-type: none"> Ice supply balance Future zoning & land use 	<ul style="list-style-type: none"> Proper coordination Proper coordination 			• •	
Pollution	Not a problem	Increase waste water discharge	Careful design to minimise problems		•		

b) Proposed Satellites At Humba, Peula, Vura, Olevugha & Soso Villages

Infra-structure Consideration:							
Waterfront users	Mostly used by the community with occasional provincial ship calling	Area with easy access to sea to be set aside for the Satellite.	Nil	•			
Power supply / transmission	Not available	Solar powered facilities	Proper instructions on the operation and maintenance to be given to community		•		
Water quality & quantity	Generally available and adequate	Rain water tank to be provided as backup source	Nil		•		
Infra-structure	None	None	Nil	•			
Site filling hazards /erosion	None	None	Nil	•			
Waste water treatment	None	None	Nil	•			
Community Consideration:							
Labour supply, including skilled labour	Adequate	None	Nil	•			
Need for resettlement	Not applicable	None	Community consensus for the site of the satellite to be obtained	•			

Table A-10.2 Model Zone 2 - Florida Islands Environmental Considerations (cont')

Items	Existing Conditions	Environmental Effect Of Development	Recommended Protection Measures	No Significant Effect	Significant Effect		
					Small	Moderate	Major
Land uses	Not applicable	None	Community consensus for the site of the satellite to be obtained	•			
Traditional fishing rights	Extends to the reef edge.	None.	Nil	•			
Economic and social structure	Self subsistence village lifestyle	Increase opportunity for cash income by development of fishery sector	Community consensus to be obtained			•	
Tourism	Not applicable	None.	Nil	•			
Marketing /Economic Consideration:							
Remoteness from marketing	Honiara being the main market for the fish is typically about 2 hrs by outboard	Eskies to be provided to the villages. Ice from Tulaghi or Honiara. Carrier vessels to be introduced.	Community consensus to be obtained			•	
Factories / Industries	None	None.	Nil	•			
Other Consideration:							
Availability of fishery resources	Present resources does not seem to be over exploited	Increase demand on fishery resources	Proper monitoring and management of resources			•	
Related Projects effects	None	None.	Nil	•			
Pollution	Not a problem	Increase waste water discharge	Careful design to minimise problems		•		

Table A-10.3 Model Zone 3 - Western Province Environmental Considerations

PROJECT COMPONENT:

Provision of regular fish collection service, satellites in villages, collection centre at Noro

AREA DESCRIPTION:

Noro: Established STL base with good facilities

DEVELOPMENT TYPE:

Improvement of marketing and distribution system

TYPE OF ENVIRONMENTAL EFFECT:

a) Noro Collection Centre

Items	Existing Conditions	Environmental Effect Of Development	Recommended Protection Measures	No Significant Effect	Significant Effect		
					Small	Moderate	Major
Infra-structure Consideration: Waterfront users	Used by STL fishing vessels. Step wharf used by small canoes.	Collection vessel will berth at relatively unused step wharf.	Nil	•			
Power supply / transmission	Adequate	None	Nil	•			
Water quality & quantity	Adequate	None	Nil	•			
Infra-structure	Adequate	Modification of existing buildings for intended purpose	Nil		•		
Site filling hazards /erosion	Not Applicable	None	Nil	•			
Waste water treatment	Adequate	None	Nil	•			
Community Consideration: Labour supply, including skilled labour	Sufficient	None	Nil	•			

Table A-10.3 Model Zone 3 - Western Province Environmental Considerations (cont')

Items	Existing Conditions	Environmental Effect Of Development	Recommended Protection Measures	No Significant Effect	Significant Effect		
					Small	Moderate	Major
Need for resettlement	Not Applicable	None	Nil	•			
Land uses	Demarcated for fishery purpose	None	Nil	•			
Traditional fishing rights	Not Applicable	None	Nil	•			
Economic and social structure	Well developed fishery processing base with large work force.	Regular and adequate fresh fish supply for local consumption and possible export	Proper management setup of the collection centre, and careful planning & consideration of the needs of the fishermen & community			•	
Tourism	Not Applicable	None	Nil	•			
Marketing /Economic Consideration:							
Remoteness from marketing / needs for freezer storage	Good transport network - port, road & airport. Freezer storage available	None	Nil	•			
Factories / Industries	Well established fish processing and export industry	Potential for fresh fish, fish fillet export	Proper management to ensure regular supply			•	
Other Consideration:							
Availability of fishery resources	Not Applicable	None	Nil	•			
Related Projects effects	<ul style="list-style-type: none"> • STL Operation • Prov. Govnm Development Plan 	<ul style="list-style-type: none"> • Demand for fresh fish by work force • Future development plans 	<ul style="list-style-type: none"> • Proper coordination • Proper coordination 			•	•
Pollution	Existing waste treatment plant at STL adequate	Increase waste water discharge	Careful design to minimise problems		•		

Table A-10.3 Model Zone 3 - Western Province Environmental Considerations (cont')

b) Proposed Satellites At Mbuli, Surato, Vatoro, Moro, Simbilando, Lambulambu and Arumana Villages

Items	Existing Conditions	Environmental Effect Of Development	Recommended Protection Measures	No Significant Effect	Significant Effect		
					Small	Moderate	Major
Infra-structure Consideration:							
Waterfront users	Mostly used by the community with occasional provincial ship calling	Area with easy access to sea to be set aside for the Satellite.	Nil	•			
Power supply / transmission	Not available	Solar powered facilities	Proper instructions on the operation and maintenance to be given to community		•		
Water quality & quantity	Generally available and adequate	Rain water tank to be provided as backup source	Nil		•		
Infra-structure	None	None	Nil	•			
Site filling hazards /erosion	None	None	Nil	•			
Waste water treatment	None	None	Nil	•			
Community Consideration:							
Labour supply, including skilled labour	Adequate	None	Nil	•			
Need for resettlement	Not applicable	None	Community consensus for the site of the satellite to be obtained	•			
Land uses	Not applicable	None	Community consensus for the site of the satellite to be obtained	•			
Traditional fishing rights	Extends to the reef edge.	None.	Nil	•			

Table A-10.3 Model Zone 3 - Western Province Environmental Considerations (cont')

Items	Existing Conditions	Environmental Effect Of Development	Recommended Protection Measures	No Significant Effect	Significant Effect		
					Small	Moderate	Major
Economic and social structure	Self subsistence village lifestyle	Increase opportunity for cash income by development of fishery sector	Community consensus to be obtained			•	
Tourism	Not applicable	None.	Nil	•			
Marketing /Economic Consideration:							
Remoteness from marketing	Gizo being the intermediate collection point for the fish is typically about 4 hrs by outboard	Eskies to be provided to the villages. Ice to be made available from Gizo. Collection service to be introduced.	Community consensus to be obtained			•	
Factories / Industries	None	None.	Nil	•			
Other Consideration:							
Availability of fishery resources	Present resources does not seem to be over exploited	Increase demand on fishery resources	Proper monitoring and management of resources			•	
Related Projects effects	None	None.	Nil	•			
Pollution	Not a problem	Increase waste water discharge	Careful design to minimise problems		•		

Table A-10.4 Model Zone 4 - Rennell Island Environmental Considerations

PROJECT COMPONENT:

Provision of self-propelled barge, multi-purpose halls, trawler-tractor & truck

AREA DESCRIPTION:

Raised coral atoll, one main unpaved road, population evenly distributed between east and west.

DEVELOPMENT TYPE:

Infrastructure and development of marketing and distribution within island.

TYPE OF ENVIRONMENTAL EFFECT:

Items	Existing Conditions	Environmental Effect Of Development	Recommended Protection Measures	No Significant Effect	Significant Effect		
					Small	Moderate	Major
Infra-structure Consideration:							
Waterfront users	Mostly used by the community with occasional provincial ship calling	Barge will greatly assist with the loading / unloading in the sea	Operation should be during calm sea or in sheltered location. When barge not in use, it should be stored away on shore			•	
Power supply / transmission	Not Available	Solar powered light, chest freezer and wireless communication set	Proper instructions on the operation and maintenance to be given to community			•	
Water quality & quantity	Generally available and adequate	Rain water tank to be provided in Multi-purpose halls as backup source. Hand pump for well as additional supply source	Water supply should be safeguarded against possible contamination		•		
Infra-structure	Undulating sometimes steep unpaved road	Trawler-tractor and 4 wheel drive truck will improve / facilitate the movement of goods and people	Increase traffic movement will necessitate passing lanes as the existing one lane road is too narrow for trucks to pass each other.			•	
Site filling hazards /erosion	Not Applicable	None	Nil	•			
Waste water treatment	None	Septic tank and proper discharge of waste water of the multi-purpose halls to be provided	Careful design		•		

Table A-10.4 Model Zone 4 - Rennell Islands Environmental Considerations (cont')

Items	Existing Conditions	Environmental Effect Of Development	Recommended Protection Measures	No Significant Effect	Significant Effect		
					Small	Moderate	Major
Community Consideration:							
Labour supply, including skilled labour	Adequate	Require some persons to run & maintain the multi-purpose halls, vehicles & barge	Proper training & instructions on the operation & maintenance to be given.			•	
Need for resettlement	Not Applicable	None	Community consensus for the site of the multi-purpose halls & barge storage to be obtained	•			
Land uses	Not Applicable	None	Community consensus for the site of the multi-purpose halls & barge storage to be obtained	•			
Traditional fishing rights	Extends to reef edge but not enforced	None	Nil	•			
Economic and social structure	Self subsistence village lifestyle	Increase opportunity for cash income by development of fishery sector	Community consensus to be obtained			•	
Tourism	Not developed	Improved road transport will make it easier for tourist to visit TeNggano Lake	Tourism policy & facilities need to be decided by community			•	
Marketing /Economic Consideration:							
Remoteness from marketing / needs for freezer storage	No facilities for marketing or storage of fish	Target is fresh fish to Honiara & local market. Ice to be used instead of freezing.	Regular shipping schedule to ensure prompt & reliable service.			•	
Factories / Industries	No fresh fish related industries	None in the short term. Fresh fish related industries may develop in the medium/long term	Nil	•			

Table A-10.4 Model Zone 4 - Rennell Islands Environmental Considerations (cont')

Items	Existing Conditions	Environmental Effect Of Development	Recommended Protection Measures	No Significant Effect	Significant Effect		
					Small	Modera te	Major
Other Consideration: Availability of fishery resources	Resources not a problem	Increase demand on fishery resources	Proper monitoring and management of resources to ensure sustainable exploitation		•		
Related Projects effects	<ul style="list-style-type: none"> • World Heritage Listing • Prov. Govnm Development Plan 	<ul style="list-style-type: none"> • Rennell Island future development policy • Future plans, zoning & land use 	<ul style="list-style-type: none"> • Proper coordination • Proper coordination 			•	
Pollution	Not a problem	Increase waste water discharge from Multi-purpose halls	Careful design to minimise problems		•		

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No.	Title	Source	Year
1	OFCF Report Prepared by Mr. Ohishi	OFCF	1993
2	Malaita Development Authority (Annual Report and Accounts, 1991/92)	MDA	1991/92
3	Solomon Taiyo Ltd. Production Statistics 1973 to Date	STL	1993
4	Summary of Domestic Frozen Fish Sales, 1992	STL	1993
5	Establishment of Rural Fishing Groups Project May 88-July 91 Final Report	ICOD	1991
6	By-laws of the Western Fishermen Cooperative Ltd.	Manager (WPFC)	1992
7	The Malaita Development Authority Ordinance 1997	MDA	1988
8	Fish Marketing and Distribution: A Case Study in Western Province, Solomon Islands	ICOD	1991
9	Land and Titles Act. Chapter 93	Authority of the Minister of Law Statistics Office	1981
10	Honaira Retail Price Index - March 1992 Statistical Bulletin (No. 8/92)	Statistics Office	1992
11	Copra Productin Ist and 2nd Quarter 1992 Statistical Bulletin (No. 18/92)	Statistics Office	1992
12	The Revision of the Legislation in Solomon Islands. Draft Provincial Fisheries Ordinance Temotu Province	FAO	1987
13	Fish Purchasing Journal April 1992	Prov. Fishery Center, Seghe	1992
14	Fish Buying/Selling Volume of MDA May-1989 - Sent 1992	MDA	1992
15	Member List of Seven Fishermen's Coop. in North Malaita	OFCF	1993
16	Divisional Establishment Post Fisheries of Western Province	FD, Gizo, Western Prov.	1993
17	Number & Name of Coop. in Makira-Ulawa Province	Commerce Division, Makira-	1993
18	Fisheries Department Annual Reports 1984, 1985, 1987-88	FD	
19	Excerpts from Unpublished FD Annual Reports	FD	1986, 1989-91
20	Review of SI Fisheries Statistics Program	FD	1988
21	ICOD Project Summaries by Region	FD	1991
22	Project Proposal: Development of Rural Fishing Enterprises	Michael Batty	1987
23	EEC Fisheries Centers Financial Reports, Jan-April	Michael Batty	1993
24	Registry of Solomon Island Ships	Marine Division	1991 ?
25	Ships Issued Safety Certificates	Marine Division	1991
26	Govt. Ships Passengers Capacities, Min. of Transport	Marine Division	Undated
27	Miscellaneous Ship Schedules	Marine Division	1993
28	The Rural Fishing Enterprises Project in SI	FD	1993
29	World Bank Solomon Islands Transport Sector	World Bank	1993

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No.	Title	Source	Year
30	Inter-Island Shipping Industry in the Pacific Area	Marine Division	1991
31	Review of Provincial Fisheries Division Management of FCs	Michael Batty	1992
32	Revision of the Fisheries Legislation in SI	FD Library	1987
33	Western Pacific + Solomon Islands Airlines Schedule	Airlines office	1993
34	Summary of Domestic Fish Sales 1988-92	FD	
35	STL Production Statistics 1973-92	FD	
36	Draft Project Proposal: Florida Fishing Co.	Tulagi Fishery Officer	1993
37	Infofish Trade News	FD Library	3.1993
38	Marine Resource Profiles: Solomon Islands	FD Library	1990
39	Design Study on Noro Fisheries Infrastructure Project	FD Library	1989
40	Evaluation of EECs Fisheries Development Projects	FD Library	1987
41	Review of Management of Fisheries Centers	FD Library	No date
42	Fisheries Sector Development Programmes 1985-1990	FD Library	No date
43	Crick carlton Consultant Report on Fisheries Development	FD Library	1981
44	Fisheries Mgmt in the Pacific, UNRISD Report	FD Library	1992
45	FAO Technical Report on Promotion of Fish Exports	FD Library	1989
46	Policy Paper on Proposed Development of SI Tuna Industry	FD Library	1985
47	FAO Report on Fisheries Dev. Assistance in the South Pacific	FFA Library	No date
48	Rural Fisheries Development Project	JICA Team	1981 ?
49	Fish Marketing and Distribution, John Sasabule	FD Library	1991
50	Strategy for Fisheries Development Assistance in South Pacific Region	Personal Copy	1988
51	Statistical Bulletin No. 15/87 - Provincial Statistics	Statistics Office	Jul-87
52	Manual and Guidelines for the Formulation and Appraisal of Development Projects	Min. of Finance & Economic Planning	May-89
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54	Development Planning Procedures in Solomon Islands	Ministry of Economic Planning	Dec-86
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57	Household Sample Survey of Smallholders in the Area of Influence of Each Rural Development Centre - Field Work Carried Out Feb.- May 1988	Min. of Agriculture & Lands and Statistics Office	Nov-89
58	Report 2 Honiara Household Income and Expenditure Survey 1990/91	Statistics Office	Aug-92

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60	Recurrent Estimate 1993 _ A Draft	Solomon Islands	1992
61	Strategies For Provincial Governments Funding System 1989-1993	Ministry of Provincial Government	Nov-89
62	Report 3 A: Provincial Summary Western Province - Solomon Islands 1986 Population Census	Statistics Office	
63	Report 3 E: Provincial Summary: Honiara Town Council - Solomon Islands 1986 Population Census	Statistics Office	
64	New Policy for the Structure of the Public Service	Office of the Prime Minister	Dec-92
65	Provinces of Solomon Islands	Govt. Information Service	Jun-88
66	Acquisition and Operation of Two 57 Meter Purse Seine Fishing Vessels	Solomon Islands Govt.	?
67	The First 10 Years of Solomon Islands Independence	Govt. Printing Press	1992
68	Survey on Honaira Markets	Honaira Town Council	?
69	Project Submission For Japan's Grant Aid Funding (Honaira Markets Development)	Honaira Town Council	?
70	Estimates of Revenue and Expenditures 1993/94	Temotu Provincial Assembly	1993
71	Report on the Census of Population 1986 Report 2. A: Basic Information	Statistics Office	1986
72	Trade Report 1987	Statistics Office	1988
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74	Exports of Principle Commodities Monthly 1989 - 1992	Statistics Office	
75	World Population Projections, 1989-90 Edition: Short- and Long-Term Estimates	World Bank	1990
76	Tropical Cyclones that Affect Solomon Islands	S.I. Meteorological	1993
77	Hydrological Investigations for Auki Water Supply	MTWU Water Units	1989
78	Hydrological Investigations for Buala Water Supply	MTWU Water Units	1989
79	Hydrological Investigations for Gizo Water Supply	MTWU Water Units	1988
80	Hydrological Investigations for Munda Water Supply	MTWU Water Units	1989
81	Hydrological Investigations for Tulaghi Water Supply	MTWU Water Units	1987
82	Assessment of the Water Supply System in Kirakira	MTWU Water Units	1987
83	Design of a Water Supply System for Atori	MTWU Water Units	1988
84	Slolomon Islands - Leakage Control Situation	MTWU Water Units	1988
85	Assessment of the White River Supply System,	MTWU Water Units	1987
86	Honiara		
87	Report on Maluu Micro Hydro project, British	SIEA	1975

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No.	Title	Source	Year
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89	Electricity Sales and Costs - Kirakira	SIEA	1993
90	Electricity Sales and Costs - Maluu	SIEA	1993
91	Water Rate, Honiara	MTWU Water Units	1993
92	Fixed - Term Estate Register with Map, Honiara	Honiara Land Regis	1993
93	Market Land		
94	Water Supply Pipe Line Map, Honiara	MTWU Water Units	1993
95	Power Supply Line Map, Honiara	SIEA	1993
96	Telephone Line Map, Honiara	TELEKOM	1993
97	Second Honiara Port Project Survey Report	SIPA	1988
98	Malaita Rural Development Study, Commission of EC	M. of Provincial Go	1992

