

**Table XII.5.7.3 Medium Public Investment Program
City of Legazpi, 2000-2004**

(1) PRIORITY SUB-SECTOR ACTIVITIES (PSAs)

(Unit: 1,000 Peso)

Sector	Resource Requirement					Total	(%)
	2000	2001	2002	2003	2004		
1. Social Development	159,847	116,693	134,479	156,456	180,707	748,182	26.8
1.1 Social Welfare and Community Devt.	5,000	3,810	4,470	4,780	5,540	23,600	
1.2 Health, Nutrition, and Family Plannin	62,847	74,083	90,509	111,476	134,267	473,182	
1.3 Education, Sports and Manpower De	3,100	3,800	4,500	5,200	5,900	22,500	
1.4 Housing	88,900	35,000	35,000	35,000	35,000	228,900	
2. Economic Development	90,776	68,105	72,885	54,665	55,705	342,136	12.3
2.1 Agriculture	13,876	6,005	3,785	3,565	2,605	29,836	
2.2 Commerce and Insdutry	59,400	49,600	60,100	50,100	52,100	271,300	
2.3 Tourism	17,500	12,500	9,000	1,000	1,000	41,000	
3. Infrastructure Facilities and Utilities	1,079,497	110,500	113,174	93,930	67,950	1,465,051	52.5
3.1 Transportation	1,038,195	93,290	91,519	87,150	61,550	1,371,704	
3.2 Water Resources	18,072	900	900	1,050	900	21,822	
3.3 Energy, Power and Electrification	10,500	-	-	-	-	10,500	
3.4 Social Infrastructure	12,730	16,310	20,755	5,730	5,500	61,025	
4. Environmental Protection/Management Disaster Mitigaton	68,405	65,673	46,784	29,181	22,801	232,844	8.3
4.1 Non-structural	6,220	6,000	6,320	6,000	6,380	30,920	
4.2 Structural	62,185	59,673	40,464	23,181	16,421	201,924	
5. Development Administration	3,200	-	-	-	-	3,200	0.1
Total	1,401,725	360,971	367,322	334,232	327,163	2,791,413	100.00

(2) PUBLIC INVESTMENT LIST (PIL)

(Unit: 1,000 Peso)

Sector	Resource Requirement					Total	(%)
	2000	2001	2002	2003	2004		
1. Social Development	103,965	118,672	139,197	167,863	194,560	724,257	39.32
1.1 Social Welfare and Community Devt.	8,685	11,458	12,840	15,555	18,420	66,958	
1.2 Health, Nutrition, and Family Plannin	84,205	95,584	115,977	141,868	166,540	604,174	
1.2 Education, Sports and Manpower De	1,590	1,945	2,170	2,230	2,290	10,225	
1.4 Housing	3,885	3,785	1,960	1,960	860	12,450	
1.5 Human and Ecological Security (HES Social Reform Agenda (SRA))	5,600	5,900	6,250	6,250	6,450	30,450	
2. Economic Development	96,568	60,852	68,588	61,788	61,139	348,935	18.94
2.1 Agriculture	3,758	3,142	3,288	3,488	3,694	17,370	
2.2 Commerce and Insdutry	81,675	52,475	59,475	52,475	51,475	297,575	
2.3 Tourism	11,135	5,235	5,825	5,825	5,970	33,990	
3. Infrastructure Facilities and Utilities	144,224	99,967	108,688	78,585	57,410	488,874	26.54
3.1 Transportation	104,851	75,837	101,848	71,475	50,000	404,011	
3.2 Power	9,145	150	125	125	125	9,670	
3.3 Water Resources	2,853	2,400	2,650	2,870	3,120	13,893	
3.5 Social Infrastructure	27,375	21,580	4,065	4,115	4,165	61,300	
4. Environmental Protection/Management Disaster Mitigation	28,036	27,688	24,764	21,751	21,081	123,320	6.70
4.1 Non-structural	5,980	4,550	5,320	6,190	7,360	29,400	
4.2 Structural	22,056	23,138	19,444	15,561	13,721	93,920	
5. Development Administration	34,393	30,370	30,820	30,270	30,720	156,573	8.50
Total	407,186	337,549	372,057	360,257	364,910	1,841,959	100.00

Source: Medium Term Public Investment Program (MTPIP), 2000-2004, City of Legazpi

Table XII5.7.4 5-Year Priority Investment Program of the Daraga Municipality, 1999-2003

No.	Sectors and Priority Sub-sectors	Main Cooperating Agency	Total Estimated Cost*, 1999-2003 (in 1,000 Pesos)
1 - HUMAN DEVELOPMENT			
1)	Social Welfare and Community Development & Education and Manpower Development	MSWDO/DSWD/NGO	2,900
2)	Health and Nutrition	MHO/DOH/ DECS/NGOs	25,600
2 - AGRI-INDUSTRIAL DEVELOPMENT			
1)	Agricultural Research & Development	LGU/DA/FIDA	1,450
2)	Crop Production	DA/LGU/PCA	10,750
3)	Poultry & Livestock Production	LGU/DA	2,250
4)	Marketing & Investment	DTI/LGU	-
5)	Irrigation Project	LGU/NIA/DPWH	510,000
6)	Commerce and Industry	LGU/DTI	110,300
7)	Tourism	DOT	7,000
3 - INFRASTRUCTURE AND UTILITIES			
1)	Air Transport	ATO/DOTC	1,500
2)	Roads / Streets / Bridges	DPWH/LGU	1,145,000
3)	Water Supply	LGU/DPWH	15,000
4)	Irrigation Program	NIA/DA/LGU	80,000
5)	Rural Electrification	ALECO	25,000
6)	Telecommunications	Nat'l Gov. and Private	-
7)	Postal Communications	PPC	2,000
8)	School Facilities	DPWH/DECS	36,785
4 - DEVELOPMENT ADMINISTRATION			
1)	Institutional Development/ Human Resource Dev. Program	LGU	3,290
5 - DISASTER MITIGATION			
1)	Non-structural Component	LGU/MSWDO	53,300
6 - ECONOMY AND DEVELOPMENT FINANCING			
1)	Local Investment Promotion	LGU/DTI/BOT	-
TOTAL		-	2,032,125

Note: * The costs of some programs are neither determined nor included in the above investment program. They are to be estimated through more detailed studies.

Source Priority Sub-sector Activities, 1999-2003, Municipal Planning and Development Office, Daraga Municipality

Table XII.5.7.5 Masterlist of Programs and Projects by Sector for Albay Province(1/4)

Project Title/Location	Total Estimated Cost (P)	Annual Cost					Indicate if Capital or Non-Capital	
		2000	2001	2002	2003	2004		
ECONOMIC : Agriculture								
1. Technology Generation and Dissemination for Crops	11,000,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	NC	
a. Production Technology Researches	2,500,000	500,000	500,000	500,000	500,000	500,000	NC	
b. Demo Farms	2,500,000	500,000	500,000	500,000	500,000	500,000	NC	
c. Seedbanks/Nurseries	2,500,000	500,000	500,000	500,000	500,000	500,000	NC	
d. IEC on Production Technologies	2,500,000	500,000	500,000	500,000	500,000	500,000	NC	
e. Soil Analysis	1,000,000	200,000	200,000	200,000	200,000	200,000	NC	
2. Farm Inputs/Farm Implementations Assistance Program	8,720,000	2,430,000	1,930,000	1,930,000	1,430,000	1,000,000	NC	
Sub Total	23,480,000	4,460,000	4,060,000	4,060,000	8,900,000	2,000,000	C	
a. Farm Inputs Distribution	8,720,000	2,430,000	1,930,000	1,930,000	1,430,000	1,000,000	NC	
b. Farm Machineries and Equipment	23,480,000	4,460,000	4,060,000	4,060,000	8,900,000	2,000,000	C	
3. Credit Assistance Program	6,000,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	NC	
4. Market Linkage Program	1,000,000	200,000	200,000	200,000	200,000	200,000	NC	
5. Livestock Auction Market	3,000,000	200,000	1,000,000	1,000,000	500,000	300,000	C	
6. Livestock Dispersal Program	6,692,000	1,973,000	1,823,000	773,000	1,623,000	500,000	NC	
7. Integrated Animal Health and Production Services	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	NC	
8. Modernization/Improvement of Agricultural Facilities	-	7,000,000	2,000,000	1,400,000	1,400,000	1,100,000	1,100,000	C
a. Soils Laboratory	1,300,000	500,000	200,000	200,000	200,000	200,000	C	
b. Albay Breeding Stational Center	1,300,000	500,000	200,000	200,000	200,000	200,000	C	
c. Albay Dairy Plant	1,300,000	500,000	200,000	200,000	200,000	200,000	C	
d. Parapoto Livestock/Poultry Production and Training Center	1,500,000	300,000	300,000	300,000	300,000	300,000	C	
e. Food Laboratories	1,600,000	200,000	500,000	500,000	200,000	200,000	C	
9. Product Development Assistance Program	1,500,000	300,000	300,000	300,000	300,000	300,000	NC	
10. Agri Fairs/Food Festival	1,500,000	300,000	300,000	300,000	300,000	300,000	NC	
11. Food Terminal/Ice Plant and Cold Storage Facilities	50,500,000	500,000	15,000,000	15,000,000	10,000,000	10,000,000	C	
12. Inland Fisheries Development	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	NC	

Soucee:Provincial Project and Develoement Office, Albay Province

Table XII5.7.5 Masterlist of Programs and Projects by Sector for Albay Province(2/4)

Project Title/Location	Total Estimated Cost (P)	Annual Cost					Indicate if Capital or Non-Capital
		2000	2001	2002	2003	2004	
ECONOMIC : <u>Agriculture</u>							
13. Marine Fisheries Development	10,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	NC
14. Coastal Resources Conservation Program	5,500,000	1,400,000	1,400,000	900,000	900,000	900,000	
a. Artificial Reef	1,000,000	200,000	200,000	200,000	200,000	200,000	NC
b. Mangrove Rehab.	1,000,000	200,000	200,000	200,000	200,000	200,000	NC
c. Marine Reserve/ Fish Sanctuary	1,600,000	500,000	500,000	200,000	200,000	200,000	NC
d. Fisheries Regulatory Project	1,900,000	500,000	500,000	300,000	300,000	300,000	NC
15. Social Capital Formation for Agricultural and Fishery Communities	1,000,000	200,000	200,000	200,000	200,000	200,000	NC
Total <u>Agriculture</u>	146,892,000	21,363,000	35,013,000	33,463,000	32,853,000	24,200,000	
ECONOMIC: <u>Tourism</u>							
16. Tourism Promotion Program	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	NC
Sub Total	50,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	C
ECONOMIC : <u>Trade and Industry</u>							
17. Product Development and Promotion of Export Commodities	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	NC
18. Enterprise Development Program	2,500,000	500,000	500,000	500,000	500,000	500,000	NC
19. Investment Promotion Program	2,500,000	500,000	500,000	500,000	500,000	500,000	NC
20. Public Employment Services	1,000,000	200,000	200,000	200,000	200,000	200,000	NC
Sub Total	11,000,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	
ECONOMIC: <u>Environment</u>							
21. Community Forestry Program	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	NC
22. Reforestation/Watershed Rehab. Program	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	NC
23. Wildlife and Forest Parks	10,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	NC
24. Clean and Green Program	1,500,000	300,000	300,000	300,000	300,000	300,000	NC
25. Ecological Waste Management Program	1,500,000	300,000	300,000	300,000	300,000	300,000	NC
Total <u>Environment</u>	23,000,000	4,600,000	4,600,000	4,600,000	4,600,000	4,600,000	
Total <u>Economic</u>	235,892,000	39,163,000	52,813,000	51,263,000	50,653,000	42,000,000	
SOCIAL: <u>Education</u>							
26. Educational Support Program	2,500,000	500,000	500,000	500,000	500,000	500,000	NC
a. Formal Education	1,500,000	300,000	300,000	300,000	300,000	300,000	NC
b. Non-Formal Education	1,000,000	200,000	200,000	200,000	200,000	200,000	NC

Table XII.5.7.5 Masterlist of Programs and Projects by Sector for Albay Province(3/4)

Project Title/Location	Total Estimated Cost (P)	Annual Cost					Indicate if Capital or Non-Capital
		2000	2001	2002	2003	2004	
SOCIAL: Health							
27. Intergrated Family Planning, Material and Child Health Care and Pop'n. Management Program	153,179,460	25,090,410	27,599,451	30,359,396	33,395,335	36,734,868	NC
28. Disease Prevention and Control Program	114,773,974	18,799,689	20,679,657	22,747,622	25,022,384	27,524,622	NC
29. Hospital Facilities Modernization Program	139,781,146	22,895,800	25,185,380	27,703,918	30,474,309	33,521,739	C
30. Medical Surgical Outreach Project	6,105,100	1,000,000	1,100,000	1,210,000	1,331,000	1,464,100	NC
Sub Total	413,839,680	67,785,899	74,564,488	82,020,936	90,223,028	99,245,329	
SOCIAL : Social Services							
31. Emergency Assistance Program	124,405,087	20,999,638	22,937,328	24,880,017	26,822,707	28,765,397	NC
a. Aid to individuals/ Families in Crisis Situation	300,000	60,000	60,000	60,000	60,000	60,000	NC
b. Emergency Disaster Relief Program	121,405,087	20,399,638	22,337,328	24,280,017	26,222,707	28,165,397	NC
c. Emergency Shelter Assistance							
d. Food for Work/Cash for Work							
32. Child and Youth Welfare Program	1,700,000	700,000	250,000	250,000	250,000	250,000	C
Total	13,000,000	2,600,000	2,600,000	2,600,000	2,600,000	2,600,000	NC
a. Day Care Services Project	1,500,000	300,000	300,000	300,000	300,000	300,000	NC
b. Child Minding Center	900,000	500,000	100,000	100,000	100,000	100,000	C
c. Integrated Human Res. Devt. Program for Youth	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	NC
d. Supplemental Feeding	1,500,000	300,000	300,000	300,000	300,000	300,000	NC
e. Establishment of Resource Center	800,000	200,000	150,000	150,000	150,000	150,000	C
f. Training on Early Childhood Care and Devt.	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	NC
33. Program for Persons w/ Disabilities & Senior Citizens	1,050,000	210,000	210,000	210,000	210,000	210,000	NC
a. Physical Restoration Service	300,000	60,000	60,000	60,000	60,000	60,000	NC
b. Capability Enhancement Program for PWDs and Senior Citizens	750,000	150,000	150,000	150,000	150,000	150,000	NC

Table XII5.7.5 Masterlist of Programs and Projects by Sector for Albay Province(4/4)

Project Title/Location	Total Estimated Cost (P)	Annual Cost					Indicate if Capital or Non-Capital
		2000	2001	2002	2003	2004	
SOCIAL : Social Services							
34. Rehabilitation Program for Disaster Victims	25,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	C
SOCIAL : Housing							
35. Resettlement Project	25,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	C
SOCIAL : Peace and Order/ Disaster Mgt							
36. Disaster Mgt. Program	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	C
	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	NC
Sub Total	10,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	
37. Public Safety and Security Program	7,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	C
	7,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	NC
Sub Total	15,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	
Total Peace & Order/Disaster Mitigation	25,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	
Total Social	631,494,767	107,795,537	116,061,816	125,460,953	135,605,735	146,570,726	
INFRASTRUCTURE:							
38. Road Opening and Upgrading	400,000,000	80,000,000	80,000,000	80,000,000	80,000,000	80,000,000	C
39. Construction and Repair of Bridges	85,000,000	17,000,000	17,000,000	17,000,000	17,000,000	17,000,000	C
40. Electrification Project	86,700,000	11,700,000	11,700,000	8,650,000	4,650,000	50,000,000	C
41. Water Supply System	140,046,000	102,572,000	10,407,000	9,867,000	8,200,000	9,000,000	C
42. Flood Control and Erosion Control System	248,470,000	72,240,000	59,140,000	54,040,000	33,050,000	30,000,000	C
43. Irrigation Facilities	339,750,000	134,050,000	58,000,000	61,350,000	46,350,000	40,000,000	C
44. Farm-to-Market Roads	151,260,000	68,450,000	27,150,000	15,460,000	20,200,000	20,000,000	C
45. Multi-Purpose Drying Pavements	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	C
Sub Total	1,456,226,000	487,012,000	264,397,000	247,367,000	210,450,000	247,000,000	
Economic Sector:							
Sub-total for Capital E	164,460,000	23,620,000	36,920,000	36,920,000	40,500,000	26,500,000	
Sub-total for NC Exp.	71,432,000	15,543,000	15,893,000	14,343,000	10,153,000	15,500,000	
	235,892,000						
Social Sector							
Sub-total for Capital E	205,681,146	36,795,800	38,185,380	40,703,918	43,474,309	46,521,739	
Sub-total for NC Exp.	425,813,621	70,999,737	77,876,436	84,757,035	92,131,426	100,048,987	
	631,494,767						
Infra Sector:							
Sub-total for Capital E	1,456,226,000	487,012,000	264,397,000	247,367,000	210,450,000	247,000,000	
GRAD TOTAL							
	2,323,612,767	633,970,537	433,271,816	424,090,953	396,708,735	435,570,726	
Total for Capital Expense							
	1,826,367,146	547,427,800	339,502,380	324,990,918	294,424,309	320,021,739	
Total for Non-Capital Expense							
	497,245,621	86,542,737	93,769,436	99,100,035	102,284,426	115,548,987	
GRAD TOTAL							
	2,323,612,767	633,970,537	433,271,816	424,090,953	396,708,735	435,570,726	

Table XII5.7.6 Growth Rate of Productivity for Agricultural Products

	Item	GRDP (Milli. Pesos; 1998 Prices)		Growth Rate
		1999	2005	
Albay Province	Rice	820	984	1.20
	Corn	168	235	1.40
	Vegetables	50	67	1.35
	Rootcrops	108	146	1.35
	Banana	82	106	1.30
	Coconut	312	436	1.40
	Abaca	567	737	1.30
	Industrials Crops	34	52	1.50
	Other Crops	345	414	1.20
	Livestock	1,312	1,574	1.20
	Poultry	73	87	1.20
	Fishery	40	48	1.20
	Total	3,909	4,885	1.25
Study Area	Rice	440	549	1.25
	Corn	113	164	1.45
	Vegetables	35	49	1.40
	Rootcrops	61	85	1.40
	Banana	46	62	1.35
	Coconut	181	263	1.45
	Abaca	315	425	1.35
	Industrials Crops	25	39	1.56
	Other Crops	103	128	1.25
	Livestock	820	1,021	1.25
	Poultry	56	70	1.25
	Fishery	19	24	1.25
	Total	2,213	2,878	1.30

Source : JICA Study Team

Table XII.5.7.7 Technical Coefficient Matrix (1994)

NO.	Sub-Sector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
1	Palay	0.02975	0.00000	0.00141	0.00000	0.00000	0.00018	0.00000	0.00049	0.00000	0.00044	0.00000	0.00000	0.04472	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00530	0.01102
2	Corn	0.00000	0.05593	0.00006	0.00000	0.00014	0.00024	0.00000	0.00006	0.00107	0.00604	0.02137	0.00000	0.00000	0.01509	0.00000	0.00000	0.00002	0.00000	0.00000	0.00000	0.00192	0.000398
3	Vegetables	0.00000	0.00000	0.04307	0.00000	0.00061	0.00000	0.00000	0.00026	0.00121	0.01130	0.00040	0.00000	0.00000	0.00429	0.00000	0.00006	0.00344	0.00001	0.00000	0.00000	0.00080	0.001160
4	Roots and tubers	0.00000	0.00000	0.00000	0.00000	0.00001	0.00000	0.00000	0.00013	0.00177	0.01791	0.00059	0.00000	0.00000	0.00060	0.00000	0.00000	0.00014	0.00000	0.00000	0.00000	0.00019	0.00037
5	Banana	0.00000	0.00000	0.00004	0.00001	0.00000	0.00001	0.00000	0.00000	0.00026	0.00000	0.00000	0.00000	0.00000	0.00093	0.00000	0.00000	0.00133	0.00000	0.00000	0.00000	0.00017	0.00035
6	Cocunut	0.00000	0.00000	0.00000	0.00000	0.00002	0.00078	0.00000	0.00036	0.00000	0.00050	0.00000	0.00000	0.00000	0.01129	0.00000	0.00000	0.00009	0.00000	0.00000	0.00000	0.00138	0.00283
7	Abaca	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00124	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00014	0.00030	0.00030
8	Industrial Crops	0.00000	0.00057	0.00007	0.00000	0.00496	0.00005	0.01747	0.01434	0.00178	0.00000	0.00000	0.00000	0.00000	0.02786	0.00000	0.00000	0.00036	0.00001	0.00000	0.00000	0.00337	0.00693
9	Other Crops	0.07931	0.05298	0.03555	0.02026	0.07851	0.03788	0.05694	0.06340	0.05461	0.06807	0.04780	0.00007	0.00007	0.00632	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00201	0.00413
10	Livestock	0.00000	0.00000	0.00000	0.00000	0.00000	0.00101	0.00000	0.00003	0.00187	0.03772	0.00267	0.00000	0.00000	0.00235	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00601
11	Poultry	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00016	0.00032	0.04256	0.00000	0.00000	0.01667	0.00000	0.00065	0.00078	0.00000	0.00000	0.00004	0.00021	0.00451
12	Fishery	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06807	0.00000	0.01989	0.00011	0.00052	0.00102	0.00001	0.00000	0.00000	0.00284	0.00641
	Sub-Total of Agricultural Sector	0.10905	0.10947	0.08019	0.14686	0.10762	0.04915	0.07441	0.07934	0.06249	0.14230	0.11538	0.06814	0.17216	0.00011	0.00052	0.00166	0.00720	0.00004	0.00000	0.00073	0.02326	0.04844
13	Mining & Quarrying	0.00000	0.00000	0.00000	0.00000	0.00039	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000	0.00024	0.04913	0.01868	0.00186	0.00001	0.00002	0.00000	0.00000	0.00647	0.01212
14	Manufacturing	0.05936	0.06086	0.06098	0.03994	0.17061	0.05555	0.21735	0.10791	0.06197	0.16872	0.23072	0.13720	0.13720	0.33850	0.28591	0.33614	0.31269	0.19210	0.02931	0.09796	0.11490	0.23883
15	Construction	0.00000	0.00009	0.00001	0.00001	0.00006	0.00046	0.00000	0.00035	0.00041	0.00081	0.00090	0.00450	0.00101	0.01047	0.01047	0.00251	0.00459	0.03441	0.00901	0.00901	0.03876	0.01352
16	Electricity, Gas & Water	0.00002	0.00353	0.00513	0.00021	0.01557	0.00233	0.01062	0.00764	0.00710	0.00874	0.01842	0.01047	0.01047	0.02293	0.00478	0.05156	0.01016	0.03830	0.01658	0.02589	0.02508	0.04044
	Sub-Total of Industrial Sector	0.05937	0.06448	0.06613	0.04017	0.18662	0.05834	0.22797	0.11591	0.06948	0.17827	0.25004	0.15240	0.15240	0.31984	0.31984	0.39277	0.32535	0.23499	0.08032	0.13286	0.18520	0.30491
17	Transportation & Communication	0.01204	0.01166	0.00669	0.00922	0.02112	0.00806	0.01529	0.01944	0.01573	0.02159	0.01771	0.02282	0.02151	0.02273	0.00256	0.03097	0.01698	0.02954	0.03058	0.04099	0.04681	0.04681
18	Trade & Tourism	0.00863	0.00831	0.00447	0.00708	0.02149	0.00540	0.04015	0.00825	0.00525	0.02435	0.02358	0.01126	0.04882	0.04446	0.04395	0.06988	0.04424	0.01605	0.02111	0.03113	0.04479	0.04479
19	Community, Social & Personal Services	0.00650	0.00017	0.00034	0.00076	0.00152	0.00414	0.00000	0.00785	0.02276	0.01216	0.00721	0.00009	0.00334	0.00087	0.00150	0.01610	0.03975	0.01710	0.05701	0.02125	0.06367	0.06367
20	Financing, Insurance, Real Estate & Business Services	0.01442	0.00577	0.00210	0.00156	0.02151	0.00828	0.01527	0.00757	0.02651	0.01449	0.02161	0.01630	0.02052	0.07576	0.01799	0.06785	0.03547	0.07627	0.06753	1.09624	0.09184	0.09184
21	Government Services	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	Sub-Total of Service Sector	0.04159	0.02590	0.01360	0.01862	0.06565	0.02589	0.07072	0.04310	0.07024	0.07258	0.07010	0.05047	0.05047	0.14382	0.06599	0.18481	0.13644	0.13896	0.17623	1.18962	1.24712	1.24712
TI	Total Intermediate Inputs	0.21002	0.19986	0.15992	0.20565	0.35990	0.13338	0.37309	0.23835	0.20221	0.39315	0.43552	0.27101	0.43765	0.67794	0.46377	0.45928	0.51183	0.39691	0.37863	0.21932	0.30981	0.30981
CE	Compensation of Employees	0.18346	0.29016	0.34112	0.34881	0.29867	0.36384	0.33855	0.29657	0.27856	0.21150	0.19017	0.17266	0.17548	0.08541	0.16029	0.09210	0.16307	0.14647	0.24425	0.11939	0.66175	0.66175
DEPN	Depreciation	0.02193	0.01370	0.02150	0.01403	0.07590	0.04961	0.04363	0.04763	0.06972	0.06857	0.07936	0.07829	0.10283	0.10504	0.02792	0.05897	0.14343	0.10821	0.04143	0.05896	0.03722	0.02837
IT-S	Indirect Taxes less Subsidies	0.01286	0.01407	0.01046	0.00902	0.06456	0.00979	0.03591	0.02518	0.01170	0.01939	0.01982	0.02924	0.02836	0.01744	0.02836	0.01744	0.02313	0.02396	0.04193	0.03010	0.04745	0.00000
OS	Operating Surplus	0.57173	0.48221	0.46700	0.42248	0.20097	0.44338	0.20881	0.39227	0.43780	0.30739	0.27512	0.44880	0.25352	0.18037	0.29952	0.28206	0.19294	0.19294	0.37326	0.28806	0.57662	0.00007
TPI	Total Primary Inputs	0.78998	0.80014	0.84008	0.79435	0.64010	0.86662	0.62691	0.76165	0.79779	0.60685	0.56448	0.72899	0.56235	0.32206	0.53623	0.54072	0.48817	0.48817	0.60309	0.62137	0.78068	0.69019
TI	Total Inputs	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

Source : 1994 Input-Output Accounts of the Philippines, National Statistical Coordination Board in Cooperation with National Statistics Office.

Note : Category of Industrial Sub-Sector is based on Statistics of Albay Province.

Table XIII.7.8 Inverse Coefficient Matrix (1994)

NO.	Sub-Sector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Forward Linkage	
1	Palay	1.0366	0.0059	0.0071	0.0041	0.0155	0.0053	0.0187	0.0104	0.0065	0.0162	0.0207	0.0127	0.0215	0.0771	0.0245	0.0283	0.0269	0.0136	0.0181	0.0053	0.0110	0.8320	
2	Corn	0.0022	1.0614	0.0021	0.0015	0.0059	0.0021	0.0068	0.0037	0.0035	0.0124	0.0312	0.0046	0.0077	0.0277	0.0088	0.0102	0.0097	0.0054	0.0066	0.0019	0.0040	0.7322	
3	Vegetables	0.0009	0.0008	1.0457	0.0005	0.0027	0.0007	0.0024	0.0016	0.0022	0.0143	0.0030	0.0015	0.0026	0.0086	0.0030	0.0034	0.0035	0.0068	0.0060	0.0008	0.0016	0.6679	
4	Roots and tubers	0.0004	0.0003	0.0003	1.1451	0.0007	0.0003	0.0007	0.0006	0.0024	0.0220	0.0015	0.0004	0.0007	0.0022	0.0008	0.0009	0.0009	0.0018	0.0008	0.0002	0.0004	0.7102	
5	Banana	0.0002	0.0001	0.0002	0.0001	1.0243	0.0001	0.0005	0.0005	0.0002	0.0004	0.0005	0.0003	0.0003	0.0005	0.0017	0.0006	0.0007	0.0007	0.0012	0.0019	0.0002	0.0004	0.6214
6	Coconut	0.0015	0.0015	0.0014	0.0010	0.0040	1.0112	0.0048	0.0029	0.0016	0.0045	0.0053	0.0032	0.0034	0.0193	0.0062	0.0072	0.0069	0.0055	0.0047	0.0014	0.0028	0.6618	
7	Abaca	0.0002	0.0002	0.0001	0.0001	0.0004	0.0001	1.0005	0.0003	0.0002	0.0004	0.0006	0.0003	0.0006	0.0021	0.0007	0.0008	0.0007	0.0004	0.0005	0.0001	0.0003	0.6060	
8	Industrial Crops	0.0038	0.0044	0.0036	0.0026	0.0150	0.0033	0.0295	1.0209	0.0060	0.0100	0.0130	0.0079	0.0134	0.0477	0.0153	0.0177	0.0177	0.0169	0.0117	0.0034	0.0069	0.7591	
9	Other Crops	0.0887	0.0616	0.0415	0.0261	0.0912	0.0425	0.0684	0.0718	1.0606	0.0821	0.0621	0.0048	0.0080	0.2833	0.0091	0.0105	0.0101	0.0147	0.0123	0.0099	0.0029	0.0060	1.0732
10	Livestock	0.0034	0.0033	0.0031	0.0023	0.0086	0.0039	0.0103	0.0055	0.0055	1.0479	0.0142	0.0068	0.0115	0.0410	0.0133	0.0153	0.0147	0.0123	0.0099	0.0029	0.0060	0.7454	
11	Poultry	0.0024	0.0024	0.0022	0.0016	0.0061	0.0020	0.0074	0.0039	0.0028	0.0066	0.0078	0.0102	0.0079	0.0084	0.0297	0.0097	0.0111	0.0115	0.0105	0.0081	0.0022	0.0045	0.7148
12	Fishery	0.0030	0.0030	0.0027	0.0021	0.0077	0.0025	0.0093	0.0049	0.0032	0.0078	0.0102	0.0079	0.0130	0.0369	0.0124	0.0146	0.0147	0.0159	0.0103	0.0028	0.0064	0.7580	
	Sub-Total of Agricultural Sector	1.1431	1.1450	1.1101	1.1872	1.1820	1.0740	1.1592	1.1270	1.0947	1.2245	1.2150	1.1269	0.9532	3.224	1.043	1.206	0.1172	0.0922	0.0855	0.0233	0.0484	8.8820	
13	Mining & Quarrying	0.0064	0.0064	0.0060	0.0044	0.0171	0.0055	0.0201	0.0107	0.0070	0.0169	0.0224	0.0140	0.0280	0.0828	0.0453	0.0324	0.0290	0.0149	0.0196	0.0065	0.0121	0.8449	
14	Manufacturing	0.1280	0.1287	0.1211	0.0890	0.3368	0.1102	0.4042	0.2153	0.1401	0.3405	0.4498	0.2757	0.4657	1.6722	0.5308	0.6135	0.5838	0.2947	0.3914	0.1149	0.2388	4.5895	
15	Construction	0.0014	0.0011	0.0008	0.0006	0.0028	0.0014	0.0027	0.0019	0.0024	0.0034	0.0042	0.0070	0.0323	0.0069	1.0167	0.0070	0.0083	0.0068	0.0084	0.0388	0.0135	0.7015	
16	Electricity, Gas & Water	0.0061	0.0093	0.0103	0.0039	0.0302	0.0071	0.0270	0.0169	0.0146	0.0236	0.0374	0.0220	0.0748	0.0530	0.0270	1.0764	0.0349	0.0506	0.0577	0.0251	0.0404	0.9895	
	Sub-Total of Industrial Sector	0.1418	0.1455	0.1382	0.0979	0.3870	0.1243	0.4541	0.2448	0.1641	0.3844	0.5137	0.3186	1.6008	1.8149	1.6198	1.7294	0.6560	0.3671	0.4771	0.1852	0.3049	21.3237	
17	Transportation & Communication	0.0206	0.0196	0.0128	0.0155	0.0391	0.0141	0.0363	0.0307	0.0246	0.0406	0.0399	0.0372	0.0508	0.0570	0.0505	0.0297	0.0290	0.1181	0.0388	0.0410	0.0468	1.0964	
18	Trade & Tourism	0.0192	0.0186	0.0132	0.0148	0.0466	0.0137	0.0684	0.0245	0.0178	0.0506	0.0562	0.0319	0.0511	0.0978	0.0823	0.0852	0.1127	0.1607	0.0756	0.0311	0.0448	1.2106	
19	Community, Social & Personal Services	0.0108	0.0031	0.0025	0.0025	0.0076	0.0066	0.0060	0.0123	0.0272	0.0188	0.0159	0.0033	0.0239	0.0128	0.0080	0.0075	0.0242	0.0157	0.0463	0.0213	0.0637	0.8033	
20	Financing, Insurance, Real Estate & Business Service	0.0262	0.0155	0.0095	0.0079	0.0442	0.0162	0.0399	0.0219	0.0394	0.0374	0.0487	0.0336	0.0957	0.0629	0.1119	0.0495	0.1074	0.1166	0.0630	0.0962	0.0918	1.2819	
21	Government Services	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.6003	
	Sub-Total of Service Sector	0.0768	0.0569	0.0381	0.0407	0.1376	0.0507	0.1505	0.0894	0.1090	0.1474	0.1588	0.1059	0.2215	0.2304	0.2527	0.1718	1.3072	1.3110	1.2236	1.1896	1.2471	43.0837	
	Output Multipliers	1.3617	1.3474	1.2864	1.3259	1.7066	1.2489	1.7638	1.4612	1.3679	1.7564	1.8875	1.5514	1.9155	2.3678	1.9768	2.0218	2.0804	1.7703	1.7862	1.3981	1.6005	0.4753	
	Backward Linkages	0.8174	0.8089	0.7722	0.7959	1.0245	0.7497	1.0588	0.8772	0.8211	1.0543	1.1330	0.9313	1.1499	1.4214	1.1867	1.2137	1.2489	1.0627	1.0723	0.8393	0.9608		

Source : 1994 Input-Output Accounts of the Philippines, National Statistical Coordination Board in Cooperation with National Statistics Office.

Note : Category of Industrial Sub-Sector is based on Statistics of Albay Province.

Table XII.5.8.1 Budget Structure of City/Municipalities in the Study Area (1999)

(Unit: 1,000 pesos)

City/Municipalities	IRA				Tax Revenue	Total Revenue	IRA/Total Revenue (%)	Total Expenditure
	Reserve for Calamity (5%)	Development Fund (20%)	Others	Sub-Total				
1. Legazpi City	9,715	38,861	145,730	194,307	53,967	248,274	78.3	248,274
2. Bacacay	1,398	5,592	20,971	27,961	1,935	29,896	93.5	29,896
3. Camalig	1,401	5,602	21,009	28,012	3,824	31,836	88.0	31,836
4. Daraga	2,046	8,184	30,689	40,919	19,394	60,313	67.8	60,313
5. Guinobatan	1,708	6,832	25,620	34,160	12,380	46,540	73.4	46,540
6. Ligao	2,036	8,146	30,546	40,728	11,734	52,462	77.6	52,462
7. Malilipot	787	3,150	11,811	15,748	1,848	17,596	89.5	17,596
8. Malinao	1,009	4,037	15,139	20,185	2,062	22,247	90.7	22,247
9. Sto. Domingo	853	3,413	12,797	17,063	3,125	20,188	84.5	20,188
10. Tabaco	2,070	8,278	31,043	41,390	19,742	61,132	67.7	61,132
Total	23,024	92,095	345,355	460,473	130,011	590,484	78.0	590,484

Source: Albay Province Budget Office

Table XII.5.8.2 Projection of Budget Structure of City/Municipalities in the Study Area (2005)

(Unit: 1,000 pesos)

City/Municipalities	IRA				Tax Revenue	Total Revenue	IRA/Total Revenue (%)	Total Expenditure
	Reserve for Calamity (5%)	Development Fund (20%)	Others	Sub-Total				
1. Legazpi City	16,334	65,336	245,010	326,680	90,732	417,413	78.3	417,413
2. Bacacay	2,234	8,937	33,513	44,683	3,092	47,776	93.5	47,776
3. Camalig	2,299	9,194	34,478	45,970	4,146	50,116	91.7	50,116
4. Daraga	3,627	14,508	54,405	72,539	21,260	93,799	77.3	93,799
5. Guinobatan	2,794	11,174	41,904	55,872	13,416	69,288	80.6	69,288
6. Ligao	2,910	11,642	43,657	58,209	12,473	70,682	82.4	70,682
7. Malilipot	1,133	4,534	17,001	22,668	1,966	24,635	92.0	24,635
8. Malinao	1,695	6,778	25,419	33,892	2,243	36,135	93.8	36,135
9. Sto. Domingo	1,542	6,167	23,125	30,833	3,435	34,268	90.0	34,268
10. Tabaco	3,793	15,172	56,893	75,858	21,744	97,602	77.7	97,602
Total	38,360	153,441	575,404	767,205	174,508	941,714	81.5	941,714

Source: JICA Study Team

**Table XII.5.8.3 Projection of Budget Structure of City/Municipalities in the Study Area (2005)
(Without Disaster Prevention Policy)**

(Unit: 1,000 pesos)

City/Municipalities	IRA				Tax Revenue	Total Revenue	IRA/Total Revenue (%)	Total Expenditure
	Reserve for Calamity (5%)	Development Fund (20%)	Others	Sub-Total				
1. Legazpi City	12,326	49,303	184,885	246,514	68,467	314,981	78.3	314,981
2. Bacacay	1,686	6,744	25,289	33,718	2,333	36,052	93.5	36,052
3. Camalig	1,734	6,938	26,017	34,689	4,736	39,425	88.0	39,425
4. Daraga	2,737	10,948	41,054	54,738	25,944	80,682	67.8	80,682
5. Guinobatan	2,108	8,432	31,621	42,161	15,280	57,441	73.4	57,441
6. Ligao	2,196	8,785	32,943	43,925	12,655	56,579	77.6	56,579
7. Malilipot	855	3,421	12,829	17,106	2,007	19,113	89.5	19,113
8. Malinao	1,279	5,115	19,181	25,575	2,613	28,188	90.7	28,188
9. Sto. Domingo	1,404	5,616	21,059	28,078	5,142	33,221	84.5	33,221
10. Tabaco	737	2,950	11,062	14,750	7,035	21,785	67.7	21,785
Total	27,063	108,251	405,940	541,254	146,212	687,466	78.7	687,466

Source: JICA Study Team

Table XII.5.8.4 Projection of Budget Structure of City/Municipalities in the Study Area (2020)

(Unit: 1,000 pesos)

City/Municipalities	IRA				Tax Revenue	Total Revenue	IRA/Total Revenue (%)	Total Expenditure
	Reserve for Calamity (5%)	Development Fund (20%)	Others	Sub-Total				
1. Legazpi City	89,888	359,553	1,348,325	1,797,766	499,313	2,297,079	78.3	2,297,079
2. Bacacay	10,972	43,888	164,579	219,439	15,186	234,624	93.5	234,624
3. Camalig	10,281	41,125	154,219	205,625	18,545	224,170	91.7	224,170
4. Daraga	17,631	70,523	264,462	352,616	103,345	455,961	77.3	455,961
5. Guinobatan	13,225	52,901	198,380	264,506	63,512	328,019	80.6	328,019
6. Ligao	13,058	52,231	195,868	261,157	55,961	317,118	82.4	317,118
7. Malilipot	5,073	20,293	76,097	101,463	8,802	110,264	92.0	110,264
8. Malinao	7,842	31,368	117,628	156,838	10,379	167,217	93.8	167,217
9. Sto. Domingo	7,736	30,944	116,041	154,721	17,237	171,958	90.0	171,958
10. Tabaco	19,620	78,481	294,303	392,403	112,482	504,885	77.7	504,885
Total	195,327	781,307	2,929,900	3,906,534	904,762	4,811,295	81.2	4,811,295

Source: JICA Study Team

**Table XII.5.8.5 Projection of Budget Structure of City/Municipalities in the Study Area (2020)
(Without Disaster Prevention Policy)**

(Unit: 1,000 pesos)

City/Municipalities	IRA				Tax Revenue	Total Revenue	IRA/Total Revenue (%)	Total Expenditure
	Reserve for Calamity (5%)	Development Fund (20%)	Others	Sub-Total				
1. Legazpi City	18,484	73,936	277,260	369,679	102,675	472,354	78.3	472,354
2. Bacacay	2,528	10,113	37,924	50,565	3,499	54,064	93.5	54,064
3. Camalig	2,601	10,404	39,016	52,021	7,102	59,123	88.0	59,123
4. Daraga	4,104	16,417	61,566	82,087	38,906	120,994	67.8	120,994
5. Guinobatan	3,161	12,645	47,420	63,226	22,914	86,140	73.4	86,140
6. Ligao	3,294	13,174	49,403	65,871	18,978	84,848	77.6	84,848
7. Malilipot	1,283	5,130	19,239	25,652	3,010	28,662	89.5	28,662
8. Malinao	1,918	7,671	28,765	38,353	3,918	42,271	90.7	42,271
9. Sto. Domingo	1,745	6,978	26,169	34,892	6,390	41,282	84.5	41,282
10. Tabaco	4,292	17,168	64,382	85,842	40,945	126,787	67.7	126,787
Total	43,409	173,638	651,142	868,189	248,337	1,116,526	77.8	1,116,526

Source: JICA Study Team

Table XII.5.8.6 Comparison of Achieved GRDP by City/Municipalities With Regard to Disaster Prevention Policy

(Unit: Milli. Peso)

City/Municipalities	Item	1998	1999	2004	2005	2006	2020	Average Annual Growth Rate (%) [1999/2020]
1. Legazpi City	With	3,410	3,659	5,654	6,151	6,892	33,852	11.2
	Without	3,410	3,659	4,442	4,642	4,769	6,961	3.1
2. Bacacay	With	1,336	1,434	2,121	2,291	2,548	11,253	10.3
	Without	1,336	1,434	1,667	1,729	1,776	2,593	2.9
3. Camalig	With	1,207	1,295	1,960	2,125	2,348	9,505	10.0
	Without	1,207	1,295	1,540	1,603	1,647	2,405	3.0
4. Daraga	With	2,126	2,281	3,689	4,044	4,494	19,659	10.8
	Without	2,126	2,281	2,898	3,052	3,135	4,577	3.4
5. Guinobatan	With	1,524	1,635	2,468	2,675	2,967	12,662	10.2
	Without	1,524	1,635	1,939	2,018	2,073	3,027	3.0
6. Ligao	With	1,889	2,027	2,726	2,897	3,202	12,999	9.3
	Without	1,889	2,027	2,141	2,186	2,246	3,279	2.3
7. Malilipot	With	626	671	908	966	1,068	4,325	9.3
	Without	626	671	713	729	749	1,094	2.4
8. Malinao	With	777	833	1,286	1,399	1,550	6,475	10.3
	Without	777	833	1,011	1,056	1,085	1,583	3.1
9. Sto. Domingo	With	598	642	1,055	1,159	1,291	5,818	11.1
	Without	598	642	829	875	899	1,312	3.5
10. Tabaco	With	2,288	2,455	4,085	4,500	5,021	23,277	11.3
	Without	2,288	2,455	3,209	3,396	3,489	5,092	3.5
Total	With	15,781	16,933	25,953	28,209	31,380	139,826	10.6
	Without	15,781	16,933	18,328	18,947	19,537	31,922	3.1

Source : JICA Study Team

**Table XII 6.1 Negative-Damage Rate of Agricultural Products by Mud Flow
in Case of Resettlement (Land Use Plan: Option-1)**

Year	Damage Rate for Difference of Agricultural Values by Return Period				
	2-Year	(5-3)-Year	(10-5)-Year	(20-10)-Year	(50-20)-Year
1	0.025000	0.500000	0.800000	0.900000	0.950000
2	0.000625	0.250000	0.640000	0.810000	0.902500
3	0.000016	0.125000	0.512000	0.729000	0.857375
4	0.000000	0.062500	0.409600	0.656100	0.814506
5	0.000000	0.031250	0.327680	0.590490	0.773781
6	0.000000	0.015625	0.262144	0.531441	0.735092
7	0.000000	0.007813	0.209715	0.478297	0.698337
8	0.000000	0.003906	0.167772	0.430467	0.663420
9	0.000000	0.001953	0.134218	0.387420	0.630249
10	0.000000	0.000977	0.107374	0.348678	0.598737
11	0.000000	0.000488	0.085899	0.313811	0.568800
12	0.000000	0.000244	0.068719	0.282430	0.540360
13	0.000000	0.000122	0.054976	0.254187	0.513342
14	0.000000	0.000061	0.043980	0.228768	0.487675
15	0.000000	0.000031	0.035184	0.205891	0.463291
16	0.000000	0.000015	0.028147	0.185302	0.440127
17	0.000000	0.000008	0.022518	0.166772	0.418120
18	0.000000	0.000004	0.018014	0.150095	0.397214
19	0.000000	0.000002	0.014412	0.135085	0.377354
20	0.000000	0.000001	0.011529	0.121577	0.358486
21	0.000000	0.000000	0.009223	0.109419	0.340562
22	0.000000	0.000000	0.007379	0.098477	0.323534
23	0.000000	0.000000	0.005903	0.088629	0.307357
24	0.000000	0.000000	0.004722	0.079766	0.291989
25	0.000000	0.000000	0.003778	0.071790	0.277390
26	0.000000	0.000000	0.003022	0.064611	0.263520
27	0.000000	0.000000	0.002418	0.058150	0.250344
28	0.000000	0.000000	0.001934	0.052335	0.237827
29	0.000000	0.000000	0.001547	0.047101	0.225936
30	0.000000	0.000000	0.001238	0.042391	0.214639
31	0.000000	0.000000	0.000990	0.038152	0.203907
32	0.000000	0.000000	0.000792	0.034337	0.193711
33	0.000000	0.000000	0.000634	0.030903	0.184026
34	0.000000	0.000000	0.000507	0.027813	0.174825
35	0.000000	0.000000	0.000406	0.025032	0.166083
36	0.000000	0.000000	0.000325	0.022528	0.157779
37	0.000000	0.000000	0.000260	0.020276	0.149890
38	0.000000	0.000000	0.000208	0.018248	0.142396
39	0.000000	0.000000	0.000166	0.016423	0.135276
40	0.000000	0.000000	0.000133	0.014781	0.128512
41	0.000000	0.000000	0.000106	0.013303	0.122087
42	0.000000	0.000000	0.000085	0.011973	0.115982
43	0.000000	0.000000	0.000068	0.010775	0.110183
44	0.000000	0.000000	0.000054	0.009698	0.104674
45	0.000000	0.000000	0.000044	0.008728	0.099440
46	0.000000	0.000000	0.000035	0.007855	0.094468
47	0.000000	0.000000	0.000028	0.007070	0.089745
48	0.000000	0.000000	0.000022	0.006363	0.085258
49	0.000000	0.000000	0.000018	0.005726	0.080995
50	0.000000	0.000000	0.000014	0.005154	0.076945

**Table XXII 6.2 Negative-Damage Rate of Structural Assets by Mud Flow
in Case of Resettlement (Land Use Plan: Option-1)**

Year	Damage Rate for Difference of Values of Sturctural Assets by Return Period				
	2-Year	(5-3)-Year	(10-5)-Year	(20-10)-Year	(50-20)-Year
1	0.75000	0.20000	0.10000	0.05000	0.02000
2	0.12500	0.10000	0.08000	0.04500	0.01900
3	0.03125	0.05000	0.06400	0.04050	0.01805
4	0.00781	0.02500	0.05120	0.03645	0.01715
5	0.00195	0.01250	0.04096	0.03281	0.01629
6	0.00049	0.00625	0.03277	0.02952	0.01548
7	0.00012	0.00313	0.02621	0.02657	0.01470
8	0.00003	0.00156	0.02097	0.02391	0.01397
9	0.00001	0.00078	0.01678	0.02152	0.01327
10	0.00000	0.00039	0.01342	0.01937	0.01260
11	0.00000	0.00020	0.01074	0.01743	0.01197
12	0.00000	0.00010	0.00859	0.01569	0.01138
13	0.00000	0.00005	0.00687	0.01412	0.01081
14	0.00000	0.00002	0.00550	0.01271	0.01027
15	0.00000	0.00001	0.00440	0.01144	0.00975
16	0.00000	0.00001	0.00352	0.01029	0.00927
17	0.00000	0.00000	0.00281	0.00927	0.00880
18	0.00000	0.00000	0.00225	0.00834	0.00836
19	0.00000	0.00000	0.00180	0.00750	0.00794
20	0.00000	0.00000	0.00144	0.00675	0.00755
21	0.00000	0.00000	0.00115	0.00608	0.00717
22	0.00000	0.00000	0.00092	0.00547	0.00681
23	0.00000	0.00000	0.00074	0.00492	0.00647
24	0.00000	0.00000	0.00059	0.00443	0.00615
25	0.00000	0.00000	0.00047	0.00399	0.00584
26	0.00000	0.00000	0.00038	0.00359	0.00555
27	0.00000	0.00000	0.00030	0.00323	0.00527
28	0.00000	0.00000	0.00024	0.00291	0.00501
29	0.00000	0.00000	0.00019	0.00262	0.00476
30	0.00000	0.00000	0.00015	0.00236	0.00452
31	0.00000	0.00000	0.00012	0.00212	0.00429
32	0.00000	0.00000	0.00010	0.00191	0.00408
33	0.00000	0.00000	0.00008	0.00172	0.00387
34	0.00000	0.00000	0.00006	0.00155	0.00368
35	0.00000	0.00000	0.00005	0.00139	0.00350
36	0.00000	0.00000	0.00004	0.00125	0.00332
37	0.00000	0.00000	0.00003	0.00113	0.00316
38	0.00000	0.00000	0.00003	0.00101	0.00300
39	0.00000	0.00000	0.00002	0.00091	0.00285
40	0.00000	0.00000	0.00002	0.00082	0.00271
41	0.00000	0.00000	0.00001	0.00074	0.00257
42	0.00000	0.00000	0.00001	0.00067	0.00244
43	0.00000	0.00000	0.00001	0.00060	0.00232
44	0.00000	0.00000	0.00001	0.00054	0.00220
45	0.00000	0.00000	0.00001	0.00048	0.00209
46	0.00000	0.00000	0.00000	0.00044	0.00199
47	0.00000	0.00000	0.00000	0.00039	0.00189
48	0.00000	0.00000	0.00000	0.00035	0.00179
49	0.00000	0.00000	0.00000	0.00032	0.00171
50	0.00000	0.00000	0.00000	0.00029	0.00162

Table XII 6.3 Farmgate Price for Main Agricultural Products

Items	Unit	Coconut (Copra)	Rice	Corn	Abaca	Banana	Rootcrops	Vegetables	Industrials Crops	Other Crops
International Market Price										
Exchange rate	US\$/ton	433	328			200				
	Peso/US\$	37.5	37.5			37.5				
Transportation Cost & Warehouse(30%)	Peso/ton	16,229	12,286			7,509				
Farm Gate Price		4,869	3,686			2,253				
Financial Price	Peso/ton	11,360	8,600	5,500	17,000	5,257	3,700	10,000	50,000	8,000
Production Cost										
Cost	Peso/ton	7,952	6,020	3,850	11,900	3,680	2,590	7,000	35,000	5,600
Net Income	Peso/ton	3,408	2,580	1,650	5,100	1,577	1,110	3,000	15,000	2,400
Economic Price	Peso/ton	9,929	7,517	4,807	14,858	4,594	3,234	8,740	43,700	6,992
Production Cost										
Conversion Factor(82%)		0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Cost	Peso/ton	6,521	4,937	3,157	9,758	3,017	2,124	5,740	28,700	4,592
Net Income	Peso/ton	3,408	2,580	1,650	5,100	1,577	1,110	3,000	15,000	2,400
Production/Ha.	Ton/ha.	1.81	5.13	2.82	2.31	6.67	13.57	5.78	7.96	9.70
Financial Price	Peso/ha.	20,541	44,097	15,491	39,314	35,044	50,215	57,839	397,764	77,638
Economic Price	Peso/ha.	17,953	38,541	13,539	34,360	30,628	43,888	50,552	347,645	67,856

Note: Farmgate price for copra, rice and banana are based in international market price by referring to "Commodity Markets and Development Countries" A World Bank Business Quarterly, Nov. 1998.

Table XII 6.4 Unit Value of Damageable Assets

(Price at 1999)

Kinds of Assets		Unit	Financial Price		Economic Price	
			1999	2020	1999	2020
Building	Residential House	Peso/Household	88,852	165,291	72,859	135,539
		Milli.Peso/Ha.	11.8	22.0	9.7	18.1
	Industrial Building	Peso/Building	1,001,000	2,788,749	820,820	2,286,774
		Milli.Peso/Ha.	57.2	159.4	46.9	130.7
	Commercial Building	Peso/Building	307,808	857,540	252,402	703,183
		Milli.Peso/Ha.	66.0	183.8	54.1	150.7
Public Facilities	Peso/Building	277,027	771,786	227,162	632,865	
	Milli.Peso/Ha.	59.4	165.4	48.7	135.6	
Indoor Movables	Residencial House	Peso/Building	44,426	123,769	36,429	101,491
		Milli.Peso/Ha.	5.9	11.0	4.9	9.0
	Industrial Building	Peso/Building	800,800	2,230,999	656,656	1,829,419
		Milli.Peso/Ha.	45.8	127.5	37.5	104.5
	Commercial Building	Peso/Building	430,931	1,200,556	353,363	984,456
		Milli.Peso/Ha.	92.3	257.3	75.7	211.0
Public Facilities	Peso/Building	304,729	848,965	249,878	696,151	
	Milli.Peso/Ha.	65.3	181.9	53.5	149.2	
Roads						
Major Road		Milli.Peso/km	7.5	20.9	6.2	17.1
Barangay Road		Milli.Peso/km	3.0	8.4	2.5	6.9
Railway		Milli.Peso/km	15.0	15.0	12.3	12.3
Bridges		Milli.Peso/km	11.3	11.3	9.2	9.2
Agricultural Products	Rice	Peso/Ha.	44,097	88,194	38,541	77,081
	Coconut	Peso/Ha.	20,541	41,083	17,953	35,906
	Corn	Peso/Ha.	15,491	30,982	13,539	27,078
	Banana	Peso/Ha.	35,044	70,088	30,628	61,257
	Abaca	Peso/Ha.	39,314	78,628	34,360	68,721
	Root Crops	Peso/Ha.	50,215	100,430	43,888	87,776
	Vegetables	Peso/Ha.	57,839	115,679	50,552	101,103
	Industrial Crops	Peso/Ha.	397,764	795,527	347,645	695,291
	Other Crops	Peso/Ha.	77,638	155,277	67,856	135,712

Note: 1. Values of assets except agricultural products are assumed to increase at the rate of 5% per annum by increase of de for building and quality improvement of materials of construction during the period from 1999 to 2020.
 2. Values of assets for agricultural products are assumed to increase to two times by improvement of productivity

Table XII 6.5 Unit Cost and Benefit of Development for Land Use Plan (Option-2&3)

(A) Cost in Economic Price

(Unit: Peso/ha.)

Sector	Present (1999)	Future	Increase
(1) Agriculture			
Production Cost			
Rice	25,312	48,092	22,780
Coconut	11,791	22,402	10,612
Vegetable	33,200	63,080	29,880
(2) Industry			
Land Acquisition		1,692,000	
Capital Cost			
Building		14,924,000	
Indoor Movables		11,939,200	
Sub-Total		26,863,200	
Land Development		1,160,278	
Total Capital Cost		29,715,478	
Annual Labor Cost		1,639,938	
Annual Materials		326,166	
Total O&M Cost		1,966,104	
(3) Service			
Land Acquisition		3,384,000	
Capital Cost			
Building		9,178,260	
Indoor Movables		6,424,782	
Sub-Total		15,603,042	
Land Development		580,139	
Total Capital Cost		19,567,181	
Annual Labor Cost		2,021,756	
Annual Materials		163,083	
Total O&M Cost		2,184,839	

(2) Benefit in Economic Price

(Unit: Peso/ha.)

Sector	Present (1999)	Future	Increase
(1) Agriculture			
Enhancement of Productivity			
Rice	38,542	77,081	38,539
Coconut	17,953	35,906	17,953
Vegetable	50,552	101,103	50,551
(2) Industry			
Annual Labor Cost (Income)		1,639,938	
Value Added Labor Cost (income)		2,459,907	
Total Benefit		4,099,845	
(3) Service			
Annual Labor Cost (Income)		2,021,756	
Value Added Labor Cost (income)		3,032,634	
Total Benefit		5,054,390	