

Table 4.7.1 List of Projects under CBFMA Within the Study Area

	Name of PO	Responsible			PO registration	CBFMA signed(3)	Agreement NO.	Other Tenurial Instruments					CBFM Area	No. of member	Ave ha per memb	
		CENRO	Municipality	Barangay				ISA(CSC)		CFSA		CADC				
								Yes(1)	Yr	Yes(1)	Year	Yes(1)				
	CBFMA						No(0)		No(0)		No(0)					
	Nueva Vizcaya															
1	Gadagad Vegetable and Fruit Tree Growers Association	Aritao	Santa Fe	Baliling		10/31/00	20119014	0				1	70	28	2.50	
2	Bakir Pagbiagan ti Pagilian CBFM Association	Aritao	Quezon	Runruno		12/4/00	20119015	0				2	222	42	5.29	
3	Latar Ilocano Minority Farmers Association Inc.	Aritao	Aritao	Latar		12/10/99	20019007	0				3	438	52	8.41	
4	Buyasyas Iwak Tribal Council	Aritao	Kayapa	Buyasyas		11/23/00	20219013	0				4	1,021	120	8.51	
5	Yaway Farmers Multi-Purpose Cooperative Inc.	Aritao	Aritao	Yaway		2/1/95	20219012	1				5	1,342	58	23.13	
6	Association of Upland Farmers of Singian Nueva Vizcaya Inc.	Bayombong	Bagabag	Pogonsino		8/25/00	20119010	0				6	64	42	1.52	
7	Singian Agro-Forest Association	Bayombong	Bagabag	Tuao South		10/17/00	20119011	0				7	85	61	1.39	
8	Socio-Economic and Environmental Development Cooperative Inc.	Bayombong	Quezon	Dagupan		12/9/99	20019008	1				8	2,200	100	22.00	
9	Federation of Vista Hills, Kakongkong and Kakilingan Upland Farmers	Bayombong	Bayombong	Buena Vista		3/29/99	20019005	1				9	3,000	207	14.49	
10	Mabasa Tree Planters and Growers Association, Inc.	Dupax	Dupax del Norte	Mabasa		1/27/98	20019001	0				10	20	25	0.80	
11	Banila Community-Based Association Inc.	Dupax	Dupax del Sur	Banila		7/12/99	20019006	1				11	225	68	3.31	
12	Bitnong Guijo Greeners Association Inc.	Dupax	Dupax del Norte	Bitnong		3/23/99	20019004	1				12	328	86	3.81	
												Sub-total	9,014	889	10.14	
	Quirino															
1	San Manuel-Victoria Forest Developers Cooperative	Aglipay	Aglipay	San Manuel, Victoria	6/19/96	11/21/96	20218301	1				1	3,176	156	20.36	
2	Alicia Sustainable Resource Development (ASREDECO)	Aglipay	Aglipay	Alicia	9/17/97	10/17/97	20218305	1	-			2	1,844	124	14.87	
3	Balligui Community Forestry and Development Cooperative Inc	Aglipay	Maddela	Balligui, Jose Ancheta	1/23/96	6/24/97	20218302	1				3	4,400	74	59.46	
4	Gomez Farmers Multi-Purpose Cooperative, Inc	Naptipunan	Cabaroguis	Gomez		9/3/00	-	1				4	620	40	15.50	
5	Ilongot Livelihood Association Inc (ILAI)	Nagtipunan	Nagtipunan	Landingan	1/28/92	12/16/95	20218304	0		1	1993	1	5	1,752	63	27.81
6	Nuh-uh-uhhaan Inc	Nagtipunan	Nagtipunan	Asaklat	3/8/94	6/15/95	20218307	1		1	1989	0	6	2,600	56	46.43
7	Kadikitan Association for Community Development (KAFCDI)	Nagtipunan	Nagtipunan	Kadikitan, Landingan	12/14/93	12/16/94	20218303	0		1	1997	1	7	4,958	176	28.17
8	Anak Intercultural Organization	Nagtipunan	Nagtipunan	Anak	4/30/96	6/15/96	20219960	1		1	1993	0	8	5,315	117	45.43
9	Wasid Ilongot Tribe Association Inc (WITAI)	Nagtipunan	Nagtipunan	Wasid	6/17/94	9/23/95	20219953	0		1	1993	1	9	6,420	59	108.81
10	Sangbay Anak Integrated Farmers Association Inc.	Naptipunan	Nagtipunan	Sangbay		8/27/97	20218309	1				10	134	32	4.19	
11	Villa Ventura Multi-Purpose Cooperative Inc.	Penro Quirino	Aglipay	Victoria	10/23/95	9/15/00	20218313	0				11	776	35	22.17	
12	Rafael Palma Multi-Purpose Cooperative, Inc.	Penro Quirino	Diffun	Rafael Palma		9/1/00	20218311	1				12	149	44	3.38	
13	Ifugao Village Aphochan Multi-Purpose Cooperative (IVAMCO)	Penro Quirino	Diffun	Ifugao Village		6/7/00	20218310	0				13	1,000	30	33.33	
14	Baguio Village Intercultural Association	Penro Quirino	Diffun	Baguio Village	4/4/94	8/29/95	20218308	1	1984	1	1990	14	1,990	120	16.58	
15	Don Mariano Perez Farmers Multi-Purpose Cooperative	Penro Quirino	Diffun	Don Mariano Perez	3/24/94	6/15/95	20218306	0				15	3,100	137	22.63	
16	Salinong T. Campamento Association Inc.	Penro Quirino	Diffun	Campamento		-	20218314	0				16	416	100	4.16	
												Sub-total	38,649	1,363	28.36	
	Ifugao															
1	Bannao Community Organization Inc.	Lamut	Banauc	Bannao		-	-	0				1	200	70	2.86	
2	Fed of Responsive Assosn for Magat Ecology, Inc	Lamut	Lamut	Binpal, Jolowon, Nayon		on process	on process	0				2	3,027	407	7.44	
3	Dalligan Multipurpose Development Association	Lamut	Kiangnan	Dalligan		11/19/99	5037	0				3	274	25	10.97	
4	Hapid Agro-forestry Developers Association Inc.	Lamut	Lamut	Hapid		12/24/00	5054	0				4	101	56	1.81	
5	Lingay Farmers Association	Lamut	Kiangnan	Lingay		11/19/99	5036	0				5	107	32	3.34	
6	Mayoyao Environment Development Association Inc.	Alfonso Lista	Mayoyao	Mayayoyao		-	5025	0				6	2,000	836	2.39	
7	Nunhabatan Greeners Livelihood Association Inc.	Lamut	Lamut	Hapid		3/29/99	5023	1				7	241	50	4.82	
												Sub-total	5,950	1,476	4.03	
	Isabela															
1	Rizal Integrated Development Multi-Purpose Cooperative Inc.	Cauayan	San Guillermo	Rizal & Burgos		5/1/97	-	1				1	5,000	100	50.00	
2	Ayangan Dappig Agro-Forestry Development Association	San Isidro	San Agustin	Dappig		-	-	0				2	488	67	7.28	
3	Taleb Upland Farmers Multi-Purpose Coop. Inc.	San Isidro	Cordon	Taleb, Dallao		12/22/98	20216660	0				3	203	37	5.49	
												Sub-total	5,691	204.00	27.89	
												Total	59,304	3,932	15.08	

Table 4.7.2 Funding Sources of CBFMA Projects within the Study Area

	Name of PO	CBFM Area	DENR funded area	%	Foreign agencies	Foreign-funded area	%	Assit Perd.	On-going	Currenty forgn funded	%
		(ha)	(ha)			(ha)				(ha)	
	Nueva Vizcaya										
1	Gadagad Vegetable and Fruit Tree Growers Ass.	70.00	70.00		-				0		
2	Bakir Pagbiagan ti Pagilian CBFM Associatio	222.00	222.00		-				0		
3	Latar Ilocano Minority Farmers Ass.	437.50	437.50		-				0		
4	Buyasayas Iwak Tribal Council	1,021.00			CASCADE, SECAR	1,021.00			1	1,021.00	
5	Yaway Farmers Multi-Purpose Cooperative Inc.	1,341.50	1,341.50		-				0		
6	Association of Upland Farmers of Singian	64.00	64.00		-				0		
7	Singian Agro-Forest Association	84.82	84.82		-				0		
8	S.E.E.D.Coop. Inc.	2,200.00			ADB	2,200.00			0		
9	Federation of Vista Hills Upland Farmers Inc.	3,000.00			ITTO	3,000.00		98-01	0	3,000.00	
10	Mabasa Tree Planters and Growers Ass.	20.00			ADB	20.00		91-93	0		
11	Banila Community-Based Association Inc	225.00			ADB	225.00			0		
12	Bitmng Guijo Greeners Association Inc.	328.00			ADB	328.00		91-93	0		
12	Sub-total	9,013.82	2,219.82	24.63%		6,794.00	75.37%			4,021.00	44.61%
	Quirino										
1	San Manuel-Victoria Forest Developers Coop	3,176.00			ADB II	3,176.00		93-00	0		
2	Allicia Sustainable Resource Development	1,844.14			USAID	1,844.00		95-02	1	1,844.00	
3	Balligui Community For. Dev. Coop Inc	4,400.00			RP-Ger.	4,400.00		97-01	1	4,400.00	
4	Gomez Farmers Multi-Purpose Cooperative, Inc	620.00	620.00		-						
5	Ilongot Livelihood Association Inc (ILAI)	1,752.00			WB	1,752.00		92-99			
6	Nuh-uh-uhaan Inc	2,600.00			RP-Ger.	2,600.00		97-01	1	2,600.00	
7	Kadikilan Association for Com Dev	4,958.00			ADB II	4,958.00		93-00	0		
8	Anak Intercultural Organizatioin	5,315.00			RP-Ger.	5,315.00		97-01	1	5,315.00	
9	Wasid Ilongot Tribe Association Inc (WITAI)	6,420.00			USAID	6,420.00		95-02	1	6,420.00	
10	Sangbay Anak Integrated Farmers Ass	134.00			ADB II	134.00		93-00	0		
11	Villa Ventura Multi-Purpose Cooperative Inc.	776.00	776.00		OECF-CARP	776.00			0		
12	Rafael Palma Multi-Purpose Coop	148.83			-				0		
13	Ifugao Village Multi-Purpose Coop	1,000.00			RP-Ger.	1,000.00		97-01	1	1,000.00	
14	Baguio Village Intercultural Association	1,990.00			RP-Ger.	1,990.00		97-01	1	1,990.00	
15	Don Mariano Perez Farmers MP Coop	3,100.00			RP-Ger.	3,100.00		97-01	1	3,100.00	
16	Salinong T. Campamento Association Inc.	415.50	415.50		-						
16	Sub-total	38,649.47	1,811.50	4.69%		37,465.00	96.94%			26,669.00	69.00%
	Ifugao										
1	Bannao Community Organization Inc.	200.00			ADB	200.00		91-93	0		
2	Fed of Responsive Assosn for Magat Ecology, Inc	3,027.00			JBIC	3,027.00		95-03	0	3,027.00	
3	Dalligan Multipurpose Development Ass	274.26			WB	274.26		92-99	0		
4	Hapid Agro-forestry Developers Ass.	101.15			ADB	101.15		91-93	0		
5	Lingay Farmers Association	106.77			WB	106.77		92-99	0		
6	Mayoyao Environment Development Ass.	2,000.00			JBIC	2,000.00		95-03	0	2,000.00	
7	Nunhabatan Greeners Livelihood Ass	241.00			ADB	241.00		91-93	0		
7	Sub-total	5,950.18	0.00	0.00%		5,950.18	100.00%			5,027.00	84.48%
	Isabela										
1	Rizal Integrated Development MP Coop	5,000.00			WB	5,000.00		92-99	0		
2	Ayangan Dappig Agro-Forestry Dev Ass	487.50	487.50		-				0		
3	Taleb Upland Farmers Multi-Purpose Coop. Inc.	203.00							0		
3	Sub-total	5,690.50	487.50	8.57%		5,000.00	87.87%			0.00	0.00%
38	Total	59,303.97	4,518.82	7.62%		55,209.18	93.10%		9	35,717.00	60.23%

Sources:

- (1) DENR internal document. PROFILE CBFM PROJECTS CY 2001. (2) DENR internal document. List of CBFM Project in Region 02, As of July 2000
(3) Date data taken from original CBFMA document (4) Date Established, data taken from PROFILE CBFM PROJECTS CY 2001

Table 4.7.3 List of Existing PLAs, FLGLAs and FLGMAs in the Study Area

Province	Lessee	Lease No.	Expiry Date	Area (ha)	Location	
Nueva Vizcaya	1. Barrairo ²⁾	132	10/30/09	500	Bagabag	
Ifugao	1. Virgilio Lam-ag	439	12/31/12	70	Aguinaldo	
	2. Porferia Acosta	311	12/31/10	90	Lamut	
	3. Adriano Abella	346	12/31/11	110	Alfonso Lista	
	4. Ricardo Abella	274	12/31/10	65	Alfonso Lista	
	5. Felino Diego	133	12/31/09	175	Alfonso Lista	
	6. Guillermo Fernando	300	12/31/10	55	Alfonso Lista	
	7. Rufino Terte	297	12/31/10	97	Alfonso Lista	
	8. Erenio Salvador	275	12/31/10	75	Alfonso Lista	
	9. Mauro Domingo	741	12/31/22	51	Alfonso Lista	
	10. Rufus Malecdan	743	12/31/22	50	Alfonso Lista	
	11. Zosimo Paredes ²⁾	746	12/31/22	332	Lamut	
	12. Leoncio Borromeo	270	12/31/10	67	Alfonso Lista	
	13. Elisea Callangan	584	12/31/15	360	Alfonso Lista	
	14. Calizo Bongat ²⁾	572	12/31/15	50	Alfonso Lista	
	15. Francisco Paredes	146	12/31/11	235	Lamut	
	16. Felix Campos	192	12/31/09	420	Alfonso Lista	
	17. Apolinario dela Cruz	269	12/31/10	85	Alfonso Lista	
	Sub-Total of Ifugao			2,387		
Quirino	1. Jesus Antonio Sulto	292	12/31/10	226	Cabbarroguis	
	2. Esteban Cumlat	488	12/31/13	120	Nagtipunan	
		Sub-Total of Quirino			346	
Isabela	1. Miguel Ponce	394	12/31/11	70	Angadanan	
	2. Marcelina vda. De Reyes	310	12/31/10	48	Angadanan	
		Sub-total of the 3rd District			118	
	3. Renerio Agatep	31	12/31/01	158	Cordon	
	4. Felipe Bangui	117	12/31/08	300	Cordon	
	5. Felimon remigio ¹⁾	429	12/31/21	70	Cordon	
	6. Delmar Bartolome ¹⁾	143	12/31/15	196	Ramon	
	7. Mariano Andres, Jr. ¹⁾	753	12/31/22	60	Cordon, Daelao	
	8. Filemon Remigio ¹⁾	429	12/31/21	70	Dallao & Aguinaldo	
	9. Jose Agustin ¹⁾	748	12/31/23	52	Villa Miemban	
	10. Mariano Andres ¹⁾	753	12/31/22	60	Dallo, Cordon	
	11. Delmar Bartolome ¹⁾	143	12/31/15	150	Ramon	
		Sub-total of the 4th District			1,116	
	Sub-Total of Isabela			1,234		
Grand Total				4,467		

- 1) FLGLA
2) FLGMA

Table 4.7.4 List of Mining Interests in the Study Area

Name of Company	Application Number	Date Filed	Area (ha)	Location	Mineral
A. FTAA					
1. Dalton Pacific Resources	R02-000006	Jan 27, '95	40,509	Conwap	Gold, copper
2. Dalton Pacific Resources	R02-000012	Jan 27, '95	36,064	Caraballo	Gold, copper
3. Socorro Mineral Exploration Corp	R02-000016	Oct 13, '95	47,606 ¹	Casiguran	Gold, copper
4. Arimco Mining Corp	R02-000001	Jan 20, '92	28,758	Malabing	Gold, copper
5. TVI-Miracle Mile Mining Corp	R02-000007	Jan 2, '94	86,634	N. Vizcaya	
6. Nelda Mineral Exploration Corp	R02-000015	Oct 13, '95	41,506	Dinajawan	
7. Batulao Mineral Corp	R02-000019	Jan 31, '96	4,940	Solano	
8. Eagle Cement Corp	R02-000020	Jan 31, '96	13,446		
9. Royal Cement & Mining Corp	R02-000021	Jan 31, '96	23,490	Echague	
B. MPSA					
1. Acacia Aqua-Culture Indl. Inc	R02-000035	Dec 8, '94	7,904	Palasian	Limestone
2. Levitco Tuquero	R02-000056	Dec 11, '95	825	Caliat	Gold
3. Agos Mining Corp	R02-000079	Jan 8, '97	5,925	Solano	Gold, copper
4. Sagem Mining & Dev't Corp	R02-000082	Feb 26, '97	2,225	Monguia	Gold, copper
5. Deltec Corp	R02-000083	Apr 24, '97	8,327	Madella	Gold, copper
6. Golden Fields Mining & Realty Dev Corp	R02-000087	Jul 29, '97	6,432	Bantiwan	Limestone
7. Anton Natividad – Connaught	R02-0000__		741	Pao, Kasibu	
8. Cabanglasan Mining Expl. Co.	R02-0000__		1,442	Cordon, Diadi	Gold, copper
9. Orophilippine Ventures Inc.	R02-000015	Nov 6, '92	10,555		Gold
10. Vulcan Indus. & Mining Corp	R02-000021	May 13, '93	6,633		
11. Anaconda Mining & Dev	R02-000049	Sept 1 '95	3,956	Madella & Nagtipunan	Gold, copper
12. Placer Mining & Indus. Corp	R02-000090	Sept 11 '97	1,319	Madella	Gold, copper
C.EPA					
1. Sulong Mining & Dev Corp			864		
2. Occ. Pacific-Climax Mining			14,986		
3. Aberdeen Mining & Dev. Corp	R02-000001	Oct 5 '95	2,885	Aritao	Gold
4. Omni Mines Dev Corp	R02-000002	Oct 16 '95	15,652	Madella	Gold
5. Aurora Copper Gold Resources & Mgt Corp	R02-000003	Oct 26 '95	16,463	Echague	Gold
6. Maria Aurora Consolidated Mining Corp	R02-000004	Nov 13 '95	16,442	Madella	Gold
7. Diteki Mines Dev Corp	R02-000005	Nov 23 '95	16,451	Echague	Gold
8. Buena Suerte Mining Corp	R02-000006	Jan 26 '96	16,491	Kasibu	Gold
9. Marcopper Mining Corp	R02-000007	Jan 26 '96	5,029	NV& Qui	Gold
10. Dalton Pacific Resources Corp	R02-000008	Feb 26 '96	10,305	Kasibu	Gold, copper
11. Crimson Ridge-Climax Mining	R02-000010	Apr 18 '96	16,463	NVizcaya	Gold, copper
12. Red Gibber-Climax Mining	R02-000011	Apr 18 '96	16,556	NVizcaya	Gold, copper
13. Climax Australia-Phil, Inc. I	R02-000016	Sept 9 '96	9,384	NV & Qui	Gold, copper
14. Climax Arimco Mining Corp	R02-000017	Sept 11 '96	17,231	NV & Qui	Gold, copper
15. El Caras Mining Corp	R02-000023	Oct 4 '96		Diadi	Gold
16. Aurum Peak-Climax Mining Corp	R02-000026	Jan 7 '97	16,478	Aritao	Gold, copper
17. Copper Fields Resource Corp	R02-000028	Jan 7 '97	16,460		Gold, copper
18. Ancan Mgt Corp	R02-000029	Jan 13, '97		NVizcaya	Gold, copper
19. St. Patrick Mining & Dev Corp	R02-000031	Feb 20 '97	6,920	NVizcaya	Gold
20. Climax Australia-Phil Inc. II	R02-000016	Sept 9 '96	16,841	Madella	Gold, copper
21. Chelsea Mining Corp	R02-000035	Apr 23, '97	7,288	NV & Qui	Gold, copper
22. Coolabah Mining Corp	R02-000037	Apr 23, '97	13,619	Palanan	Gold
				Quirino	Gold, copper

¹A large part in Aurora Province

Table 4.7.5 List of Species for Reforestation

Province	Tree Species
1. Nueva Vizcaya	<ul style="list-style-type: none"> - Alibangbang (<i>Bauhinia monandra</i>) - Mahogany (<i>Swietenia macrophylla</i>)* - Narra (<i>Pterocarpus</i> spp.)* - Palosanto (<i>Triplaris cumingiana</i>) - Talisai (<i>Terminalia catappa</i>) - Teak (<i>Tectona grandis</i>) - Yakal (<i>Hopea astylosa</i>) - Yemane (<i>Gmelina arborea</i>)*
2. Ifugao	<ul style="list-style-type: none"> - Agoho (<i>Casuarina equisetifolia</i>) - Akleng Parang (<i>Semalbizia</i> spp) - Almaciga (<i>Agathis dammara</i>) - Alnus (<i>Alunus formosana</i> or <i>japonica</i>)* - Bagras = Kamerere (<i>Eucalyptus deglupta</i>)* - Benguet Pine (<i>Pinus kesiya</i>)* - Mahogany (<i>Swietenia macrophylla</i>)* - Narra (<i>Pterocarpus indicus</i>)* - Rain tree (<i>Samanea saman</i>) - Talisai (<i>Terminalia catappa</i>) - Teak (<i>Tectona grandis</i>) - Yemane (<i>Gmelina arborea</i>)* - White Lauan (<i>Pentacme contorta</i> or <i>Shorea squamata</i>)
3. Quirino	<ul style="list-style-type: none"> - Bagras (<i>Eucalyptus deglupta</i>) - Ipil-ipil (<i>Leucanena leucocephala</i>) - Mahogany (<i>Swietenia macrophylla</i>)* - Narra (<i>Pterocarpus indicus</i>)* - Yemane (<i>Gmelina arborea</i>)*
4. Isabera	<ul style="list-style-type: none"> - Alibangbang (<i>Bauhinia monandra</i>) - Mahogany (<i>Swietenia macrophylla</i>)* - Narra (<i>Pterocarpus indicus</i>)* - Palosanto (<i>Triplaris cumingiana</i>) - Rain tree (<i>Samanea saman</i>)* - Talisai (<i>Terminalia catappa</i>) - Teak (<i>Tectona grandis</i>)* - Tindalo (<i>Pachyrrhizus rhomboidea</i>) - Yemane (<i>Gmelina arborea</i>)*

*) Popular species for planting

Table 4.11.1 Result of Management Capability Assessment of PO/NGOs (1/4)

- A. Human Resource Development
- B. Organizational Structure, Processes and Management Style
- C. Network of Org'l Interaction
- D. Resources and Institutional Environment
- E. Action Environment
- 1. Training of Members
- 2. Membership Recruitment
- 3. Structure
- 4. Authority Relationship and Leadership Practice
- 5. Incentive System
- 6. Communication and Work Environment
- 7. Ability to Facilitate Participation
- 8. Supporting Organization
- 9. Access to Information
- 10. Monetary Resources
- 11. Physical Resources
- 12. Human Resources
- 13. Legal Environment
- 14. Economic, Social and Political Environment for Activities

(N=137, n=365)

Name of PO/NGOS	Address	Year of Establishment	# of Mmbr	Active Mmbrs	A		B					C		D				E	TOTAL	Total of 3, 4, 6, 7, 12	
					1	2	3	4	5	6	7	8	9	10	11	12	13	14			
NGOs and Research Institutions																					
1 Plan International	ISU	Cabagan	3-Jul-61	52		4	3	4	4	4	4	4	4	4	4	4	4	3	3	53	20
2 College of Forestry and Environmental Sciences, Isabela State University	ISU	Cabagan	1976	31	25	3	3	4	4	4	3	3	4	4	3	3	4	4	3	49	18
3 EDSA Environmental Multi Consultants		Echague	Mar-00			3	0	3	3	3	3	3	3	2	3	3	2	3	3	37	15
4 Cagayan Valley Partners in People Dev't.		Tuguegarao	Oct-89			3	3	3	4	3	4	3	3	4	2	3	3	4	3	45	17
5 Apochan Development Program Inc.		Banaue	1-Jan-89	547	547	3	4	4	4	3	3	3	3	4	4	3	4	4	3	49	18
6 Noah's Ark House for Children		Banaue	1990			2	0	3	2	2	3	2	3	2	2	2	2	3	2	30	12
7 Philippine Rural Reconstruction Movement (PRRM) Iugao		Kiangan	1998			4	4	4	4	2	4	3	4	4	3	4	4	4	3	51	19
8 Kataguan Center		Lagawe	1995	7		4	3	4	4	3	4	4	4	4	3	4	4	4	4	53	20
9 College of Forestry, Ifugao State Collage of Agriculture and Forestry (ISCAF)		Lamut	1983	5		3	2	3	2	3	2	2	3	3	3	2	4	2	37	11	
10 Baptist Out of School Training, Inc. (BOOST)	Bone North	Aritao	Jan-95	6	6	4	0	4	2	3	2	4	4	4	2	4	4	4	4	45	16
11 Tribal Cooperation for Rural Development, Inc. (TRICORD)	Calititan	Aritao	Oct-90			4	4	4	4	2	4	4	4	4	3	4	4	4	3	52	20
12 Friends of the Environ. for Dev't. & Sustainability (FREND'S)	Don Domingo Maddela	Bayombong	Sep-95	15	15	3	0	4	4	3	4	4	4	4	2	4	4	4	4	48	20
13 Philippine Rural Reconstruction Movement (PRRM) NV	Magsaysay	Bayombong	1990			3	3	3	3	3	3	3	3	3	3	4	3	3	3	37	15
14 College of Forestry and Environmental Science	NVSIT	Bayombong	1974	556	556	4	3	3	3	3	3	3	4	4	3	3	3	4	4	43	15
15 Found. of Oriented Resrcs & Ecosystem for Sustainable Tech. & Society (FOREST)	NVSIT	Bayombong	2nd sem 00	18	18	2	2	3	3	3	3	3	3	3	2	3	3	3	3	39	15
16 Philippine Association for Intercultural Development (PAFID)		Bayombong	1967	50	50	3	2	3	3	3	3	3	4	3	4	3	3	3	3	43	15
17 Organization for Industrial Spiritual and Cultural Advancement (OISCA)	Capitol	Bayombong	1978	30	30	3	3	4	4	4	3	3	4	3	4	3	3	4	2	47	17
18 Kalahan Educational Foundation, Inc.	Imugan	Sta. Fe	Jun-69	3,770	2,820	4	3	4	4	2	4	2	4	3	3	4	3	4	3	47	17
19 Agro-Forestry Department, Quirino State College	Campamento	Diffun	SY 94-95	210	210	2	2	3	3	3	2	3	4	3	2	3	2	4	3	39	13
20 Spiritwood Corporation		Diffun	1996			3	0	4	4	4	4	4	3	4	4	4	3	4	3	48	19
						3.20	2.20	3.55	3.40	3.00	3.25	3.15	3.60	3.50	3.15	3.15	3.25	3.65	3.05	44.60	16.60
POs																					
ISABELA (With CBFMA)																					
1 Taleb Upland Farmers MPCl	Dallao	Cordon	19-Nov-88	37	32	2	0	2	2	1	4	2	3	3	2	2	2	3	3	31	12
2 Ayangan Dapiz Agro-Forestry Dev't Coop	Dapiz	San Agustin	6-Dec-99	67	67	0	2	3	2	0	2	3	2	2	0	0	2	1	3	22	12
3 Rizal Integrated & Dev't. Coop.	Rizal	San Guillermo	Sep-97	100	60	2	2	2	2	0	0	0	2	2	0	0	2	3	2	19	6
						1.33	1.33	2.33	2.00	0.33	2.00	1.67	2.33	2.33	0.67	0.67	2.00	2.33	2.67	24.00	10.00
ISABELA (Non-CBFMA)																					
1 Baggak MPCl	Loria	Angandanan	1988	189	113	2	2	2	2	2	2	2	2	2	3	2	3	2	3	30	10
2 Pag-asa Farmers Dev't. Coop.	Pag-asa	Echague	6-Aug-92	69	35	3	2	3	3	2	3	2	3	3	2	3	3	3	3	38	14
3 Madadamian ARB MPCl	Madadamian	Echague	1996	280	280	2	3	3	2	2	3	3	2	2	3	2	2	3	2	34	13
4 Aromin Farmers MPCl	Aromin	Echague	6-Aug-92	140	75%	3	3	3	4	2	3	2	3	3	4	4	4	4	4	42	16
5 Jones Environmental Friendly MPCl	Barangay I	Jones	7-Feb-96	60	2	3	3	2	1	2	3	2	2	1	0	2	3	2	28	12	
6 Balligi ti Biag Credit Cooperatives	Pompongan	Jones	1987	245	70%	3	3	3	3	2	3	2	3	3	2	3	3	3	3	39	14
7 Alpha Omega Credit Dev't. Coop. Inc.	Centro	San Agustin	Oct-89	368	257	4	2	4	4	4	4	2	3	4	-3	3	3	4	4	42	17
8 Masaya Sur MPCl	Masaya Sur	San Agustin	Jan-90	276	69	2	1	1	1	1	1	1	1	2	0	2	1	2	1	17	5
9 Reliance Development MPCl	Centro II	San Guillermo	1992	27	50%	2	2	3	2	0	1	0	2	2	1	0	2	3	1	21	8
10 Nakar ARB MPCl	Nakar	San Guillermo	Oct-91	55	30	2	2	3	3	3	3	2	3	3	2	2	3	2	3	35	13
11 Dipacamo-Palawan Settlers MPCl	Dipacamo	San Guillermo	Oct-97	46	22	3	2	3	3	2	3	2	3	2	2	0	2	3	0	30	13
12 San Mariano Sur MPCl	San Mariano	San Guillermo	Nov-99	34	34	2	2	2	2	2	2	2	2	2	2	2	2	2	2	28	10
13 San Guillermo MPCl	Centro II	San Guillermo	Apr-89	330	330	2	2	3	3	2	3	3	3	3	3	3	3	3	3	39	15
						2.46	2.23	2.77	2.62	1.92	2.54	2.00	2.46	2.54	1.62	2.08	2.38	3.00	2.08	32.54	12.31

Table 4.11.1 Result of Management Capability Assessment of PO/NGOs (2/4)

- | | | | |
|---|---|--|---|
| A. Human Resource Development | 1. Training of Members | 7. Ability to Facilitate Participation | 13. Legal Environment |
| B. Organizational Structure, Processes and Management Style | 2. Membership Recruitment | 8. Supporting Organization | 14. Economic, Social and Political Environment for Activities |
| C. Network of Org'l Interaction | 3. Structure | 9. Access to Information | |
| D. Resources and Institutional Environment | 4. Authority Relationship and Leadership Practice | 10. Monetary Resources | |
| E. Action Environment | 5. Incentive System | 11. Physical Resources | |
| | 6. Communication and Work Environment | 12. Human Resources | |

(N=137, n=365)

Name of PO/NGOS	Address	Year of Establishment	# of Mmbr	Active Mmbrs	A		B			C		D				E	TOTAL	Total of 3, 4, 6, 7, 12				
					1	2	3	4	5	6	7	8	9	10	11	12			13	14		
IFUGAO (with CBFMA)																						
1 Bannao Community Organizations Inc.	Bannao	Banaue	20-Mar-97	70	70	3	3	3	3	0	3	3	3	1	2	0	3	4	3	34	15	
2 Dalligan Multi-Purpose Dev't. Ass'n.	Dalligan	Kiangnan	1994	25	25	2	2	2	2	0	2	3	2	2	2	0	2	3		24	11	
3 Lingay Farmer's Ass'n	Lingay	Kiangnan	Apr-96	32	25	2	2	1	1	0	2	1	2	2	0	2	3	2		22	7	
4 Federation of Responsive Association for Magat Ecology, Inc.	Poblacion	Lamut	20-Aug-97	407	300	2	3	3	4	3	3	3	3	2	2	3	3	2		39	16	
5 Hapid Agro-Forestry Developers Ass'n.	Hapid	Lamut	1996	56	56	1	2	3	3	3	3	3	3	2	0	2	3	2		32	14	
6 Nunhubatan Greeners Livelihood Ass'n	Hapid	Lamut	Apr-97	50	25	2	2	2	2	2	2	2	3	2	2	2	3	2		30	10	
7 * Mayuyao Environment Development Association, Inc.	Mayuyao	Mayuyao																				
						2.00	2.33	2.33	2.50	1.33	2.50	2.50	2.67	2.00	2.00	0.67	2.33	3.17	2.20	30.17	12.17	
IFUGAO (Non-CBFMA)																						
1 Golonogan MPC	Golonogan	Aguinaldo	Aug-97	300	279	3	3	3	3	3	3	3	3	3	3	3	3	3		42	15	
2 Namnama Irrigator's Association	Namnama	Alfonso Lista	1974	30	30	2	3	3	2	2	3	4	3	3	0	0	3	2		32	15	
3 Namnama Women's Association	Namnama	Alfonso Lista	1995	24	24	2	3	3	1	0	2	3	3	2	2	0	2	3	2		28	11
4 Panubtuban MPC	Panubtuban	Asipulo	Sep-92	72	2	2	2	2	2	0	2	3	3	2	0	2	2	3	2		27	11
5 Haliap MPC	Haliap	Asipulo	Mar-97	107	107	3	3	3	4	3	3	3	3	3	4	3	4	3		45	17	
6 Attaban MPC	Amduntog	Asipulo	Aug-95	52	52	2	3	3	3	3	3	3	2	3	2	4	2	3	2		38	14
7 Cambulo People's Development	Cambulo	Banaue	1990	246	246	2	2	2	2	2	3	3	2	2	0	2	2	2		28	12	
8 Viewpoint Credit & Savings Dev't. Coop.	Viewpoint	Banaue	Mar-91	67	67	2	2	2	2	2	3	3	3	3	1	2	3	3		34	13	
9 Apochan Parent's Association	Poblacion	Banaue	1997	500	500	2	3	2	3	3	3	3	3	2	2	2	3	2		36	13	
10 Banaue Savings and Credit Cooperative, Inc	Poblacion	Banaue	1982	4,500	4,500	2	4	4	2	4	3	4	3	3	4	3	3	3		45	16	
11 Banaue Public Vendors Association Inc	Poblacion	Banaue	May-96	48	40	0	2	2	2	2	3	3	2	4	2	2	2	3	2		31	12
12 Tam-An MPC	Tam-An	Banaue	1990	3,250		3	4	4	4	0	4	4	4	4	4	4	4	3	4		50	20
13 Piwong MPC	Poblacion	Hingyon	Apr-85	15		0	4	4	3	4	3	3	3	3	4	3	3	4	3		44	16
14 O-ong Chayote Planters Association	O-ong	Hingyon	May-98	11	11	2	0	1	2	0	2	2	2	2	2	1	3	2		23	8	
15 Hapao Irrigation Service Association	Hapao	Hungduan	Oct-70	79	79	1	3	2	3	3	3	3	3	2	0	3	2	3		33	14	
16 Hapao MPC	Hapao	Hungduan	18-Mar-88	722	722	3	3	4	4	4	4	4	3	3	4	4	2	4	3		49	18
17 Pag-asa MPC	Bolog	Kiangnan	1996	66	66	3	3	3	3				3	4	3	3	3	3		34	9	
18 Kiangnan Community Multipurpose & Development Coop	Poblacion	Kiangnan	2-Dec-72	2,339	2,005	3	4	4	3	4	3	2	3	4	3	4	2	4	4		47	14
19 Kiangnan Kahiyeagan MPC	Poblacion	Kiangnan	3-Oct-95	180	180	2	2	3	2	2	3	2	2	2	2	2	2	3	2		31	12
20 Hucab Irrigators Association	Hucab	Kiangnan	May-99	24		2	3	3	0	3	2	3	3	2	0	0	2	1	2		26	10
21 Ifugao Coffee Greeners MPC	Poblacion	Lagawe	1995	98	62	3	3	3	3	2	3	2	2	3	1	1	2	3	1		32	13
22 Natuwolan MPC	Cudog	Lagawe	1996	118	110	2	3	3	3	3	3	2	2	3	2	2	3	3	3		37	14
23 Boliwong Development Cooperative	Boliwong	Lagawe	1994	185	175	2	2	3	3	3	3	3	2	3	3	3	4	4	3		41	16
24 Burnay Savings Cooperative	Burnay	Lagawe	Apr-97	138	138	2	3	2	2	2	3	2	3	3	2	2	2	3	2		33	11
25 Luta Upland Farmer's Ass'n.	Luta	Lagawe	Mar-85	79	79	3	3	3	3	2	3	3	3	2	2	3	3	3	2		39	15
26 Tungngod Rural Improvement Club	Tungngod	Lagawe	Mar-92	22	16	2	0	2	2	0	2	1	2	3	1	0	2	2	2		21	9
27 Bimpal Women's Savers Organization	Bimpal	Lamut	1995	77	77	2	2	3	2	1	3	3	2	2	0	2	2	2	2		28	13
28 Alupapan MPC	Pugol	Lamtu	10-May-90	81	81	3	2	3	3	3	3	3	3	3	2	3	2	3	2		38	14
29 Pugol Women's Organization	Pugol	Lamut	14-Jul-94	43	43	3	3	2	2	2	3	3	3	3	2	2	2	3	3		36	12
30 Tanap Women's Organization	Lawig	Lamut	1983	21	16	3	2	2	2	2	2	2	2	3	1	0	3	2	1		27	11
31 Sanafe Progressive Women's Association	Sanafe	Lamut	Nov-97	34	34	3	2	3	3	2	2	2	2	3	2	2	3	3	2		34	13
						2.23	2.61	2.77	2.52	2.20	2.83	2.80	2.65	2.87	2.10	1.97	2.52	2.87	2.45	35.13	13.26	

Table 4.11.1 Result of Management Capability Assessment of PO/NGOs (3/4)

- A. Human Resource Development
- B. Organizational Structure, Processes and Management Style
- C. Network of Org'l Interaction
- D. Resources and Institutional Environment
- E. Action Environment

- 1. Training of Members
- 2. Membership Recruitment
- 3. Structure
- 4. Authority Relationship and Leadership Practice
- 5. Incentive System
- 6. Communication and Work Environment

- 7. Ability to Facilitate Participation
- 8. Supporting Organization
- 9. Access to Information
- 10. Monetary Resources
- 11. Physical Resources
- 12. Human Resources

- 13. Legal Environment
- 14. Economic, Social and Political Environment for Activities

(N=137, n=365)

Name of PO/NGOS	Address	Year of Establishment	# of Mmbr	Active Mmbrs	A		B					C		D				E	TOTAL	Total of 3, 4, 6, 7, 12	
					1	2	3	4	5	6	7	8	9	10	11	12	13	14			
NUEVA VIZCAYA (With CBFMA)																					
1. Latar Ilocano-Minority Farmers Association, Inc	Latar	Aritao	Jul-97	52	52	1	1	1	2	0	2	3	1	1	1	0	1	2	2	18	9
2. Yaway Farmers Multi-Purpose Cooperative, Inc.	Yaway	Aritao	Nov-95	58	47	1	1	2	2	2	1	3	2	1	2	2	2	2	3	26	10
3. Association of Upland Farmers of Singian, Nueva Viz.	Pogonsino	Bagabag	1998	42	35	1	2	1	2	2	1	1	1	1	1	0	1	2	1	17	6
4. Singian Agro-Forest Association	Tuao South	Bagabag	1987	61	61	3	3	3	3	2	2	1	2	3	2	1	2	3	1	31	11
5. Federation of Vista Hills, Kalongkong and Kakilingan Upland Farmers' Inc	Buenavista	Bayombong	1998	207	80%	4	3	3	3	3	3	3	4	4	2	2	3	3	3	43	15
6. Bitnong Guijo Greens Association, Inc.	Bitnong	Dupax del Norte	Apr-96	86	38	3	2	2	3	2	2	3	2	1	2	2	3	2	3	32	13
7. Mabasa Tree Planters & Growers Association, Inc.	Mabasa	Dupax del Norte	Nov-91	25	17	2	1	1	2	1	0	2	1	1	0	0	1	2	2	16	6
8. Banila Community-Based Cooperative, Inc.	Banila	Dupax del Sur	Jun-94	68	68	3	3	2	3	2	4	3	2	1	2	2	2	4	3	36	14
9. Bakir Pagbiagan ti Pag-Ilian, Inc.	Runruno	Quezon	Sep-00	42	39	0	1	1	1	1	1	2	1	0	1	0	2	1	3	15	7
10. Socio-Economic and Environmental Dev't. Coop.	Dagupan	Quezon	1995	100+	50	1	2	2	2	1	2	2	2	2	2	2	1	2	3	26	9
11. Buyasayas Iwak Tribal Council	Buyasayas	Sta. Fe	Nov-91	120	120	1	1	2	3	1	2	3	3	1	0	0	1	2	2	22	11
12. Gadagad Vegetable & Fruit Tree Growers Assn., Inc	Baliling	Sta. Fe	Jan-96	28	24	2	2	1	1	1	2	3	1	2	0	0	1	2	2	20	8
					1.83	1.83	1.75	2.25	1.50	1.83	2.42	1.83	1.50	1.25	0.92	1.67	2.25	2.33	25.17	9.92	
NUEVA VIZCAYA (Non-CBFMA)																					
1. Cabaduyan Farmers Irrigation Association	Cabaduyan	Ambaguio	1997	30	15	1	1	1	1	1	1	1	2	1	0	0	1	0	1	12	5
2. Sto. Domingo Irrigator's Association	Sto. Domingo	Bambang	Apr-May-96	210	210	3	3	3	3	2	3	3	3	3	2	2	3	3	2	38	15
3. Bambang Fruits & Vegetable Growers MPC	Macate	Bambang	Sep-89	408	150	2	2	3	3	4	4	2	3	4	4	4	3	4	3	45	15
4. Raymar's Development Cooperatives Inc.	Indiana	Bambang	Apr-95	50	40	3	3	3	2	3	3	3	1	3	4	3	3	3	3	40	14
5. Escoting Farmers MPC	Escoting	Diadi	2-Apr-95	174	174	0	1	1	1	1	1	1	1	1	0	1	1	1	2	14	5
6. Lamo Rural Improvement Center Association	Lamo	Dupax del Norte	Feb-97	57	20	1	3	2	3	1	1	1	1	1	0	1	3	2	1	21	10
7. St. Joseph Credit Cooperatives	Belance	Dupax del Norte	8-Jan-85	365	290	4	4	2	2	3	4	3	3	4	3	1	2	4	3	42	13
8. Ganao MPC	Ganao	Dupax del Sur	Feb-91	70	25	1	0	0	1	1	1	1	2	2	0	1	3	2	0	14	5
9. Macalong-Kongkong Farmers Irrigators Assn., Inc	Malabing	Kasibu	Aug-75	85	60	1	2	1	1	2	1	2	1	1	0	1	1	4	2	20	6
10. Malabing Valley Multi-Purpose Coop., Inc.	Macalong	Kasibu	Nov-89	276	193	3	4	4	3	4	4	4	4	3	3	4	4	4	4	52	19
11. Pingkian Community Development Cooperative, Inc.	Pingkian	Kayapa	May-96	180	130	2	2	3	1	4	4	2	3	2	1	3	4	3	3	36	16
12. Boliwao MPC	Boliwao	Quezon	Feb-86	399	266	3	3	3	2	2	2	3	3	2	3	2	3	3	3	36	12
13. Uddiawan Irrigator's Association	Uddiawan	Solano	400+	400+	2	3	3	3	2	3	3	3	2	3	2	1	3	2	2	34	15
14. Wacal Farmers Multi-Purpose Cooperative	Wacal	Solano	1991	82	65	3	0	1	1	1	0	1	1	1	2	2	2	2	2	19	5
15. Buan, Ipong, San Luis, Lactawan Irrigator's Assn.	Roxas	Solano	Spanish Time	290	290	3	3	3	3	2	3	3	4	3	2	2	3	3	2	39	15
16. Cameam North IA	San Luis	Solano	128	128	2	0	3	3	2	3	3	3	3	3	3	3	3	3	2	36	15
17. Baliling Agri-based Multi-Purpose Cooperative, Inc.	Baliling	Sta. Fe	Sep-91	335	335	4	4	4	4	3	4	4	4	3	3	3	3	4	4	51	19
18. Ibung Baliqut Farmers Irrigator's Association	Ibung	Villaverde	Early 70's	85	65	1	1	3	2	2	2	2	1	0	1	0	1	2	1	19	10
19. Samahang Pangkababaihan ng Ibung	Ibung	Villaverde	11-Dec-99	50	44	2	3	3	3	3	3	3	2	2	2	0	3	2	1	32	15
20. Villa Verde Credit & Development Cooperatives Inc. (VICDECO)	Bintawan Sur	Villaverde	9-Sep-89	302	182	3	3	3	3	2	2	2	3	3	2	2	3	2	2	35	13
21. Magapuy Tree Planters & Growers Association Inc.	Magsaysay	Bayombong	1989	23	23	3	4	2	3	1	3	3	2	3	1	2	3	2	1	33	14
22. BETSKAYA Upland Farmers Association, Inc.	Capitol	Bayombong	1993	41	41	2	3	3	3	3	3	3	2	1	2	1	3	3	3	35	15
					2.23	2.36	2.41	2.36	2.09	2.55	2.45	2.27	2.32	1.82	1.73	2.55	2.68	2.14	31.95	12.32	

Table 4.11.1 Result of Management Capability Assessment of PO/NGOs (4/4)

- | | | | |
|---|---|--|---|
| A. Human Resource Development | 1. Training of Members | 7. Ability to Facilitate Participation | 13. Legal Environment |
| B. Organizational Structure, Processes and Management Style | 2. Membership Recruitment | 8. Supporting Organization | 14. Economic, Social and Political Environment for Activities |
| C. Network of Org'l Interaction | 3. Structure | 9. Access to Information | |
| D. Resources and Institutional Environment | 4. Authority Relationship and Leadership Practice | 10. Monetary Resources | |
| E. Action Environment | 5. Incentive System | 11. Physical Resources | |
| | 6. Communication and Work Environment | 12. Human Resources | |

(N=137, n=365)

Name of PO/NGOS	Address	Year of Establishment	# of Mmbr	Active Mmbrs	A		B			C		D			E		TOTAL	Total of 3, 4, 6, 7, 12			
					1	2	3	4	5	6	7	8	9	10	11	12			13	14	
QUIRINO (with CBFMA)																					
1 San Manuel Victoria Forest Developers Cooperative	San Manuel Victoria	Aglipay	1996	156	30	0	2	2	1	2	2	2	2	1	3	2	2	2	1	24	9
2 Villa Ventura MPCl	Victoria	Aglipay	1986	35	18	2	1	2	1	2	2	1	1	1	2	1	1	2	1	20	7
3 Alicia Sustainable Resource Development Cooperative	Alicia	Aglipay	21-Sep-97	124	124	2	3	2	2	3	3	3	3	2	2	3	2	3	1	34	12
4 Gomez Farmers Cooperative Inc.	Gomez	Cabarroguis	Apr-May 93	40	20	0	0	1	1	1	2	1	1	1	0	1	1	1	2	13	6
5 Don Mariano Perez Farmers MPCl	Don Mariano Perez	Diffun	Feb-92	137	55	3	1	2	2	2	3	2	2	1	2	3	2	2	1	28	11
6 Baguio Village Inter-Cultural Association	Baguio Village	Diffun	Oct-94	120	20%	3	3	2	3	3	1	1	3	2	3	3	3	3	3	36	10
7 Salinong Ti Campamento Association	Campamento	Diffun	1998	100+	15	1	1	2	0	2	1	0	1	1	1	2	1	2	3	18	4
8 Rafael Palma Multi-Purpose Cooperative, Inc.	Rafael Palma	Diffun	3-Jul-95	44	44	2	1	2	2	2	3	3	3	3	2	2	3	3	2	33	13
9 Ifugao Village Aphochan Multi-Purpose Cooperative	Ifugao Village	Diffun	Last q 98	30	28	3	2	2	2	2	2	2	3	2	2	2	2	3	2	31	10
10 Balligui Community Forestry & Dev't. Coop., Inc	Balligui	Maddela	22-Mar-98	74	54	2	3	2	2	0	2	2	2	2	2	2	2	2	2	27	10
11 Sangbay-Anak Integrated Farmers Ass'n., Inc.	Sangbay	Nagtipunan	26-Jun-97	32	12	0	0	1	1	2	1	1	1	1	2	0	1	2	1	14	5
12 Nun-uh-uh-haan Farmers Association, Inc.	Asaklat	Nagtipunan	1992	56	56	1	1	2	2	1	2	2	1	1	0	2	2	2	1	20	10
13 Wasid Ilongot Tribes Association	Wasid	Nagtipunan	16-Jun-94	59	30	0	0	1	1	1	0	1	1	1	2	0	1	2	1	12	4
14 Anak Intercultural Organization	Anak	Nagtipunan	Dec-95	117	80	2	2	2	2	1	2	2	2	2	2	1	2	3	3	28	10
15 Ilongot Livelihood Association, Inc./Bugkalot MPCl	Landingan	Nagtipunan	Jan-92/Sep-96	63	63	2	3	2	2	2	2	2	2	3	2	3	2	3	2	32	10
16 Kadikitan Association for Community Development	Kadikitan, Landingan	Nagtipunan	1989	176	88	2	2	2	2	1	2	1	2	2	2	2	2	3	2	26	9
						1.5625	1.5625	1.8125	1.625	1.6875	1.875	1.625	1.875	1.625	1.8125	1.8125	1.8125	2.3125	1.75	24.75	8.75
QUIRINO (Non-CBFMA)																					
1 Villa Santiago MPCl	San Leonardo	Aglipay	31-Jan-91	321	257	3	4	3	3	2	3	3	3	4	3	4	3	2	3	43	15
2 San Francisco Irrigators' Association	San Francisco	Aglipay	1975	112	80%	1	1	3	2	1	2	2	2	1	1	2	2	1	3	24	11
3 Dagupan MPCl	Dagupan	Aglipay	1992	45	30	1	1	1	0	1	0	1	2	1	1	1	1	2	1	14	3
4 Villarose Watershed Enterprise MPCl	Villarose	Cabarroguis	1996	52	52	1	2	2	1	1	2	2	2	1	1	2	2	2	1	22	9
5 Addalem-Dibibi MPCl	Dibibi	Cabarroguis	Oct-92	404	75%	2	2	3	2	2	2	2	2	2	3	2	2	1	29	11	
6 Baro A Lubong Farmer's Cooperative, Inc.	Magandangay	Cabarroguis	19-Mar-91	112	30	1	1	2	1	1	0	1	1	1	2	3	1	2	1	18	5
7 Mangandangay-Banuar Irrigators Association	Magandangay	Cabarroguis	1972	70	70	1	0	2	2	1	2	2	1	1	1	0	2	2	1	18	10
8 Campamento Irrigator's Association	Campamento	Diffun	1980	30	30	1	1	2	2	2	2	3	2	1	1	1	2	1	22	10	
9 Ganano 2 Irrigators' Association	Cajel	Diffun	1998	91	71	2	0	2	2	1	2	2	2	2	1	0	2	2	2	22	10
10 Pimentel Upland Developers Association, Inc.	Pimentel	Diffun	Jul-98	40	40	0	1	1	1	1	0	1	2	1	1	2	1	2	1	15	4
11 Cupianan Farmers' MPCl	Cupianan	Diffun	12-Dec-97	32	32	2	1	2	2	2	2	3	1	1	1	2	3	2	2	24	12
12 Villa Norte United Farmers Multi-Purpose	Poblacion Norte	Maddela	16-Feb-91	417	70%	3	3	3	2	2	2	2	2	2	3	3	3	2	1	33	12
13 Maddela Integrated Farmers' Cooperative, Inc.	Maddela	Nov-96	217	176	2	3	3	3	2	2	2	2	2	0	2	3	3	2	1	30	13
14 Ponggo Farmers MPCl	Ponggo	Nagtipunan	1992	260	200	2	3	3	3	2	3	3	2	3	3	3	3	2	3	38	15
						1.57	1.64	2.29	1.86	1.50	1.79	2.00	1.86	1.50	1.64	2.07	2.07	1.93	1.54	25.14	10.00

* This PO was not surveyed due to the inaccessibility of the area after the typhoon

- 1: Application in process
- 2: Area is covered by CBFMA for Baguio Village Inter-Cultural Association

PO-CBFM (37)	1.70	1.76	1.92	2.00	1.46	1.97	2.03	2.03	1.70	1.57	1.24	1.86	2.43	2.08	25.70	9.78
	1.73				1.88				1.86		1.78		2.08		1.84	1.96
PO-Non CBFM	2.15	2.31	2.59	2.38	2.00	2.52	2.43	2.38	2.43	1.86	1.94	2.43	2.68	2.15	32.09	12.28
	2.23				2.38				2.40		2.23		2.15		2.29	2.46
SUB-TOTAL	2.01	2.14	2.38	2.26	1.83	2.34	2.30	2.26	2.20	1.77	1.72	2.25	2.60	2.13	30.07	11.49
	2.07				2.22				2.23		2.08		2.13		2.15	2.30
NGO	3.20	2.20	3.55	3.40	3.00	3.25	3.15	3.60	3.50	3.15	3.15	3.25	3.65	3.05	44.60	16.60
	2.70				3.27				3.55		3.30		3.05		3.19	3.32

Table 4.12.1 Budget Allocation of Region II to Various Sectors

(Unit: P'000)

	2001			2000			1999			1998			1997		
	PS	MOE	CO	PS	MOE	CO	PS	MOE	CO	PS	MOE	CO	PS	MOE	CO
Region II	214598	34810	8036	217323	39005	7423	221791	34674	11213	217342	50676	14868	169456	49012	1551
GASS ¹	35238	2414		35238	2604		42602	1588	2600	40692	5261	8500	31415	3872	
Support to Operations	5316	1132		5316	1489		5316	1002		5688	1002		4300	1002	
Forest Management Service	120839	17089	4233	120839	15748	7423	117371	13915	8613	113716	15651	6368	90885	21001	1138
Land Management Service	41720	3689	3123	44247	6726		42556	5402		45100	8076		33756	6929	
Protected Area and Wildlife Service	2180	4093		2180	5425		2146	6565		4863	6116		3439	8345	413
Environmental Management Service	2826	3740	680	3076	2834		4963	2524		1498	2690		1209	2782	
Ecosystems Research and Development Service	6419	2653		6427	4179		6837	3678		5785	11880		4452	5081	
% FMS to total MOE		49.09			40.37			40.13			30.88			42.85	

¹General Administration and Support Services

PS = Personal Services

MOE = Maintenance and Operating Expenses

CO = Capital Outlay

Source: Budget Section, Finance Division, DENR Regional Office #2

Table 4.12.2 Budget Allocation for MOE of FMS Activities in Region II

(Unit:P'000)

	2001	2000	1999	1998	1997
Region II					
FMS	17089	15746	13915	15651	21001
- Forest Management Service	821 4.8%	1116 7.09%	946 6.80%	1725 11.02%	1212 5.77%
- Plantation establishment and maintenance and protection	573 3.35%	478 3.04%	434 3.12%	434 2.77%	551 2.62%
- Forest protection	3897 22.8%	5221 33.16%	4717 33.90%	5668 36.22%	7558 35.99%
- Community-based forestry program	1556 9.11%	3667 23.28%	3253 23.37%	3257 20.81%	5391 25.68%
- Soil conservation and watershed management	2172 12.71%	4945 31.40%	4308 30.96%	4310 27.54%	6003 28.58%
- Forestland Sub-classification (Support to Banner program)	8070 47.23%	319 2.03%	257 1.85%	257 1.64%	286 1.36%

General Administration and Support Services

Source: Budget Section, Finance Division, DENR Regional Office #2

Table 4.12.3 Budgetary allocation of PENROs and CENROs covered by the Study Area (1/2)

(Unit:P'000)

	IFUGAO			ISABELA			NUEVA VIZCAYA			QUIRINO		
	PENRO	Lamut	A. Lista	PENRO	Cauayan	Sn Isidro	PENRO	Aritao	Dupax	PENRO	Aglipay	Nagtipunan
GASS	MOE+PS	MOE	MOE	MOE+PS	MOE	PS/MOE	MOE+PS	MOE	MOE	PS+MOE	MOE	MOE
- 2001	3699	137	123	5168	20.56	21.95	4556	345.7	33.2	19449.84	28.56	33.6
- 2000	3699	137	123	5168	20.56	21.95	4556	345.7	33.2	19449.84	28.56	33.6
- 1999	3979	115	115	18	9.8	9.3	10314	39.7	39.7	17297.74	17.63	31.65
- 1998	2921	107	80	22	10.5	10.5	26	21	21	15572.22	21.9	21.9
- 1997	2592	120	120	5916.56	14.24	14.24	25	16	16	13836	20.5	20.5
B. SUPPORT TO OPERATION				MOE+PS	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
- 2001	92	19	31	14	5	6.5	49	10.25	10.25	30.13	11.23	
- 2000	92	19	31	14	5	6.5	49	10.25	10.25	30.13	11.23	
- 1999	84	25	22	10.82	3.5	4.73	38	5.33	7.83	24.8	8.5	7.5
- 1998	222	7	9	10.84	4.15	5.86	2.5	3.5	3.5	22	8.5	10
- 1997	173	15	14	21.56	6.77	6.78	20.25	11.6	9.05	17	12.5	9.5
C. Forest Management Sector	MOE	MOE/CO	MOE/CO	MOE+CO	MOE+CO	MOE+CO	MOE	MOE+PS+CO	MOE+PS+CO	MOE	MOE	MOE
- 2001	409	903/1583	765/1572	1497	419	571.64	432	737	812	827.002	433.999	420.999
- 2000	409	903/1583	765/1572	1497	419	571.64	432	737	812	827.002	433.999	420.999
- 1999	842	1176/288	975/289	164.01	182.67	253.38		3206.75	1001.25	903.8	438.8	577.5
- 1998	331	749/162	352/163	397.4	508.22	726.71	163.24	401.52	483.42	292.7	434.5	682.8
- 1997	360	7821.5/1636	679.5/1295	676.67	258.45	594.27	241.6	652.33	606.93	186	414.5	849.191
D. Land Management Sector	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
- 2001	67	28	30	274.02	99.53	34.83	783.9	53	59	224.2	72.9	30.9
- 2000	67	28	30	274.02	99.53	34.83	783.9	53	59	224.2	72.9	30.9
- 1999	35	16	21	77.3	7.9	7.3	1104	15.95	11.65	92.4	71.5	12
- 1998	428	16	16	304.45	11.17	10.67	105	93	130	335.4	71.3	17.3
- 1997	48	54	91	45.8	12.75	12.75	97	341.26	11.87	14	16.5	16.5

Table 4.12.3 Budgetary allocation of PENROs and CENROs covered by the Study Area (2/2)

(Unit:P'000)

	IFUGAO			ISABELA			NUEVA VIZCAYA			QUIRINO		
	PENRO	Lamut	A. Lista	PENRO	Cauayan	Sn Isidro	PENRO	Aritao	Dupax	PENRO	Aglipay	Nagtipunan
F. Environmental Mgt. Sector	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE	MOE			
- 2001	0	48	5	50.6								
- 2000	0	48	5	50.6								
- 1999	39	73	77	77.54	30.95	21.6		40.8	22.3			
- 1998	27	48	47		51.04	49.55	45.25		27.56			
- 1997	40	18	17				60.40		32.44			
G. Ecosystems Research				MOE							MOE	
- 2001											190	
- 2000				23							190	
- 1999				50.3								
- 1998												
- 1997												

Source: Provincial DENR Office

¹ FY 2001 budget is the same as FY2000

Table 4.12.4 Breakdown of CBFMP MOE of PENROs & CENROs in the Study Area for Year 2001

Object Class	Ifugao			Isabela			Nueva Vizcaya			Quirino		
	PENRO	CENRO Lamut	CENRO Lista	PENRO	CENRO Cauayan	CENRO Sn Isidro	PENRO	CENRO Aritao	CENRO Dupax	PENRO	CENRO Aglipay	CENRO Nagtipunan
TOTAL	101,000	125,000	116,000	230,000	197,845	8,000	107,300	41,900	138,000	152,800	28,600	46,600
02-Traveling Expenses	17,000	26,000	25,000	22,000	46,003	4,500	30,000	15,000	29,000	30,000	3,000	3,000
03-Communication Services				33,000	2,947		16,000	7,000	3,000	13,800	3,600	17,600
04-Repair & Maint. of Equip.				3,000				2,000	0	3,000		
05-Repair & Maint. Of Equip.	2,000		1,000	5,000			1,000	1,000	2,000	5,000		
06-Transportation Services									0			
07-Supplies & Materials	9,000	7,000		13,000	19,302	2,500	10,000	3,000	19,000	3,000	2,000	2,000
08-Rentals										10,000		
014-Water,illumination & Power				64,000			22,000	4,000	5,000	8,000	8,000	8,000
017-Training & Seminar				5,000	2,000		1,000	1,000	2,000	5,000		
023-Gasoline, Oil & Lubricants	16,000	2,000	2,000	40,000	5,267		14,300	3,900	34,000	52,000	10,000	12,000
024-Fidelity bond & insurance Prem.					39,000			13,000	5,000	4,000	10,000	
029-Other Services	57,000	90,000	88,000	6,000	122,326	1,000	0	0	40,000	13,000	2,000	4,000

Source: PENRO/CENRO Planning or Budget Officers

Table 9.1.1 Priority Ranking of Sub-watersheds (SWSs) in the Upper Magat and Cagayan River Basin (1/2)

Ranking	ID	Basin Area (ha)	Changed Area (ha)	Erodible Layer Reduction (mm/year)	Area (Man+ Agro) (ha)	Ref. Area Ratio (%)	Soil loss reduction (m3/yr)	Natural Score			Social Score	Synthesized Score	CADC (ha) DfR	CADC /Basin DfR	Remarks
								Layer	Area Ratio	Reduction					
1	M1-h	7,600	5,019	6,580	3,452	45	330,203	7	7	7	7	7	0	SAPI ¹⁾	
2	M2-i	7,613	2,396	7,336	2,104	28	175,706	7	7	7	7	7	7,031	92%	
3	M2-h	7,306	2,449	5,070	2,021	28	124,195	7	7	7	7	7	6,243	85%	
4	M1-f	7,316	2,350	6,992	1,979	27	164,368	7	7	7	7	7	0	Rice Terrace	
5	M5-d	7,689	5,533	5,441	4,297	56	301,143	7	7	7	6	7	0	SAPI	
6	M1-i	7,900	5,600	4,457	2,809	36	249,582	6	7	7	7	7	0	SAPI	
7	M2-d	8,038	3,352	7,334	2,441	30	245,820	7	7	7	6	7	16	0% SAPI	
8	M4-d1	6,810	1,888	5,094	1,567	23	96,150	7	6	7	7	7	6,757	99%	
9	M1-d	12,208	4,517	4,645	2,676	22	209,873	6	6	7	7	7	0	FSP (2,317ha) ²⁾	
10	M1-g	6,790	2,194	6,172	1,789	26	135,378	7	6	7	6	7	0	Rice Terrace	
11	M5-e	3,089	2,161	5,282	1,656	54	114,141	7	7	7	5	7	0	SAPI	
12	M4-c	5,522	1,119	7,101	925	17	79,461	7	5	7	7	7	25	0% SAPI	
13	M2-e	6,698	2,635	3,089	2,106	31	81,358	5	7	7	6	6	2,053	31%	
14	M2-c	5,631	3,497	2,897	1,571	28	101,331	4	7	7	7	6	120	2% SAPI	
15	M2-g	5,649	1,425	5,339	1,070	19	76,092	7	6	7	5	6	0		
16	M4-a	5,781	3,364	3,218	1,944	34	108,240	5	7	7	5	6	0	SAPI/ITTO ³⁾	
17	M5-c	6,683	5,017	2,341	3,877	58	117,448	4	7	7	5	6	0	National Park	
18	M1-e	6,258	1,573	2,793	1,199	19	43,942	4	6	6	7	6	0	SAPI	
19	M2-1	7,863	1,276	3,762	906	12	48,015	5	5	6	7	6	0	SAPI	
20	M2-f	4,332	957	6,538	802	19	62,588	7	5	6	5	6	0	SAPI	
21	C7-a	8,153	942	8,371	578	7	78,851	7	4	7	5	6	8,153	100%	
22	M4-g	10,732	4,676	1,048	3,830	36	48,984	3	7	6	6	6	0	SAPI	
23	M4-e	10,177	3,463	2,126	2,647	26	73,589	4	6	6	6	6	98	1% SAPI	
24	M6-c	6,835	2,898	2,125	2,012	29	61,603	4	7	6	5	6	6,331	93%	
25	M2-b	6,787	3,419	1,406	1,335	20	48,085	3	6	6	7	6	2,251	33% FSP (1,032ha)	
26	M1-b	4,787	3,579	1,228	1,176	25	43,959	3	6	6	7	6	0	SAPI	
27	M6-a	3,604	2,184	3,207	1,046	29	70,064	5	7	6	4	6	1,151	32%	
28	C9-f	4,573	1,418	4,290	920	20	60,830	6	6	6	4	6	4,384	96%	
29	M5-g	3,046	1,479	3,494	881	29	51,662	5	7	6	4	6	29	1% SAPI	
30	C10-d	5,374	1,222	5,249	452	8	64,149	7	4	6	5	6	3,568	66%	
31	M4-b	7,454	1,581	2,617	1,256	17	41,379	4	5	5	7	5	0		
32	M2-j	9,064	2,742	1,391	2,097	23	38,151	3	6	5	6	5	3,298	36%	
33	C11-a	14,253	4,458	1,025	2,036	14	45,672	3	5	6	6	5	0	SAPI/RP-G ⁴⁾	
34	M2-k	9,487	1,761	1,712	1,307	14	30,104	3	5	5	7	5	5,384	57%	
35	M1-c	5,243	3,934	0,974	1,189	23	38,308	2	6	5	7	5	0		
36	M4-d2	7,401	1,518	2,487	1,161	16	37,760	4	5	5	6	5	6,180	84%	
37	M6-e	4,691	2,065	3,030	853	18	62,587	5	5	6	4	5	864	18%	
38	A3-e	5,991	360	7,141	253	4	25,693	7	3	5	5	5	166	3%	
39	M6-d	8,296	3,436	1,597	2,040	25	54,898	3	6	6	4	5	6,560	79%	
40	M1-j	7,490	5,202	0,880	1,207	16	45,771	2	5	6	6	5	0		
41	M6-b	4,666	2,085	2,099	1,177	25	43,774	4	6	5	4	5	3,414	73%	
42	M1-a	6,643	4,005	0,698	1,121	17	27,961	2	5	5	7	5	0		
43	M5-f	4,051	1,367	1,837	990	24	25,099	3	6	5	5	5	3,327	82%	
44	C9-e	3,692	930	2,439	718	19	22,663	4	6	5	4	5	3,692	100%	
45	M5-b	3,421	2,255	2,465	559	16	55,564	4	5	6	4	5	0		
46	C10-f	4,656	1,006	4,708	393	8	47,365	6	4	6	3	5	4,655	100%	
47	A3-d	6,719	809	2,623	309	5	21,203	4	3	5	7	5	0		
48	C10-c	5,281	577	4,805	229	4	27,744	6	3	5	5	5	779	15% RP-G	
49	M4-f	7,222	2,519	2,557	1,912	26	64,418	4	6	6	2	5	677	9%	
50	M5-a	7,504	4,455	2,676	609	8	119,222	4	4	7	3	5	0		
51	C9-g	5,228	1,101	3,451	424	8	37,992	4	4	5	4	5	5,212	100%	
52	A3-b	5,908	305	4,061	207	4	12,395	6	2	4	6	5	0		
53	M7-e	6,255	3,453	0,576	1,084	17	19,904	2	5	5	5	4	0		
54	A3-c	5,371	417	2,441	221	4	10,193	4	3	3	7	4	0		
55	A3-f	6,110	439	3,109	196	3	13,660	5	2	4	6	4	5,671	93%	
56	M7-d	7,066	3,964	0,543	2,214	31	21,511	2	7	5	2	4	0	SAPI	
57	M6-f	5,269	2,351	0,609	1,109	21	14,333	2	6	4	4	4	1,276	24% SAPI	
58	M3-c	4,571	2,088	0,834	882	19	17,411	2	6	4	4	4	0	ITTO	
59	M8-g	7,894	658	1,591	494	6	10,455	3	3	4	6	4	0		
60	C7-c	10,177	535	3,303	410	4	17,685	5	3	4	4	4	6,654	65%	
61	M8-h	3,659	479	1,681	402	11	8,049	3	4	3	6	4	0		
62	C7-b	5,585	488	2,939	352	6	14,347	4	4	4	4	4	5,377	96%	
63	C8-c	5,139	377	4,847	317	6	18,273	6	3	4	3	4	5,138	100%	
64	C6-c	6,653	461	6,371	253	4	29,360	7	2	5	2	4	6,653	100%	
65	C10-e	8,250	438	7,180	235	3	31,458	7	2	5	2	4	8,231	100%	
66	C5-c	8,746	434	4,115	220	3	17,880	6	2	4	4	4	0		
67	C6-a	8,901	392	3,284	199	2	12,857	5	2	4	5	4	792	9% RP-G	
68	A3-g	4,130	271	2,389	188	5	6,461	4	3	3	6	4	3,843	93%	
69	C5-d	6,064	161	6,294	117	2	10,133	7	2	3	4	4	4,697	77%	

Table 9.1.1 Priority Ranking of Sub-watersheds (SWSs) in the Upper Magat and Cagayan River Basin (2/2)

Ranking	ID	Basin Area (ha)	Changed Area (ha)	Erodible Layer Reduction (mm/year)	Area (Man+ Agro) (ha)	Ref. Area Ratio (%)	Soil loss reduction (m3/yr)	Natural Score			Social Score	Synthesized Score	CADC (ha) DfR	CADC /Basin DfR	Remarks
								Layer	Area Ratio	Reduction					
70	C6-b	5,490	367	3.570	94	2	13,103	5	2	4	5	4	5,398	98%	
71	C6-e	7,050	37	9.594	29	0	3,603	7	1	2	6	4	7,003	99%	
72	M6-g	5,759	2,707	0.216	1,977	34	5,861	2	7	3	3	4	795	14%	SAPI
73	C8-g	5,507	2,128	0.187	1,799	33	6,477	2	7	3	3	4	5,452	99%	
74	M8-e	8,035	3,603	0.438	1,021	13	15,784	2	5	4	4	4	0		
75	A2-e	5,609	1,645	0.205	893	16	3,366	2	5	2	6	4	800	14%	
76	A2-c	4,783	1,673	0.260	780	16	4,337	2	5	2	6	4	823	17%	
77	C8-a	7,705	495	3.614	390	5	17,875	5	3	4	3	4	7,518	98%	
78	A1-c	6,370	739	0.988	383	6	7,276	2	3	3	7	4	0		
79	M2-a	8,024	3,221	0.379	296	4	12,196	2	2	4	7	4	0		
80	C5-b	4,024	282	2.950	179	4	8,315	4	3	3	5	4	0		
81	M3-b	12,026	1,746	0.650	972	8	11,385	2	4	4	4	4	0		
82	A2-f	5,909	1,529	0.351	662	11	5,357	2	5	2	5	4	826	14%	
83	M8-b	4,448	2,355	0.372	343	8	8,757	2	4	3	5	4	0		
84	C9-b	5,684	834	3.857	298	5	32,134	5	3	5	1	4	5,684	100%	
85	A3-a	4,217	591	1.277	288	7	7,553	3	4	3	4	4	0		
86	C9-a	3,805	342	4.458	180	5	15,252	6	3	4	1	4	3,803	100%	
87	C10-a	9,385	214	3.379	130	1	7,216	5	1	3	5	4	0		RP-G
88	C10-b	6,419	161	3.702	98	2	5,962	5	2	3	4	4	0		
89	C8-h	8,291	1,557	0.603	1,409	17	9,396	2	5	3	3	3	7,308	88%	
90	C8-i	4,825	1,524	0.104	1,241	26	1,565	2	6	2	3	3	995	21%	
91	M8-f	8,655	1,490	0.653	937	11	9,732	2	4	3	4	3	0		
92	M8-c	6,899	4,432	0.446	722	10	19,778	2	4	5	2	3	0		
93	C9-c	5,829	673	0.629	562	10	4,223	2	4	2	5	3	5,789	99%	
94	M7-b	5,366	1,852	0.609	538	10	11,281	2	4	4	3	3	0		
95	C8-b	7,074	472	2.178	387	5	10,281	4	3	4	2	3	6,052	86%	
96	A2-a	5,857	737	0.531	205	3	3,931	2	2	2	7	3	0		
97	C3-c	5,425	116	1.620	78	1	1,881	3	2	2	6	3	0		
98	C6-d	4,507	50	12.377	45	1	6,149	7	1	3	2	3	4,507	100%	
99	C8-d	7,630	1,538	0.421	910	12	3,965	2	5	2	3	3	6,875	90%	
100	A2-d	6,137	1,096	0.417	648	11	4,583	2	4	2	4	3	0		
101	M7-c	6,183	2,049	0.554	440	7	11,350	2	4	4	2	3	0		
102	C8-e	5,609	359	1.760	256	5	6,332	3	3	3	3	3	5,604	100%	
103	C5-e	7,834	194	2.223	126	2	4,317	4	2	2	4	3	5,544	71%	
104	C1-d	6,832	827	0.445	261	4	3,674	2	3	2	4	3	0		
105	M6-h	3,697	1,103	0.853	244	7	9,398	2	4	3	2	3	0		
106	A1-a	7,136	1,798	-0.009	196	3	-158.573	2	2	1	6	3	0		
107	C1-e	6,619	595	0.246	96	1	1,471	2	2	2	5	3	0		
108	C3-e	5,221	102	1.254	79	2	1,276	3	2	1	5	3	0		
109	C4-c	5,024	82	3.849	53	1	3,148	5	1	2	3	3	0		
110	C3-d	6,860	33	7.505	27	0	2,470	7	1	2	1	3	0		
111	M3-a	21,345	2,921	0.148	1,404	7	4,364	2	4	2	2	3	0		
112	M7-a	6,246	1,069	0.613	391	6	6,551	2	3	3	2	3	0		
113	A1-b	4,828	540	0.877	314	6	4,742	2	4	2	2	3	0		
114	M8-d	4,863	2,093	0.373	251	5	7,802	2	3	3	2	3	0		
115	A4-b	13,010	641	0.299	151	1	1,908	2	1	2	5	3	0		
116	C2-d	5,223	620	-0.072	77	1	-441	2	2	1	5	3	0		
117	C5-a	6,044	138	1.028	55	1	1,424	3	1	2	4	3	0		
118	C3-a	5,680	430	-0.147	42	1	-631	2	1	1	6	3	0		
119	C4-d	4,926	14	5.849	11	0	788	7	1	1	1	3	67	1%	
120	C8-f	5,349	878	-0.253	645	12	-2,235	1	5	1	2	2	4,746	89%	
121	M8-a	6,033	3,214	0.038	235	4	1,233	2	3	1	3	2	0		
122	A2-b	6,101	369	0.365	144	2	1,356	2	2	1	4	2	0		
123	C1-c	7,787	311	0.144	46	1	450	2	1	1	5	2	0		
124	C4-b	3,946	28	1.980	15	0	561	3	1	1	4	2	0		
125	C1-b	5,878	155	-0.187	0	0	-287	2	1	1	5	2	0		
126	C9-d	6,237	127	0.991	95	2	1,275	2	2	1	3	2	6,237	100%	
127	C3-b	8,332	299	0.187	54	1	555	2	1	1	4	2	0		
128	C4-a	2,881	74	-0.250	2	0	-179	1	1	1	5	2	0		
129	C2-a	5,976	19	-0.017	0	0	0	2	1	1	4	2	0		
130	A4-a	10,586	70	0.300	14	0	188	2	1	1	3	2	0		
131	C2-c	7,118	60	-0.153	1	0	-95	2	1	1	3	2	0		
132	C2-b	4,966	96	-0.092	0	0	-88	2	1	1	2	2	0		
133	C1-a	8,454	0	0.000	0	0	0	2	1	1	1	1	0		
TOTAL		874,602	210,992		111,222								23,257,550		

- 1) SAPI: SWS is included in FSP-2 by Special Assistance for Project Implimentation
- 2) FSP: Ther is a Sub-project sit of Forestry Sector Project
- 3) ITTO: Ther is a CBFM project funded by International Timber Trading Organization
- 4) RP-G: There is a CBFM project funded by RP-German Debt-for-Nature-Swap Initiative Program

Table 9.1.2 Ranking of Degraded Area by Sub-watersheds (SWs) in the Upper Magat and Cagayan River Basin (1/2)

Ranking	ID	Basin Area (ha)	Area (Man+ Agro) (ha)	Ref. Area Ratio (%)	CADC (ha) DfR	CADC /Basin (%) DfR	Remarks	SUSIMO	
								(1)	(2)
5	M5-d	7,689	4,297	56			SAPI ¹⁾	○	
17	M5-c	6,683	3,877	58			National Park	○	
22	M4-g	10,732	3,830	36			SAPI	○	
1	M1-h	7,600	3,452	45			SAPI	○	
6	M1-i	7,900	2,809	36			SAPI	○	
9	M1-d	12,208	2,676	22			FSP (2,317ha) ²⁾	○	
23	M4-e	10,177	2,647	26	98	1%	SAPI	○	
7	M2-d	8,038	2,441	30	16	0%	SAPI	○	
56	M7-d	7,066	2,214	31			SAPI	○	
13	M2-e	6,698	2,106	31	2,053	31%		○	○
2	M2-i	7,613	2,104	28	7,031	92%			○
32	M2-j	9,064	2,097	23	3,298	36%		○	○
39	M6-d	8,296	2,040	25	6,560	79%			○
33	C11-a	14,253	2,036	14			SAPI/RP-G ³⁾	○	
3	M2-h	7,306	2,021	28	6,243	85%			○
24	M6-e	6,835	2,012	29	6,331	93%			○
4	M1-f	7,316	1,979	27			Rice Terrace	○	
72	M6-g	5,759	1,977	34	795	14%	SAPI	○	
16	M4-a	5,781	1,944	34			SAPI/ITTO ⁴⁾	○	
49	M4-f	7,222	1,912	26	677	9%		○	
73	C8-g	5,507	1,799	33	5,452	99%			○
10	M1-g	6,790	1,789	26			Rice Terrace	○	
11	M5-e	3,089	1,656	54			SAPI	○	
14	M2-c	5,631	1,571	28	120	2%	SAPI	○	
8	M4-d1	6,810	1,567	23	6,757	99%			○
89	C8-h	8,291	1,409	17	7,308	88%			○
111	M3-a	21,345	1,404	7				○	
25	M2-b	6,787	1,335	20	2,251	33%	FSP (1,032ha)	○	○
34	M2-k	9,487	1,307	14	5,384	57%		○	○
31	M4-b	7,454	1,256	17				○	
90	C8-i	4,825	1,241	26	995	21%		○	○
40	M1-j	7,490	1,207	16				○	
18	M1-e	6,258	1,199	19			SAPI	○	
35	M1-c	5,243	1,189	23				○	
41	M6-b	4,666	1,177	25	3,414	73%		○	○
26	M1-b	4,787	1,176	25			SAPI	○	
36	M4-d2	7,401	1,161	16	6,180	84%			○
42	M1-a	6,643	1,121	17				○	
57	M6-f	5,269	1,109	21	1,276	24%	SAPI	○	○
53	M7-e	6,255	1,084	17				○	
15	M2-g	5,649	1,070	19				○	
27	M6-a	3,604	1,046	29	1,151	32%		○	○
74	M8-e	8,035	1,021	13				○	
43	M5-f	4,051	990	24	3,327	82%			○
81	M3-b	12,026	972	8				○	
91	M8-f	8,655	937	11				○	
12	M4-c	5,522	925	17	25	0%	SAPI	○	
28	C9-f	4,573	920	20	4,384	96%			○
99	C8-d	7,630	910	12	6,875	90%			○
19	M2-l	7,863	906	12			SAPI	○	
75	A2-e	5,609	893	16	800	14%		○	
58	M3-c	4,571	882	19			ITTO	○	
29	M5-g	3,046	881	29	29	1%	SAPI	○	
37	M6-e	4,691	853	18	864	18%		○	
20	M2-f	4,332	802	19			SAPI	○	
76	A2-c	4,783	780	16	823	17%		○	
92	M8-c	6,899	722	10				○	
44	C9-e	3,692	718	19	3,692	100%			○
82	A2-f	5,909	662	11	826	14%		○	
100	A2-d	6,137	648	11				○	
120	C8-f	5,349	645	12	4,746	89%			○
50	M5-a	7,504	609	8				○	
21	C7-a	8,153	578	7	8,153	100%			○
93	C9-c	5,829	562	10	5,789	99%			○
45	M5-b	3,421	559	16				○	
94	M7-b	5,366	538	10				○	
59	M8-g	7,894	494	6				○	
30	C10-d	5,374	452	8	3,568	66%		○	○
101	M7-c	6,183	440	7				○	
51	C9-g	5,228	424	8	5,212	100%			○
60	C7-c	10,177	410	4	6,654	65%		○	○
61	M8-h	3,659	402	11				○	
46	C10-f	4,656	393	8	4,655	100%			○

Table 9.1.2 Ranking of Degraded Area by Sub-watersheds (SWs) in the Upper Magat and Cagayan River Basin (2/2)

Ranking	ID	Basin Area (ha)	Area (Man+ Agro) (ha)	Ref. Area Ratio (%)	CADC (ha) DfR	CADC /Basin (%) DfR	Remarks	SUSIMO	
								DENR	NCIP
		(1)	(2)	(3)=(2)/(1)	(4)	(5)=(4)/(1)			
112	M7-a	6,246	391	6				○	
77	C8-a	7,705	390	5	7,518	98%			○
95	C8-b	7,074	387	5	6,052	86%			○
78	A1-c	6,370	383	6				○	
62	C7-b	5,585	352	6	5,377	96%			○
83	M8-b	4,448	343	8				○	
63	C8-c	5,139	317	6	5,138	100%			○
113	A1-b	4,828	314	6				○	
47	A3-d	6,719	309	5				○	
84	C9-b	5,684	298	5	5,684	100%			○
79	M2-a	8,024	296	4				○	
85	A3-a	4,217	288	7				○	
104	C1-d	6,832	261	4				○	
102	C8-e	5,609	256	5	5,604	100%			○
64	C6-c	6,653	253	4	6,653	100%			○
38	A3-e	5,991	253	4	166	3%		○	
114	M8-d	4,863	251	5				○	
105	M6-h	3,697	244	7				○	
65	C10-e	8,250	235	3	8,231	100%			○
121	M8-a	6,033	235	4				○	
48	C10-c	5,281	229	4	779	15%	RP-G	○	
54	A3-e	5,371	221	4				○	
66	C5-c	8,746	220	3				○	
52	A3-b	5,908	207	4				○	
96	A2-a	5,857	205	3				○	
67	C6-a	8,901	199	2	792	9%	RP-G	○	
55	A3-f	6,110	196	3	5,671	93%			○
106	A1-a	7,136	196	3				○	
68	A3-g	4,130	188	5	3,843	93%			○
86	C9-a	3,805	180	5	3,803	100%			○
80	C5-b	4,024	179	4				○	
115	A4-b	13,010	151	1				○	
122	A2-b	6,101	144	2				○	
87	C10-a	9,385	130	1			RP-G	○	
103	C5-e	7,834	126	2	5,544	71%		○	○
69	C5-d	6,064	117	2	4,697	77%		○	○
Sub-total		727,953	110,212		209,364			81	40
88	C10-b	6,419	98	2					
107	C1-e	6,619	96	1					
126	C9-d	6,237	95	2	6,237	100%			
70	C6-b	5,490	94	2	5,398	98%			
108	C3-e	5,221	79	2					
97	C3-c	5,425	78	1					
116	C2-d	5,223	77	1					
117	C5-a	6,044	55	1					
127	C3-b	8,332	54	1					
109	C4-c	5,024	53	1					
123	C1-c	7,787	46	1					
98	C6-d	4,507	45	1	4,507	100%			
118	C3-a	5,680	42	1					
71	C6-e	7,050	29	0	7,003	99%			
110	C3-d	6,860	27	0					
124	C4-b	3,946	15	0					
130	A4-a	10,586	14	0					
119	C4-d	4,926	11	0	67	1%			
128	C4-a	2,881	2	0					
131	C2-c	7,118	1	0					
125	C1-b	5,878	0	0					
129	C2-a	5,976	0	0					
132	C2-b	4,966	0	0					
133	C1-a	8,454	0	0					
Sub-total		146,649	1,010		23,211				
TOTAL		874,602	111,222		232,576			81	40

- 1) SAPI: SWS is included in FSP-2 by Special Assistance for Project Implimentation
- 2) FSP: Ther is a Sub-project sit of Forestry Sector Project
- 3) RP-G: There is a CBFM project funded by RP-German Debt-for-Nature-Swap Initiative Program
- 4) ITTO: Ther is a CBFM project funded by International Timber Trading Organization

Table 9.4.1 Unit Cost(1/2)

I. Rehabilitation Plan		Unit Cost (Round)	Unit/year	Unit Cost (P1,000)
I-1	Rehabilitation w/CBFM			
	a) Assisted natural regeneration (ANR)	6,200.00	Php/ha	6.2
	b) Forest stand improvement (FSI)	4,500.00	Php/ha	4.5
	c) Timber stand improvement (TSI)	5,200.00	Php/ha	5.2
	d) Reforestation	16,100.00	Php/ha	16.1
	e) Agroforestry	14,900.00	Php/ha	14.9
	f) Silvopastoral	15,300.00	Php/ha	15.3
	Total of Plantation Establishment			
I-2	Protection and Maintenance			
	Components			
	a1) Assisted natural regeneration (ANR) (1st year)	6,200.00	Php/ha	6.2
	a2) Assisted natural regeneration (ANR) (2nd year)	4,700.00	Php/ha	4.7
	b1) Forest stand improvement (FSI) (1st year)	3,200.00	Php/ha	3.2
	b2) Forest stand improvement (FSI) (2nd year)	2,000.00	Php/ha	2.0
	c1) Timber stand improvement (TSI) (1st year)	1,600.00	Php/ha	1.6
	c2) Timber stand improvement (TSI) (2nd year)	1,100.00	Php/ha	1.1
	d1) Reforestation (1st year)	12,700.00	Php/ha	12.7
	d2) Reforestation (2nd year)	6,800.00	Php/ha	6.8
	d3) Reforestation (3rd year)	3,200.00	Php/ha	3.2
	e1) Agroforestry (1st year)	5,900.00	Php/ha	5.9
	e2) Agroforestry (2nd year)	8,200.00	Php/ha	8.2
	e3) Agroforestry (3rd year)	2,800.00	Php/ha	2.8
	f1) Silvopastoral (1st year)	6,700.00	Php/ha	6.7
	f2) Silvopastoral (2nd year)	1,400.00	Php/ha	1.4
	f3) Silvopastoral (3rd year)	200.00	Php/ha	0.2
I-3	Infrastructure for Nursery			
	a) Assisted natural regeneration (ANR)	600.00	Php/ha	0.6
	b) Reforestation	1,800.00	Php/ha	1.8
	c) Agroforestry	1,200.00	Php/ha	1.2
IV-4	Community based Enterprise Development	100,000.00	nos.	100.0
II	PO/IPO Capacity Building			
		Unit Cost	Unit/year	Unit Cost (P1,000)
II-1	Community Organizing and PO Formulation			
	a) POs/IPOs with Rehabilitation Plan III (112)	546,800.00	Php/POorIPO	546.8
	b) POs/IPOs without Rehabilitation Plan III (296)	41,100.00	Php/POorIPO	41.1
II-2	Participatory Planning			
	a) POs/IPOs with Rehabilitation Plan III	2,500.00	Php/POorIPO	2.5
	b) POs/IPOs without Rehabilitation Plan III	600.00	Php/POorIPO	0.6
II-2	PO/IPO Capacity Building			
	a) POs/IPOs with Rehabilitation Plan III	3,272,200.00	Php/POorIPO	3,272.2
	b) POs/IPOs without Rehabilitation Plan III	695,800.00	Php/POorIPO	695.8

Table 9.4.1 Unit Cost(2/2)

III	Institutional Strengthening	Unit Cost	Unit/year	Unit Cost (P1,000)
III-1	SUSIMO (DENR/NCIP) Building Construction	200,000.00	Php/unit	200.0
III-2	Vehicle			
	For DENR/NCIP			
	Pick-up	1,050,000.00	Php/unit	1,050.0
	For PMOs			
	Pick-up	1,050,000.00	Php/unit	1,050.0
	Motorcycle	90,000.00	Php/unit	90.0
	For SUSIMO (DENR/NCIP)			
	Pick-up	1,050,000.00	Php/unit	1,050.0
	Motorcycle	90,000.00	Php/unit	90.0
III-3	Equipment			
	For DENR/NCIP			
	Computer set	85,000.00	Php/unit	85.0
	Laser printer	40,000.00	Php/unit	40.0
	Photo copier	350,000.00	Php/unit	350.0
	Others	1,525,000.00	Php/unit	1,525.0
	For PMO (DENR/NCIP)			
	Computer set	85,000.00	Php/unit	85.0
	Laser printer	40,000.00	Php/unit	40.0
	Photo copier	350,000.00	Php/unit	350.0
	GPS	20,000.00	Php/unit	20.0
	Others	505,000.00	Php/unit	505.0
	For SUSIMO (DENR/NCIP)			
	Computer set	85,000.00	Php/unit	85.0
	Laser printer	40,000.00	Php/unit	40.0
	Surveying equipment	110,000.00	Php/unit	110.0
	GPS	20,000.00	Php/unit	20.0
	Others	245,000.00	Php/unit	245.0
III-4	Capacity building			
	Informal training (short training)	540,000.00	Php in total	540.0
	Formal training (MS scholarship)	716,000.00	Php in total	716.0
	Field visit (ASEAN)	990,000.00	Php in total	990.0
III-5	Str'ng tech. acq'n and transfer	1,020,000.00	Php in total	1,020.0
IV	Watershed Management Council and Cost Sharing Mechanism Establishment for FSP-2	Unit Cost	Unit/year	Unit Cost (P1,000)
IV-1	Initiative for WM councils establishment	1,800,000.00	Php	1,800.0
IV-2	Initiative for Cost Sharing Mechanism	1,300,000.00	Php	1,300.0

Table 9.4.2 Indicative Cost Estimate for the M/P

(unit: million pesos)

Items	Total
I. Preparatory Wokk	215.1
II. PO Formation & CBFMA Acquisition / IPO Formation	73.4
II-1 Pos/IPOs with Rehabilitation Plan	61.2
II-2 Pos/IPOs without Rehabilitation Plan	12.2
III. Participatory Planning	0.5
III-1 Pos/IPOs with Rehabilitation Plan	0.3
III-2 Pos/IPOs without Rehabilitation Plan	0.2
IV. Rehabilitation of Degraded Protected and Forestland	5,791.9
IV-1 Plantation Establishment	2,697.2
IV-2 Infrastructure	184.9
IV-3 Protection and Maintenance	2,909.9
V. Community based Enterprise Development	40.8
VI. PO/IPO Capacity Building	573.3
VI-1 Pos/IPOs with Rehab. Plan III above	366.5
VI-2 Pos/IPOs without Rehab. Plan III above	206.8
VII. Institutional Strengthening	690.7
VII-1 SUSIMO Building Construction	24.2
VII-2 Vehicle	323.0
VII-3 Equipment	151.6
VII-4 Capacity building	179.6
VII-5 Strengthening technical. acquisition and transfer	12.2
VIII. Initiative for WM councils establishment	1.8
IX. Initiative for Cost Sharing Mechanism	1.3
X. SUB-TOTAL	7,388.8
XI. TA Consultant (8% of X)	591.1
XII. Contingency (10 % of X-XI)	798.0
XIII. Administrative Cost (6% of X-XI)	478.8
Grand Total	9,256.6

Table 9.5.1 Implementation Schedule of the Master Plan

Activities	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
1 Preparatory Works	[Solid bar from 2004 to 2008]												
2 PO Formation and CBFMA Acquisition/IPO Formation		[Solid bar from 2005 to 2008]					[Solid bar from 2010 to 2012]						
3 Participatory Planning			[Solid bar from 2006 to 2008]						[Solid bar from 2012 to 2014]				
4 Rehabilitation of Degraded Protected Area and Forestland				[Solid bar from 2007 to 2014]									
4.1 Nursery preparation				[Solid bar from 2007 to 2014]									
4.2 Plantation Establishment				[Solid bar]	[Solid bar]	[Solid bar]	[Solid bar]	[Solid bar]	[Solid bar]	[Solid bar]			
4.3 Protection and maintenance (regular survival rate survey/replanting)				[Solid bar from 2007 to 2015]									
4.4 Community Based Enterprise Development					[Solid bar from 2008 to 2009]					[Solid bar from 2013 to 2014]			
5 PO/IPO Capacity Building (POCB) by AO		[Solid bar from 2005 to 2008]					[Solid bar from 2010 to 2013]						
5.1 Capacity building for preparatory work		[Solid bar from 2005 to 2008]					[Solid bar from 2010 to 2013]						
5.2 Capacity building for participatory planning			[Solid bar from 2006 to 2008]						[Solid bar from 2012 to 2014]				
5.3 Capacity building for project implementation				[Solid bar from 2007 to 2010]									
6 Institutional Strengthening		[Dashed bar from 2005 to 2010]											
6.1 Human resource development		[Dashed bar from 2005 to 2010]											
6.2 Construction of SUSIMO offices		[Solid bar from 2005 to 2006]											
6.3 Mobility improvement (procurement of vehicles and motorcycles)		[Solid bar from 2005 to 2006]					[Solid bar from 2010 to 2011]						
6.4 Provision of office equipment and furniture		[Solid bar from 2005 to 2006]					[Solid bar from 2010 to 2011]						
7 Initiative for Watershed Management Council			[Solid bar from 2006 to 2007]		[Solid bar from 2007 to 2008]								
7.1 Creation of a task force			[Solid bar from 2006 to 2007]										
7.2 Formulation of action plan				[Solid bar from 2007 to 2008]									
7.3 Dissemination and consensus building				[Solid bar from 2007 to 2009]									
7.4 Preparation of draft documents					[Solid bar from 2008 to 2009]								
7.5 Workshop to refine the draft documents by stakeholders						[Solid bar from 2009 to 2014]							
7.6 Authorization of creation of the council				[Solid bar]									
7.7 General Assembly Meeting				[Dashed bar from 2007 to 2014]									
8 Initiative for Cost Sharing Mechanism				[Solid bar from 2007 to 2008]		[Solid bar from 2008 to 2009]							
8.1 Creation of a task force				[Solid bar from 2007 to 2008]									
8.2 Formulation of action plan					[Solid bar from 2008 to 2009]								
8.3 Dissemination and consensus building					[Solid bar from 2008 to 2009]								
8.4 Drafting the mechanism						[Solid bar from 2009 to 2010]							
8.5 Workshop to refine the draft documents by stakeholders							[Solid bar from 2010 to 2014]						
8.6 Legislative process of the mechanism										[Solid bar from 2013 to 2014]			

Table 9.5.2 Action Plan of the Master Plan (1/3)

Items	unit	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
I. Preparatory Wokk		LS	LS	LS	LS	LS								
II. PO Formation & CBFMA Acquisition / IPO Formation	ha													408
II-1 POs with Rehabilitation Plan			112	112	112									112
II-2 POs without Rehabilitation Plan								296	296	296				296
III. Participatory Planning	ha													408
III-1 POs with Rehabilitation Plan				112	112	112								112
III-2 POs without Rehabilitation Plan										296	296	296		296
IV. Rehabilitation of Degraded Protected and Forestland	ha													
IV-1 Plantation Establishment														<i>181,000</i>
a) Assisted natural regeneration (ANR)	ha										8,000			8,000
b) Forest stand improvement (FSI)	ha										2,100			2,100
c) Timber stand improvement (TSI)	ha										2,500			2,500
d) Reforestation	ha				11,086	11,086	11,086	11,086	11,086	11,086	11,086			77,600
e) Agroforestry	ha				4,814	4,814	4,814	4,814	4,814	4,814	4,814			33,700
f) Silvopastoral	ha				8,157	8,157	8,157	8,157	8,157	8,157	8,157			57,100
IV-2 Infrastructure														<i>119,300</i>
a) Assisted natural regeneration (ANR)	ha										8,000			8,000
d) Reforestation	ha				11,086	11,086	11,086	11,086	11,086	11,086	11,086			77,600
e) Agroforestry	ha				4,814	4,814	4,814	4,814	4,814	4,814	4,814			33,700
IV-3 Protection and Maintenance														<i>530,400</i>
a1) Assisted natural regeneration (ANR) (1st year)	ha										8,000			8,000
a2) Assisted natural regeneration (ANR) (2nd year)	ha											8,000		8,000
b1) Forest stand improvement (FSI) (1st year)	ha										2,100			2,100
b2) Forest stand improvement (FSI) (2nd year)	ha											2,100		2,100
c1) Timber stand improvement (TSI) (1st year)	ha										2,500			2,500
c2) Timber stand improvement (TSI) (2nd year)	ha											2,500		2,500
d1) Reforestation (1st year)	ha				11,086	11,086	11,086	11,086	11,086	11,086	11,086			77,600
d2) Reforestation (2nd year)	ha					11,086	11,086	11,086	11,086	11,086	11,086	11,086		77,600
d3) Reforestation (3rd year)	ha						11,086	11,086	11,086	11,086	11,086	11,086	11,086	77,600
e1) Agroforestry (1st year)	ha				4,814	4,814	4,814	4,814	4,814	4,814	4,814			33,700
e2) Agroforestry (1st year)	ha					4,814	4,814	4,814	4,814	4,814	4,814	4,814		33,700
e3) Agroforestry (1st year)	ha						4,814	4,814	4,814	4,814	4,814	4,814	4,814	33,700
f1) Silvopastoral (1st year)	ha				8,157	8,157	8,157	8,157	8,157	8,157	8,157			57,100
f2) Silvopastoral (2nd year)	ha					8,157	8,157	8,157	8,157	8,157	8,157	8,157		57,100
f3) Silvopastoral (3rd year)	ha						8,157	8,157	8,157	8,157	8,157	8,157	8,157	57,100
V. Community based Enterprise Development	nos.					75	37				148	148		408
VI. PO/IPO Capacity Building														408
VI-1 Pos/IPOs with Rehab. Plan III above	nos.		112	112	112	112	112	112						112
VI-2 Pos/IPOs without Rehab. Plan III above	nos.	6	6	6				296	296	296	296	296		296

Table 9.5.2 Action Plan of the Master Plan (2/3)

Items	unit	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
VII. Institutional Strengthening														
VII-1 SUSIMO Building Construction														
a) SUSIMO DENR	nos.		54	27										81
b) SUSIMO NCIP	nos.		27	13										40
VII-2 Additional Manpower Input for PMOs														
a) PMO DENR														
Project Manager (1)	persons	4												4
Technical staff (3)	persons	12												12
Administrative staff (1)	persons	4												4
Driver and Utility (1)	persons	4												4
b) PMO NCIP														0
Project Manager (1)	persons	4												4
Technical staff (3)	persons	12												12
Administrative staff (1)	persons	4												4
Driver and Utility (1)	persons	4												4
VII-3 Additional Manpower Input for SUSIMOs														
a) SUSIMO DENR														
Office Manager (1)	persons	54	27											81
Unit Head (3)	persons	162	81											243
Technical staff (5)	persons	270	135											405
Clerk (1)	persons	54	27											81
Driver (1)	persons	54	27											81
b) SUSIMO NCIP														
Office Manager (1)	persons	27	13											40
Unit Head (3)	persons	81	39											120
Technical staff (5)	persons	135	65											200
Clerk (1)	persons	27	13											40
Driver (1)	persons	27	13											40
VII-4 Additional Manpower Input for Regular Organization														
a) PENRO/CENRO														0
Forester I (1)_FPU	persons	8												8
Forester II (1)_FPU	persons	4												4
Forest Ranger_FPU	persons	25												25
Forest Guard_FPU	persons	36												36
Forester I (1)_WMU	persons	21												21
Forester II (1)_WMU	persons	1												1
Forester I (2)_PA&WU	persons	1												1
Forester II (2)_PA&WU	persons	1												1
PA Guard_PA&WU	persons	4												4
b) ENROs														0
Forester I (1)_CBFMU	persons	2					5							7
Forester I (1)_WMU	persons	2					6							8

Table 9.5.2 Action Plan of the Master Plan (3/3)

Items	unit	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
VII-5 Vehicle														
a) For DENR/NCIP														
Pick-up	nos.	4						4						8
b) For PMOs														
Pick-up	nos.	8						8						16
c) For SUSIMOs DENR														
Pick-up		81						81						162
Motorcycle		162						162						324
d) For SUSIMOs NCIP														
Pick-up		40						40						80
Motorcycle		81						81						162
VII-6 Equipment														
a) For DENR/NCIP														
Computer set	nos.	7						7						14
Laser printer	nos.	7						7						14
Photo copier	nos.	2						2						4
Others	set	2						2						4
b) For 4 PMOs DENR and 4 PMOs NCIP														
Computer set	nos.	32						32						64
Laser printer	nos.	24						24						48
Photo copier	nos.	8						8						16
GPS	nos.	8						8						16
Others	set.	8						8						16
c) For SUSIMOs DENR														
Computer set	nos.	81						81						162
Laser printer	nos.	81						81						162
Surveying equipment	nos.	81						81						162
GPS	nos.	81						81						162
Others	nos.	81						81						162
d) For SUSIMOs NCIP														
Computer set	nos.	40						40						80
Laser printer	nos.	40						40						80
Surveying equipment	nos.	40						40						80
GPS	nos.	40						40						80
Others	nos.	40						40						80
VII-7 Capacity building														
a) Informal training (short training)	times	9	9	9	9	9		9		9		9		72
b) Formal training (MS scholarship)	person		9	18	18	18	18	12	6	6	3			108
c) Field visit (ASEAN)	person		16		16		16		16					64
VII-8 Str'ng tech. acq'n and transfer														
	nos.	1	1	1	1	1	1	1	1	1	1	1	1	12
VIII Initiative for WM councils establishment														
	LS			1	1	1	1	1	1	1	1	1	1	
VIII Initiative for Cost Sharing Mechanism														
	LS				1	1	1	1	1	1	1	1	1	

Table 9.5.3 Implementation Schedule of the FSP Phase 2

Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Pledge of the loan (by JBIC)	●										
Loan Agreement Period - 10 years (expected)		■	■	■	■	■	■	■	■	■	■
Consulting Services		■	■	■	■	■	■	■	■	■	■
Assisting Organization (AO)		■	■	■	■	■	■	■	■	■	■
1 Preparatory Works		■	■	■	■	■	■	■	■	■	■
1.1 Organizing PMOs & SUSIMOs	■	■									
1.2 Procurement of TA Consultants	■	■									
1.3 Preparation of digital topographic maps (1:10,000)		■	■								
1.4 Socio-economic Baseline Survey		■	■	■							
1.5 Preliminary Study on Livelihood/Enterprise Development		■	■								
1.6 Selection of PO CB (CO) Contractors		■	■								
1.7 Silvo-pasture Development Study (sub-contract)		■	■	■	■	■	■	■	■	■	■
2 PO Formation and CBFMA Acquisition		■	■	■	■	■	■	■	■	■	■
2.1 Preliminary identification of CBFM target sites		■	■								
2.2 CBFM campaign		■	■	■	■	■	■	■	■	■	■
2.3 Consultation with the communities / potential PO members		■	■	■	■	■	■	■	■	■	■
2.4 PO registration		■	■	■	■	■	■	■	■	■	■
2.5 Recruitment of PO members and consensus building		■	■	■	■	■	■	■	■	■	■
2.6 Identification and Approval of CBFM areas by PO		■	■	■	■	■	■	■	■	■	■
2.7 Perimeter survey of the selected CBFM areas		■	■	■	■	■	■	■	■	■	■
2.8 CBFMA acquisition		■	■	■	■	■	■	■	■	■	■
2.9 Evaluation on the PO Formation for Implementation		■	■	■	■	■	■	■	■	■	■
3 Participatory Planning		■	■	■	■	■	■	■	■	■	■
3.1 Social survey on CBFM area users/occupants/claimants		■	■	■	■	■	■	■	■	■	■
3.2 Planning of Sub-projects		■	■	■	■	■	■	■	■	■	■
4 Site Development		■	■	■	■	■	■	■	■	■	■
4.1 Conclusion of site development contracts		■	■	■	■	■	■	■	■	■	■
4.2 Nursery preparation		■	■	■	■	■	■	■	■	■	■
4.3 Plantation Establishment		■	■	■	■	■	■	■	■	■	■
4.4 Protection and maintenance (regular survival rate survey/replanting)		■	■	■	■	■	■	■	■	■	■
4.5 Survey on survival rate by a third party (sub-contract)		■	■	■	■	■	■	■	■	■	■
4.6 Community Based Enterprise Development		■	■	■	■	■	■	■	■	■	■
4.7 Formulation and approval of RUP		■	■	■	■	■	■	■	■	■	■
5 Rural Infrastructure Development		■	■	■	■	■	■	■	■	■	■
5.1 Planning		■	■	■	■	■	■	■	■	■	■
5.2 Detailed engineering design and cost estimate		■	■	■	■	■	■	■	■	■	■
5.3 Procurement of civil work contractors		■	■	■	■	■	■	■	■	■	■
5.4 Construction work		■	■	■	■	■	■	■	■	■	■
5.5 Maintenance (by LGUs and POs)		■	■	■	■	■	■	■	■	■	■
6 PO Capacity Building (POCB) by AO		■	■	■	■	■	■	■	■	■	■
6.1 Assistance in PO formation and CBFMA acquisition		■	■	■	■	■	■	■	■	■	■
6.2 Assistance in participatory planning		■	■	■	■	■	■	■	■	■	■
6.3 Assistance in organizational structure improvement		■	■	■	■	■	■	■	■	■	■
6.4 Assistance in managerial capacity development		■	■	■	■	■	■	■	■	■	■
6.5 Assistance in PO enterprise development		■	■	■	■	■	■	■	■	■	■
6.6 Assistance in technical capacity development		■	■	■	■	■	■	■	■	■	■
6.7 Assistance in Annual review and updating of I/P		■	■	■	■	■	■	■	■	■	■
7 Institutional Strengthening		■	■	■	■	■	■	■	■	■	■
7.1 Human resource development		■	■	■	■	■	■	■	■	■	■
7.2 Construction of SUSIMO offices		■	■	■	■	■	■	■	■	■	■
7.3 Mobility improvement (procurement of vehicles and motorcycles)		■	■	■	■	■	■	■	■	■	■
7.4 Provision of office equipment and furniture		■	■	■	■	■	■	■	■	■	■
8 Initiative for Watershed Management Council		■	■	■	■	■	■	■	■	■	■
8.1 Creation of a task force		■	■	■	■	■	■	■	■	■	■
8.2 Formulation of action plan		■	■	■	■	■	■	■	■	■	■
8.3 Dissemination and consensus building		■	■	■	■	■	■	■	■	■	■
8.4 Preparation of draft documents		■	■	■	■	■	■	■	■	■	■
8.5 Workshop to refine the draft documents by stakeholders		■	■	■	■	■	■	■	■	■	■
8.6 Authorization of creation of the council		■	■	■	■	■	■	■	■	■	■
8.7 General Assembly Meeting		■	■	■	■	■	■	■	■	■	■
9 Initiative for Cost Sharing Mechanism		■	■	■	■	■	■	■	■	■	■
9.1 Creation of a task force		■	■	■	■	■	■	■	■	■	■
9.2 Formulation of action plan		■	■	■	■	■	■	■	■	■	■
9.3 Dissemination and consensus building		■	■	■	■	■	■	■	■	■	■
9.4 Drafting the mechanism		■	■	■	■	■	■	■	■	■	■
9.5 Workshop to refine the draft documents by stakeholders		■	■	■	■	■	■	■	■	■	■
9.6 Legislative process of the mechanism		■	■	■	■	■	■	■	■	■	■
10 Terminal and Ex Post Project Evaluation		■	■	■	■	■	■	■	■	■	■
10.1 Socio-economic Survey for Evaluation (sub-contract)		■	■	■	■	■	■	■	■	■	■
10.2 Terminal evaluation and phase in/out planning		■	■	■	■	■	■	■	■	■	■
10.3 Aerial Validation of the Plantation		■	■	■	■	■	■	■	■	■	■

Source : Implementation Program for Forestry Sector Project Phase 2

Table 9.5.4 Annual Cost Schedule of the Master Plan (Break Down) (1/4)

(unit: million Pesos)

Items	unit	Unit Price	2,004	2,005	2,006	2,007	2,008	2,009	2,010	2,011	2,012	2,013	2,014	2,015	Total
I. Preparatory Work			43.0	43.0	43.0	43.0	43.0								215.1
II. PO Formation & CBFMA Acquisition / IPO Formation	Total														73.4
II-1 POs with Rehabilitation Plan		20	20.4	20.4	20.4										61.2
II-2 POs without Rehabilitation Plan		4							4.1	4.1	4.1				12.2
III. Participatory Planning	Total														0.5
III-1 POs with Rehabilitation Plan		0.1		0.1	0.1	0.1									0.3
III-2 POs without Rehabilitation Plan		0.1									0.1	0.1	0.1		0.2
IV. Rehabilitation of Degraded Protected and Forestland															5,791.9
IV-1 Plantation Establishment															2,697.2
a) Assisted natural regeneration (ANR)	ha	0.006											49.6		49.6
b) Forest stand improvement (FSI)	ha	0.005											9.5		9.5
c) Timber stand improvement (TSI)	ha	0.005											13.0		13.0
d) Reforestation	ha	0.016				178.5	178.5	178.5	178.5	178.5	178.5	178.5			1,249.4
e) Agroforestry	ha	0.015				71.7	71.7	71.7	71.7	71.7	71.7	71.7			502.1
f) Silvopastoral	ha	0.015				124.8	124.8	124.8	124.8	124.8	124.8	124.8			873.6
IV-2 Infrastructure															184.9
a) Assisted natural regeneration (ANR)	ha	0.001											4.8		4.8
d) Reforestation	ha	0.002				20.0	20.0	20.0	20.0	20.0	20.0	20.0			139.7
e) Agroforestry	ha	0.001				5.8	5.8	5.8	5.8	5.8	5.8	5.8			40.4
IV-3 Protection and Maintenance															2,909.9
a1) Assisted natural regeneration (ANR) (1st year)	ha	0.006											49.6		49.6
a2) Assisted natural regeneration (ANR) (2nd year)	ha	0.005												37.6	37.6
b1) Forest stand improvement (FSI) (1st year)	ha	0.003											6.7		6.7
b2) Forest stand improvement (FSI) (2nd year)	ha	0.002												4.2	4.2
c1) Timber stand improvement (TSI) (1st year)	ha	0.002											4.0		4.0
c2) Timber stand improvement (TSI) (2nd year)	ha	0.001												2.8	2.8
d1) Reforestation (1st year)	ha	0.013				140.8	140.8	140.8	140.8	140.8	140.8	140.8			985.5
d2) Reforestation (2nd year)	ha	0.007					75.4	75.4	75.4	75.4	75.4	75.4	75.4		527.7
d3) Reforestation (3rd year)	ha	0.003						35.5	35.5	35.5	35.5	35.5	35.5	35.5	248.3
e1) Agroforestry (1st year)	ha	0.006				28.4	28.4	28.4	28.4	28.4	28.4	28.4			198.8
e2) Agroforestry (1st year)	ha	0.008					39.5	39.5	39.5	39.5	39.5	39.5	39.5		276.3
e3) Agroforestry (1st year)	ha	0.003						13.5	13.5	13.5	13.5	13.5	13.5	13.5	94.4
f1) Silvopastoral (1st year)	ha	0.007				54.7	54.7	54.7	54.7	54.7	54.7	54.7			382.6
f2) Silvopastoral (2nd year)	ha	0.001						11.4	11.4	11.4	11.4	11.4	11.4		79.9
f3) Silvopastoral (3rd year)	ha	0.000							1.6	1.6	1.6	1.6	1.6	1.6	11.4

Table 9.5.4 Annual Cost Schedule of the Master Plan (Break Down) (2/4)

(unit: million Pesos)

Items	unit	Unit Price	2,004	2,005	2,006	2,007	2,008	2,009	2,010	2,011	2,012	2,013	2,014	2,015	Total
V. Community based Enterprise Development	nos.	0.1					7.5	3.7				14.8	14.8		40.8
VI. PO/IPO Capacity Building															573.3
VI-1 Pos/IPOs with Rehab. Plan III above	nos.	61.1		61.1	61.1	61.1	61.1	61.1	61.1						366.5
VI-2 Pos/IPOs without Rehab. Plan III above	nos.	0.1	0.8	0.8	0.8				40.9	40.9	40.9	40.9	40.9		206.8
VII. Institutional Strengthening															690.7
VII-1 SUSIMO Building Construction															24.2
a) SUSIMO DENR	nos.	0.2		10.8	5.4										16.2
b) SUSIMO NCIP	nos.	0.2		5.4	2.6										8.0
VII-2 Additional Manpower Input for PMOs															0.0
a) PMO DENR															
Project Manager (1)	persons	0.0	0.0												0.0
Technical staff (3)	persons	0.0	0.0												0.0
Administrative staff (1)	persons	0.0	0.0												0.0
Driver and Utility (1)	persons	0.0	0.0												0.0
b) PMO NCIP															
Project Manager (1)	persons	0.0	0.0												0.0
Technical staff (3)	persons	0.0	0.0												0.0
Administrative staff (1)	persons	0.0	0.0												0.0
Driver and Utility (1)	persons	0.0	0.0												0.0
VII-3 Additional Manpower Input for SUSIMOs															0.0
a) SUSIMO DENR															
Office Manager (1)	persons	0.0	0.0	0.0											0.0
Unit Head (3)	persons	0.0	0.0	0.0											0.0
Technical staff (5)	persons	0.0	0.0	0.0											0.0
Clerk (1)	persons	0.0	0.0	0.0											0.0
Driver (1)	persons	0.0	0.0	0.0											0.0
b) SUSIMO NCIP															
Office Manager (1)	persons	0.0	0.0	0.0											0.0
Unit Head (3)	persons	0.0	0.0	0.0											0.0
Technical staff (5)	persons	0.0	0.0	0.0											0.0
Clerk (1)	persons	0.0	0.0	0.0											0.0
Driver (1)	persons	0.0	0.0	0.0											0.0

Table 9.5.4 Annual Cost Schedule of the Master Plan (Break Down) (3/4)

(unit: million Pesos)

Items	unit	Unit Price	2,004	2,005	2,006	2,007	2,008	2,009	2,010	2,011	2,012	2,013	2,014	2,015	Total
VII-4 Additional Manpower Input for Regular Organization															0.0
a) PENRO/CENRO															
Forester I (1)_FPU	persons	0.0	0.0												0.0
Forester II (1)_FPU	persons	0.0	0.0												0.0
Forest Ranger_FPU	persons	0.0	0.0												0.0
Forest Guard_FPU	persons	0.0	0.0												0.0
Forester I (1)_WMU	persons	0.0	0.0												0.0
Forester II (1)_WMU	persons	0.0	0.0												0.0
Forester I (2)_PA&WU	persons	0.0	0.0												0.0
Forester II (2)_PA&WU	persons	0.0	0.0												0.0
PA Guard_PA&WU	persons	0.0	0.0												0.0
b) ENROs															
Forester I (1)_CBFMU	persons	0.0	0.0					0.0							0.0
Forester I (1)_WMU	persons	0.0	0.0					0.0							0.0
VII-5 Vehicle															323.0
a) For DENR/NCIP															
Pick-up	nos.	1	4.2						4.2						8.4
b) For PMOs															
Pick-up	nos.	1.1	8.4						8.4						16.8
c) For SUSIMOs DENR															
Pick-up	nos.	1.1	85.1						85.1						170.1
Motorcycle	nos.	0.1	14.6						14.6						29.2
d) For SUSIMOs NCIP															
Pick-up	nos.	1.1	42.0						42.0						84.0
Motorcycle	nos.	0.1	7.3						7.3						14.6
VII-6 Equipment															151.6
a) For DENR/NCIP															
Computer set	nos.	0.09	0.6						0.6						1.2
Laser printer	nos.	0.04	0.3						0.3						0.6
Photo copier	nos.	0.35	0.7						0.7						1.4
Others	set	1.5	3.1						3.1						6.1
b) For 4 PMOs DENR and 4 PMOs NCIP															
Computer set	nos.	0.09	2.7						2.7						5.4
Laser printer	nos.	0.04	1.0						1.0						1.9
Photo copier	nos.	0.35	2.8						2.8						5.6
GPS	nos.	0.02	0.2						0.2						0.3
Others	set.	0.5	4.0						4.0						8.1

Table 9.5.4 Annual Cost Schedule of the Master Plan (Break Down) (4/4)

(unit: million Pesos)

Items	unit	Unit Price	2,004	2,005	2,006	2,007	2,008	2,009	2,010	2,011	2,012	2,013	2,014	2,015	Total
c) For SUSIMOs DENR															
Computer set	nos.	0.09	6.9						6.9						13.8
Laser printer	nos.	0.04	3.2						3.2						6.5
Surveying equipment	nos.	0.11	8.9						8.9						17.8
GPS	nos.	0.02	1.6						1.6						3.2
Others	nos.	0.2	19.8						19.8						39.7
d) For SUSIMOs NCIP															
Computer set	nos.	0.09	3.4						3.4						6.8
Laser printer	nos.	0.04	1.6						1.6						3.2
Surveying equipment	nos.	0.11	4.4						4.4						8.8
GPS	nos.	0.02	0.8						0.8						1.6
Others	nos.	0.2	9.8						9.8						19.6
VII-7 Capacity building															<i>179.6</i>
a) Informal training (short training)	times	0.5	4.9	4.9	4.9	4.9	4.9		4.9		4.9		4.9		38.9
b) Formal training (MS scholarship)	person	0.7		6.4	12.9	12.9	12.9	12.9	8.6	4.3	4.3	2.1			77.3
c) Field visit (ASEAN)	person	1.0		15.8		15.8		15.8		15.8					63.4
VII-8 Str'ng tech. acq'n and transfer	nos.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	<i>12.2</i>
VIII Initiative for WM councils establishment	LS	0.20			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		1.8
IX. Initiative for Cost Sharing Mechanism	LS	0.16				0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16		1.3
X. TA Consultant (8% of I-IX)			23.0	13.6	12.2	62.7	70.5	71.7	92.7	69.4	68.5	68.8	30.1	7.7	591.1
XI. SUB-TOTAL			310.0	183.3	164.6	846.9	952.2	968.0	1,252.4	937.3	925.5	929.5	406.0	103.8	7,979.8
XII. Contingency (10% of XI)			31.0	18.3	16.5	84.7	95.2	96.8	125.2	93.7	92.6	93.0	40.6	10.4	798.0
XIII Administrative Cost (6% of XI)			18.6	11.0	9.9	50.8	57.1	58.1	75.1	56.2	55.5	55.8	24.4	6.2	478.8
TOTAL (XI-XIII)			360	213	191	982	1,105	1,123	1,453	1,087	1,074	1,078	471	120	9,257

Table 10.3.1 List of Laws and Regulations on Environment in the Philippines (1/5)

<p><u>Framework Laws</u></p> <ul style="list-style-type: none"> • Constitution of the Republic of the Philippines - various provisions • PD 1151, Philippine Environmental Policy (6 June 1977) • PD 1152, Philippine Environmental Code - Natural Resource Management and Conservation (6 June 1977) • PD 1067, Water Code of the Philippines • Commonwealth Act No. 141, The Public Land Act (An Act to Amend and Compile the Laws relative to Lands of the Public Domain) • Executive Order No. 192, the Reorganization Act of the Department of Environment and Natural Resources (1987) • RA 6657, The Comprehensive Agrarian Reform Law of 1988 (10 June 1988) • EO 15/1992, Creating the Philippine Council for Sustainable Development (PCSD) • DAO 30/1992, Providing Guidelines for the Transfer and Implementation of DENR Functions to the Local Government Units • DAO 36/1992, Assignment and Supervision of the DENR-Non Governmental/People's Organization (NG/PO) Desk • DAO 32/1994, Creation of an Office to Coordinate DENR Commitments to Inter-Agency Committees, Commissions, Task Forces and Special Projects • DAO 35/1994, Guidelines Governing the Implementation and Monitoring of the DENR National Crime Reporting System • EO 291, Creating Environmental Units in National Government Agencies (1996)
<p><u>Environmental Impact Assessment (EIA) Legislation</u></p> <ul style="list-style-type: none"> • PD 1586, Establishing an Environmental Impact Statement System, Including Other Environmental Management Related Research and for Other Purposes (11 June 1978) • Proclamation 2146, Proclaiming Certain Areas and Types of Projects as Environmentally Critical and Within the Scope of the • Environmental Impact Statement System Established under PD 1586 • DENR Office Circular No. 3, Series of 1983, Technical Definitions and Scope of the Environmentally Critical Projects and Areas Enumerated in Proclamation 2146 • EO 291, Improving the Environmental Impact Statement (EIS) System (12 January 1996) • DAO 37/1996, Revising DAO 21/1992 to Further Strengthen the Implementation of the Environmental Impact Statement (EIS) System • EO 342, Declaring Golf Courses as Environmentally Critical Projects and Creating the Golf Course Committee for Environmental Protection Programs (1996) • Golf Course Committee Resolution 1 of 1997, Rules and Standards in Reviewing Proposed Golf Course Projects
<p><u>Pollution Control and Hazardous Substances</u></p> <ul style="list-style-type: none"> • PD 984, National Pollution Control Decree, Providing for the Revision of RA 3931 Commonly Known as the Pollution Control Law and for Other Purposes • EO 374, Creating the Presidential Task Force on Water Resource Development and Management (to provide a harmonious and coordinated approach to water resources management) • DAO 14/1993, Revising Chapter II, Sections 57-66 of the 1978 Implementing Rules and Regulations for PD 984 (revision of air quality standards) • DAO 14A/1993, Amending DAO 14/1993 and Clarifying its Scope and Coverage • PD 1181, Providing for the Prevention, Control and Abatement of Air Pollution from Motor Vehicles and for Other Purposes (Anti Smoke-Belching Law of 1977) • DAO 12/1996, Prescribing Organizational and Management Arrangement of the Pasig River Rehabilitation Program • Laguna Lake Development Authority Resolution No. 33 of 1996, Prescribing Use of Environmental User Fees for Facilities under the Jurisdiction of the Laguna Lake Development Authority • Resolution No. 1-C of 1997 of the Pollution Adjudication Board (PAB), revising Procedural Rules of the PAB in Pollution Cases • DAO 5/1997, Procedures in the Retention of Areas within Certain Distances along the Banks of Rivers, Streams and Shores of Seas, Lakes and Oceans for Environmental Protection

Table 10.3.1 List of Laws and Regulations on Environment in the Philippines (2/5)

<ul style="list-style-type: none"> • RA 6969, Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 • DAO 29/1992, Implementing Rules and Regulations of RA 6969 • DAO 28/1994, Interim Guidelines for the Importation of Recyclable Materials Containing Hazardous Substances • DAO 38/1997, Chemical Control Order for Mercury and Mercury Compounds • DAO 39/1997, Chemical Control Order for Cyanide and Cyanide Compounds
<p><u>Protected Areas and Wildlife</u></p> <ul style="list-style-type: none"> • RA 7586, National Integrated Protected Areas System Act of 1992 (NIPAS) • DENR Memorandum Circular No. 20/1990, Guidelines on the Restoration of Open and Denuded Areas within National Parks and Other Protected Areas for the Enhancement of Biological Diversity • DAO 13/1992, Regulations Governing the Establishment of Buffer Zones within Forest Lands • DAO 25/1992, National Integrated Protected Areas System (NIPAS) Implementing Rules and Regulations (29 June 1992) • DENR Memorandum Circular No. 45/1992, Clarifications on Some Provisions of RA 7586, DAO 25/1992 and Other Related Guidelines • DAO 13/1993, Guidelines in the Conduct of Census and Registration of Protected Area Occupants (12 March 1993) • DENR Memorandum Circular No. 16/1993, Guidelines on the Establishment and Management of Buffer Zones for Protected Areas (13 May 1993) • DENR Memorandum Circular No. 22/1994, Delegation of Authority Regarding the Implementation of Foreign Assisted Integrated Protected Area Projects (IPAS) • DAO 3/1995, Procedural and/or Documentary Requirements, Guidelines and/or Criteria to be Observed and/or Followed in the Selection of Local Government Units, Non-Governmental Organizations and People's Organizations to the Protected Areas Management Board (PAMB) • DAO 5/1995, Guidelines for the Selection, Awards, Monitoring and Evaluation of Host Non-Government Organizations in the Conservation of Protected Area Projects • DENR Memorandum Order No. 8/1995, Clarifications on the Provisions of the NIPAS Law regarding the Modification of Boundary of the Protected Area and Its Buffer Zone • DAO 31/1996, Amendment of Section 61 of DAO 25/1992 Re: Implementing Rules and Regulations of RA 7586 (National Integrated Protected Areas Act of 1992) • DAO 142/1989, Guidelines on the Disposition of Confiscated Wildlife Species • DAO 36/1991, Guidelines Governing the Confiscation, Seizure and Disposition of Wild Flora and Fauna Illegally Collected, Gathered, Acquired, Transported and Imported including Paraphernalia
<p><u>Forestry</u></p> <ul style="list-style-type: none"> • PD 705, Revised Forestry Code of the Philippines (Revising PD 389) (19 May 1975) • DAO 4/1989, Revising Regulations Governing Rattan Resource (10 January 1989) • DAO 4A/1989, Special Provisions for the Processing of Rattan Applications Within Areas Reserved/occupied by Cultural Communities (12 January 1989) • DAO 59/1990, Providing Guidelines on the Confiscation, Forfeiture and Disposition of Conveyances Used in the Commission of Offences Penalized under PD 705, as amended by EO 277, and Other Forestry Laws, Rules and Regulations (22 June 1990), amended subsequently by DAO 54/1993 (16 September 1993) • DAO 4/1991, Revising Regulations Governing the Integrated Social Forestry Program (27 February 1991) • DAO 24/1991, Shift in Logging from the Old Growth (Virgin) Forests to the Second Growth (Residual) Forests (3 May 1991) • DENR Memorandum Circular No. 17/1992, Delineation of Functions and Implementation of the Integrated Social Forestry Program after the Devolution of Functions to the Local Government Units (15 October 1992) • DAO 23/1992, Institutionalizing the Master Plan for Forestry Development within the DENR and Defining Functions of Offices for the Purpose • DAO 27/1992, Management of Mossy Forests

Table 10.3.1 List of Laws and Regulations on Environment in the Philippines (3/5)

<ul style="list-style-type: none"> • DAO 35/1992, Prescribing Guidelines for Community Reforestation Contract under the Low Income Upland Communities Project (LIUCP) • DAO 22/1993, Revised Guidelines for Community Forestry Program (27 April 1993) • DAO 23/1993, Forest Land Management Program (27 April 1993) • DENR Memorandum Circular No. 1/1994, Guidelines for the Prosecution of Illegal Logging and Related Cases • DAO 7/1994, Revised Guidelines Governing the Issuance of Certificates of Origin for Logs, Timber, Lumber and Non-Timber Forest Products (17 February 1994) • DAO 30/1994, Implementing Guidelines for Non-Government Organization Assisted Community-Based Mangrove Forest Management (NGO-Assisted CBMFM) for the DENR (2 September 1994) • DENR Memorandum Circular No. 34/1994, General Outline for the Formulation of Initial Protected Area Plan • DAO 15/1995, Revised General Guidelines in the Implementation of the Sub-Classification of Forestlands and Other Inalienable Lands of the Public Domain (10 May 1995) • DAO 17/1995, Institutionalization of the Multi-Sectoral Forest Protection Communities Within the DENR System (20 May 1995) • DENR Memorandum Order No. 4/1995, Creation and Constitution of the National Federation of Multi-Sectoral Forest Protection Communities (NFMFPC) (2 February 1995) • EO 263, Adopting Community-Based Forest Management as the National Strategy to Ensure the Sustainable Development of the Country's Forestlands Resources and Providing Mechanisms for its Implementation (19 July 1995) • DAO 24/1996, Rules and Regulations Governing the Socialized Industrial Forest Management Program (23 August 1996) • DAO 29/1996, Rules and Regulations for the Implementation of Executive Order 263, Otherwise Known as the Community-Based Forest Management Strategy (CBFMS) (10 October 1996) • DAO 4/1997, Rules and Regulations Governing the Industrial Forest Management Program • DAO 1/1998, Forest Resource Securitization Strategy
<p><u>Prospecting of Biological and Genetic Resources</u></p> <ul style="list-style-type: none"> • EO 247, Prescribing Guidelines and Establishing a Regulatory Framework for the Prospecting of Biological and Genetic Resources, Their By-Products and Derivatives, for Scientific and Commercial Purposes, and for Other Purposes • DAO 20/1996, Implementing Rules and Regulations on the Prospecting of Biological and Genetic Resources
<p><u>Marine Environment</u></p> <ul style="list-style-type: none"> • PD 979, Marine Pollution Decree, Amending PD 600 Providing for Prevention and Control of Marine Pollution • National Marine Pollution Control Contingency Plan (30 June 1975) • PD 601, Empowering Coast Guards as Enforcement Agents of the Bureau of Fisheries and Aquatic Resources and the National • Pollution Control Commission (9 December 1974) • PD 602, Establishing Oil Pollution Operations Centre in the Philippine Coast Guard Headquarters (9 December 1974) • PD 1219, Providing for the Exploration, Exploitation, Utilization and Conservation of Coral Resources (Coral Resources Development and Conservation Decree) (14 October 1977), amended by PD 1698 (22 May 1990) • PD 579, on Dumping of Wastes • EO 396, Providing the Institutional Framework for the Administration of the Standards of Training, Certification and Watchkeeping for Seafarers in the Philippines (30 January 1997) • Headquarters of the Philippine Coast Guard (HPCG) Memorandum Circular No. 2/1977, Containing Rules and Regulations of Marine Pollution Prevention and Control (20 May 1977) • HPCG Memorandum Circular No. 2/1980, Ensuring that Equipment in Ships, Oil Refineries and Other Installations meet the Required Standards (7 November 1980)

Table 10.3.1 List of Laws and Regulations on Environment in the Philippines (4/5)

<ul style="list-style-type: none"> • HPCG Memorandum Circular No. 1/1981, Rules and Regulations on Monitoring Procedures for SOLAS and Maritime • Environmental Protection Requirements for Domestic Vessels • HPCG Memorandum Circular No. 5/1983, Implementing MARPOL 73/78 with respect to Vessels of Philippine Registry (12 August 1983) • HPCG Memorandum Circular No. 1/1985, Rules for Tank Cleaning Operations • HPCG Memorandum Circular No. 1/1991, Prevention, Containment, Abatement and Control of Marine Pollution (8 January 1991) • HPCG Memorandum Circular No. 2/1991, Dumping and Discharge of Wastes and Other Harmful Matter at Sea (21 January 1991) • HPCG Memorandum Circular No. 6/1991, Rules and Regulations for Tank Cleaning Operations of Vessels and Oil Tankers • HPCG Memorandum Circular No. 8/1991, Rules Providing for Marine Pollution Inspection and Apprehension Report (20 May 1991) • HPCG Memorandum Circular No. 2/1992, Port State Control • HPCG Memorandum Circular No. 4/1993, Shipboard Oil Pollution Emergency Plan for Philippine-Registered Vehicles • HPCG Memorandum Circular No. 1/1994, Prevention of Pollution by Sewage from Ships and Issuance of International Sewage Pollution Prevention (ISPP) Certificate for Philippine-Registered Vessels • HPCG Memorandum Circular No. 2/1994, Prevention of Pollution by Garbage from Ships • HPCG Memorandum Circular No. 3/1994, Prevention, Containment, Abatement and Control of Marine Pollution (16 August 1994) • Philippine Port Authority Memorandum Circular No. 4/1985, Policy on the Prevention and Control of Marine Pollution • Philippine Port Authority Memorandum Circular No. 7/1995, Anti-Pollution Measures within the Port Zone • Philippine Port Authority Administrative Order 16/1995, Rules and Regulations on the Prevention/Control of Oil, Garbage and Sewage Wastes Through the Use of Reception Facilities/Collection of Vessels Refuse • Standards on Training, Certification and Watchkeeping (STCW) Executive Committee Resolution No. 1/1997, Rules and Regulations for the Implementation of EO 396 (30 April 1997)
<p><u>Fisheries</u></p> <ul style="list-style-type: none"> • RA 8550, The Philippine Fisheries Code of 1998 • DAO 3/1998, Implementing Rules and Regulations Pursuant to RA 8550 • RA 8435, Agriculture and Fisheries Modernization Act of 1997
<p><u>Ancestral Domain and Indigenous People's Rights</u></p> <ul style="list-style-type: none"> • DENR Circular No. 3/1990, Rules on the Acceptance, Identification, Evaluation and Delineation of Ancestral Land Claims by the Special Task Force Created by Virtue of DENR Special Order Nos. 31 & 31A, Series of 1990 (27 April 1990) • DAO 61/1991, Rules on the Acceptance, Identification, Evaluation and Delineation of Ancestral Land Claims in the Province of Palawan (7 November 1991) • DAO 2/1993, Rules and Regulations for the Identification, Delineation And Recognition of Ancestral Land and Domain Claims (15 January 1993) • DAO 34/1996, Guidelines for Management of Certified Ancestral Domain Claims (12 November 1996) • DENR Memorandum Circular No. 26/1994, Flagship Program for the Indigenous Cultural Communities under the Social Reform Agenda • RA 6734, Providing for an Organic Act for the Autonomous Region in Muslim Mindanao • RA 8371, Indigenous Peoples Right Act of 1997 (29 October 1997)

Table 10.3.1 List of Laws and Regulations on Environment in the Philippines (5/5)

<p><u>Mining</u></p> <ul style="list-style-type: none">• PD 512, Declaring Prospecting and Other Mining Operations of Public Use and Benefit and Establishing the Basis and Prescribing the Rules and Procedures relating to Acquisition and Use of Surface Rights in Mineral Prospecting, Development and Exploitation, and Providing Protection and Compensation to Surface Owners (16 January 1981)• RA 7942, Philippine Mining Act of 1995 (3 March 1995)• DAO 40/1996, Revising the Implementing Rules and Regulations of the Mining Act of 1995 (20 December 1996)• Mines Adjudication Board Rules on Pleading, Practice and Procedure before the Panel of Arbitrators and the Mines Adjudication Board (12 August 1997)• RA 7076, People's Small-scale Mining Act of 1991 (27 June 1991)• DAO 34/1992, Rules and Regulations to Implement RA 7076 (6 August 1992)
<p><u>Land Acquisition, Compensation, and Resettlement</u></p> <ul style="list-style-type: none">• Local Governmental Code (LGC), 1991• Administrative Order No.50• Republic Act No.8974• Republic Act No.7279 (Urban Development and Housing Act)

Table 10.4.1 Check-list of environmental screening for the M/P

Items for Assessment		Level of Impact						Comments
		Positive impact very likely	Positive impact possible	No impact likely	Negative impact possible	Negative impact very likely	No judgement possible at present	
I. Social Environment	1. Social Condition	1-1 Scheduled resettlement			x			
		1-2 Involuntary resettlement			x			
		1-3 Changes in life style			x			
		1-4 Conflict among residence					x	
		1-5 Impact on minorities/indigenous people	x					
		1-6 Alteration of right on land tenure		x				
		1-7 Change of life style		x				
	2. Pollution	2-1 Agro-chemicals					x	
		2-2 Toxic substance			x			
		2-3 Organic pollution			x			
		2-4 Anaerobic effects			x			
		2-5 Gas emissions			x			
	3. Soils	3-1 Soil erosion	x					
		3-2 Soil properties		x				
3-3 Saline groundwater				x				
3-4 Saline drainage				x				
4. Sediments	4-1 Local erosion	x						
	4-2 Hinterland effect		x					
	4-3 River morphology			x				
	4-4 Channel regime			x				
	4-5 Sedimentation	x					Magat Reservoir	
	4-6 Estuary erosion			x				
5. Ecology	5-1 Project lands	x						
	5-2 Surrounding areas			x				
	5-3 Valleys & shores		x					
	5-4 Wetlands & plains			x				
	5-5 Aquatic species			x				
	5-6 Rare wildlife species			x				
	5-7 Wildlife habitat		x					
	5-8 Natural forest	x						
6. Socio-economic	6-1 Population change			x				
	6-2 Income & amenity	x						
	6-3 Human migration			x				
	6-4 Resettlement			x				
	6-5 Women's role			x				
	6-6 Minority groups		x					
	6-7 Sites of value			x				
	6-8 Regional effects		x					
	6-9 Recreation			x				
7. Health	7-1 Water & sanitation		x					
	7-2 Habitation			x				
	7-3 Health services			x				
	7-4 Nutrition		x					
	7-5 Relocation effect			x				
	7-6 Waterborne diseases			x				
	7-7 Vector-borne diseases			x				
	7-8 Disease control			x				
	7-9 Other hazards			x				
8. Land	8-1 Forest plantations	x						
	8-2 Upland farming	x						
	8-3 Rural communities		x					
	8-4 Mining and quarrying			x				
	8-5 Dam/reser. Potentials			x				

Figures

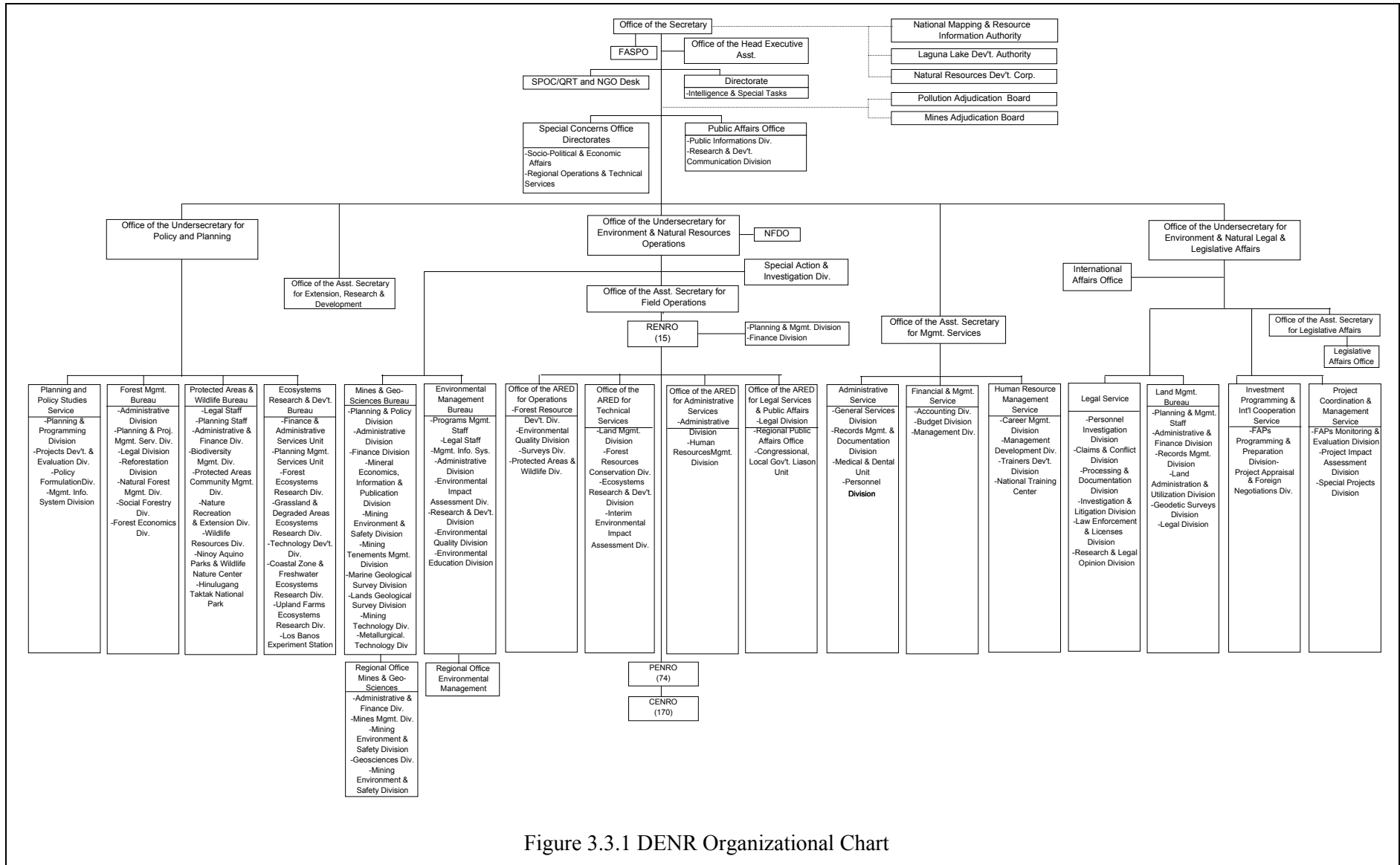


Figure 3.3.1 DENR Organizational Chart

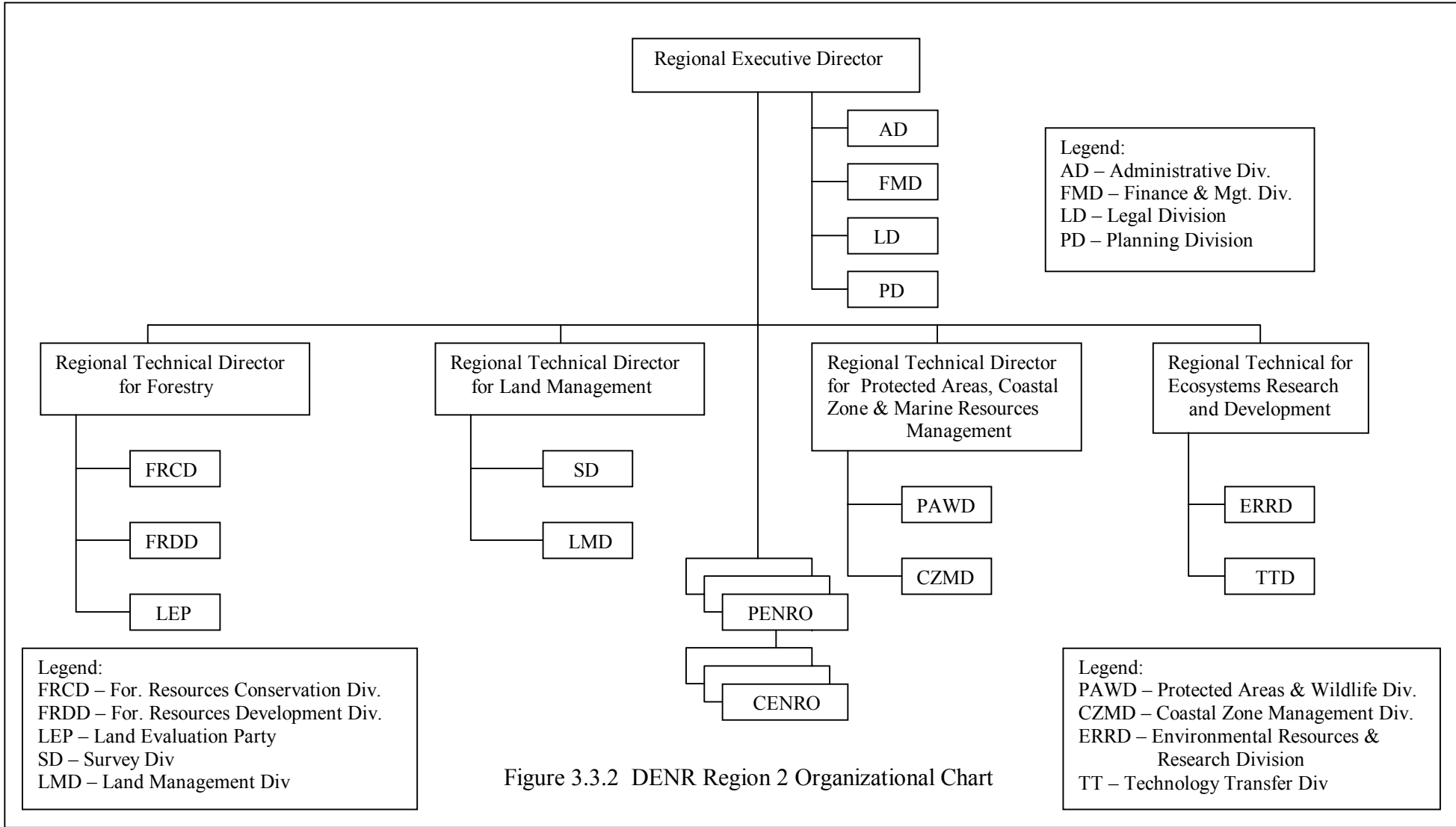


Figure 3.3.2 DENR Region 2 Organizational Chart

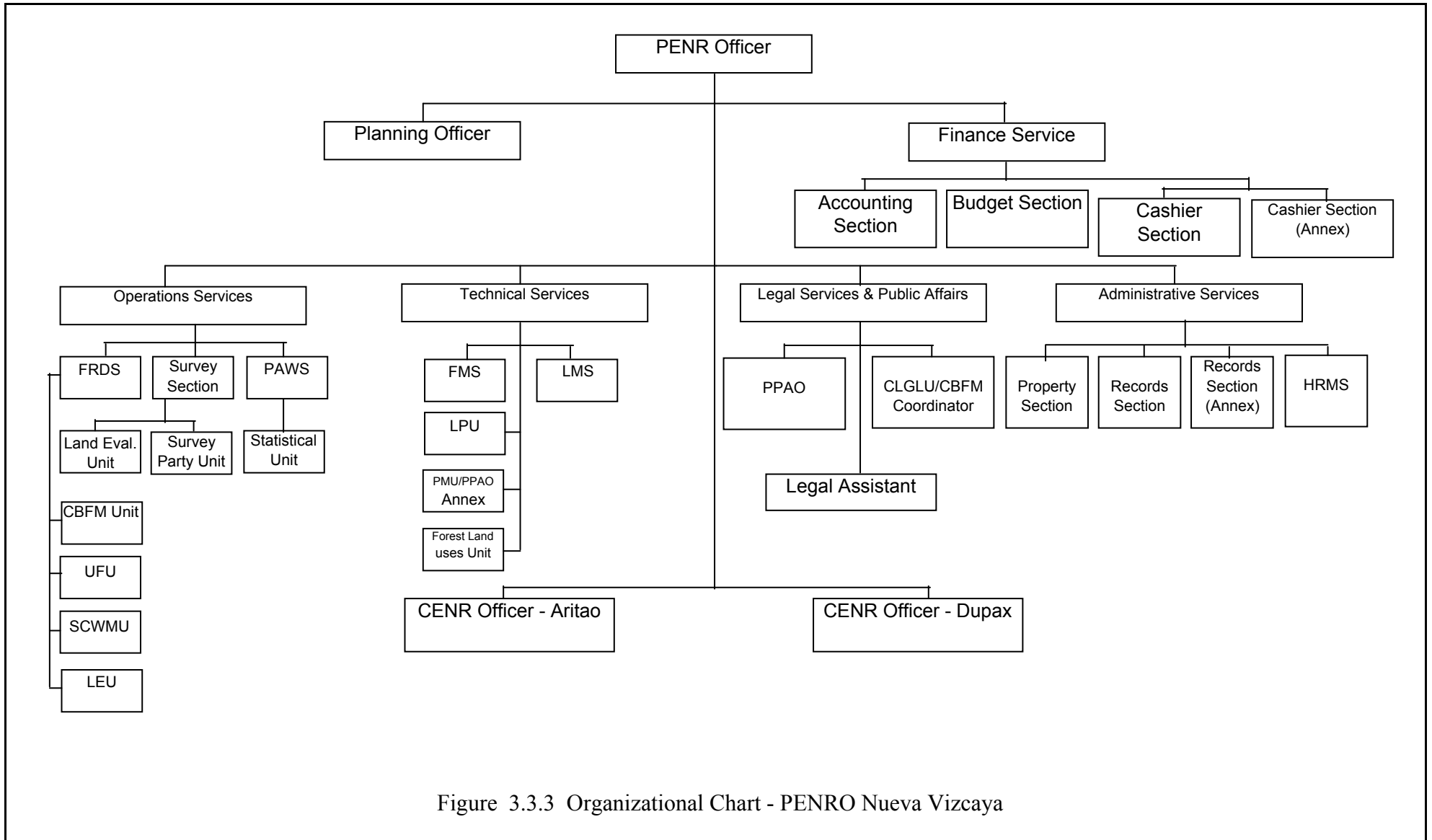


Figure 3.3.3 Organizational Chart - PENRO Nueva Vizcaya

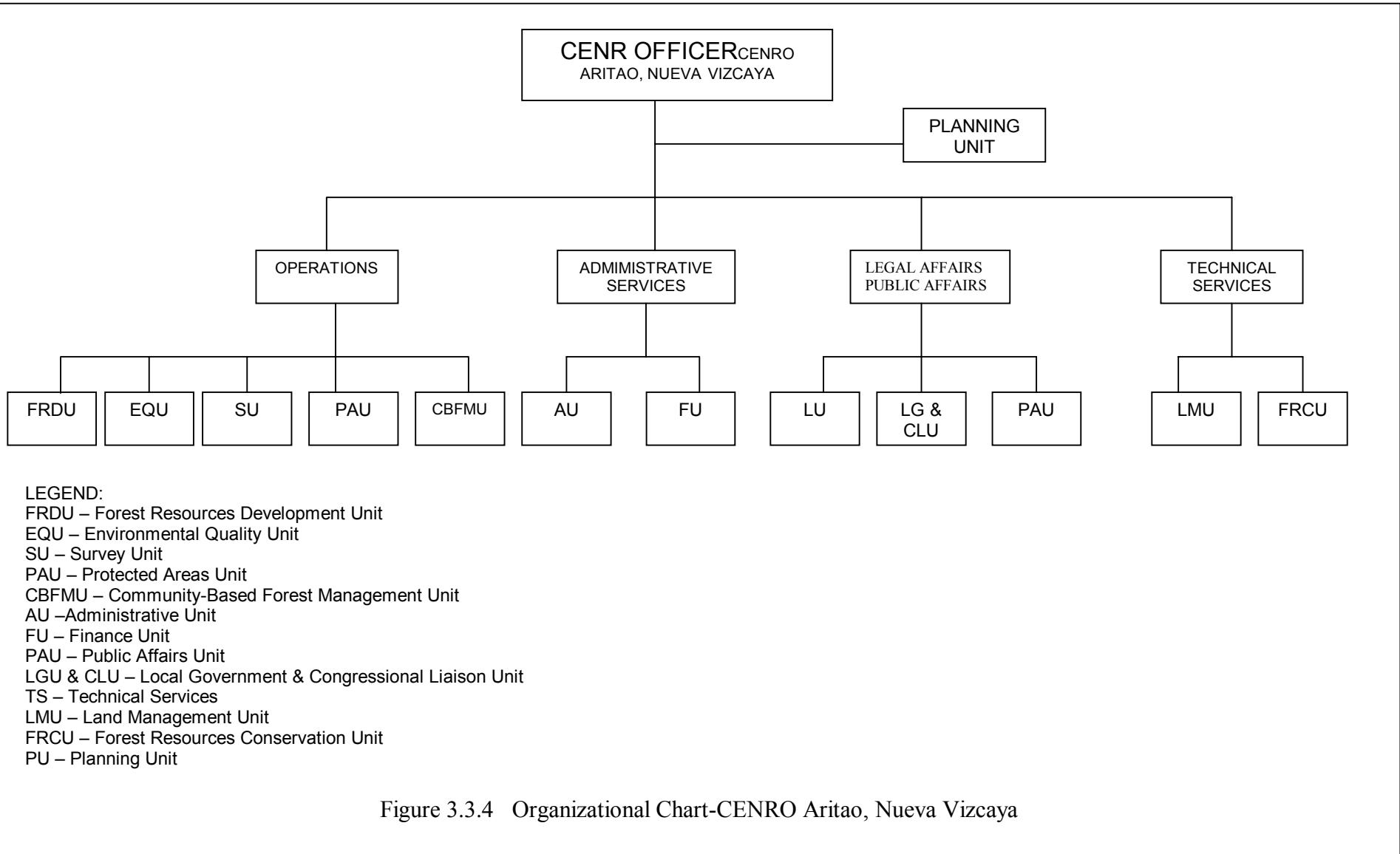


Figure 3.3.4 Organizational Chart-CENRO Aritao, Nueva Vizcaya

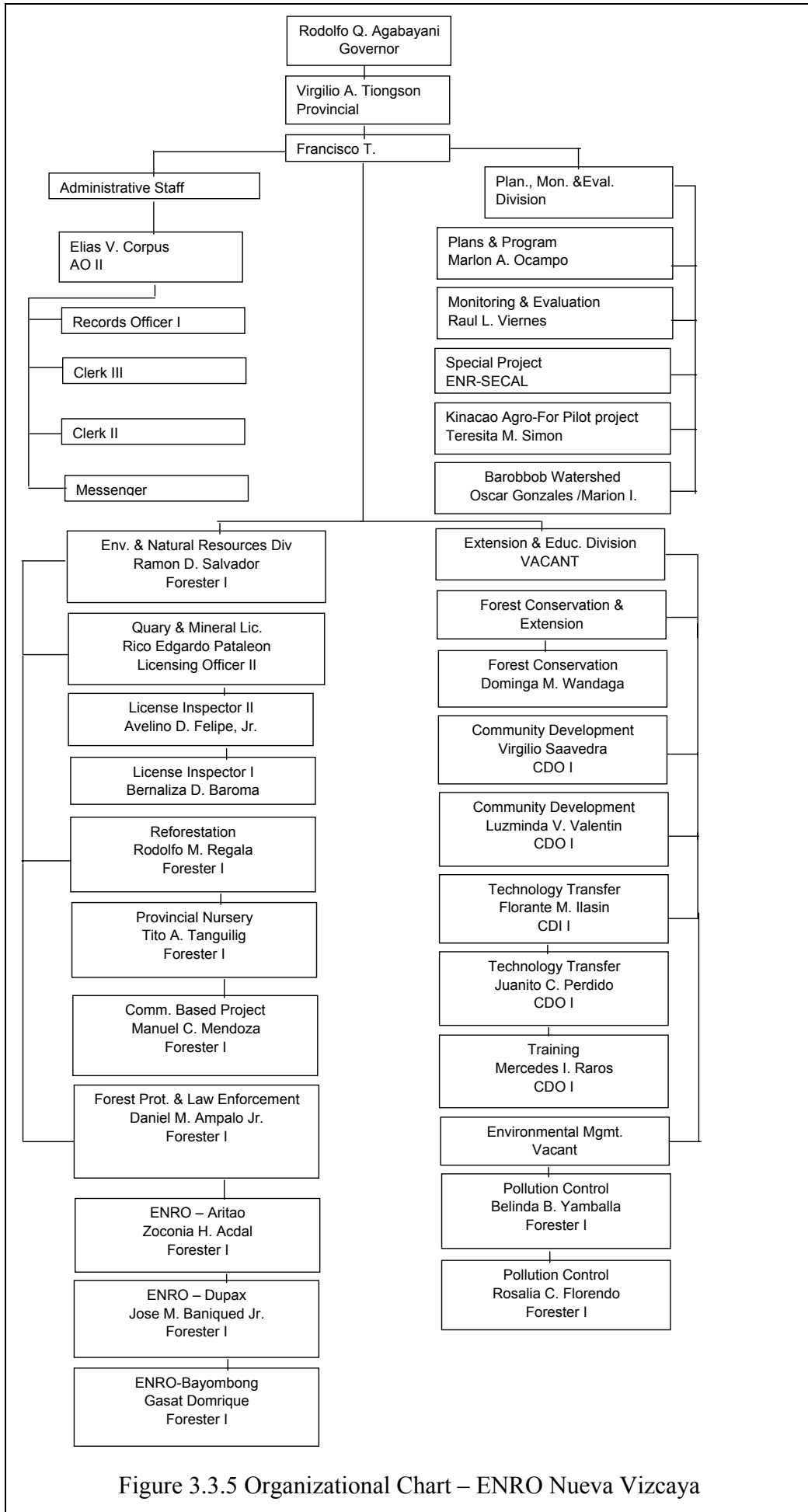


Figure 3.3.5 Organizational Chart – ENRO Nueva Vizcaya

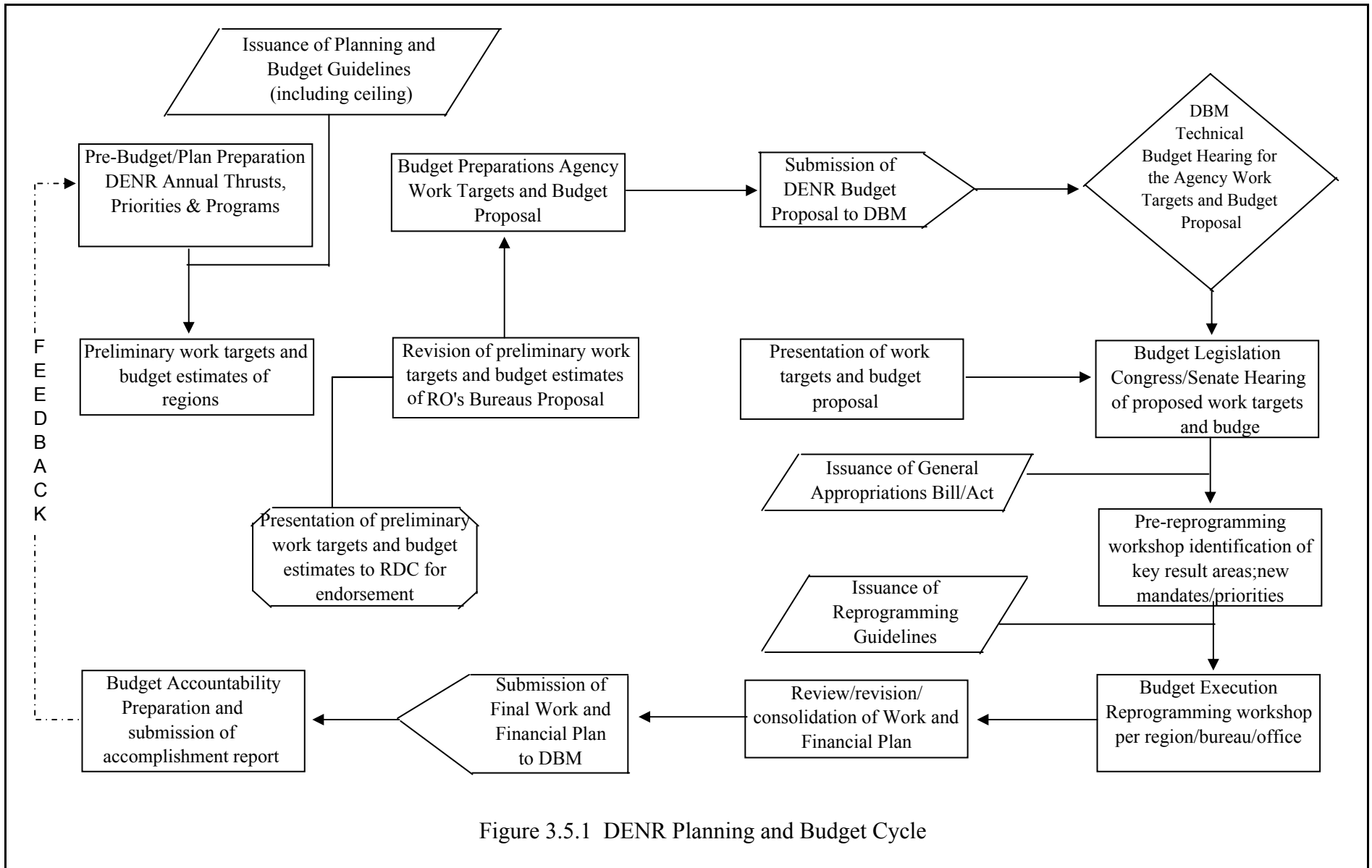
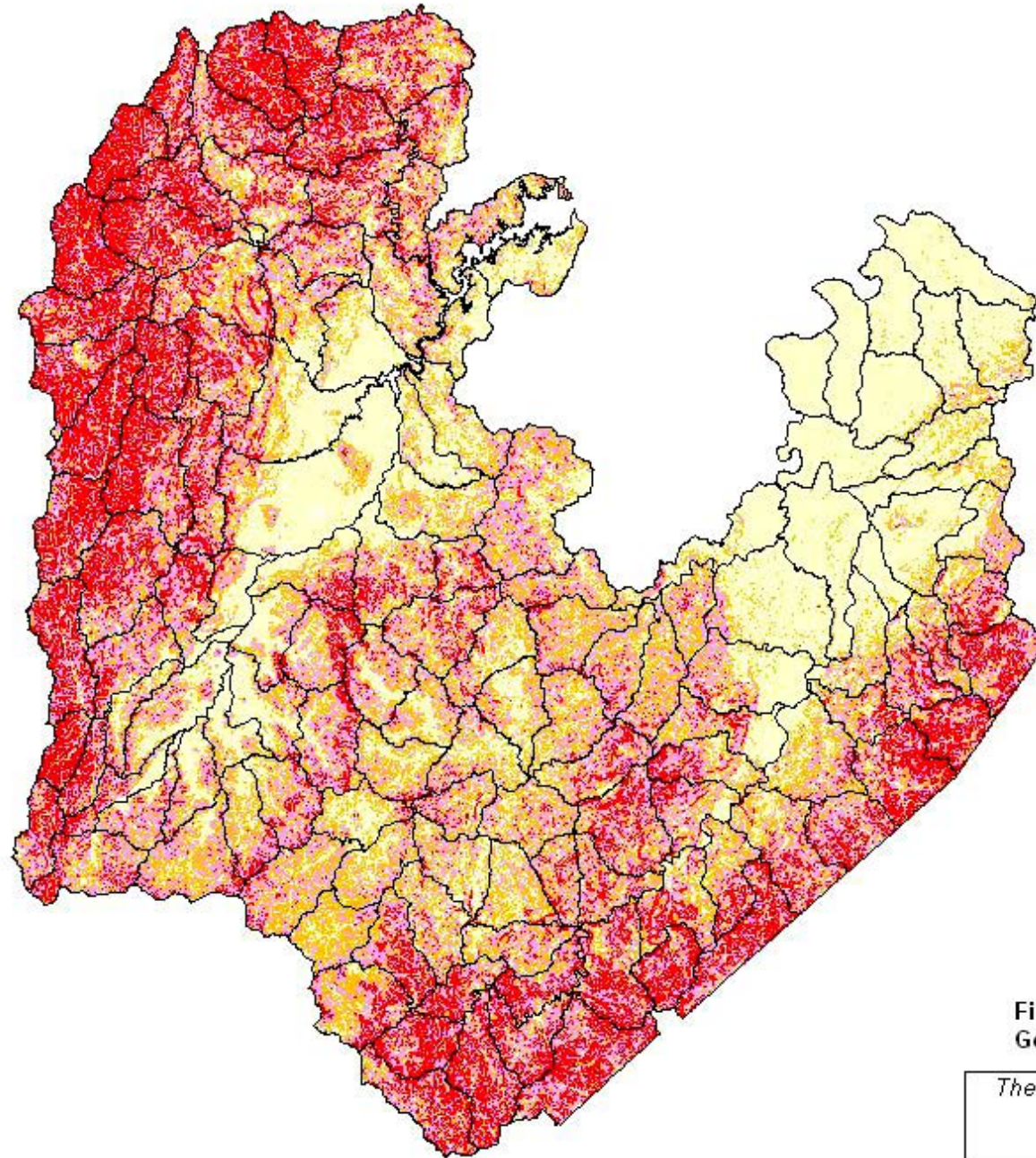


Figure 3.5.1 DENR Planning and Budget Cycle



Legend






-  Gently Sloping (0~17%)
-  Moderately Steep (18~29%)
-  Rolling to Steep (30~49%)
-  Very Steep to Steep (over 50% slope)
-  Boundary of Sub-watersheds

Figure 4.3.1
Geographical Distribution of Slope Categories

*The Master Plan Study for Watershed Management
in Upper Magat and Cagayan River Basin
in the Republic of the Philippines*

JAPAN INTERNATIONAL COOPERATION AGENCY

0 10 20 30 40 50 Kilometers

*Prepared by the Study Team based on digitized
topographic data from NAMRIA MAP with 1:50,000*

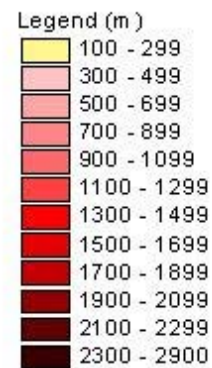
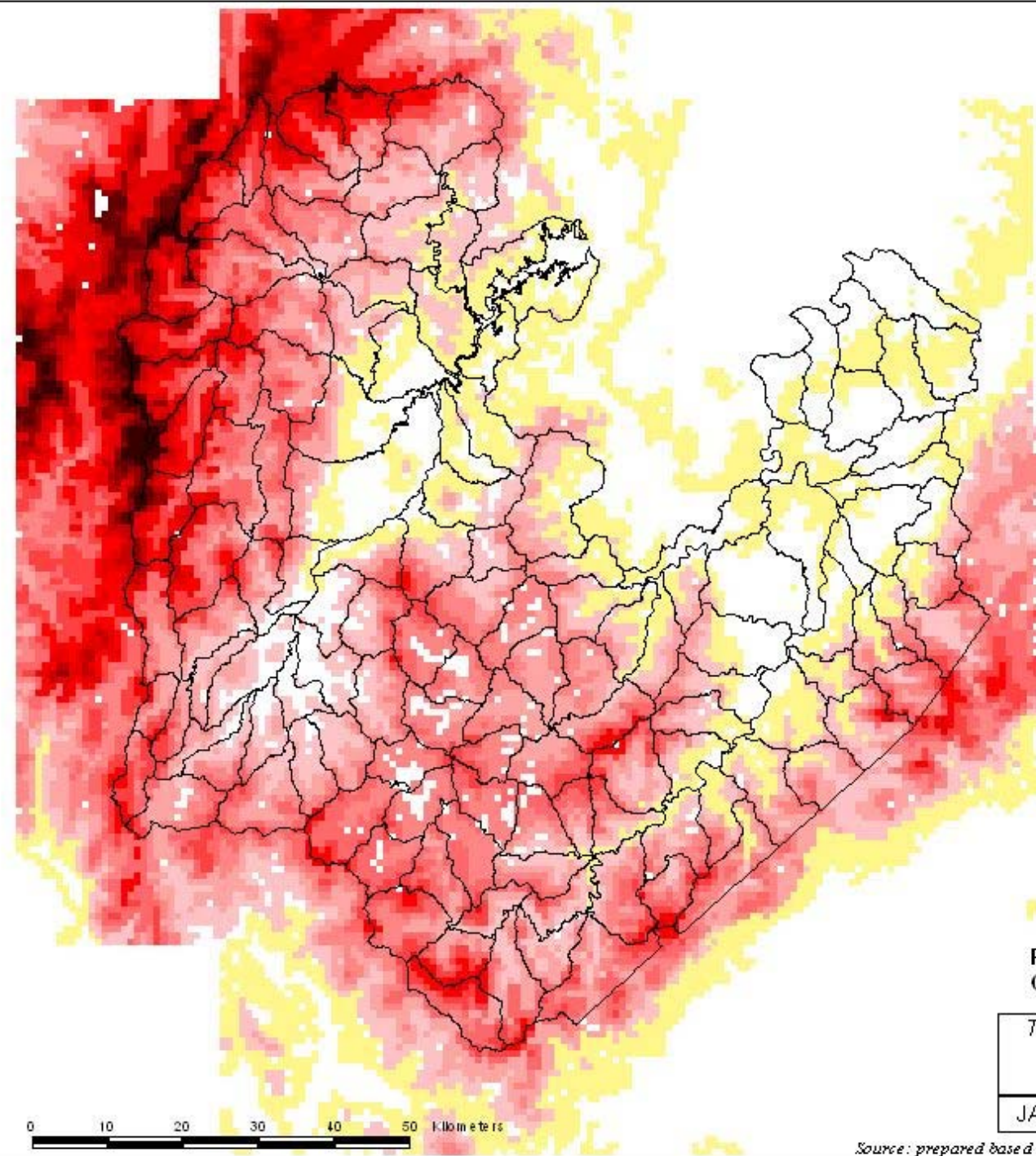
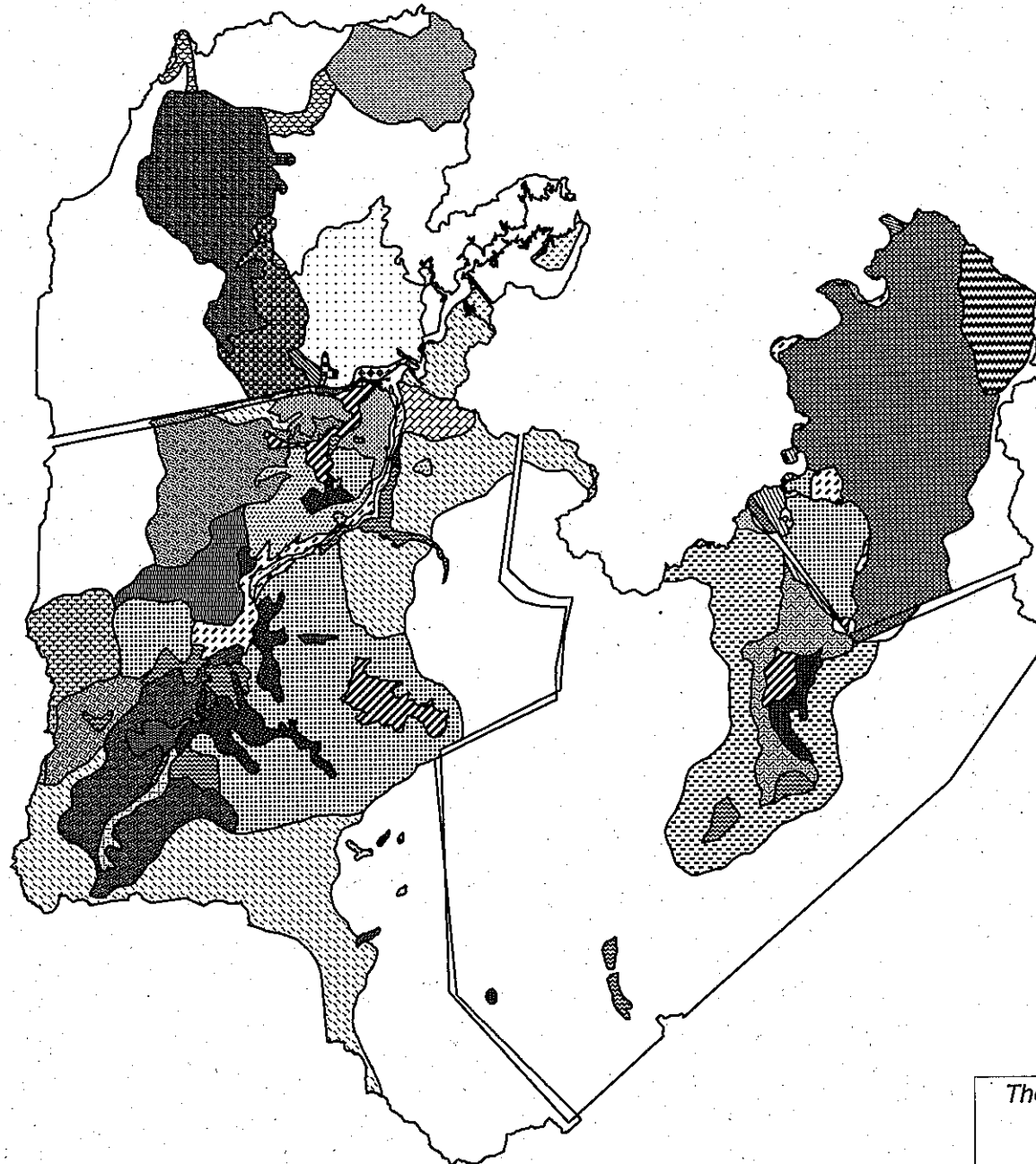


Figure 4.3.2
Geographical Distribution of Altitude Categories

*The Master Plan Study for Watershed Management
in Upper Magat and Cagayan River Basin
in the Republic of the Philippines*

JAPAN INTERNATIONAL COOPERATION AGENCY

Source: prepared based on digitized topographic data from NAMRIA MAP with 1:50,000 scale



- Legend**
- Alaminos clay loam
 - Annam clay loam
 - Bago clay loam
 - Bago sandy clay loam
 - Balog clay
 - Bantay-Bauang complex
 - Batang clay loam
 - Bolinao clay loam
 - Brooke's loam
 - Cauayan clay loam
 - Cauayan loam
 - Cauayan sandy loam
 - Guimbaion-Annam complex
 - Guimbalaon clay loam
 - Guimbalaon gravelly clay loam
 - Ilagan loam
 - Lagawe silty clay loam
 - Lamut sandy loam
 - Longa silty clay loam
 - Luisland clay loam
 - Maligaya clay loam
 - Mayoyao clay loam
 - Mountain soils undifferentiated
 - Nayon clay loam
 - Panupdupan clay loam
 - Quimbalaon clay loam eroded phase
 - Quingua clay loam
 - Quingua silt loam
 - Quingua silty clay loam
 - Riverwash
 - Rockland
 - Rough Mountainous
 - Rugeo clay
 - San Juan clay
 - San Manuel fine sandy loam
 - San Manuel sandy loam
 - San Manuel silt loam
 - Sevilla clay loam
 - Sibui clay
 - Sta. Filomena clay loam
 - Sta. Maria clay
 - Umingan loam

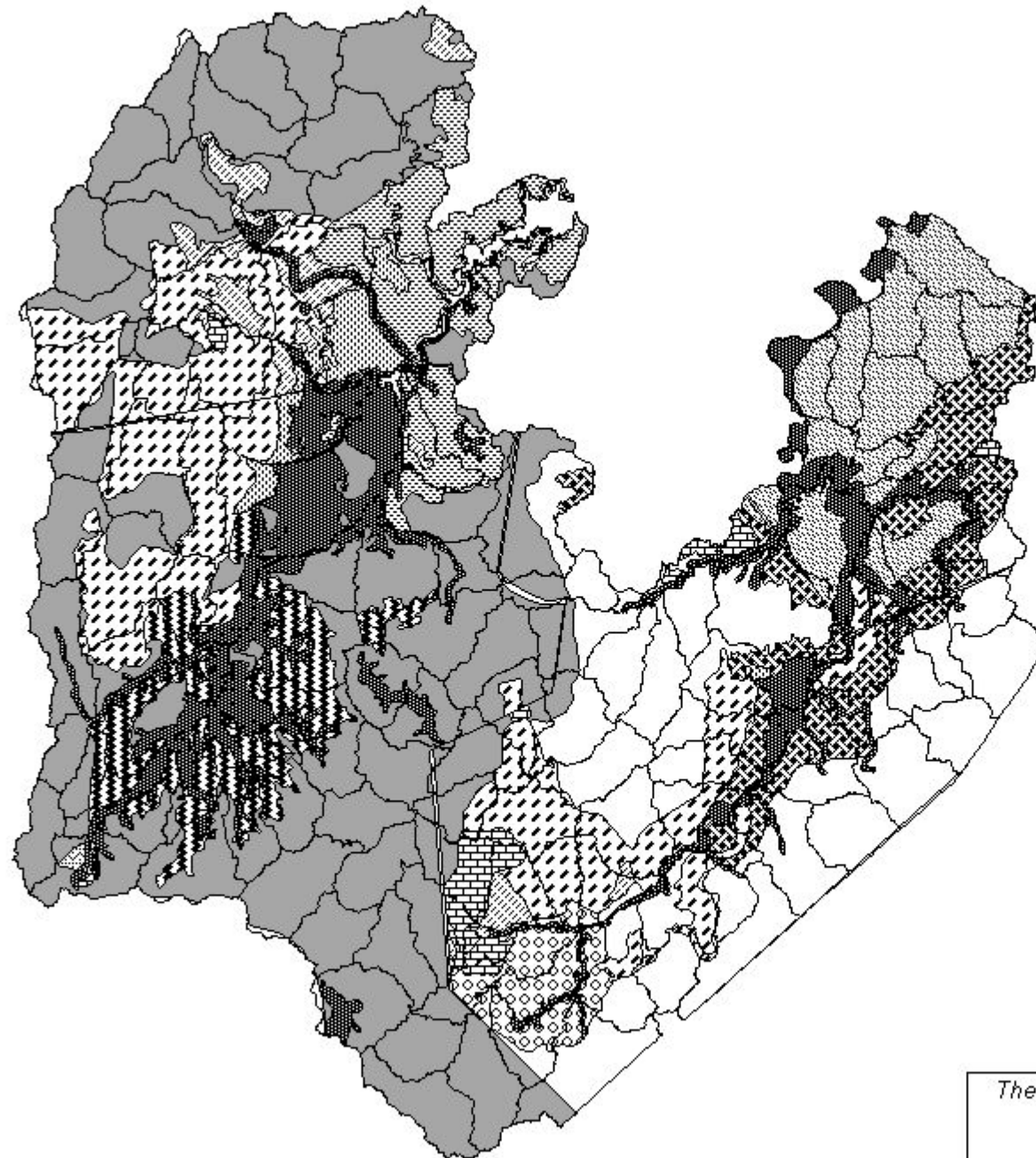
Figure 4.3.3 Soil Map

*The Master Plan Study for Watershed Management
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in the Republic of the Philippines*

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0 10 20 30 40 50 Kilometers

Source: Bureau of Soils and Water Management



Legend

- Eocene
- Lower-Middle Miocene
- Middle Miocene
- Pliocene to Pleistocene
- Quaternary volcanic pyroclastic
- Recent Alluvium
- Shale/sandstone and mudstone sequence
- Unconsolidated sandstone
- Upper Cretaceous
- Upper Cretaceous to Paleocene
- Upper Miocene
- Upper Miocene to Pliocene volcanic agglomerate
- Volcanic rock
- Boundary of Sub-watershed

Figure 4.3.4 Geological Map

*The Master Plan Study for Watershed Management
in Upper Magat and Cagayan River Basin
in the Republic of the Philippines*

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Source: Bureau of Soils and Water Management

0 10 20 30 40 50 Kilometers

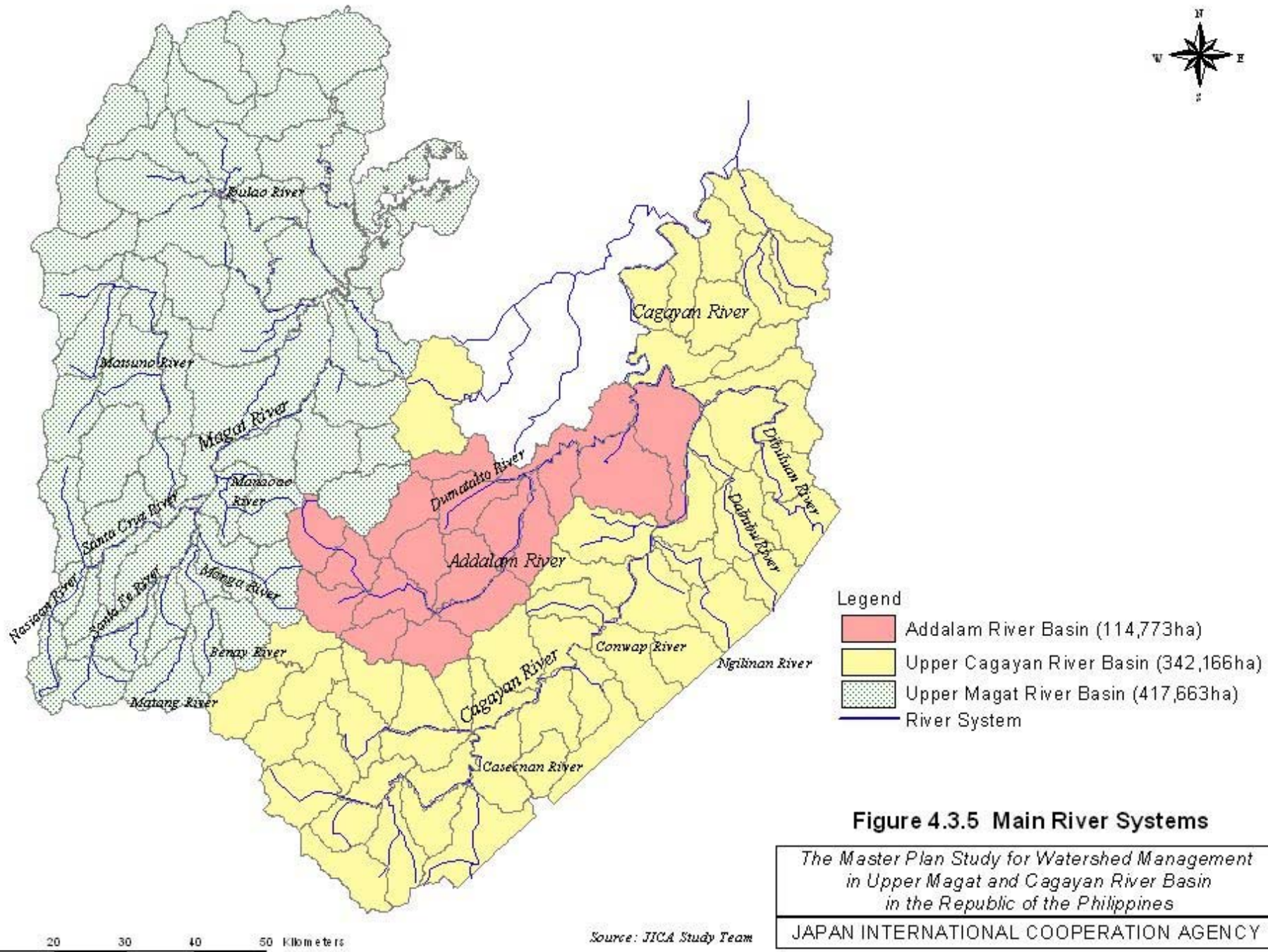
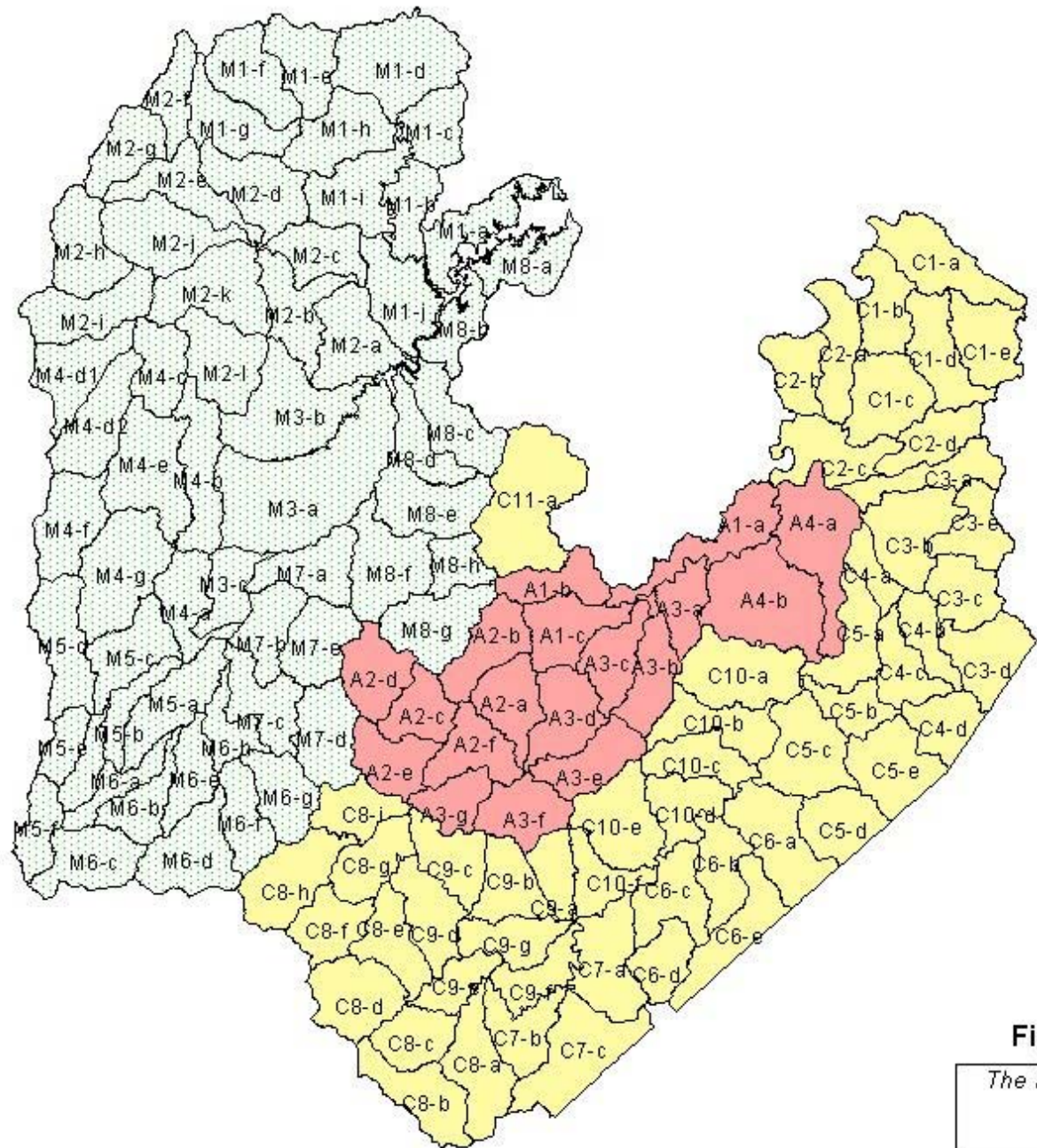


Figure 4.3.5 Main River Systems

*The Master Plan Study for Watershed Management
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JAPAN INTERNATIONAL COOPERATION AGENCY

Source: JICA Study Team



Legend

- Addalam River Basin
- Upper Cagayan River Basin
- Upper Magat River Basin

Figure 4.3.6 Map of Sub-watersheds

*The Master Plan Study for Watershed Management
in Upper Magat and Cagayan River Basin
in the Republic of the Philippines*

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Source: JICA Study Team