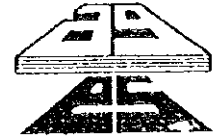


III.4 PASIG RIVER





SUMMARY OF LABORATORY TEST RESULTS --WATCH POINT 5

Date of Sampling	Trial No.	Unit Wt. (kN/m ³)	Available Moist. %	Specific Gravity	Grain Size Distribution				Soil Class.
					% Gravel	% Sand	% Silt	% Clay	
3-Jun 1995	1	18.24	21.54	2.60	17	71	12*		SM
	2	18.04	21.74	2.60	6	80	14		SM
	3	18.14	20.16	2.59	7	81	12*		SM
	Average	18.14	21.15	N.A.	10	77	13*		
31-Jul 1995	1	10.10	85.15	2.50	0	16	48	36	ML
	2	9.81	85.59	2.43	0	10	50	40	ML
	3	10.49	84.53	2.40	0	15	49	36	ML
	Average	10.13	85.09	2.44	0	14	49	37	
30-Aug 1995	1	11.96	64.36	2.59	0	34	45	20	ML
	2	11.77	67.92	2.58	0	33	67*		ML
	3	12.06	64.62	2.60	4	40	57		ML
	Average	11.93	65.63	2.59	1	36	N.A.	N.A.	
6-Sep 1995	1	10.20	96.65	2.37	0	9	59	32	ML
	2	1.10	97.43	2.39	0	4	64	32	ML
	3	10.00	97.23	2.35	0	7	59	34	ML
	Average	7.10	97.10	2.37	0	7	61	33	
14-Sep 1995	1	11.77	73.20	2.39	0	3	57	40	ML
	2	11.77	88.70	2.40	0	9	51	40	ML
	3	11.77	88.30	2.37	0	6	48	46	CL-ML
	Average	11.77	83.40	2.39	0	6	52	42	

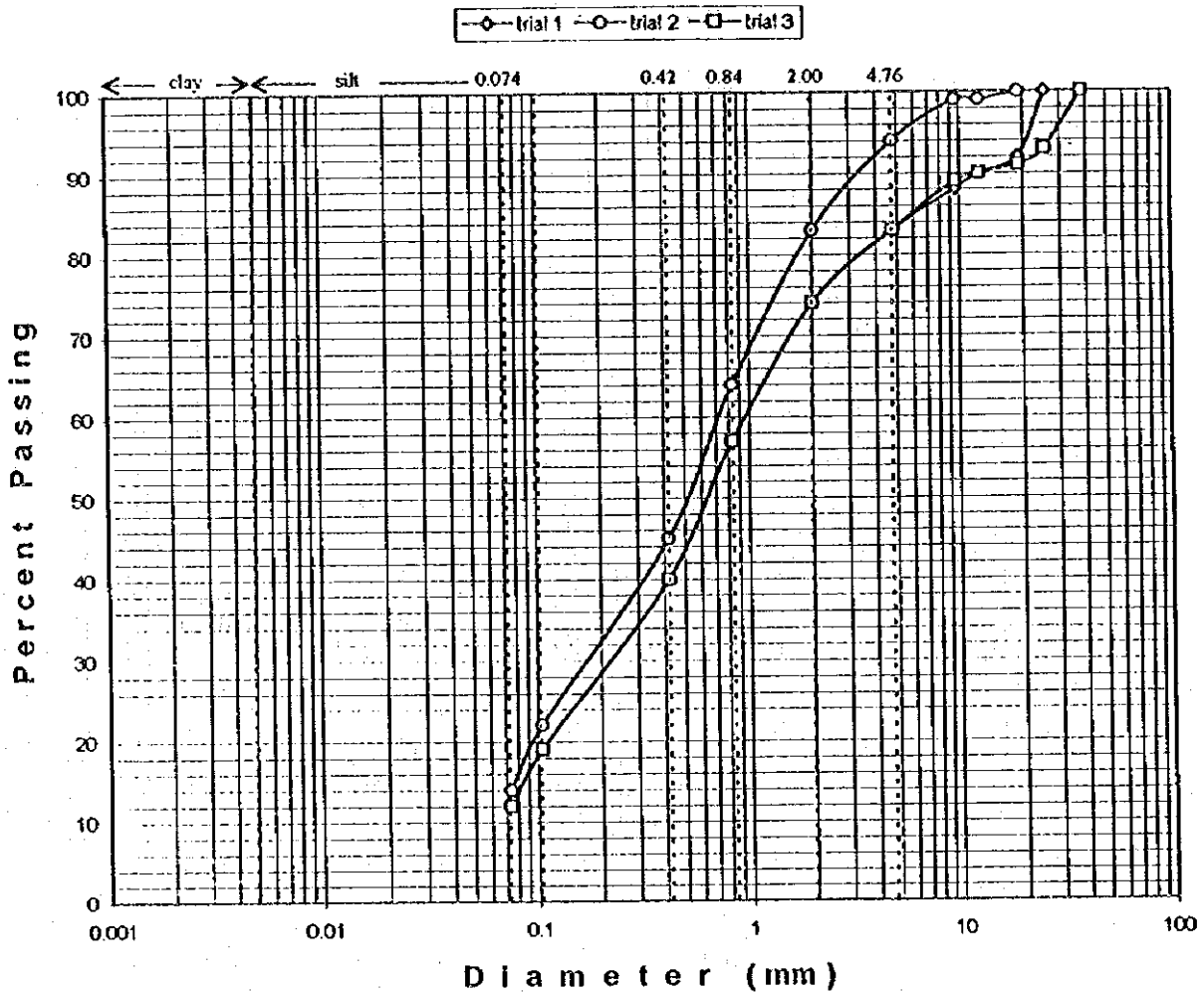
Note:

1. Available moisture (%) is defined as the ratio of the wt. of water to the total wt. of sample in per 100% means practically zero sediments.
2. I.S. - Insufficient sample for testing.
3. * - Insufficient sample for hydrometer test.
4. Numbers with * indicate the cumulative amount of silt and clay.

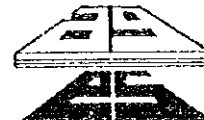


GRAIN SIZE ANALYSIS	SITE: <u>WATCH POINT 5</u> LOCATION: <u>Pasig River</u> DATE SAMPLED: <u>June 3, 1995</u> DATE TESTED: <u>October 12, 1995</u> SHEET NO. <u>1 of 1</u>
PROJECT: SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT	

GRAIN SIZE ANALYSIS CURVE

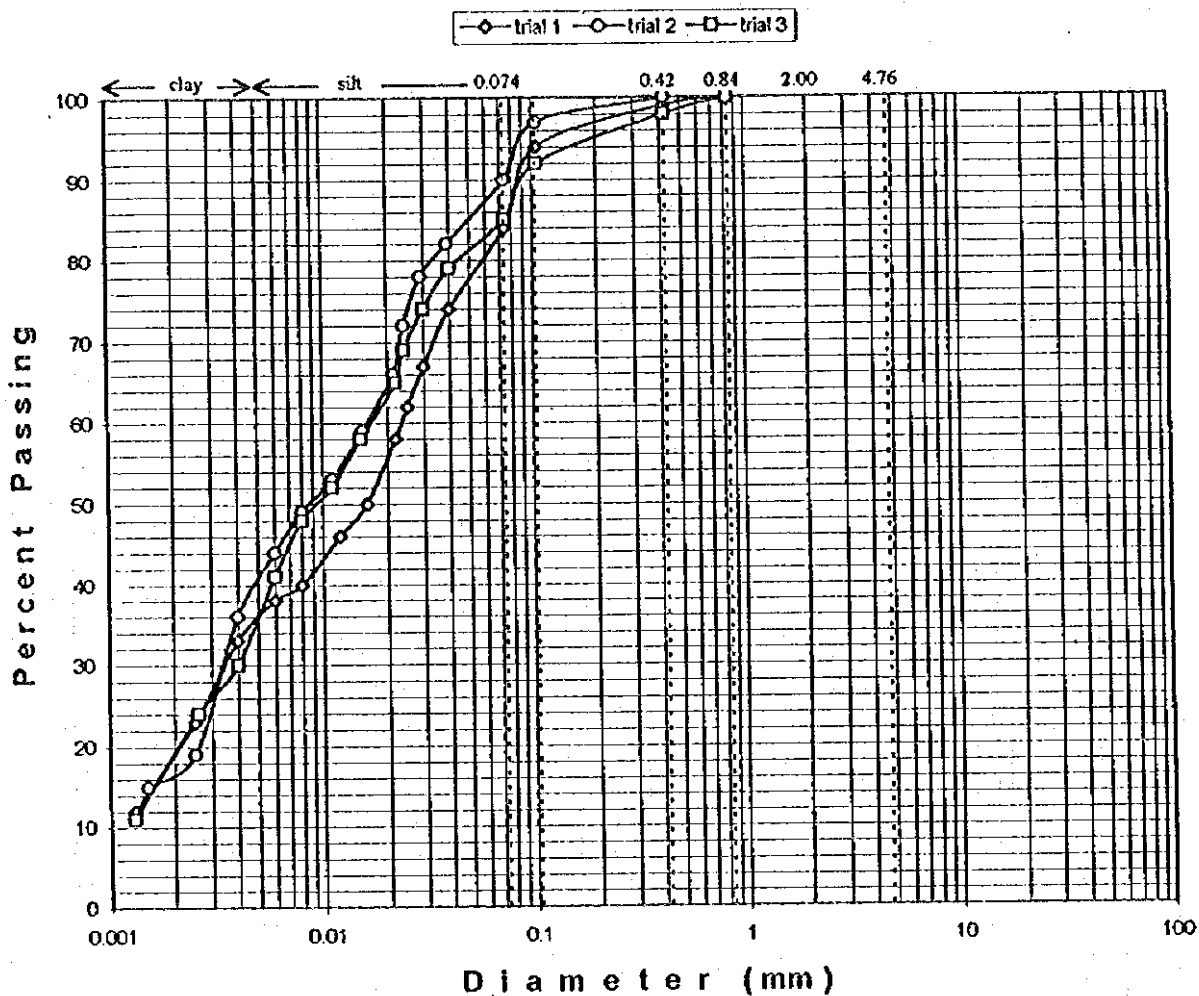


TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	PI	USCS	DESCRIPTION
1			1					SM	*SAND
2			2					SM	*SAND
3			3					SM	*SAND
									* Description is based on mechanical sieve analysis only.



GRAIN SIZE ANALYSIS	SITE: <u>WATCH POINT 5</u> LOCATION: <u>Pasig River</u> DATE SAMPLED: <u>July 31, 1995</u> DATE TESTED: <u>August 7, 1995</u> SHEET NO. <u>1 of 1</u>
PROJECT : SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT	

GRAIN SIZE ANALYSIS CURVE

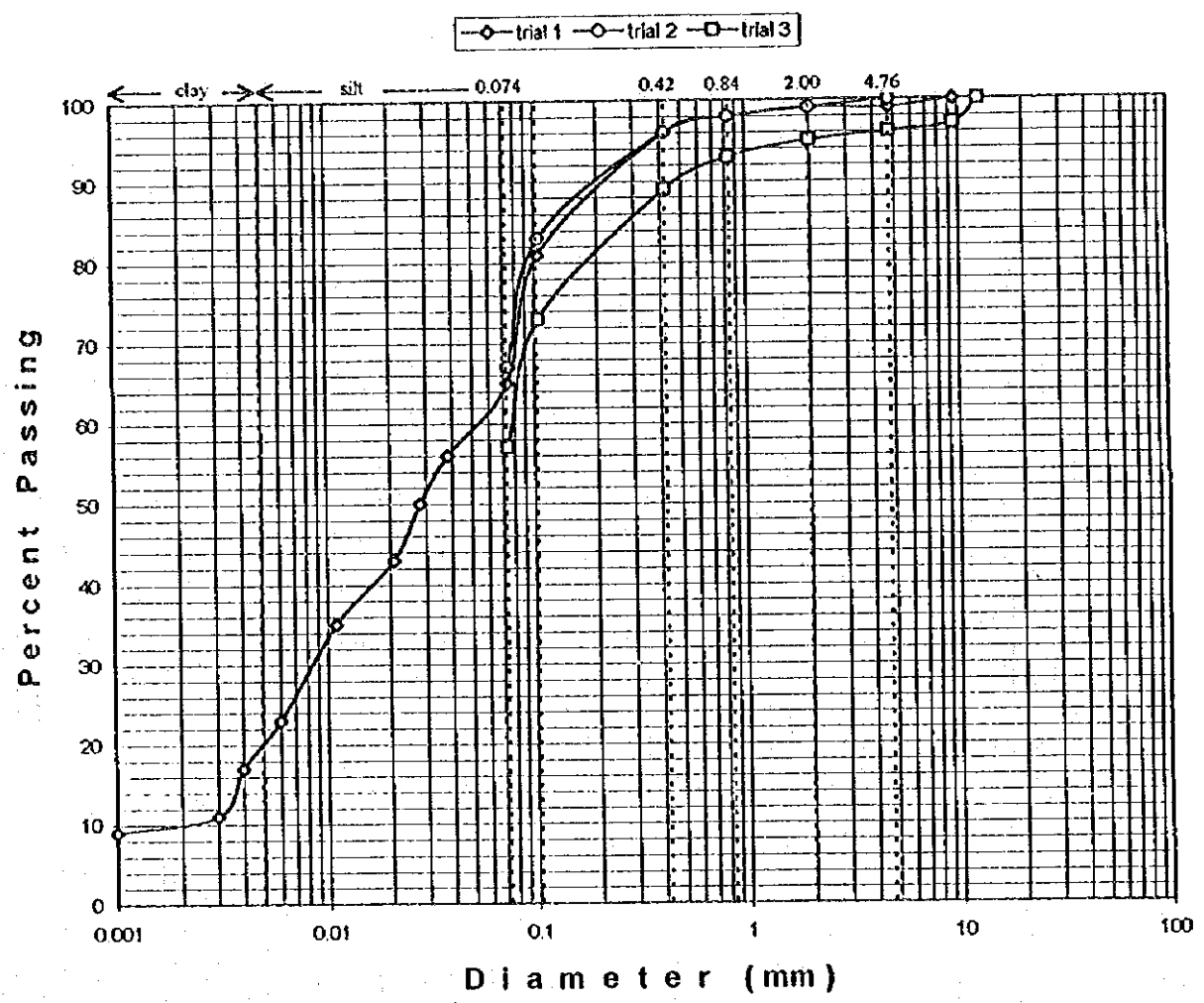


TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	PI	USCS	DESCRIPTION
1			1					ML	Clayey SILT, little amount of fine sand.
2			2					ML	- same -
3			3					ML	- same -



GRAIN SIZE ANALYSIS	SITE: <u>WATCH POINT 5</u> LOCATION: <u>Pasig River</u> DATE SAMPLED: <u>August 30, 1995</u> DATE TESTED: <u>October 12, 1995</u> SHEET NO. <u>1 of 1</u>
	PROJECT: <u>SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT</u>

GRAIN SIZE ANALYSIS CURVE

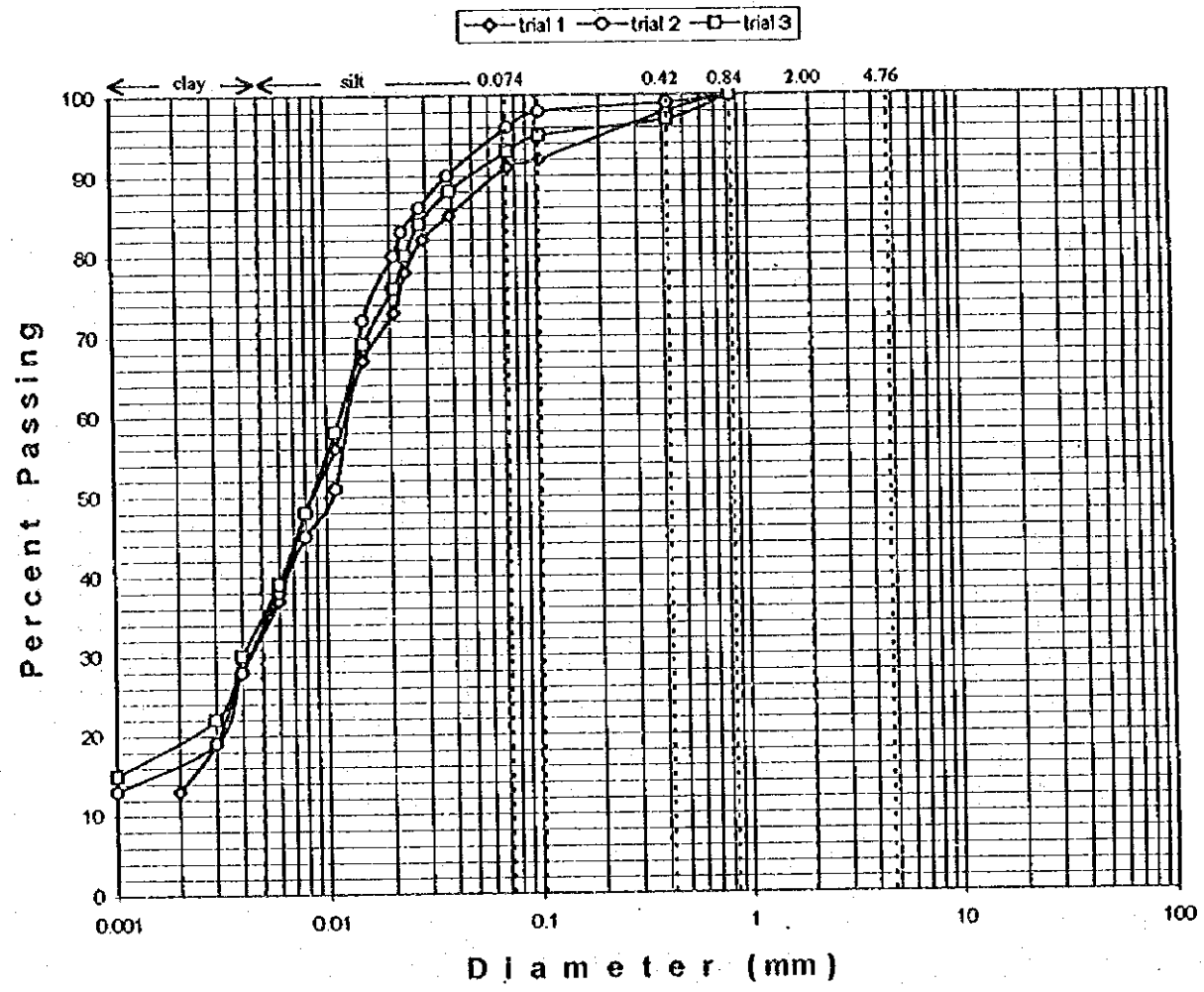


TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	PI	USCS	DESCRIPTION
1			1					ML	Sandy, clayey SILT
2			2					ML	*Sandy SILT
3			3					ML	*Sandy SILT
* Description is based on mechanical sieve analysis only.									



GRAIN SIZE ANALYSIS	SITE: <u>PASIG POTRERO</u> LOCATION: <u>Pasig River</u> DATE SAMPLED: <u>Sept. 6, 1995</u> DATE TESTED: <u>Sept. 11, 1995</u> SHEET NO. <u>1 of 1</u>
PROJECT : SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT	

GRAIN SIZE ANALYSIS CURVE

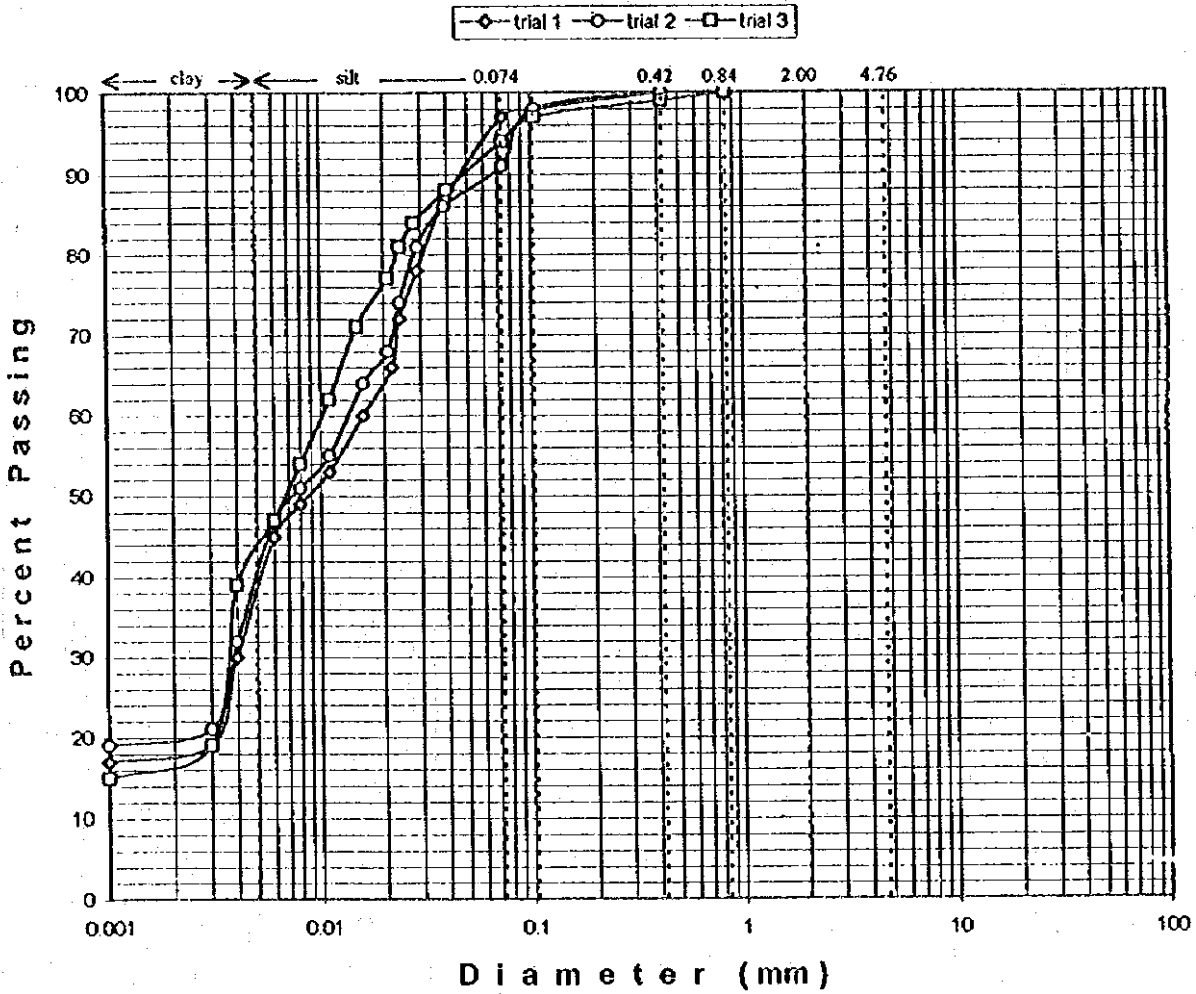


TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	PI	USCS	DESCRIPTION
1			1					ML	Clayey SILT
2			2					ML	Clayey SILT
3			3					ML	Clayey SILT

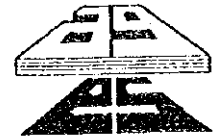


GRAIN SIZE ANALYSIS	SITE: <u>PASIG POTRERO</u> LOCATION: <u>Pasig River</u> DATE SAMPLED: <u>Sept. 14, 1995</u> DATE TESTED: <u>Sept. 18, 1995</u> SHEET NO. <u>1 of 1</u>
PROJECT : SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT	

GRAIN SIZE ANALYSIS CURVE



TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	PI	USCS	DESCRIPTION
1			1					ML	Clayey SILT
2			2					ML	Clayey SILT
3			3					CL-ML	SILT & CLAY



SUMMARY OF LABORATORY TEST RESULTS --MANCATION

Date of Sampling	Trial No.	Unit Wt. (kN/m ³)	Available Moist. %	Specific Gravity	Grain Size Distribution				Soil Class.
					% Gravel	% Sand	% Silt	% Clay	
3-Jun 1995	1	18.24	21.54	2.60	17	71	12*		SM
	2	18.04	21.74	2.60	6	80	14		SM
	3	18.14	20.16	2.59	7	81	12*		SM
	Average	18.14	21.15	2.60	10	77	13*		
15-Jun 1995	1	11.87	69.59	2.50	0	10	52	38	ML
	2	11.47	69.59	2.49	0	10	58	32	ML
	3	11.87	67.78	2.47	0	15	55	30	ML
	Average	11.74	68.99	N.A.	0	12	74*		
5-Jul 1995	1	13.53	48.38	2.58	11	37	52*		ML
	2	13.63	48.52	2.57	8	38	54*		ML
	3	13.53	45.71	2.56	23	32	45*		ML
	Average	13.56	47.54	2.57	14	36	50*		
31-Jul 1995	1	10.89	82.22	2.52	0	9	61	30	ML
	2	10.69	80.16	2.47	0	8	58	34	ML
	3	10.40	81.86	2.51	0	8	58	34	ML
	Average	10.66	81.41	2.50	0	8	59	33	
8-Aug 1995	1	10.98	82.22	2.51	0	17	58	25	ML
	2	10.69	80.16	2.50	0	15	66	19	ML
	3	10.79	81.16	2.52	0	14	64	22	ML
	Average	10.82	81.18	2.51	0	15	63	22	
8-Aug 1995	1	17.65	25.66	2.60	2	81	17*		SM
	2	17.65	24.71	2.60	4	82	14*		SM
	3	17.65	25.33	2.59	2	83	15*		SM
	Average	17.65	25.23	2.60	3	82	15*		
25-Aug 1995	1	16.97	33.81	2.64	5	74	21*		SM
	2	16.87	27.66	2.65	3	78	19*		SM
	3	17.06	24.71	2.64	5	81	14*		SM
	Average	16.97	28.73	2.64	4	78	18*		
28-Aug 1995	1	10.59	83.25	2.35	0	9	62	29	ML
	2	9.91	82.15	2.45	0	9	57	34	ML
	3	9.91	81.43	2.41	0	8	58	34	ML
	Average	10.14	82.28	2.40	0	9	59	32	
30-Aug 1995	1	12.16	60.61	2.48	0	39	61*		ML
	2	12.55	55.96	2.46	1	45	54*		ML
	3	13.04	52.60	2.48	2	49	49*		ML
	Average	12.58	56.39	2.47	1	44	55*		

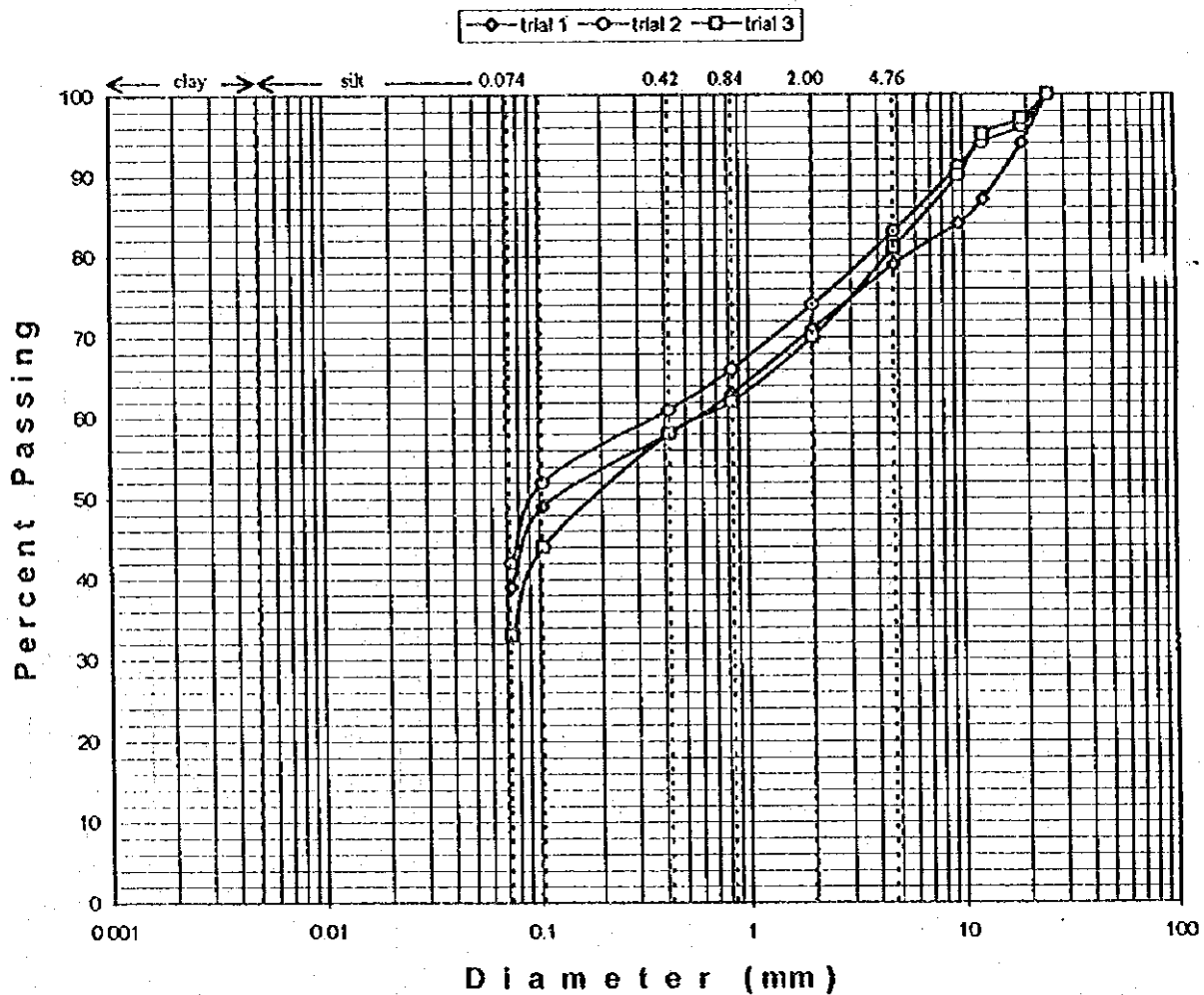
Note:

1. Available moisture (%) is defined as the ratio of the wt. of water to the total wt. of sample in per 100% means practically zero sediments.
2. I.S. - Insufficient sample for testing.
3. * - Insufficient sample for hydrometer test.
4. Numbers with * indicate the cumulative amount of silt and clay.

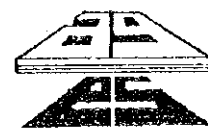


GRAIN SIZE ANALYSIS PROJECT : SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT	SITE: <u>Mancatlan</u> LOCATION: <u>Pasig River</u> DATE SAMPLED: <u>June 3, 1995</u> DATE TESTED: <u>October 12, 1995</u> SHEET NO. <u>1 of 1</u>

GRAIN SIZE ANALYSIS CURVE

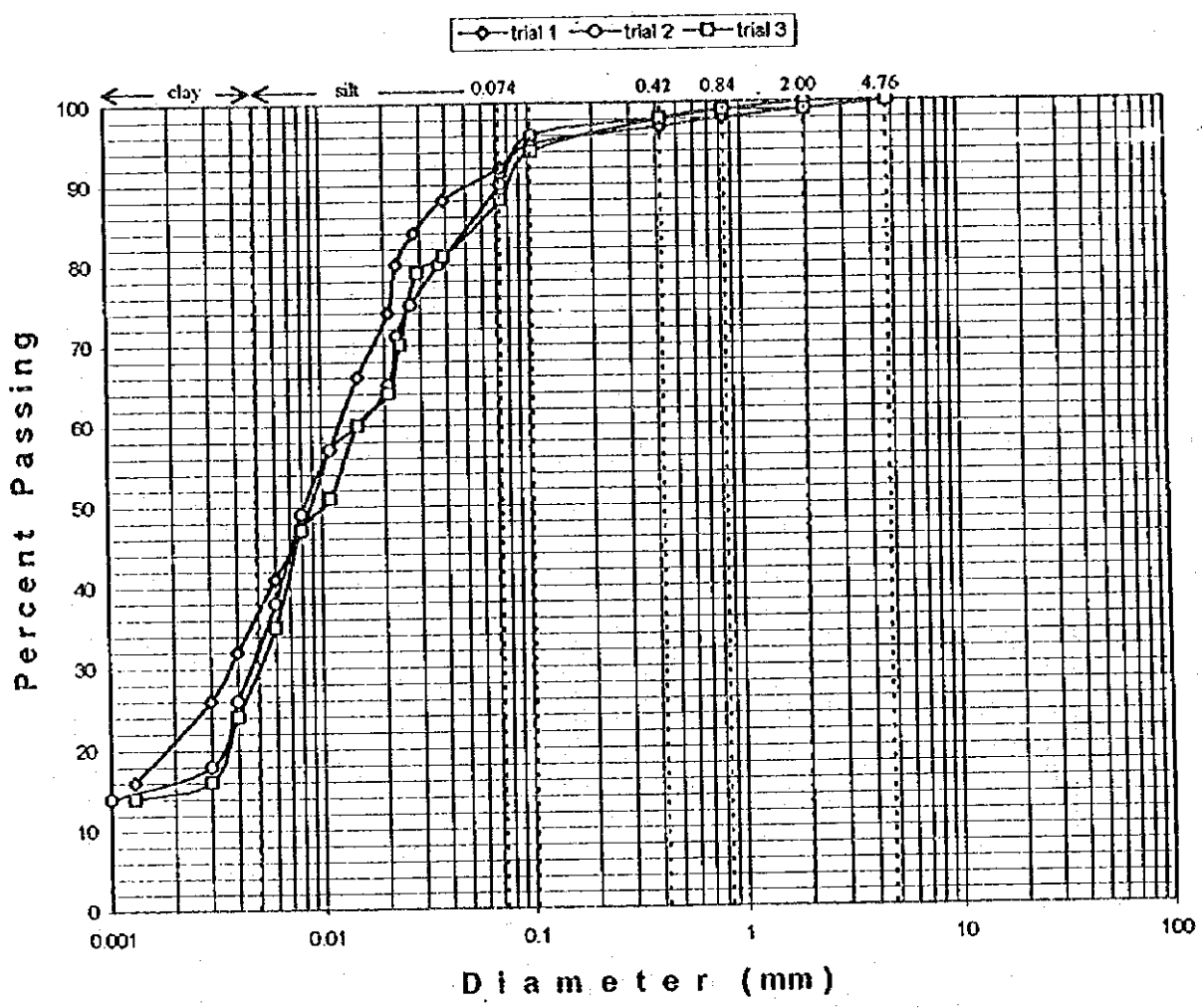


TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	PI	USCS	DESCRIPTION
1			1					SM	*SAND & SILT
2			2					SM	*SAND & SILT
3			3					SM	*Silty SAND
* Description is based on mechanical sieve analysis only.									



GRAIN SIZE ANALYSIS	SITE: <u>Mancalian</u> LOCATION: <u>Pasig River</u> DATE SAMPLED: <u>June 15, 1995</u> DATE TESTED: <u>October 12, 1995</u> SHEET NO. <u>1 of 1</u>
PROJECT : SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT	

GRAIN SIZE ANALYSIS CURVE

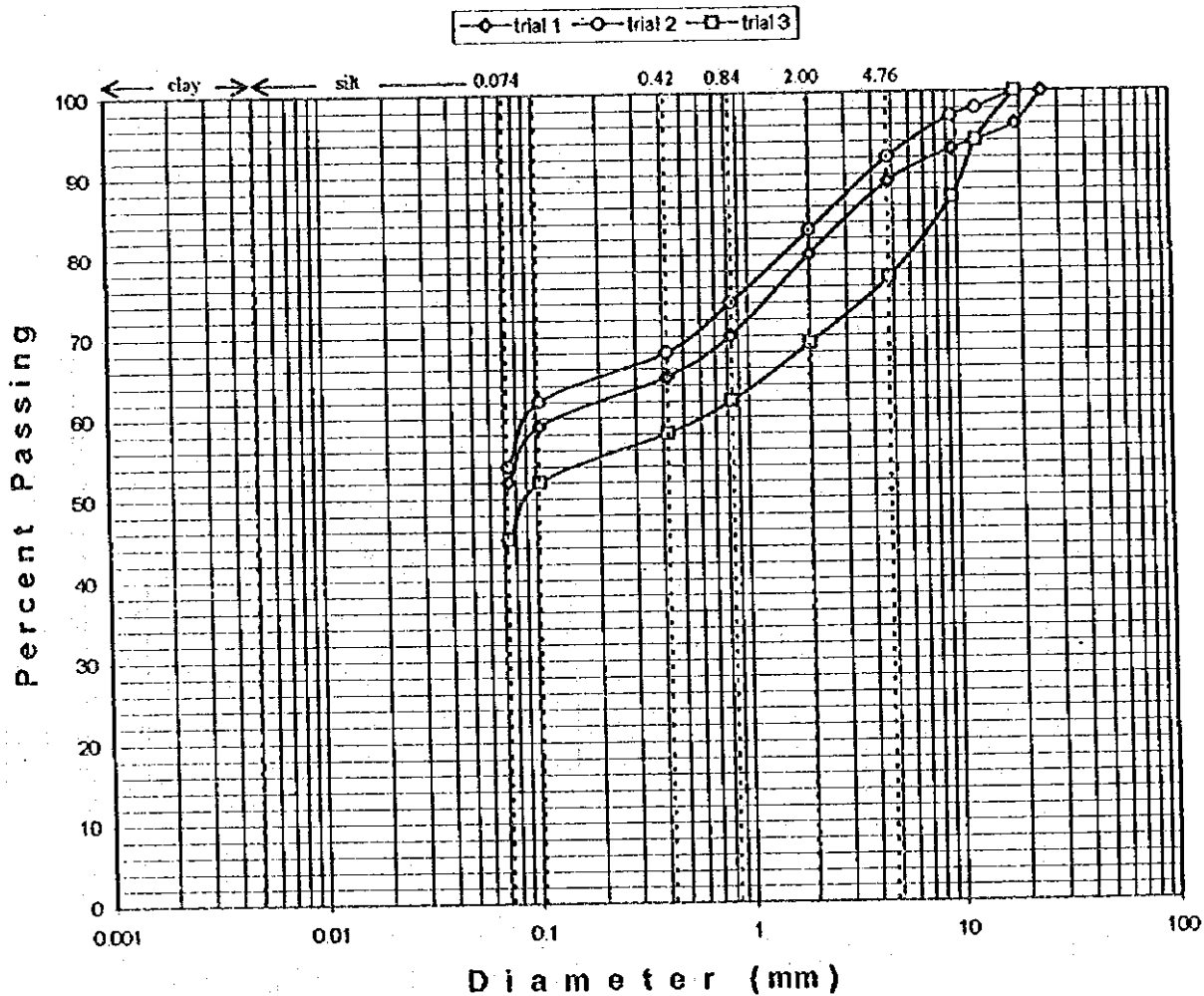


TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LI	PL	PI	USCS	DESCRIPTION
1			1					ML	Clayey SILT
2			2					ML	Clayey SILT
3			3					ML	Clayey SILT



GRAIN SIZE ANALYSIS PROJECT : SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT	SITE: <u>Mancatian</u> LOCATION: <u>Pasiq River</u> DATE SAMPLED: <u>July 6, 1995</u> DATE TESTED: <u>October 12, 1995</u> SHEET NO. <u>1 of 1</u>
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GRAIN SIZE ANALYSIS CURVE



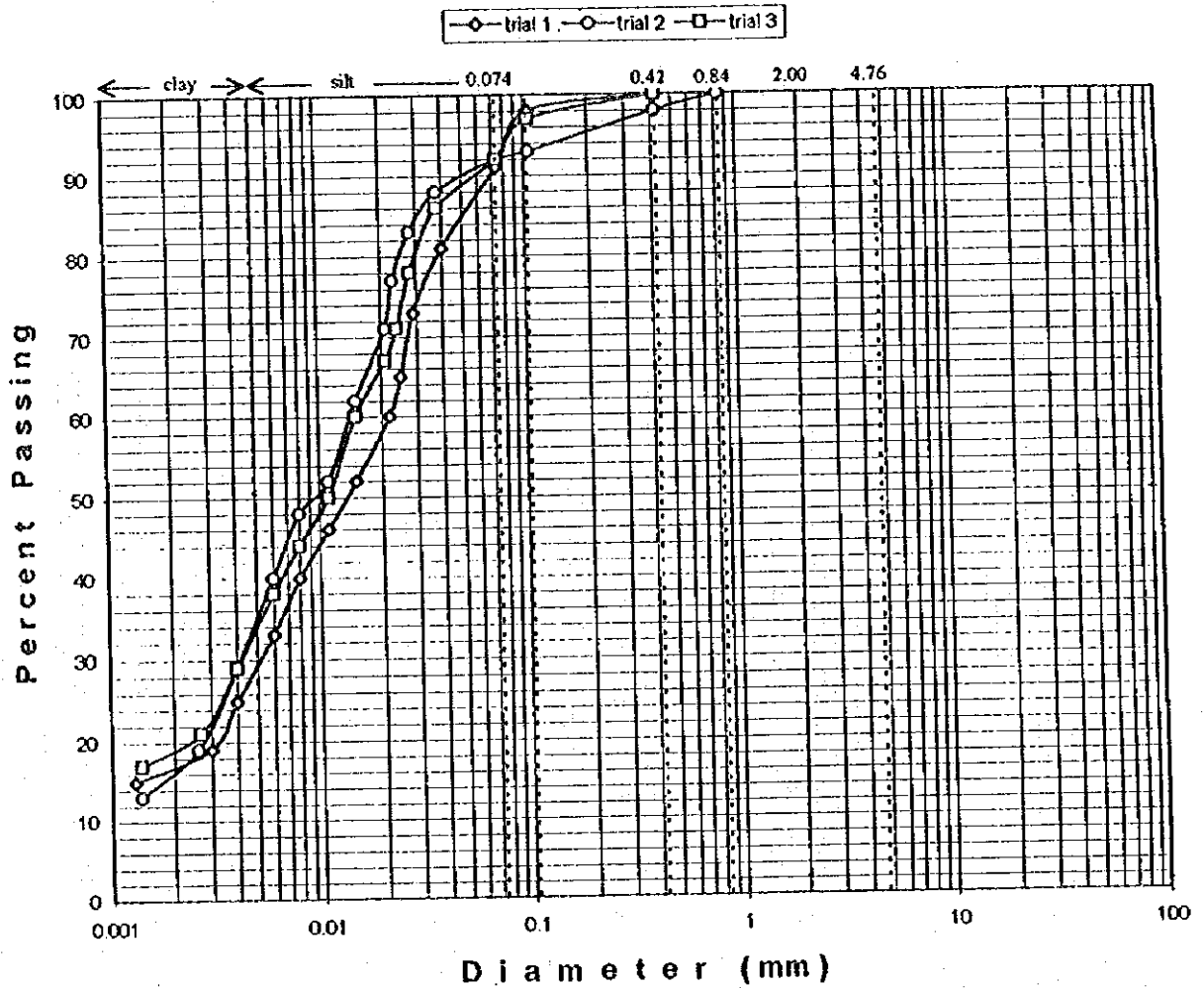
TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	PI	USCS	DESCRIPTION
1			1					ML	*Sandy SILT
2			2					ML	*Sandy SILT
3			3					ML	*Sandy SILT

* Description is based on mechanical sieve analysis only.



GRAIN SIZE ANALYSIS	SITE: <u>MANCATIAN</u> LOCATION: <u>Pasig River</u> DATE SAMPLED: <u>July 31, 1995</u> DATE TESTED: <u>August 7, 1995</u> SHEET NO. <u>1 of 1</u>
	PROJECT : SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT

GRAIN SIZE ANALYSIS CURVE

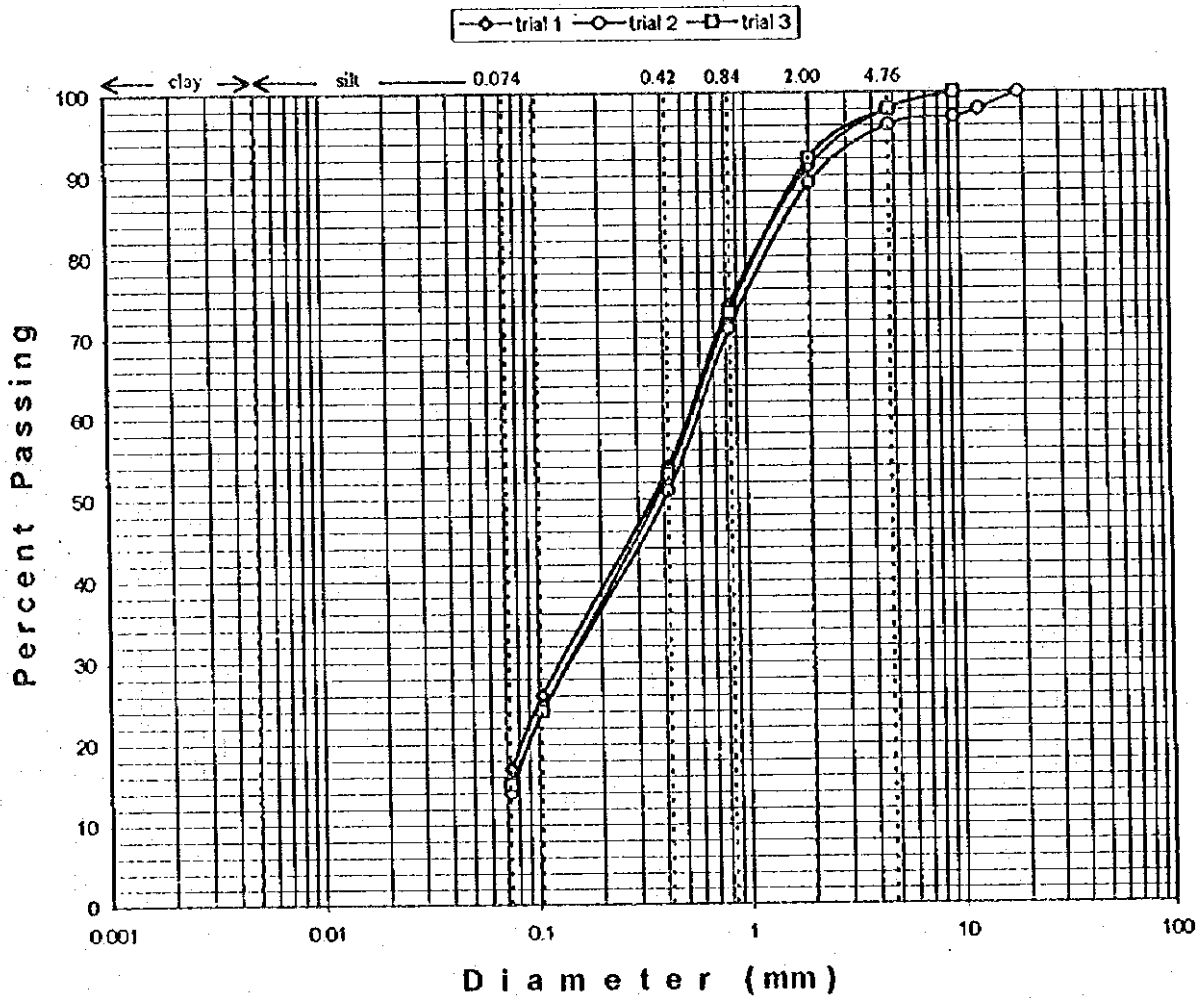


TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	PI	USCS	DESCRIPTION
1			1					ML	Clayey SILT, traces of sand.
2			2					ML	- same -
3			3					ML	- same -



GRAIN SIZE ANALYSIS PROJECT : SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT	SITE: <u>Mancatlan</u> LOCATION: <u>Pasig River</u> DATE SAMPLED: <u>August 8, 1995</u> DATE TESTED: <u>October 12, 1995</u> SHEET NO. <u>1 of 1</u>

GRAIN SIZE ANALYSIS CURVE

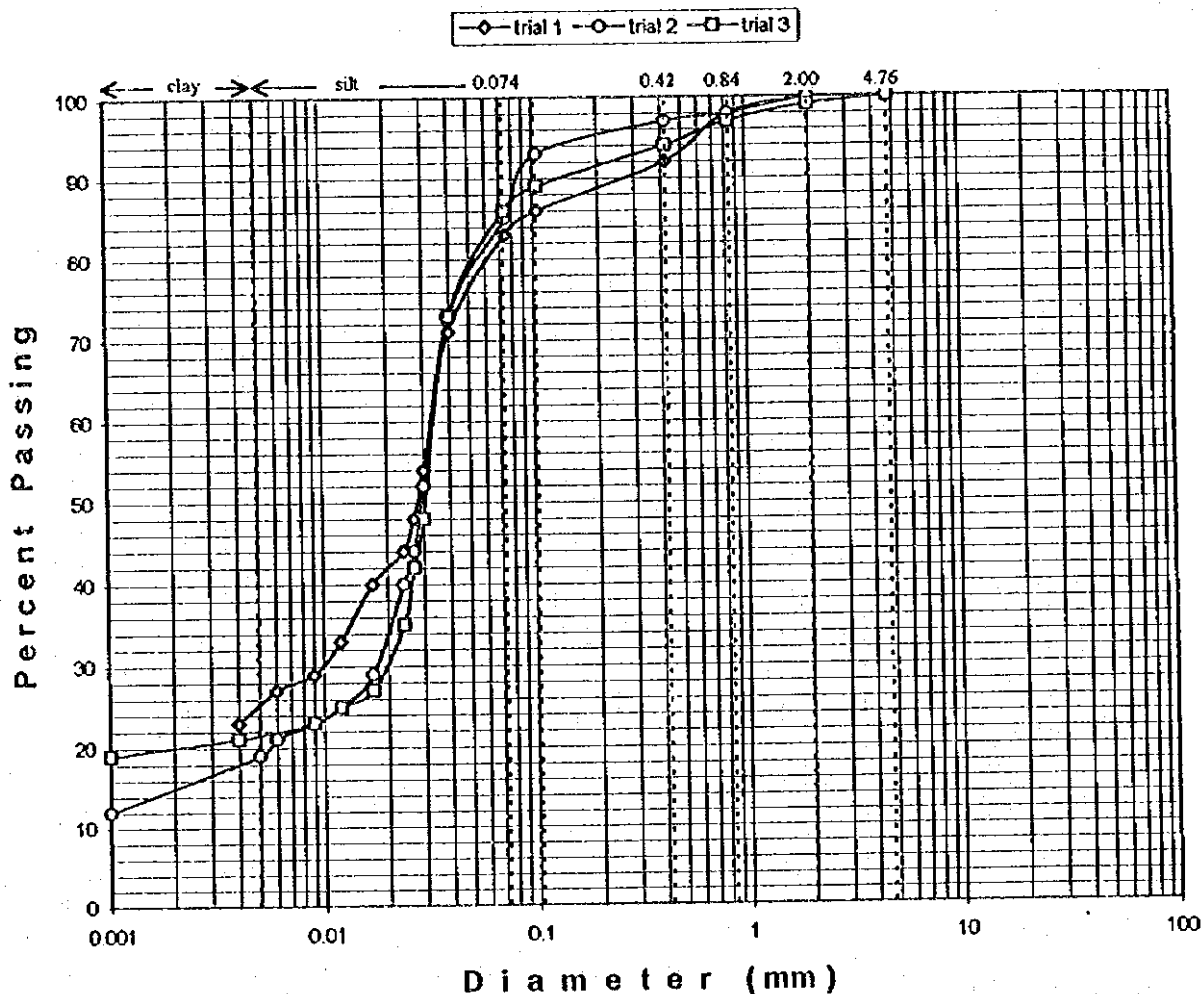


TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	Pi	USCS	DESCRIPTION
1			1					SM	*SAND, little amt. of silt
2			2					SM	*SAND, little amt. of silt
3			3					SM	*SAND, little amt. of silt
* Description is based on mechanical sieve analysis only.									



GRAIN SIZE ANALYSIS	SITE: <u>MANCATION</u> LOCATION: <u>Pasig River</u> DATE SAMPLED: <u>August 8, 1995</u> DATE TESTED: <u>August 11, 1995</u> SHEET NO. <u>1 of 1</u>
	PROJECT : <u>SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT</u>

GRAIN SIZE ANALYSIS CURVE

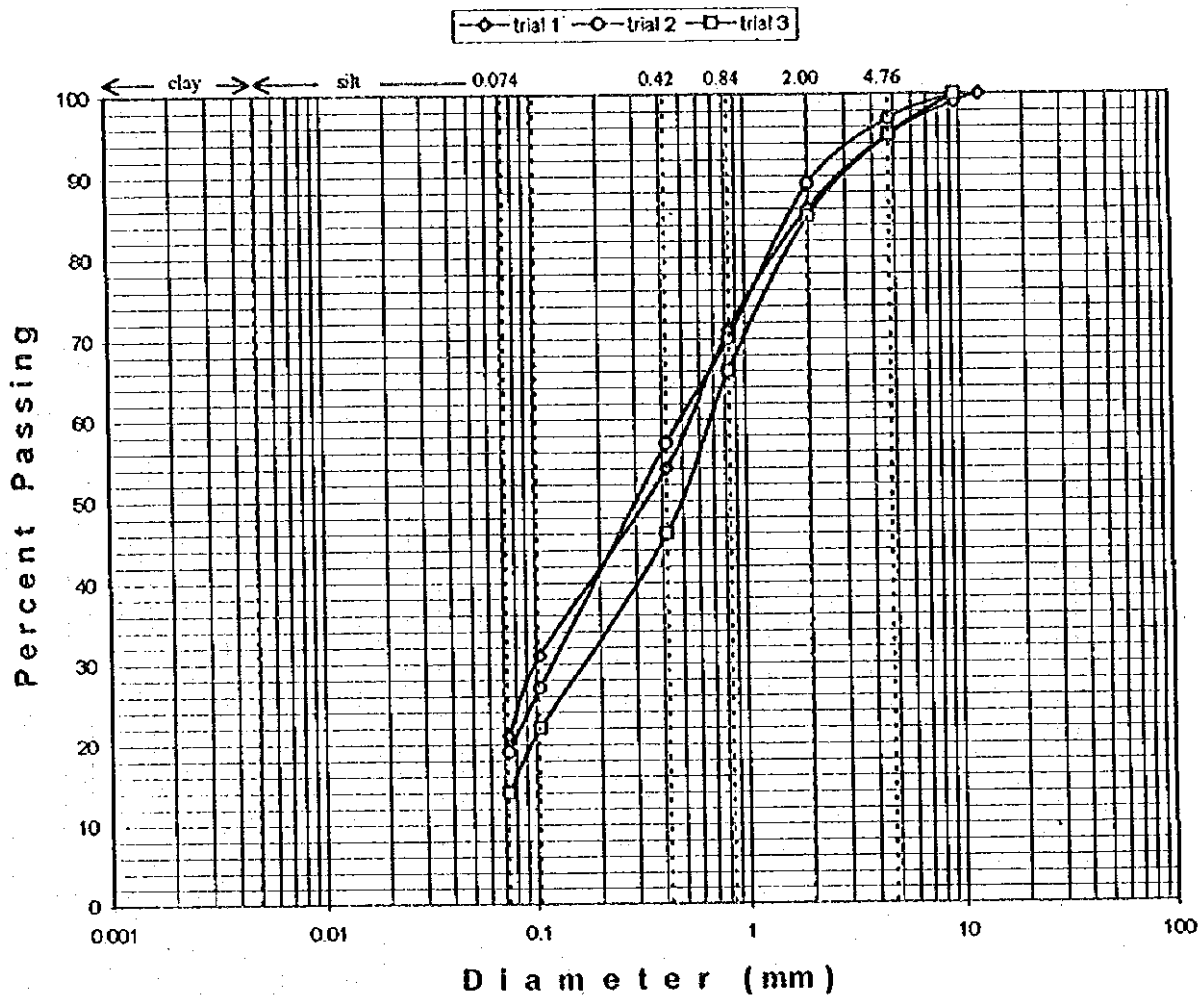


TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	PI	USCS	DESCRIPTION
1			1					ML	SILT, with clay.
			2					ML	SILT, with clay.
2			3					ML	SILT, with clay.
3									



GRAIN SIZE ANALYSIS	SITE: <u>Mancatian</u> LOCATION: <u>Pasiq River</u> DATE SAMPLED: <u>August 25, 1995</u> DATE TESTED: <u>October 12, 1995</u> SHEET NO. <u>1 of 1</u>
PROJECT : SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT	

GRAIN SIZE ANALYSIS CURVE

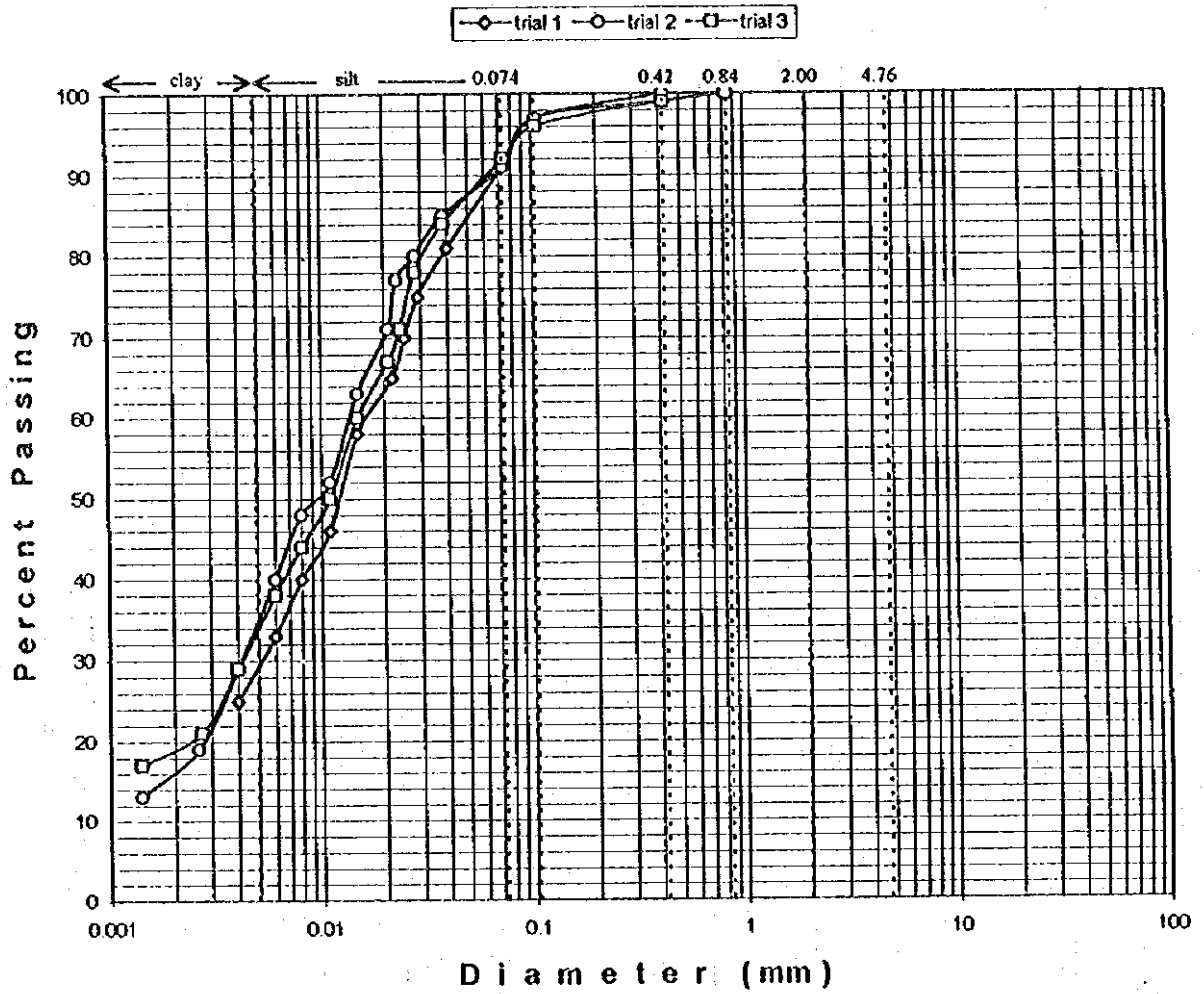


TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	PI	USCS	DESCRIPTION
1			1					SM	*SAND, some silt
2			2					SM	*SAND, some silt
3			3					SM	*SAND, little silt
* Description is based on mechanical sieve analysis only.									



GRAIN SIZE ANALYSIS PROJECT : SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT	SITE: MANCATIAN LOCATION: Pasig River DATE SAMPLED: August 28, 1995 DATE TESTED: August 31, 1995 SHEET NO. 1 of 1

GRAIN SIZE ANALYSIS CURVE

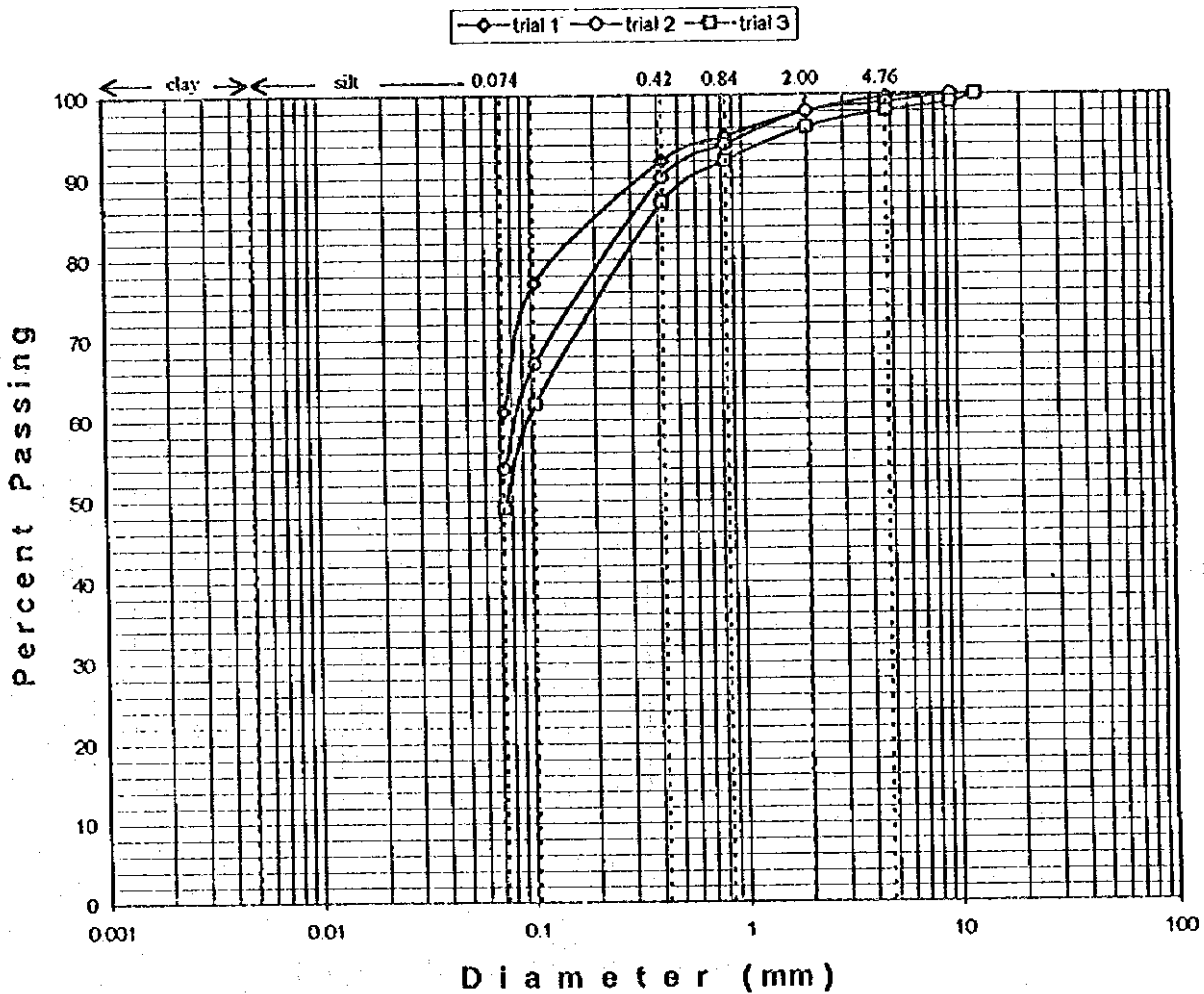


TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	PI	USCS	DESCRIPTION
1			1					ML	Clayey SILT
2			2					ML	Clayey SILT
3			3					ML	SILT, with clay.

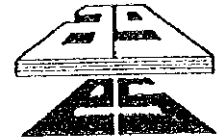


GRAIN SIZE ANALYSIS	SITE: <u>MANCATION</u> LOCATION: <u>Pasig River</u> DATE SAMPLED: <u>August 30, 1995</u> DATE TESTED: <u>October 12, 1995</u> SHEET NO. <u>1 of 1</u>
	PROJECT : SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT

GRAIN SIZE ANALYSIS CURVE



TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	PI	USCS	DESCRIPTION
1			1					ML	*Sandy SILT
2			2					ML	*Sandy SILT
3			3					ML	*Sandy SILT
									* Description is based on mechanical sieve analysis only.



SUMMARY OF LABORATORY TEST RESULTS -- STA. BARBARA

Date of Sampling	Trial No.	Unit Wt. (kN/m ³)	Available Moist. %	Specific Gravity	Grain Size Distribution				Soil Class.
					% Gravel	% Sand	% Silt	% Clay	
25-Aug 1995	1	13.63	46.96	2.57	4	62	34*		SM
	2	13.53	46.60	2.57	11	56	33*		SM
	3	13.93	40.48	2.58	14	61	25*		SM
	Average	13.70	44.68	2.57	10	60	31*		
30-Aug 1995	1	11.87	66.26	2.46	0	19	61	20	ML
	2	11.47	66.08	2.47	0	20	80*		ML
	3	12.06	65.29	2.46	0	24	76*		ML
	Average	11.80	65.88	2.46	0	21	N.A.	N.A.	

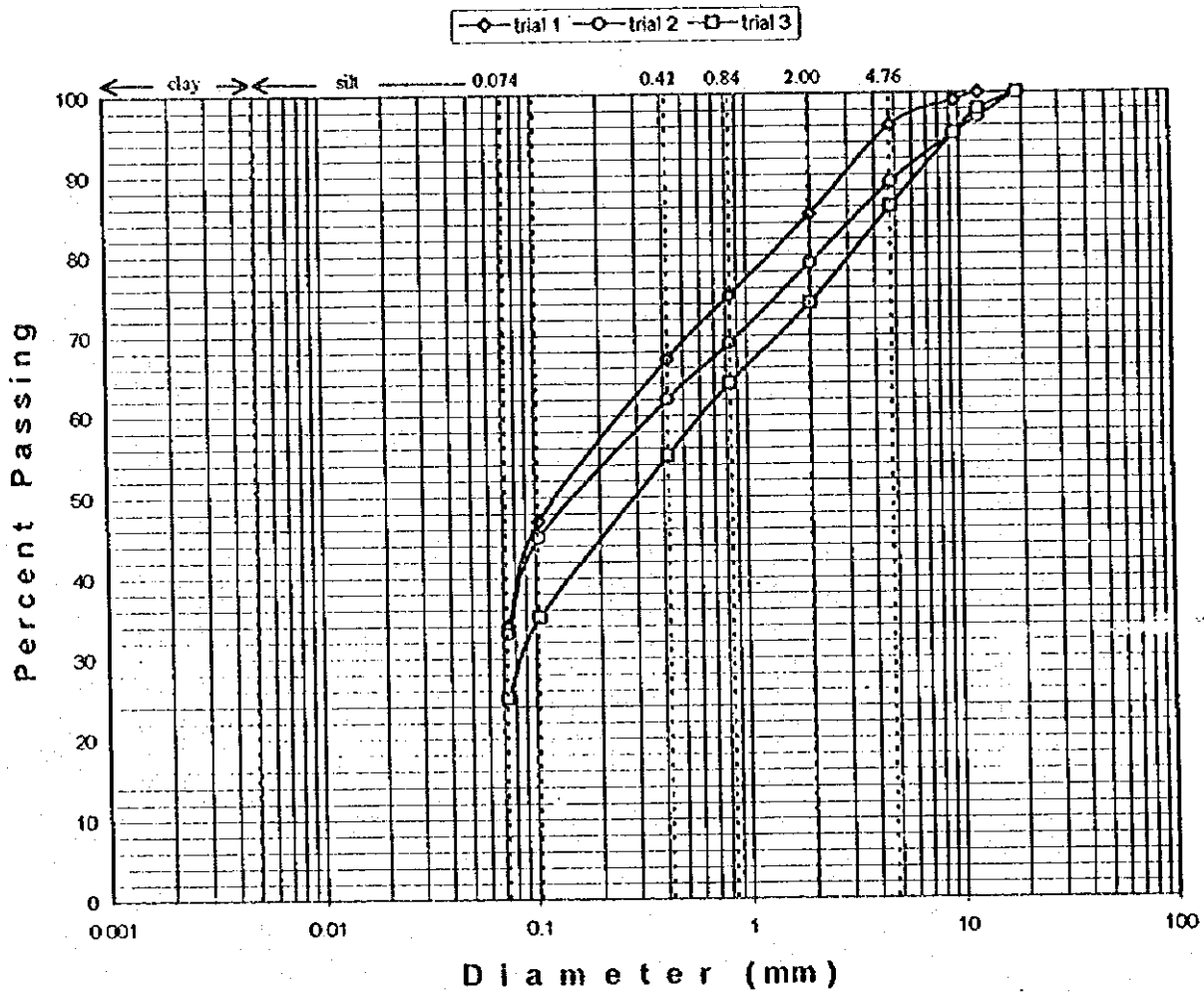
Note:

1. Available moisture (%) is defined as the ratio of the wt. of water to the total wt. of sample in per 100% means practically zero sediments.
2. I.S. - Insufficient sample for testing.
3. * - Insufficient sample for hydrometer test.
4. Numbers with * indicate the cumulative amount of silt and clay.



GRAIN SIZE ANALYSIS PROJECT : SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT	SITE: STA. BARBARA LOCATION: Pasig River DATE SAMPLED: August 25, 1995 DATE TESTED: October 12, 1995 SHEET NO. 1 of 1
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GRAIN SIZE ANALYSIS CURVE

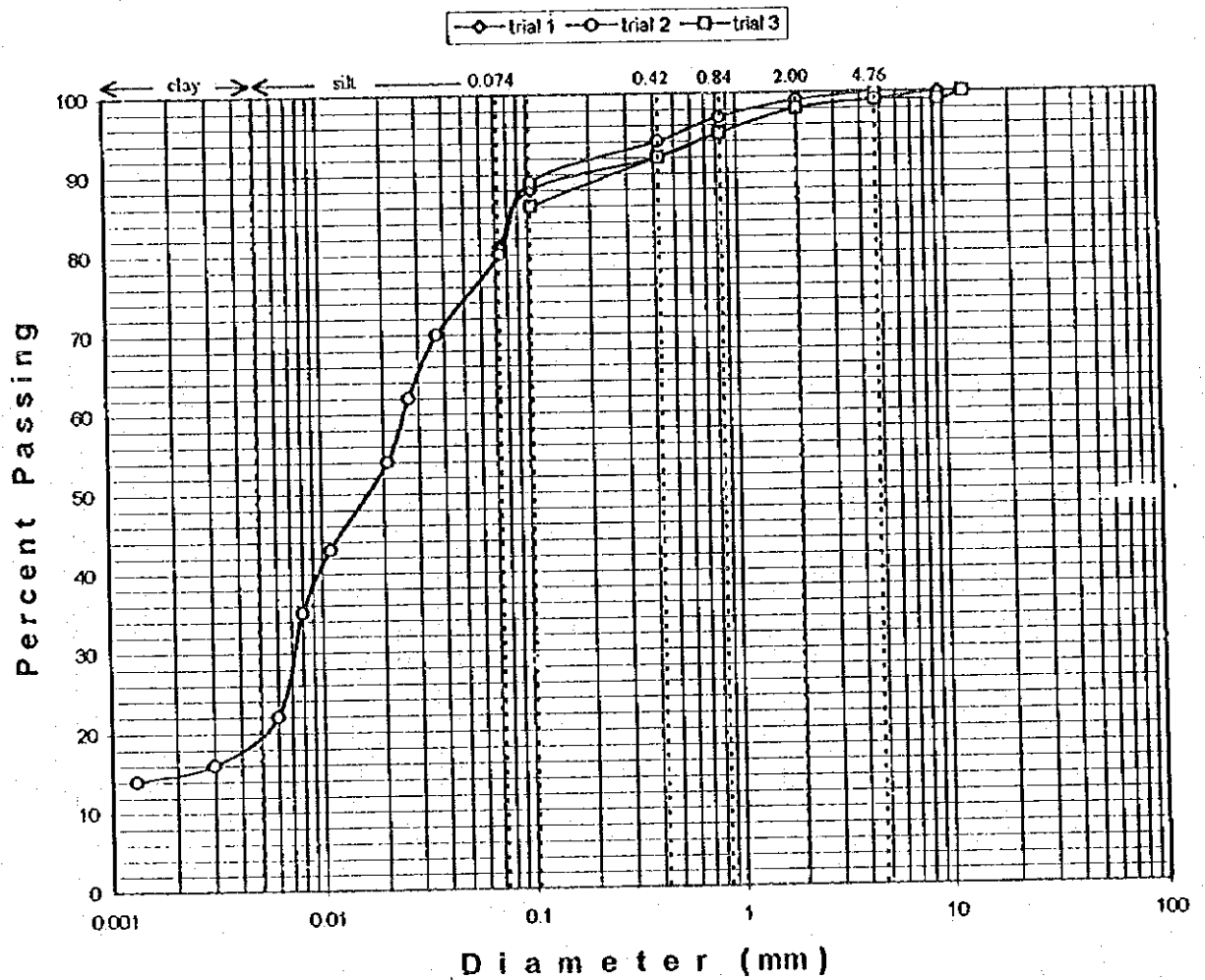


TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	PI	USCS	DESCRIPTION
1			1					SM	*Silty SAND
2			2					SM	*Silty SAND
3			3					SM	*Silty SAND
* Description is based on mechanical sieve analysis only.									

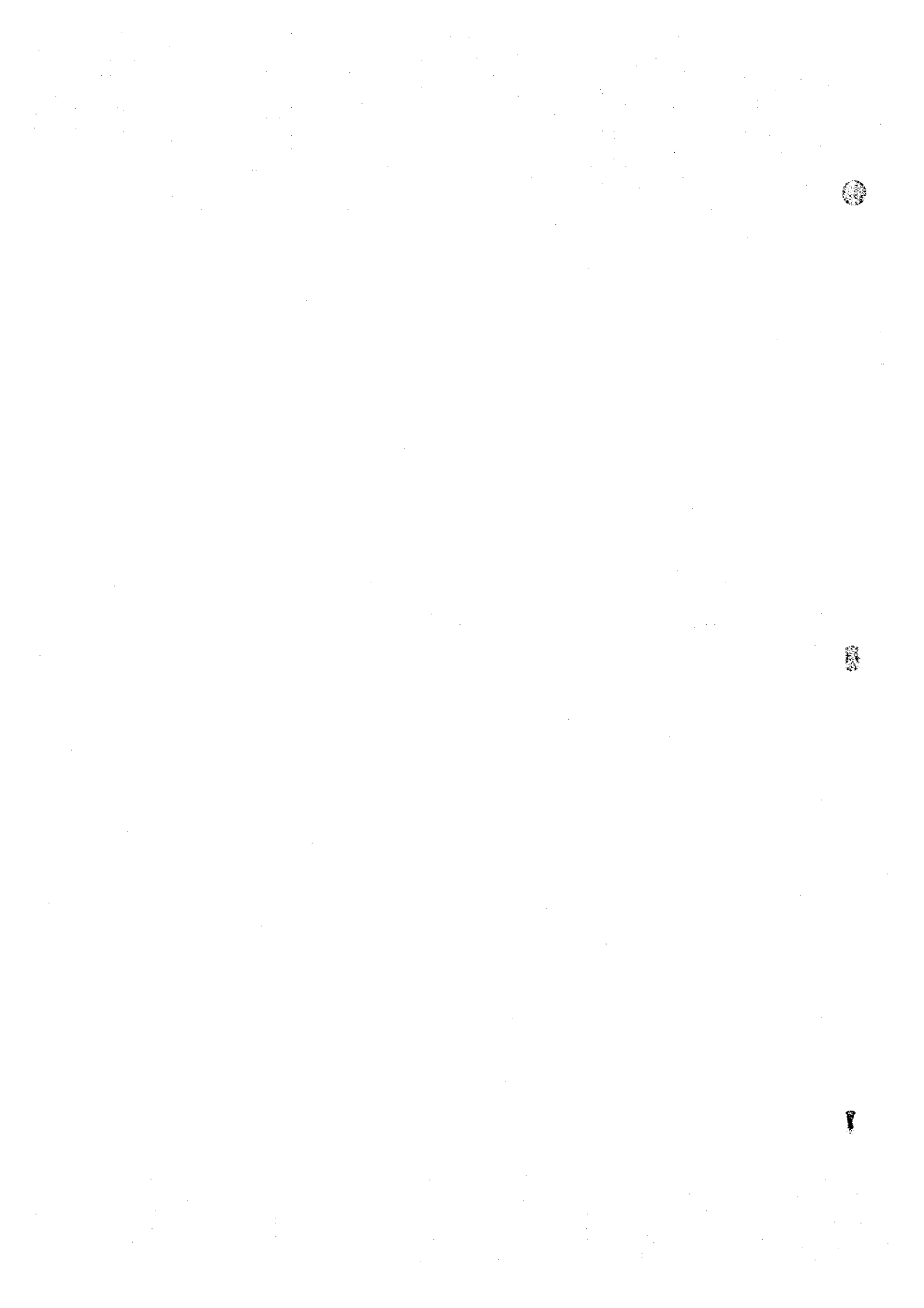


GRAIN SIZE ANALYSIS	SITE: <u>STA. BARBARA</u> LOCATION: <u>Pasig River</u> DATE SAMPLED: <u>August 30, 1995</u> DATE TESTED: <u>October 12, 1995</u> SHEET NO. <u>1 of 1</u>
	PROJECT : <u>SEDIMENTS SAMPLING FOR THE MT. PINATUBO PROJECT</u>

GRAIN SIZE ANALYSIS CURVE



TRIAL NO.	SAMPLE NO.	DEPTH (m)	CURVE NO.	NMC	LL	PL	PI	USCS	DESCRIPTION
1			1					ML	Clayey SILT
2			2					ML	*SILT, some sand
3			3					ML	*Sandy SILT
* Description is based on mechanical sieve analysis only.									



DATABOOK
EXTENT OF DAMAGE
(DB.5)

DATABOOK (DB.5)
EXTENT OF DAMAGE

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PART I

EXTENT OF DAMAGE



Table I.1 Area Affected by Mt.Pinatubo Eruption

REGION III

PROVINCE	TOTAL		AREA AFFECTED BY ASH / SANDFALL			
	AREA	FARMER	3 inch below	3" - 6"	6" above	TOTAL
1. BATAAN	15,877	10,374	2,692	8,915	167	11,774
2. PAMPANGA	61,791	34,503	7,436	22,049	-	29,485
3. TARLAC	84,123	53,573	5,652	22,950	-	28,602
4. ZAMBALES	23,576	16,830	2,535	5,463	11,826	19,824
TOTAL	185,367	115,280	18,315	59,377	11,993	89,685

Table I.2 Crop Area Damaged by Lahar

MUNICIPALITY	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
TARLAC:						
1. Moncada	544	965	1,744	2,203	2,288	3,168
2. Concepcion	1,597	4,200	655	1,377	2,252	5,577
3. Capas	1,254	2,620	171	321	1,425	2,941
4. Bamban	506	882	309	553	815	1,435
5. Paniqui	434	435	793	858	1,227	1,293
6. Camiling	563	846	357	223	920	1,069
7. La Paz	45	100	0	0	45	100
8. Tarlac	244	936	717	117	961	1,053
9. Gerona	0	0	2	1	2	1
Sub-Total	5,187	10,984	4,748	5,653	9,935	16,637
PAMPANGA:						
1. Angeles City	400	672	0	0	400	672
2. Floridablanca	825	1,051	16	21	841	1,072
3. Guagua	15	26	38	89	53	115
4. Lubao	48	75	121	128	169	203
5. Magalang	52	148	362	795	414	943
6. Mexico	849	1,806	0	0	849	1,806
7. Porac	232	228	176	299	408	527
8. Sta. Ana	286	437	0	0	286	437
9. San Simon	84	206	0	0	84	206
10. Bacolor	758	1,272	92	221	850	1,493
11. Sta. Rita	176	269	230	297	406	566
12. Mabalacat	145	192	271	1,227	416	1,419
13. Minalin	70	143	0	0	70	143
Sub-Total	3,940	6,525	1,306	3,077	5,246	9,602
Fishpond Area						
1. Minalin	248	677	0	0	248	677
2. Sasmuan	480	1,695	0	0	480	1,695
3. Lubao	120	260	0	0	120	260
Sub-Total	848	2,632	0	0	848	2,632
ZAMBALES:						
1. Botolan	997	1,197	7	326	1,004	1,523
2. Sn. Felipe	65	55	0	0	65	55
3. Sn. Narcisco	274	380	162	186	436	566
4. Sn. Marcelino	269	168	81	50	350	218
5. Castillejos	48	30	0	0	48	30
Sub-Total	1,653	1,830	250	562	1,903	2,392
GRAND TOTAL	11,628	21,971	6,304	9,292	17,932	31,263

Source : DEPARTMENT OF AGRICULTURE, Region III

Table I.3 Damage of Agricultural Products in Region III

By Ashfall Enclude Lahar as of July 12, 1991

PARTICULAR	BATAAN(\$1)	BULACAN(\$2)	PAMPANGA	TARLAC	ZAMBALES(\$3)	TOTAL
1. RICE						
No. of farmers affected	1,364		8,871	5,183	2,784	18,202
a. Area affected (ha.)						
- Vegetative	74		7,797	3,890	156	11,916
- Harvestable	843	68	960		385	14,172
- Seedlings (cav)	1,735	568	8,442	5,254	7,005	25,260
b. Est. Production Loss (50 kg. cavan)						
- Vegetative	705		457,116	223,364	1,135	682,320
- Harvestable	70,715	5,189	65,906		31,825	173,635
- Seedlings (cav)	1,735	568	8,442	5,254	7,005	23,004
c. Est. Value of Loss (P) P 300/50 kg.						
- Vegetative	162,000		137,134,800	67,009,200	340,500	204,646,500
- Harvestable	17,182,730	1,556,790	19,771,875		9,547,500	48,058,895
- Seedlings (cav)	533,550	204,480	2,175,250	1,891,440	2,101,500	6,906,220
Sub-total	17,878,280	1,761,270	159,081,925	68,900,640	11,989,500	259,611,615
2. ASSORTED VEGETABLES						
a. Area affected (ha.)	179	111	204	119	30	643
b. Est. Prod. Loss (MT)	491	332	1,827	379	626	3,655
c. Est. Value of Loss (P)	4,307,000	1,657,500	20,422,600	1,516,000	4,710,000	32,613,100
3. ASSORTED ROOT CROPS						
a. Area affected (ha.)			1,323	207	540	2,070
b. Est. Prod. Loss (MT)			13,814	3,304	3,053	20,171
c. Est. Value of Loss (P)			159,708,365	8,113,000	14,970,000	182,791,365
4. ASSORTED FRUIT TREES						
a. Fruit trees affected (No.)	456,979		447,343	109,045	520,917	1,534,284
b. Est. Value of Loss (P)	123,838,790		10,000,000	65,629,750	300,636,675	500,105,215
Sub-total	128,145,790	1,657,500	190,130,965	75,258,750	320,316,675	715,509,680
5. LIVESTOCK & POULTRY						
a. Animals affeted (head)						
- Carabao	74	3	735	235	241	1,288
- Cattle	103	14	333	162	280	892
- Swine	375	44	8,250	375	2,856	11,900
- Goat	118	11	1,735	420	215	2,499
- Horse	12				1	13
- Duck	1,565	162	10,401	7,713		19,841
- Chicken	1,819	740	646,805	6,100	10,034	665,498
- Quail			4,000			4,000
b. Est. Value of Loss (P)						
- Carabao	444,000	30,000	5,400,000	2,350,000	2,154,000	10,378,000
- Cattle	618,000	140,000	17,304,000	1,458,000	1,604,000	21,124,000
- Swine	300,000	132,000	23,906,000	750,000	7,700,300	32,788,300
- Goat	35,400	5,500	867,500	210,000	125,250	1,243,650
- Horse	72,000				5,000	77,000
- Duck	117,375	12,150	676,065	578,475		1,384,065
- Chicken	72,760	29,600	61,625,675	244,000	1,001,530	62,973,565
- Quail			52,000			52,000
Sub-Total	1,659,535	349,250	109,831,240	5,590,475	12,590,080	130,020,580
6. FISHERIES						
a. Inland fishpond						
- Stock Fingerlings (pcs.)			550,000	1,400,000	944,000	2,894,000
- Area affected (ha.)	2,184		13,151		339	15,674
- Est. value of stock loss facilities/infrastructure loss (P)			16,980,000	1,237,500	1,958,000	20,175,500
			30,382,000		5,619,750	36,001,750
Sub-Total			47,362,000	1,237,500	7,577,750	56,177,250

Table I.3 Damage of Agricultural Products in Region III

By Ashfall Enclude Lahar as of July 12, 1991

PARTICULAR	BATAAN(\$1)	BULACAN(\$2)	PAMPANGA	TARLAC	ZAMBALES(\$3)	TOTAL
National Project (Income Generating Project)						
7. SMALL SCALE IGP						
- Assorted Projects (No.)	29		641	21		691
(4-Hers & RIC's)						
Est. value of loss (P)	251,000		996,250	32,638		1,279,888
8. L.E.A.D. Projects						
- I.D. a/	5		1	3	1	10
- Est. value of loss (P)	482,000		37,000	102,000	126,000	747,000
Institute Development Project						
- I.D. b/					9	9
- Est. value of loss (P)					602,920	602,920
Income Generating Project						
Sub-Total	733,000	0	37,000	102,000	728,929	1,349,929
9. SWIP						
Small Water Impounding Project						
- SWIP affected (no.) c/	3		6	1	4	14
- Est. value of loss (P)	120,000		890,000	75,000	300,000	1,385,000
Sub-Total	120,000		890,000	75,000	300,000	1,385,000
10. FACILITIES						
a. Sacobia Seed Fara at						
Bamban, Tarlac						
- Assorted fruit tree (no.)				6,445		6,445
- Value of Loss (P)				911,000		911,000
- Assorted seedlings				32,000		32,000
- Value of Loss				292,000		292,000
- Infrastructures/Buildings				9 units		0
- Value of Loss				565,000		565,000
Sub-Total				1,768,000		1,768,000
b. Zambales						
- Soils Laboratory, Iba					30,000	30,000
- Provincial Nursery, Iba					387,000	387,000
- Farmer's Pavillion, Iba					150,000	150,000
- Provincial Office, Iba					150,000	150,000
- Nat'l Bangus Breeding Project, Masinloc					75,200	75,200
- Zamb. Breeding Station, San Marcelino					850,000	850,000
- Magsaysay Memorial Fish Nursery Castillejos					250,000	250,000
Sub-Total					1,892,200	1,892,200
GRAND TOTAL	148,536,605	3,768,020	507,333,130	152,932,365	355,395,134	1,167,714,254

Note : \$ 1 - Riceland heavily silted is estimated at 2,822 hectares.

\$ 2 - Include damage caused by Typhoon Diding.

\$ 3 - About 12,000 hectares of riceland are covered by 6-8 inches of volcanic sud and ashes.

Remarks: a/ solar driers covered with ashfall/sand/volcanic nud

b/ stock and facilities

c/ washout embankments and entrance of main canal, silted and covered with volcanic ash/sand/nud.

Source : Department of Agriculture, Region III

Table I.4 Damage to Reforestation Project as of July 31, 1991

Penro/Centro	Funding Source	DAMAGES						Location	Estimated Cost of Damage	Rehab. Measures Recommended	Remarks
		Area (ha)	SDLOS (no.)	Access Road (KM)	Footpath (M)	Look-out Tower (Unit)	Bunkhouse (Unit)				
Zambales Masinloc Botolan			NONE					not indicated in the report submitted			
	ADB	100	-	1.85	5,000	-	2	-	738,457.00		
	OECF	604	-	13.46	30,200	7	9	-	5,531,779.10		
	Regular Funded - by Contract	79	-	-	3,950	-	-	-	774,057.34		
	- by Admi.	1,435	-	-	-	-	-	-	-		
Sub-Total		2,218		15.31	39,150	7	11	-	7,044,293.44		
Olongapo	ADB	509.32	506,304	7.25	5.37	12	12	Cawang, Subic, Zambales, Tawirang Balie, Sta. Rita Quezon City, So. Payudpod, Sta. Fe, San Marcelino, Zambales	5,427,499.60		
	OECF	217	540,981	-	-	7	57	So. Lubot, Sta. Fe, San Marcelino, Zambales, So. Tarudoc, Sta. Fe, San Marcelino, Zambales	1,275,012		
	Regular	147	139,916	1.8	2.6	5	5	So. Payudpod, Sta. Fe, San Marcelino, Zambales, Cawang, Subic, Zambales, Palatan, Aglao, San Marcelino, Zambales, Sio. Libertad, Sta Fe, San Marcelino, Zambales	1,950,100.30		
	Sub-Total		873.32	1,187,201	9.05	7.97	24.00	74.00	-	8,652,611.90	
Tarlac											
Capas	ADB	3455	1,167,700					Maamot, San Jose Bueno, Capas, Lourdes, Bamban, Sta. Juliana, Bigbiga, Mayantoc Marunglo	60,903,312.44		Within 20 km. radius proj. have 0-5% chance of survival recovery covered w/ 12-43 cm. volcanic ashes, & w/in the 21-40 km. radius have 10-30% chance of survival recovery
	OECF	380			Not Identified				4,769,427.90		
	Regular Funded - by Contract	304	452,100						6,130,478.35		
	- by Admi.	172							2,375,000.00		
	Sub-Total		4,139	1,619,800						71,803,218.69	
Camiling			MINIMAL								
Bataan Bagac	ADB	22.5						Bagac, Morong, Mariveles Bataan	211,500.00		Painting of broken benches & clean up of the ash and sand
	ADB/OECF (Regional)	100	332,500					-	1,195,726.50		
	ADB/OECF (OSEC)	229	219,000					-	2,489,410.00		
	OECF (Prov'l)	449	137,000					-	4,503,924.00		
	Regular Funded - by Adm.	139	15,000					-	358,150.00		
	- by Contract	30	20,800					-	180,779.40		
	Sub-Total		919.5	724,300						8,939,489.90	
	ADB/OECF (Provincial)		42,660						70,000		
	OECF	63	101,250		total length not indicated			1 Roosevelt, Pita & San Pablo Dinaluphan	28,680		
	Regular Funded - by Adm.	1497	35,077					2 BH & w-a Roosevelt, Dwater system Dinaluphan	63,970		
	- by contract	10	15,332						14,601		
	Sub-Total		3089	1,584,023						6,966,449.90	
Pampanga Angeles	ADB	337						Floridablanca, So. Tang. Porac, Villa Maria, Inararo, Sapang usak, Nabuklod, Ha. Dolores	3,262,115.40		Excluding the estimated cost of damage for the 50 has.
	OECF	867.5							6,795,303.50		
	Regional	132							4,533,803.24		
	OSEC	250						Tanga, Porac, Panapanga	1,599,399.40		
	Regular	90							487,506.14		
Sub-Total		1,676.50	0						16,678,126.68		
Grand Total		12,915.32	5,115,324	24.36	39,157.97	31.00	85.00		120,064,190.51		

Table I.5 Damage to Reforestation Project as of August 31, 1991
Contract Reforestation Project as of August 31, 1991

Penros/Centro	Name of Contractor	Date of Contract Issued	Funding Source	Location	Amount Allocated for the Project	DAMAGES						Estimated Cost of Damage (Amount Released)	Date Released	Kind of Damage	Rehabilitation Measures Recommended	Name of Contractor
						SDLCS. AREA (has.)	Access Road (KM)	Footpath (M)	Look-out Tower (Unit)	Bankhouse (Unit)						
Bataan Abucay	Family															
	1. Manvik Lamsang	1990	Regular	Recoveret, Dinalupihan	65,120	9,332	5	250	-	-	-	14,601		40% partially damaged	Total area can be rehabilitated	PENRO/CENRO Eva. Team
	2. Andres Horrado	1990	ADB	-do-	65,120	7,160	5	250	-	-	-	16,217		Partially	-do- replanting -do-	PENRO/CENRO Eva. Team
	3. Ignacio Cuyos	1990	ADB	-do-	65,120	4,580	5	250	-	-	-	7,530		-do- -do-	-do- -do-	PENRO/CENRO Eva. Team
	4. Pablo Albor	1989	ADB	-do-	47,000	2,300	1	-	-	-	-	6,183		Totally damaged by eruption	Totally area cannot be rehabilitated anymore	PENRO/CENRO Eva. Team
	5. Celestino Rovales	1989	ADB	-do-	47,000	7,520	5	250	-	-	-	18,442		partially damaged	can be rehabilitated -do-	PENRO/CENRO Eva. Team
	6. Abbie Loyola	1989	ADB	-do-	47,000	4,815	5	250	-	-	-	6,595		partially damaged	-do- replanting	PENRO/CENRO Eva. Team
	7. Nemesio Banas	1989	ADB	Tipo, Hermosa	28,200	5,625	3	150	-	-	-	18,026		Totally damaged	replanting	PENRO/CENRO Eva. Team
	8. Elenito Pabalan	1989	ADB	-do-	28,200	4,938	3	150	-	-	-	9,500		partially damaged	-do-	PENRO/CENRO Eva. Team
	9. Ernesto Suba	1989	ADB	-do-	18,800	3,950	2	100	-	-	-	12,024		Totally damaged	cannot be rehabilitated	PENRO/CENRO Eva. Team
	10. Comelio Munayak	1989	ADB	-do-	28,200	8,625	3	150	-	-	-	14,963.5		Totally damaged	can be rehabilitated	PENRO/CENRO Eva. Team
	11. Librado Luistro	1989	ADB	Tipo, Hermosa	37,600	9,125	4	200	-	-	-	19,447		Totally damaged	replanting	PENRO/CENRO Eva. Team
	12. Francisco Pabalan	1989	ADB	-do-	28,200	11,156	3	150	-	-	-	22,100		Totally damaged	replanting	PENRO/CENRO Eva. Team
	13. Jose Omias	1989	ADB	-do-	37,600	7,480	4	200	-	-	-	15,493		-do-	can be rehabilitated	PENRO/CENRO Eva. Team
	14. Lazaro Umali	1989	ADB	-do-	28,200	6,435	3	150	-	-	-	11,963		-do-	replanting -do-	PENRO/CENRO Eva. Team
15. Elisa Tipan	1989	ADB	Tala, Dnati	37,600	5,375	4	200	-	-	-	6,789		partially damaged	replanting (remains of branches/cultivation)	PENRO/CENRO Eva. Team	

Table 1.5 Damage to Reforestation Project as of August 31, 1991
Contract Reforestation Project as of August 31, 1991

Perno/Cerro	Name of Contractor	Date of Contract Issued	Funding Source	Location	Amount Allocated for the Project	DAMAGES						Estimated Cost of Damage (Amount Released)	Date Released	Kind of Damage	Rehabilitation Measures Recommended	Name of Contractor	
						SDLGS. (no.)	AREA (has.)	Access Road (KM)	INFRASTRUCTURE								Bunkhouse (Unit)
									Footpath (M)	Look-out Tower (Unit)	Look-out Tower (Unit)						
	16. Linda Gonzales	1989	ADB	-do-	42,500	3,635	4.5	-	225	-	-	-	6,851		Totally damaged	-do-	PENRO/CENRO Eva. Team
	17. Marcilio Casavan	1989	ADB	-do-	37,600	1,225	4	-	200	-	-	-	4,590		partially damaged	pruning/trimming cultivation	PENRO/CENRO Eva. Team
	18. Efrén Gonzales	1989	ADB	-do-	42,500	3,850	4.5	-	225	-	-	-	7,228		-do-	-do-	PENRO/CENRO Eva. Team
	19. Alfredo Tipán	1989	ADB	-do-	37,600	2,350	4	-	200	-	-	-	8,413		-do-	-do-	PENRO/CENRO Eva. Team
	20. Remigio Dimayuga	1989	ADB	-do-	37,600	3,250	4	-	200	-	-	-	4,475 1,637		-do- Totally damaged	-do-	PENRO/CENRO Eva. Team
	21. Leonardo Adraneta	1989	ADB	Paliti, Samal	47,000	11,625	5	-	250	-	-	-	21,966		Totally damaged	replanting	PENRO/CENRO Eva. Team
	22. Octafín Pruma	1989	ADB	-do-	28,200	8,750	3	-	150	-	-	-	10,895		-do-	-do-	PENRO/CENRO Eva. Team
	23. Anobio Parás	1989	ADB	-do-	37,600	5,815	4	-	200	-	-	-	9,023		-do-	-do-	PENRO/CENRO Eva. Team
	24. Zenaida Jamin	1989	ADB	-do-	28,200	4,375	3	-	150	-	-	-	6,984		-do-	-do-	PENRO/CENRO Eva. Team
	25. Concepcion Hincir	1989	ADB	-do-	28,200	7,750	3	-	150	-	-	-	13,111		-do-	-do-	PENRO/CENRO Eva. Team
	26. Reynaldo Balba	1989	ADB	-do-	18,800	4,700	2	-	100	-	-	-	8,172		-do-	-do-	PENRO/CENRO Eva. Team
	27. Theino Balba	1989	ADB	-do-	18,800	4,700	2	-	100	-	-	-	8,172		-do-	-do-	PENRO/CENRO Eva. Team
	28. Benjamin Berenil	1989	ADB	-do-	28,200	7,500	3	-	150	-	-	-	15,241.95		-do-	cannot be rehabilitated	PENRO/CENRO Eva. Team
	Community 1. Arcas Agro-Industrial Dev. Resources, Inc.	1989	ADB	Roosevelt, Denaliuphan	141,000	20,615	15	-	750	-	-	-	55,440		totally damaged	cannot be rehabilitated	PENRO/CENRO Eva. Team
	2. Mun. Govt. of Hermosa c/o Mayor N. Cruz	1990	ADB	-do-	390,780	48,000	30	-	1,500	-	-	-	175,520		-do-	-do-	PENRO/CENRO Eva. Team
		1990	ADB	Mabiga, Hermosa	1,107,210	166,000	85	-	4,250	-	-	-	108,460		Partially damaged	pruning/trimming/cultivation, replanting	PENRO/CENRO Eva. Team

Table 1.5 Damage to Reforestation Project as of August 31, 1991
Contract Reforestation Project as of August 31, 1991

Penno/Contro	Name of Contractor	Date of Contract Issued	Funding Source	Location	Amount Allocated for the Project	DAMAGES						Estimated Cost of Damage (Amount Released)	Date Released	Kind of Damage	Rehabilitation Measures Recommended	Name of Contractor
						SIDLGS. (no.)	AREA (has.)	INFRASTRUCTURE			Bunkhouse (Unit)					
								Access Road (K.M)	Footpath (M)	Look-out Tower (Unit)						
	3. Mun. Govt. of Samal c/o Mayor E. Forbes	1990	ADB	Palili, Samal	455,910	56,000	35		1,750			51,000		-do-	-do-	PENRO/CTENRO Eva. Team
	Corporate 1. Prov. Govt. of Dinalupihan c/o Gov. L. Roman	1989	ADB	Roosevelt, Dinalupihan	6,016,671	750,000	300		15,000			5,435,337.5		Totally damaged	can be rehabilitated: pruning/proping replanting/cultivation	PENRO/CTENRO Eva. Team
	2. PCBs-Abuay c/o Gov. L. Roman	1989	ADB	Palili, Samal BINAS, Abuay	4,711,966		200		10,000			300,000		Partially damaged	-do-	PENRO/CTENRO Eva. Team
		1990	ADB	-do-	6,007,526	150,000	295		14,750			180,000 70,000		-do-	-do-	
Subtotal Bagac					19,872,473	1,356,536	1,061		53,000	2	2	6,803,799.95				
	1. PCB Contract Refo. Project	1989	ADB (OECP)	Bagac, Bataan	3,998,366		20					300,000		Partial/plm. suffered broken branches	Pruning of broken branches & clean-up of the ash and sand	PENRO/CTENRO Eva. Team
	2. PCB Reforestation Contract	1989	ADB (OECP)	Morong, Bataan	1,898,149.5	40,000	15					180,550		-do-	-do-	PENRO/CTENRO Eva. Team
	3. Bagac Family Contract Reforestation Proj.	1989	ADB (Prov't)	Bagac, Bataan	282,000		6					56,400		-do-	-do-	PENRO/CTENRO Eva. Team
	4. Morong Family Contract Reforestation Proj.	1989	ADB	Morong, Bataan	141,000		3					28,200		-do-	-do-	PENRO/CTENRO Eva. Team
	5. Phil. Refugee Proc. Center Refo Contract	1989	ADB	Morong, Bataan	1,898,149.5		not indi- cated					not indicated		not indicated	not indicated	PENRO/CTENRO Eva. Team
	6. Tenejero Association	1990	OECP (Reg'l)	Bagac, Bataan	1,599,400	40,000	50					539,700		-do-	-do-	PENRO/CTENRO Eva. Team
	7. Piyawan Agro-Forestry Association	1990	OECP (Reg'l)	Bagac, Bataan	1,599,400	40,000	50			1		482,270		-do-	-do-	PENRO/CTENRO Eva. Team
	8. Banaawang Farmers Association	1990	ADB (Prov't)	Morong, Bataan	482,820	15,000	15			1		195,150		-do-	-do-	PENRO/CTENRO Eva. Team
	9. Pag-uas Tree Growers Association	1990	ADB (Prov't)	Morong, Bataan	804,700	30,000	25			1		310,250		-do-	-do-	PENRO/CTENRO Eva. Team
	10. Bagong Silat Livelihood Association	1990	ADB (Prov't)	Bagac, Bataan	804,700	20,000	15					171,200		-do-	-do-	PENRO/CTENRO Eva. Team

Table 1.5 Damage to Reforestation Project as of August 31, 1991
Contract Reforestation Project as of August 31, 1991

Penro/Centro	Name of Contractor	Date of Contract Issued	Funding Source	Location	Amount Allocated for the Project	SDLGS. AREA (has.)	DAMAGES				Estimated Cost of Damage (Amount Released)	Date Released	Kind of Damage	Rehabilitation Measures Recommended	Name of Contractor
							Access Road (KM)	Footpath (M)	Tower (Unit)	Look-out (Unit)					
	11. FCB Contract Reforestation Project	1990	ADB (OSEC)	Bagac, Batan	16,224,000	24					300,000		-do-	-do-	PENRO/CENRO Eva. Team
	12. Morong Family Contract Reforestation Project	1990	ADB (Prov'l)	Morong, Bagac	not indicated	24					156,317		-do-	-do-	PENRO/CENRO Eva. Team
	13. LGU Bagac Contract Reforestation Project	1990	OECT (Prov'l)	Bagac, Batan	2,957,915	70					2,58,000		-do-	-do-	PENRO/CENRO Eva. Team
	14. Bagac Timber Based Livelihood Ecological Development Project	1990	OECT (Prov'l)	Bagac, Batan	not indicated	70					406,000		-do-	-do-	PENRO/CENRO Eva. Team
	15. Bagac Family Based Reforestation Project	1990	OECT (Prov'l)	Bagac, Batan	7,854,949.3	20					130,000		-do-	-do-	PENRO/CENRO Eva. Team
	16. Morong Family Based Contract Reforestation Project	1990	Regular	Morong, Batan	7,815,870	26					12,000		-do-	-do-	PENRO/CENRO Eva. Team
	Sub-total				69,033,910	433	0	0	3	0	3,726,037				
	Grand Total				69,033,910	1,678,336	0	53,000	5	2	10,529,816.95				
Zambales															
Olongapo	1. Cawang Tree Farmers (Federico Maraton)	4-1-90	ADB	Cawang, Subic, Zambales	1,020,000	50	1.25	1.38	1	1	662,800		Totally damaged	not indicated	PENRO/CENRO Eva. Team
	2. Mt. Redondo Tree Farmers (Eduardo Abed)	4-1-90	ADB	-do-	816,000	36	1	0.6	1	1	614,960		90% of the area was damaged	-do-	PENRO/CENRO Eva. Team
	3. Mountain Developers Group (Albino Rodolfo)	4-1-90	ADB	-do-	not indicated	30	0.75	0.689	1	1	436,160		Totally damaged	-do-	PENRO/CENRO Eva. Team
	4. Subic Bay Tree Farmers (Gregorio Lapey)	4-1-90	ADB	-do-	408,000	20	0.5	2	1	1	229,740		Totally damaged	-do-	PENRO/CENRO Eva. Team
	5. Olongapo Tree Farmers (Jaime Jimenez)	4-1-90	Regular	-do-	408,000	20	0.5	0.5	1	1	305,140		Totally damaged	-do-	PENRO/CENRO Eva. Team
	6. Gemmas Tree Farmers (Rufino Paderno)	4-1-90	Regular	-do-	408,000	20	0.5	0.9	1	1	283,440		Totally damaged	-do-	PENRO/CENRO Eva. Team
	7. Cawang Tree Farm Dev. (Rodolfo Magayem)	4-1-90	Regular	-do-	346,800	17	0.425	0.7	1	1	198,324		Totally damaged	-do-	PENRO/CENRO Eva. Team
	8. Kabinaugan Tree Farmers (Reynaldo T. Carano)	4-1-90	Regular	-do-	306,000	15	0.375	0.5	1	1	130,778.25		Totally damaged	-do-	PENRO/CENRO Eva. Team

Table I.5 Damage to Reforestation Project as of August 31, 1991
Contract Reforestation Project as of August 31, 1991

Penro/Centro	Name of Contractor	Date of Contract Issued	Funding Source	Location	Amount Allocated for the Project	DAMAGES					Estimated Cost of Damage (Amount Released)	Date Released	Kind of Damage	Rehabilitation Measures Recommended	Name of Contractor	
						SDLSGS. AREA (has.)	Access Road (KM)	Footpath (M)	Look-out Tower (Unit)	Bunkhouse (Unit)						
	9. Piedad Ranes Ecological Foundation (Carrizos Pablo)	9-19-90	ADB	Tawaring Balina, Sta. Rita Quezon City	1,020,000	43,122	26.9%	1.25	0.501	-	-	285,012		54% of the area was damaged	-do-	PENROCENTRO Eva. Team
	10. Saghai Forest Dev't Foundation Inc. (Ana Dolores Puraza)	3-5-90	ADB	-do-	not indicated	300,000	40	2.5	0.2	-	-	1,123,753.1		-do-	-do-	PENROCENTRO Eva. Team
	11. Payudpod Tree Planters (M. Arquero)	1980	ADR	So. Payudpod, Sta. Fe, San Marcelino, Zambales	702,350	8,669	50	-	-	-	-	32,587		Totally damaged	-do-	PENROCENTRO Eva. Team
	12. San Marcelino Tree Growers (Romeo Corpuz)	1990	ADB	-do-	1,020,000	49,843	27	-	-	-	-	631,187		54% of the area was damaged	-do-	PENROCENTRO Eva. Team
	13. San Marcelino Tree Planters Dev. (Isabel Corpuz)	1990	ADB	-do-	510,000	13,545	25	-	-	-	-	297,238		Totally damaged	-do-	PENROCENTRO Eva. Team
	14. Payudpod Tree Planters (M. Arquero)	1990	ADB	-do-	1,020,000	25,005	50	-	-	-	-	65,260		Totally damaged	-do-	PENROCENTRO Eva. Team
	15. San Marcelino Tree Farmers (Onilda Gilang)	1990	ADB	-do-	510,000	28,172	12	-	-	-	-	377,594		48% of the area was damaged	-do-	PENROCENTRO Eva. Team
	16. Palisan Tree Farmers Group (Antonio Binuya)	1990	Regular	Palisan, Aglao, San Marcelino, Zambales	300,000	7,502	15	-	-	-	-	213,103		Totally damaged	-do-	PENROCENTRO Eva. Team
	17. Kakilingan Tribal Council (Dionisio Dumias)	1990	OECF	So. Lubok, Sta. Fe, San Marcelino, Zambales	1,019,756	9,000	50	-	-	-	-	56,050		Totally damaged	-do-	PENROCENTRO Eva. Team
	18. Misher Farm Foundation (Teodoro Domingo)	1990	ADB	So. Lubok, Sta. Fe, San Marcelino, Zambales	2,390,310	21,671	100	-	-	-	-	66,692		Totally damaged	-do-	PENROCENTRO Eva. Team
	19. L.G.U. of Sta. Fe (Francisco Orla)	1990	OECF	So. Tinubad, Sta. Fe, San Marcelino, Zambales	9,498,898	243,670	100	-	-	55	-	587,340		30% of the area was damaged	-do-	PENROCENTRO Eva. Team
	20. Pnatubo Foundation, Inc. (Eusebio Magpayas)	1990	OECF	So. Payudpod, Sta. Fe, San Marcelino, Zambales	1,527,451	216,797	-	-	-	1	-	433,594		partially damaged	-do-	PENROCENTRO Eva. Team
	21. Ingal Cubat Foundation (Albert Malvar)	1990	OECF	So. Payudpod, Sta. Fe, San Marcelino, Zambales	1,527,451	71,514	67	-	-	-	-	198,028.00		67% of the area was damaged	-do-	PENROCENTRO Eva. Team
	22. Eddie Romaldo	1990	ADB	-do-	82,500	2,167	4	-	-	-	-	55,176		80% of the area was damaged	-do-	PENROCENTRO Eva. Team
	23. Roosevelt de San Jose	1990	ADB	-do-	82,500	3,468	3.4	-	-	-	-	56,712.5		68% of the area was damaged	-do-	PENROCENTRO Eva. Team

Table 1.5 Damage to Reforestation Project as of August 31, 1991
Contract Reforestation Project as of August 31, 1991

Penno/Centro	Name of Contractor	Date of Contract Issued	Funding Source	Location	Amount Allocated for the Project	DAMAGES					Estimated Cost of Damage (Amount Released)	Date Released	Kind of Damage	Rehabilitation Measures Recommended	Name of Contractor	
						SDLGS. (no.)	AREA (has.)	Access Road (KM)	INFRASTRUCTURE							
									Footpath (M)	Look-out Tower (Unit)						Bunkhouse (Unit)
	24. John Mendoza	1990	ADB	-0-	82,500	130	4.94	-	-	-	50,320	-0-	-0-	PENRO/CENRO Eva. Team		
	25. Guillermo Panaleon	1990	ADB	-0-	82,500	6,501	2	-	-	-	54,833	-0-	-0-	PENRO/CENRO Eva. Team		
	26. Romeo Dalit	1990	ADB	-0-	82,500	9,000	3	-	-	-	67,750	-0-	-0-	PENRO/CENRO Eva. Team		
	27. Dionato Esteban	1990	ADB	-0-	82,500	7,922	5	-	-	-	65,638	-0-	-0-	PENRO/CENRO Eva. Team		
	28. Guillermo Raquandin	1990	ADB	-0-	82,500	8,666	5	-	-	-	67,019.5	-0-	-0-	PENRO/CENRO Eva. Team		
	29. Liberto Flores	1990	ADB	-0-	82,500	6,128	5	-	-	-	62,278	-0-	-0-	PENRO/CENRO Eva. Team		
	30. Alfredo Sabagun	1990	ADB	-0-	82,500	7,229	5	-	-	-	64,623.5	-0-	-0-	PENRO/CENRO Eva. Team		
	31. Romie Espedon	1990	ADB	-0-	82,500	8,166	5	-	-	-	58,162	-0-	-0-	PENRO/CENRO Eva. Team		
	32. Erwin Antonio	1990	ADB	-0-	82,500	7,888	5	-	-	-	65,717.25	-0-	-0-	PENRO/CENRO Eva. Team		
	33. Salvador Justo	1990	ADB	-0-	82,500	6,182	5	-	-	-	62,300.25	-0-	-0-	PENRO/CENRO Eva. Team		
	34. Rodrigo Juliano	1990	ADB	-0-	82,500	6,182	5	-	-	-	63,718.25	-0-	-0-	PENRO/CENRO Eva. Team		
	35. Ulyses Domenden	1990	Regular	-0-	82,500	7,819	5	-	-	-	65,338	-0-	-0-	PENRO/CENRO Eva. Team		
	36. Norberto Dalit	1990	Regular	-0-	82,500	7,999	5	-	-	-	65,939.25	-0-	-0-	PENRO/CENRO Eva. Team		
	37. Heliodoro Unzuiga, Jr.	1990	Regular	-0-	82,500	10,836	5	-	-	-	74,171	-0-	-0-	PENRO/CENRO Eva. Team		
	38. Agrifino Domingo	1990	Regular	-0-	82,500	9,000	5	-	-	-	67,750	-0-	-0-	PENRO/CENRO Eva. Team		
	39. Nelson de San Jose	1990	Regular	-0-	82,500	9,000	5	-	-	-	67,942.5	-0-	-0-	PENRO/CENRO Eva. Team		

Table I.5 Damage to Reforestation Project as of August 31, 1991
Contract Reforestation Project as of August 31, 1991

Perno/Centro	Name of Contractor	Date of Contract Issued	Funding Source	Location	Amount Allocated for the Project	DAMAGES					Estimated Cost of Damage (Amount Released)	Date Released	Kind of Damage	Rehabilitation Measures Recommended	Name of Contractor		
						SDLGS. (no.)	AREA (has.)	Access Road (KM)	INFRASTRUCTURE							Bunkhouse (Unit)	
									Footpath (M)	Look-out Tower (Unit)							Look-out Tower (Unit)
	40. Eduardo Ronceteza	1990	Regular	-do-	82,500	10,836	5	.	.	.	74,171	-do-	-do-	PENRO/CENRO Eva. Team			
	41. Alfredo Justo	1990	Regular	-do-	82,500	10,836	5	.	.	.	74,171	-do-	-do-	PENRO/CENRO Eva. Team			
	42. Pablo de San Jose	1990	Regular	-do-	82,500	9,000	5	.	.	.	67,755	-do-	-do-	PENRO/CENRO Eva. Team			
	43. Credit Umrig	1990	Regular	-do-	82,500	10,836	5	.	.	.	71,321	-do-	-do-	PENRO/CENRO Eva. Team			
Sub-Total					26,549,016	1,187,201	873,32	9,05	7,97	24,00	8,652,611.85						
Pampanga Angeles	1. Bonifacio Mungral	6-1990	AIDB	Inarao, Porac	81,4232	.	100	.	.	.	52,115.0	Totally damaged	-do-	PENRO/CENRO Eva. Team			
	2. Zoilo Mariano	6-1990	OECF	-do-	651,385.6	.	80	.	.	.	677,540.8	Totally damaged	-do-	PENRO/CENRO Eva. Team			
	3. Virgilio Tached	6-1990	OECF	-do-	718,016	.	100	.	.	.	459,579	Totally damaged	-do-	PENRO/CENRO Eva. Team			
	4. Tacio Camduli	6-1990	OECF	-do-	162,846.4	.	20	.	.	.	169,360.2	Totally damaged	-do-	PENRO/CENRO Eva. Team			
	5. Daniel Lumbang	9-1990			508,244.5	.	50	.	.	.	not indicated		-do-	PENRO/CENRO Eva. Team			
	6. David Tate	1-1990	OECF	Inarao, Porac	324,615	.	167.5	.	.	.	163,660.05	Totally damaged	-do-	PENRO/CENRO Eva. Team			
	7. Zoilo Mariano	2-6-91			664,200	.	50	.	.	.	227,956.81		-do-	PENRO/CENRO Eva. Team			
	8. Antonio Modesto	6-1990	OECF	Tanag. Diaz, Porac	648,760	.	40	.	.	.	413,194.4	Totally damaged	-do-	PENRO/CENRO Eva. Team			
	9. Fortunato Espoma	6-1990	OECF	Porac, Pampanga	1,276,400	.	100	.	.	.	816,896	Totally damaged	-do-	PENRO/CENRO Eva. Team			
	10. Antonio Modesto	2-6-91			1,160,332	.	100	.	.	.	488,432.17		-do-	PENRO/CENRO Eva. Team			
	11. Christopher Rodriguez	6-1990	AIDB	Tanag. Porac	1,539,538	.	77	.	.	.	1,014,615.7	Totally damaged	-do-	PENRO/CENRO Eva. Team			
	12. Oresaz Salazar	6-1990	OECF	Dolores, Porac	916,650	.	75	.	.	.	476,658.0	Totally damaged	-do-	PENRO/CENRO Eva. Team			

Table I.5. Damage to Reforestation Project as of August 31, 1991
Contract Reforestation Project as of August 31, 1991

Penro/Centro	Name of Contractor	Date of Contract Issued	Funding Source	Location	Amount Allocated for the Project	D A M A G E S					Estimated Cost of Damage (Amount Released)	Date Released	Kind of Damage	Rehabilitation Measures Recommended	Name of Contractor	
						SDLGS. (no.)	AREA (has.)	Access Road (KM)	INFRASTRUCTURE							Look-out Tower (Unit)
									Footpath (M)	Blankhouse (Unit)						
	13. Vicente Domingo (KMMMPI-I)	6-1990	OECF	-do-	1,739,478	87						-do-	Totally damaged	-do-	PENROCENTRO Eva. Team	
	14. V. Domingo (KMMMPI-I)	6-1990	OECF	-do-	1,959,412	98						-do-	Totally damaged	-do-	PENROCENTRO Eva. Team	
	15. Nestro Callena	6-1990	ADB	-do-	1,599,520	80						-do-	Totally damaged	-do-	PENROCENTRO Eva. Team	
	16. Crisanto Evangelista	6-1990	OECF	Nabuklod, Floridablanca	739,278	37						-do-	Totally damaged	-do-	PENROCENTRO Eva. Team	
	17. Leonel Lacanibo	6-1990	OECF	-do-	1,999,200	100						-do-	Totally damaged	-do-	PENROCENTRO Eva. Team	
	18. Family Approach Contractors	6-1990			788,054	67						as of 12		-do-	PENROCENTRO Eva. Team	
	19. Family Approach Contractors	5-1990	Regular	Floridablanca, Pamp.	225,000	15						as of 4	Totally damaged	-do-	PENROCENTRO Eva. Team	
	20. CRPSS-RHOP	1989			5,011,461.72	82						not indicated		-do-	PENROCENTRO Eva. Team	
	21. Family Approach Contractors	1989			940,000	88						as of 12		-do-	PENROCENTRO Eva. Team	
	22. Jose Torres	2-1990	ADB	Batang, 2nd. Seasmoo	593,028	73						as of 3	86% of the area was damaged	-do-	PENROCENTRO Eva. Team	
	23. Eitem Villanueva	2-1990	ADB	Mabuanbuan, Seasmoo	572,097.6	78						-do-	95% of the area was damaged	-do-	PENROCENTRO Eva. Team	
	24. Andres Balazar	2-1990	OECF	Batang, 2nd. Seasmoo	558,144	68						-do-	85% of the area was damaged	-do-	PENROCENTRO Eva. Team	
	25. Arturo Tungol	2-1990	OECF	Sebianan, Seasmoo	418,608	53						-do-	88% of the area was damaged	-do-	PENROCENTRO Eva. Team	
	26. Victorio Maninang	2-1990	OECF	Maluac, Seasmoo	418,608	55						-do-	92% of the area was damaged	-do-	PENROCENTRO Eva. Team	
Sub-Total					26,947,608.81	1,940.5	0.0	0.0	0.0	0.0	0.0				17,650,579.54	

Source : DENR.
NOTE: All refo projects which were affected by the eruption of Mt. Pinatubo are presently being evaluated/improved by the Regional Evaluation Teams.

Table I.6 Affected Population in Region III (1991)

Type of Disaster : Mt. Pinatubo Ashfall/Lahar's 91
Date of Occurrence : June 12, 1991

Region/ Province/City	Affected		Served in Outside CTRS/Staging Areas		Served in Outside Evacuation Center		Served in Resettlement Areas		Total Served		No. of Resettlement Areas	No. of Evacuations Centers	Damaged Houses		Casualties		
	Families	Persons	Families	Persons	Families	Persons	Families	Persons	Families	Persons			Totally	Partially	Dead	Injured	Missing
	Angelas City	15,864	63,515	2,313	10,704	-	-	-	-	2,313	10,704	-	20	5,509	8,504	32	17
Bataan	9,143	35,952	-	-	-	-	-	-	-	-	-	-	1,920	4,975	11	5	-
Nueva Ecija	79	373	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Olongapo City	17,815	88,935	-	-	461	1,875	461	1,875	461	1,875	1	-	6,412	21,476	134	1	-
Pampanga	134,355	632,252	3,312	16,106	1,290	5,848	3,340	16,246	3,340	16,246	4	19	7,514	16,274	235	27	10
Palayan City	-	-	-	-	456	1,750	708	2,645	708	2,645	2	-	-	-	25	-	-
Tarlac	15,719	85,532	746	3,952	944	4,039	1,690	7,991	1,690	7,991	2	2	2,228	542	173	-	-
Zambales	56,396	273,573	1,194	5,714	2,940	13,425	4,165	19,055	4,165	19,055	4	5	18,396	18,504	324	134	8
Total	249,371	1,180,132	7,565	36,476	0	0	6,091	26,937	12,677	58,516	13	46	41,979	70,275	934	184	23

Source : Disaster Monitoring Report (DSSWD, Region III, April 15, 1993)

Table 1.7 Affected Population in Region III (1992)

Type of Disaster : Flashflood/Lahar's 92
Date of Occurrence : August 15, 1992

Province	No. of Affected										No. Being Served Outside Evacuation Center										No. Being Served Outside Evacuation Center										Total Served											
	Flashflood					Lahar					Flashflood					Lahar					Flashflood					Lahar					Flashflood					Lahar					Families	Persons
	Families	Persons	Total	Families	Persons	Total	Families	Persons	Total	Families	Persons	Total	Families	Persons	Total	Families	Persons	Total	Families	Persons	Total	Families	Persons	Total	Families	Persons	Total	Families	Persons	Total												
Pampanga	75,087	376,086	451,173	5,197	28,583	33,780	57	264	2	2,530	2,532	12,466	3	12,700	15,232	2,587	12,700	15,287	5	5	10	5	629	634	12,700	13,229	2,587	12,700	15,287	2,587	12,700	15,287	2,587	12,700	15,287							
Tarlac	6,551	30,417	36,968	7,992	38,559	46,551	57	68,976	5	629	634	3,121	5	3,121	3,126	629	3,121	3,750	5	5	10	629	634	3,121	3,750	629	3,121	3,750	629	3,121	3,750	629	3,121	3,750	629	3,121	3,750					
Bataan @	24,304	115,664	139,968	1,281	6,869	8,150	57	6,869	2	2,619	2,621	570	2	570	572	137	570	707	2	2	4	137	139	570	572	137	570	707	137	570	707	137	570	707	137	570	707					
Olongapo @	34,002	163,894	197,896	6,602	28,309	34,911	57	192,203	2	2,619	2,621	570	2	570	572	137	570	707	2	2	4	137	139	570	572	137	570	707	137	570	707	137	570	707	137	570	707					
Zambales	2,619	11,730	14,349	141	651	792	57	651	2	622	624	570	2	570	572	137	570	707	2	2	4	137	139	570	572	137	570	707	137	570	707	137	570	707	137	570	707					
Bulacan @	622	3,210	3,832	19,932	96,102	116,034	57	803,972	2	3,296	3,301	16,157	16	16,157	16,173	3,353	16,421	19,774	16	16	32	3,353	3,369	16,421	16,453	3,353	16,421	19,774	3,353	16,421	19,774	3,353	16,421	19,774	3,353	16,421	19,774					
Angies #	144,468	707,870	852,338	19,932	96,102	116,034	57	803,972	2	3,296	3,301	16,157	16	16,157	16,173	3,353	16,421	19,774	16	16	32	3,353	3,369	16,421	16,453	3,353	16,421	19,774	3,353	16,421	19,774	3,353	16,421	19,774	3,353	16,421	19,774					
N. Ectip @	144,468	707,870	852,338	19,932	96,102	116,034	57	803,972	2	3,296	3,301	16,157	16	16,157	16,173	3,353	16,421	19,774	16	16	32	3,353	3,369	16,421	16,453	3,353	16,421	19,774	3,353	16,421	19,774	3,353	16,421	19,774	3,353	16,421	19,774					
Grand Total	144,468	707,870	852,338	19,932	96,102	116,034	57	803,972	2	3,296	3,301	16,157	16	16,157	16,173	3,353	16,421	19,774	16	16	32	3,353	3,369	16,421	16,453	3,353	16,421	19,774	3,353	16,421	19,774	3,353	16,421	19,774	3,353	16,421	19,774					

(@) Disaster operation has stopped. No. served have already been reflected in previous report.

Note: # Number served of Angies City includes evacuees from Malabac, Pampanga.

Province	DAMAGED HOUSES										No. Being Served Outside Evacuation Center										No. Being Served Outside Evacuation Center										Total										
	Flashflood					Lahar					Flashflood					Lahar					Flashflood					Lahar					Flashflood					Lahar					Total
	Totally	Partially	Total	Partially	Total	Totally	Partially	Total	Partially	Total	Totally	Partially	Total	Partially	Total	Totally	Partially	Total	Partially	Total	Totally	Partially	Total	Partially	Total	Totally	Partially	Total	Totally	Partially	Total	Totally	Partially	Total							
Pampanga	1,362	2,932	4,294	1,665	2,932	4,600	9	2,932	11	6	11	6	17	11	6	17	11	6	17	11	6	17	11	6	17	11	6	17	11	6	17	11	6	17	11	6	17				
Tarlac	7	20	27	1,362	2,932	4,299	1	2,932	2	1	2	1	2	2	1	2	2	1	2	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2					
Bataan	59	120	179	106	120	225	1	120	2	1	2	1	2	2	1	2	2	1	2	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2					
Olongapo	7	20	27	106	120	147	1	120	2	1	2	1	2	2	1	2	2	1	2	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2					
Zambales	59	120	179	106	120	225	1	120	2	1	2	1	2	2	1	2	2	1	2	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2					
Bulacan	1,424	3,072	4,496	1,665	3,072	4,737	16	3,072	18	6	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18				
Angies	1,424	3,072	4,496	1,665	3,072	4,737	16	3,072	18	6	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18				
N. Ectip	1,424	3,072	4,496	1,665	3,072	4,737	16	3,072	18	6	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18				
Grand Total	1,424	3,072	4,496	1,665	3,072	4,737	16	3,072	18	6	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18	24	6	18				

Note: Evacuees are all victims of the recent Typhoons/Lahar for 1992.

Source: DSWD, Region III as of April 15, 1993

Table I.8 Affected Population in Region III (1993)

Type of Disaster Lahar III

Date of Occurrence 1993

Province	No. of Affected			Served in Evac. CTR.			Served in Evac. CTR.			Reported No. of Evac. Ctr.	Damaged Houses			Casualties		
	Brgys.	Families	Persons	Families	Persons	Persons	Families	Persons	Totally		Partially	Dead	Injured	Missing		
Pampanga	15	6,563	36,727	1,109	4,936				6	114	187					
Tarlac	256	32,188	151,514	827	4,936				3	205	76	2				
Zambales	169	27,705	126,664	1,791	9,138				7	1,365	3,226	9				4
Grand Total	440	66,456	314,905	3,727	19,010	0	0	0	16	1,684	3,489	11	0			4

Source : DSWD, Region III

**Table 1.9 Agricultural Products Affected by Lahar
(Pampanga Province)**

PARTICULAR	Number of		1991		1992		TOTAL	
	Municipality	Barangay	Farmer	Area	Farmer	Area	Farmer	Area
			(no.)	(ha.)	(no.)	(ha.)	(no.)	(ha.)
1. Rice 80-85 cav/ha 90-95 350P/cav	13	107	3,614	6,123.70	1,104	2,106.48	4,718	8,230
2. Vegetables/ Rootcrops/ Coffee/ Orchard/	6	17	225	401.80	292	397.30	517	799.10
3. Sugarcane	4	8	-	-	312	1,439.00	312	1,439.00
4. Fishpond	3	21	848	2,632.00	9	8.00	857	2,640.00
TOTAL	-	-	4,687	9,157.50	1,717	3,950.78	6,404	13,108.28

Table I.10 Agricultural Products Affected by Lahar (Barangay Level)

MUNICIPALITY	No. of Brgy.	1991		1992		TOTAL	
		FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
RICE							
1. Angeles city	11	235	307.15	-	-	235	307.15
2. Bacolor	11	758	1,272.00	83	168.00	841	1,440.00
3. Floridablanca	11	724	1,051.00	18	24.00	742	1,075.00
4. Guagua	4	15	26.20	38	89.00	53	115.20
5. Lubao	9	48	75.00	146	176.60	194	251.60
6. Mabalacat	8	145	192.00	190	494.00	335	686.00
7. Magalang	8	52	148.15	215	495.28	267	643.43
8. Mexico	19	849	1,806.20	90	159.20	939	1,965.40
9. Minalin	3	70	143.00	29	84.00	99	227.00
10. Porac	11	232	228.00	104	110.35	336	338.35
11. Sta. Ana	6	226	400.00	-	-	226	400.00
12. Sta. Rita	4	176	269.00	191	306.05	367	575.05
13. San Simon	2	84	206.00	-	-	84	206.00
Sub-Total	107	3,614	6,123.70	1,104	2,106.48	4,718	8,230.18
VEGETABLES/COFFEE/ ROOTCROPS/ ORCHARD							
1. Angeles city	11	165	364.80	224	305.15	389	669.95
2. Magalang	1	-	-	3	3.75	3	3.75
3. Sta. Rita	1	-	-	21	10.00	21	10.00
4. Sta. Ana	1	60	37.00	-	-	60	37.00
5. Floridablanca	1	-	-	2	5.00	2	5.00
6. Porac	2	-	-	42	73.40	42	73.40
Sub-Total	17	225	401.80	292	397.30	517	799.10
SUGARCANE							
1. Bacolor	1	-	-	17	53.00	17	53.00
2. Porac	2	-	-	30	115.00	30	115.00
3. Mabalacat	2	-	-	80	871.00	80	871.00
4. Magalang	3	-	-	185	400.00	185	400.00
Sub-Total	8	0	0.00	312	1,439.00	312	1,439.00
FISHPOND							
1. Minalin	10	248	677.00	9	8.00	257	685.00
2. San Simon	7	480	1,695.00	-	-	480	1,695.00
3. Lubao	4	120	260.00	-	-	120	260.00
Sub-Total	21	848	2,632.00	9	8.00	857	2,640.00
GRAND TOTAL		4,687	9,157.50	1,717	3,950.78	6,404	13,108.28

Table I.11 Damage to Agricultural Products by Barangay

BARANGAYS AFFECTED BY LAHAR
Sasmuan

BARANGAYS	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
FISHPOND						
1. Sta. Monica	179	515.00	-	-	179	515.00
2. San Antonio	209	900.00	-	-	209	900.00
3. San Nicolas I	5	15.00	-	-	5	15.00
4. San Nicolas II	15	75.00	-	-	15	75.00
5. Sto. Tomas	4	15.00	-	-	4	15.00
6. San Pablo	60	150.00	-	-	60	150.00
7. Sta. Lucia	8	25.00	-	-	8	25.00
TOTAL	480	1,695.00	0	0	480	1,695.00

BARANGAYS AFFECTED BY LAHAR
San Simon

BARANGAYS	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
RICE						
1. San Pablo Lib	42	113.50	-	-	42	113.50
2. Dela Paz	42	92.50	-	-	42	92.50
TOTAL	84	206.00	0	0	84	206.00

BARANGAYS AFFECTED BY LAHAR
Sta. Rita

BARANGAYS	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
RICE						
1. San Juan	37	57.00	71.00	133.95	108	190.95
2. San Jose	85	120.80	-	-	85	120.80
3. San Isidro	51	87.20	67	112.65	118	199.85
4. San Basilio	3	4.00	53	59.45	56	63.45
Sub-Total	176	269	191	306	367	575
VEGETABLES						
7. San Isidro	-	-	21	10.00	21	10.00
GRAND TOTAL	176	269.00	212	316.05	388	585.05

Table I.11 Damage to Agricultural Products by Barangay

BARANGAYS AFFECTED BY LAHAR
Sta. Ana

BARANGAYS	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
Rice						
1. San Pablo	27	46.40	-	-	27	46.40
2. San Roque	78	162.30	-	-	78	162.30
3. San Agustin	94	137.30	-	-	94	137.30
4. San Joaquin	8	20.00	-	-	8	20.00
5. San Juan	11	21.00	-	-	11	21.00
6. San Pedro	8	13.00	-	-	8	13.00
Sub-Total	226	400.00	0	0	226	400.00
VEGETABLES						
1. San Bartolome	60	37	-	-	60	37
TOTAL	286	437.00	-	-	286	437.00

BARANGAYS AFFECTED BY LAHAR
Porac

BARANGAYS	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
RICE						
1. Babo Sacan	10	10.55	-	-	10	10.55
2. Poblacion	5	5.00	-	-	5	5.00
3. Cangatba	4	5.50	-	-	4	5.50
4. Jalung	71	66.17	-	-	71	66.17
5. Seping Bulaun	3	1.99	-	-	3	1.99
6. Hacienda Dolores	28	21.10	-	-	28	21.10
7. Babo Porgulo	21	19.99	-	-	21	19.99
8. Pio	65	69.20	-	-	65	69.20
9. Plaras	25	28.50	-	-	25	28.50
10. San Jose Mitla	-	-	25	24.50	25	24.50
11. Mitla Proper	-	-	79	85.85	79	85.85
Sub-Total	232	228.00	104	110.35	336	338.35
SUGARCANE						
1. Mitla Proper	-	-	20	80.00	20	80.00
2. San Jose	-	-	10	35.00	10	35.00
Sub-Total	0	0	30	115.00	30	115.00
VEGETABLES						
1. Mitla Proper	-	-	22	39.20	22	39.20
2. San Jose Mitla	-	-	20	34.20	20	34.20
Sub-Total	0	0	42	73.40	42	73.40
GRAND TOTAL	232	228.00	176	298.75	408	526.75

Table I.11 Damage to Agricultural Products by Barangay

BARANGAYS AFFECTED BY LAHAR
Minalin

BARANGAYS	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
RICE						
1. Sta. Catalina	22	58.00	28	81.50	50	139.50
2. Sta. Maria	48	85.00	-	-	48	85.00
3. San Francisco	-	-	1	2.50	1	2.50
Sub-Total	70	143.00	29	84.00	99	227.00
FISHPOND						
1. Dawe	45	153.94	-	-	45	153.94
2. Saplad	67	213.92	-	-	67	213.92
3. Bulac	12	25.00	-	-	12	25.00
4. Sto. Rosario	17	27.00	-	-	17	27.00
5. Mesalipit	5	7.50	-	-	5	7.50
6. San Isidro	15	43.00	-	-	15	43.00
7. Sta. Maria	6	13.50	-	-	6	13.50
8. Sto. Domingo	6	9.50	-	-	6	9.50
9. Maniago	75	183.64	-	-	75	183.64
10. Sta. Catalina	-	-	9	8.00	9	8.00
Sub-Total	248	677.00	9	8.00	257	685.00
GRAND TOTAL	318	820.00	38	92.00	356	912.00

BARANGAYS AFFECTED BY LAHAR
Mexico

BARANGAYS	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
RICE						
1. Concepcion	69	156.75	-	-	69	156.75
2. San Pablo	33	82.70	-	-	33	82.70
3. Sta. Cruz	32	59.75	-	-	32	59.75
4. Anao	36	83.70	-	-	36	83.70
5. San Jose Malino	97	152.20	-	-	97	152.20
6. Laput	41	82.70	-	-	41	82.70
7. San Juan	99	173.50	-	-	99	173.50
8. Sto Rosario	32	92.80	-	-	32	92.80
9. Balas	39	91.90	-	-	39	91.90
10. San Lorezo	2	5.50	-	-	2	5.50
11. San Carlos	15	40.00	-	-	15	40.00
12. San Patricio	120	305.40	90	159.20	120	464.60
13. Sto. Domingo	38	92.00	-	-	38	92.00
14. Laug	11	21.00	-	-	11	21.00
15. Culubasa	131	261.30	-	-	131	261.30
16. Sublaban	17	33.00	-	-	17	33.00
17. Cawayan	23	53.00	-	-	23	53.00
18. Buenavista	2	3.80	-	-	2	3.80
19. Tangle	12	15.00	-	-	12	15.00
TOTAL	849	1,806.00	90	159.20	849	1,965.20

Table I.11 Damage to Agricultural Products by Barangay

**BARANGAYS AFFECTED BY LAHAR
MAGALANG**

BARANGAYS	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
RICE						
1. Sto. Rosario	3	7.00	54.00	118.90	57	125.90
2. Escala	44	120.40	-	-	44	120.40
3. Kabayong Sarol	1	4.00	4	11.50	5	15.50
4. San Roque	1	2.00	34	80.70	35	82.70
5. Navaling	3	14.75	91	184.93	94	199.68
6. Sta. Maria	-	-	4	12.00	4	12.00
7. Mapinya	-	-	2	8.00	2	8.00
8. Concepcion	-	-	26	79.25	26	79.25
Sub-Total	52	148.15	215	495.28	267	643.43
SUGARCANE						
1. Sto. Rosario	-	-	80	178.10	80	178.10
2. San Roque	-	-	102	217.90	102	217.90
3. Sta. Maria	-	-	3	4.00	3	4.00
Sub-Total	0	0	185	400.00	185	400.00
VEGETABLES						
1. Navaling	-	-	3	3.75	3	3.75
GRAND TOTAL	52	148.15	403	899.03	455	1,047.18

**BARANGAYS AFFECTED BY LAHAR
MABALACAT**

BARANGAYS	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
RICE						
1. Calumpang	57	73.50	-	-	57	73.50
2. Dolores	25	30.00	-	-	25	30.00
3. Tabun	26	45.00	11	38.50	37	83.50
4. Macapaya Village	12	17.00	-	-	12	17
5. Malonzo	25	26.50	30	98.50	55	125.00
6. Athe Bola	-	-	10	22.50	10	22.50
7. Cacutud	-	-	60	142.50	60	142.50
8. Sapang Balen	-	-	79	192.00	79	192.00
Sub-Total	145	192.00	190	494.00	335	686.00
SUGARCANE						
1. Tabun	-	-	39	203.50	39	203.50
2. Dolores	-	-	41	667.50	41	667.50
Sub-Total	0	0	80	871.00	80	871.00
GRAND TOTAL	145	192.00	270	1,365.00	415	1,557.00

Table I.11 Damage to Agricultural Products by Barangay

**BARANGAYS AFFECTED BY LAHAR
LUBAO**

BARANGAYS	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
RICE						
1. Sto.Cristo	20	34.00	15.00	16.00	35	50.00
2. Sta. Catalina	5	4.00	40	48.60	45	52.60
3. Sta. Barbara	5	7.00	-	-	5	7.00
4. Sta. Cruz	18	30.00	-	-	18	30.00
5. San Juan	-	-	11	12.00	11	12.00
6. Remedios	-	-	31	34.00	31	34.00
7. Sta. Maria	-	-	10	10.00	10	10.00
8. San Agustin	-	-	16	22.00	16	22.00
9. San Nicolas	-	-	23	34.00	23	34.00
Sub-Total	48	75.00	146	176.60	194	251.60
FISHPOND						
1. Sta. Catalina	40	65.00	-	-	40	65.00
2. Sta. Barbara	20	35.00	-	-	20	35.00
3. San Juan	15	30.00	-	-	15	30.00
4. San Jose	45	130.00	-	-	45	130.00
Sub-Total	120	260.00	0	0	120	260.00
GRAND TOTAL	168	335.00	146	176.60	314	511.60

**BARANGAYS AFFECTED BY LAHAR
GUAGUA**

BARANGAYS	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
RICE						
1. San Juan Nepo	4	2.70	27	62.50	31	65.20
2. San Miguel	3	5.50	5	16.00	8	21.50
3. Sta Ines	4	10.00	-	-	4	10.00
4. San Matias	4	8.00	6	10.50	10	18.50
TOTAL	15	26.20	38	89.00	53	115.20

Table I.11 Damage to Agricultural Products by Barangay

**BARANGAYS AFFECTED BY LAHAR
FLORIDABLANCA**

BARANGAYS	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
RICE						
1. Pabanlag	377	509.80	-	-	377	509.80
2. San Roman	3	4.50	-	-	3	4.50
3. Palmayo	33	50.80	-	-	33	50.80
4. Gutad	14	23.20	2	3.00	16	26.20
5. Calantas	15	23.70	-	-	15	23.70
6. Pandaguiring	108	128.30	-	-	108	128.30
7. Apalit	72	134.70	-	-	72	134.70
8. Consuelo	40	55.20	-	-	40	55.20
9. Paguiruan	3	2.10	-	-	3	2.10
10. Carmencita	59	118.70	-	-	59	118.70
11. Sta. Monica	-	-	16	21.00	16	21.00
Sub-Total	724	1,051.00	18	24.00	742	1,075.00
ORCHARD						
1. Bodega	-	-	2	5	2	5.00
Sub-Total	0	0.00	2	5	2	5
GRAND TOTAL	724	1,051.00	20	29.00	744	1,080.00

**BARANGAYS AFFECTED BY LAHAR
BACOLOR**

BARANGAYS	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
RICE						
1. Balas	58	82.50	83.00	168.00	141	250.50
2. Potrero	175	310.00	-	-	175	310.00
3. San Vicente	39	61.50	-	-	39	61.50
4. Duat	86	142.50	-	-	86	142.50
5. Sta. Barbara	150	237.00	-	-	150	237.00
6. Cabelican	100	188.00	-	-	100	188.00
7. Parulog	56	105.50	-	-	56	105.50
8. Sta. Grelanio	82	127.30	-	-	82	127.30
9. Sta. Ines	12	18.00	-	-	12	18.00
10. Tinajero	-	-	-	-	-	-
11. Talba	-	-	-	-	-	-
Sub-Total	758	1,272.30	83	168.00	841	1,440.30
SUAGRCANE						
1. Balas	-	-	17	53.00	17	53.00
Sub-Total	0	0	17	53.00	17	53.00
GRAND TOTAL	758	1,272.30	100	221.00	858	1,493.30

Table I.11 Damage to Agricultural Products by Barangay

**BARANGAYS AFFECTED BY LAHAR
ANGELES CITY**

BARANGAYS	1991		1992		TOTAL	
	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)	FARMER (no.)	AREA (ha.)
RICE						
1. Mining	22	22.65	-	-	22	22.65
2. Pulong Bulo	18	26.00	-	-	18	26.00
3. Pulong Cacutiid	4	3.50	-	-	4	3.50
4. Tabun	26	33.50	-	-	26	33.50
5. Cutud	15	20.50	-	-	15	20.50
6. Pulong Maragal	28	31.50	-	-	28	31.50
7. Capaya	18	31.50	-	-	18	31.50
8. Sapa Libutad	93	125.50	-	-	93	125.50
9. Pampang	3	4.00	-	-	3	4.00
10. Sto Domingo	2	3.00	-	-	2	3.00
11. Sapang Bato	6	5.50	-	-	6	5.50
Sub-Total	235	307.15	0	0	235	307.15
Rootcrops	45	279.85	224	305.15	269	585
Coffee	70	70.00	-	-	70	70.00
Leafy veg.	25	5.00	-	-	25	5.00
Fruit crop	25	10.00	-	-	25	10.00
Sub-Total	165	364.85	224	305.15	389	670.00
GRAND TOTAL	400	672.00	224	305.15	624	977.15

Table I.12 Damage Report caused by Mt. Pinatubo Eruption

DA, OFFICE OF THE PROVINCIAL VETERINARIAN
 DAMAMGE REPORT CAUSED BY MOUNT PINATUBO ERUPTION
 AS OF OCTOBER 25, 1991 ON POULTRY AND LIVESTOCK

PROVINCE : PAMPANGA
 MUNICIPALITIES COVERED : 14
 AMOUNT : P 179,919,405

MUNICIPALITY	No. of Farmers/ Raiser	NO. OF HEADS										Amount of Stocks	Covered by Lahar underground Housing	TOTAL AMOUNT
		CATTLE	CARABAO	CHICKEN	SWINE	GOAT	DUCK	CHICKEN	SWINE	GOAT	DUCK			
1. Porac	368	256	150,000	Quail 4,000	7,801	1,500	4,500					37,465,500	31,687,490	69,152,990
2. Floridablanca	234	82	177	407,000	2,045	95	4,045					16,852,425	13,570,000	30,422,425
3. Lubao	118	-	3	700	183	10	1,900					422,850	733,500	1,156,350
4. Guagua	32	4	9	L 30,000 B 40,000	23	-	-					3,241,600	278,000	3,519,600
5. Sta. Rita	59	2	2	L 600 B 6,750	114	10	-					500,490	3,252,000	3,752,490
6. Bacolor	25	26	71	2,070	328	94	350					1,856,900	113,850	1,970,750
7. Candaba	18	-	3	113	26	5	2,962					207,550	-	207,550
8. Minalin	30	5	10	15,487	39	-	-					962,350	-	962,350
9. San Fernando	5	-	-	Layers 130	8	-	-					32,400	-	32,400
10. Mexico	8	-	-	-	87	-	-					574,000	2,510,000	3,084,000
11. Angeles City	76	11	17	-	74	45	1,600					504,000	-	504,000
12. Malabacat	58	37	81	20,000	8,139	-	1,000					25,902,000	38,000,000	63,902,000
13. Sasmoan	42	8	16	-	180	-	-					780,000	-	780,000
14. Sto Tomas	48	-	7	-	20	18	2,000					190,000	-	190,000
15. Sta. Lucia	9	2	-	4,000	20	5	-					262,500	-	262,500
TOTAL	1,130	433	546	704,850	19,087	1,782	18,357					89,754,565	90,144,840	179,899,405

Table I.13 Partial Damage Report caused by Mt. Pinatubo Eruption

DA, OFFICE OF THE PROVINCIAL VETERINARIAN
 PARTIAL DAMAGED REPORT CAUSED BY MUDFLOW
 AS OF OCTOBER 25, 1991 ON POULTRY AND LIVESTOCK

MUNICIPALITY	No. of Farmers/Raiser	15,000 Cattle	Cara	Chicken	Swine	Duck	Goat	Pigeon	Sheep	Amount of Stocks	Covered by Lahar underground Housing	TOTAL AMOUNT
1. Angeles City	2	4	8					500	40	212,500		212,500
2. Apalit				75	80	120	1,000		1,000			
3. Arayat	30	23	65	Broylar L 2,500 B 500	450	30				2,432,500	4,500,000	6,932,500
4. Bacolor				Layer	12		35			235,500		235,500
5. Candaba	39	6	14							40,000		40,000
6. Floridablanca	3	1	3		pigtlets					47,000		47,000
7. Guagua	4				sow					14,570,000	4,800,000	19,370,000
8. Lubao	6		11		4,800							
9. Mabalacat Hy-San												
10. Macabebe												
11. Magalang												
12. Masantol												
13. Mexico	48	5	10	L-			25			205,000		205,000
14. Minalin					pigtlets	50				4,500		4,500
15. Porac												
16. San Fernando												
17. San Luis												
18. San Simon	28					2,000	18			79,000		79,000
19. Sasmoan	40	3	5		pigtlets	50	13			112,000		112,000
20. Sta. Ana	20	1	5	L-	50		10			328,750	100,000	428,750
21. Sta. Rita				B-	200							
22. Sto. Tomas												
23. Bahay-Pare			121	3,475	5,437	2,200	1,060	500	1,040	18,266,750	9,400,000	27,666,750
TOTAL	220	49	121	3,475	5,437	2,200	1,060	500	1,040	18,266,750	9,400,000	27,666,750

DAMAGE REPORT
Caused by : TYPHOON KADIANG
As of October 22, 1993

Crop : Rice
 Province : Pampanga

GPEP & NON GPEP PROGRAM

MUNICIPALITY	No. of Affected		Area Planted (has.)	Phase of Growth	Area Affected (has.)		Yield/ha.		Actual Production Loss (P)	Value P	Remarks
	Barangay	Farmer			Total	Completely Damaged	Changes w/ Recovery	Before Calamity			
1. Mabalacat		19	1,528.00	Vegetative	80.00	40.00	75	70	452,000.00		
				Reproductive	210.00	170.00	85	65	1,501,500		
				Maturity	176.00	284.50	85	68	1,346,400		
				Sub-Total	466.00	494.50			3,299,900		
2. San Fernando		10	546.10	Planting stage	151.00				709,700		
				Vegetative	138.15	59.62	85	82	443,694		
				Reproductive	179.05	162.04	85	80	121,621		
				Maturity	130.55	100.21	85	72	232,101		
Sub-Total	598.75	321.87			1,507,116						
3. Porac		18	1,296.00	Reproductive	486.50	286.50	80	68	1,430,000.00		
4. Sto. Tomas		6	476.70	Planting stage	49.00				230,300		
				Vegetative	316.70		75		1,789,355		
				Maturity	80.40	80.40	70		615,060		
				Sub-Total	446.10				2,634,715		
5. Sta. Rita		7	800.00	Vegetative	55.50	21.75	85	70	190,687		
				Reproductive	125.00	125.00	90	75			
				Sub-Total	180.50	146.75			190,687		
				Planting stage	10.00	10.00					
6. Guagua		13	1,759.13	Vegetative	60.10	60.10	90	75			
				Reproductive	1,054.60	1,054.60	85	40			
				Maturity	571.43	571.43	85	40			
				Sub-Total	1,696.13	1,696.13					
7. Masamtol		10		Planting stage	880.00				4,136,000		

DAMAGE REPORT
 Caused by : **TYPHOON KADIANG**
 As of October 22, 1993

Crop : Rice
 Province : Pampanga

GPEP & NON GPEP PROGRAM

MUNICIPALITY	No. of Affected		Area Planted (has.)	Phase of Growth	Area Affected (has.)		Yield/ha.		Actual Production Loss (P)	Value P	Remarks
	Barangay	Farmer			Total	Completely Damaged	w/ changes of Recovery	Before Calamity			
8. Bacolor	11	382	1,181.55	Vegetative	58.00	-	80	327,700			
				Reproductive	158.20	52.00	85	759,330	70		
				Maturity	378.00	194.50	88	1,403,775	72		
				Sub-Total	594.20	246.50		2,490,805			
9. Minalin	3	169	42.00	Planting stage	608.00	-		2,857,600			
				Vegetative	18.50	-	80	104,525			
				Maturity	23.50	-	75	179,775			
				Sub-Total	650.00			3,141,900			
10. Angeles City	9	75	89.00	Vegetative	32.00	32.00	80				
				Maturity	48.50	48.50	80	371,025			
				Sub-Total	80.50	32.00		371,025			
				Planting stage	1,769.00	-		8,314,300			
11. Macabebe	6	380	36.20	Vegetative	15.20	-	70	85,880			
				Reproductive	21.00	-	68	150,150			
				Sub-Total	1,805.20	-		8,550,330			
				Planting stage	65.78	27.84	81	214,361	76		
12. Floridablanca	19	1,896	3,621.61	Vegetative	1,530.51	510.69	83	7,291,713			
				Reproductive	853.84	419.16	85	3,325,302	70		
				Maturity	2,450.13	957.69		10,831,376			
				Sub-Total	221.10	11.10	90	1,186,500	75		
13. Mexico	42	1,768	5,617.00	Vegetative	2,710.83	2,248.44	95	3,206,088			
				Reproductive	856.68	715.88	90	1,077,120	60		
				Maturity	140.80						
				Sub-Total	3,788.61	2,975.42		5,569,708			

DAMAGE REPORT
Caused by : TYPHOON KADIANG
As of October 22, 1993

Crop : Rice
 Province : Pampanga

GPEP & NON GPEP PROGRAM

MUNICIPALITY	No. of Affected		Area Planted (has.)	Phase of Growth	Area Affected (has.)		Yield/ha.		Actual Production Loss (P)	Value P	Remarks			
	Barangay	Farmer			Total	Completely Damaged	w/ changes of Recovery	Before Calamity				After Calamity		
14. Magalang		29	4,616.37	Growth	29.00	29.00			136,300					
				Planting stage										
				Vegetative	193.64	29.65	163.99	75	70		167,522			
				Reproductive	1,984.94	164.70	1,820.24	80	60		1,177,605			
				Maturity	991.03	125.80	865.23	80	60		962,370			
				Sub-Total	3,198.61	3,49.15	2,849.46				2,443,797			
15. Sta. Ana	14	706	3,373.80	Growth	104.50	62.25	42.25	75	70					
				Planting stage										
				Vegetative	577.80	293.50	284.30	80	68		2,098,525			
				Reproductive	265.40	161.90	103.50	82	73		1,238,535			
				Maturity	947.70	517.65	430.05				3,688,772			
				Sub-Total	75.00	75.00					352,500			
16. Apalit	12	989	2,241.00	Growth	786.00	786.00	486.00	80	68					
				Planting stage										
				Vegetative	853.50	503.10	350.40	85	65		3,848,715			
				Reproductive	2,200.50	1,364.10	836.40				9,821,115			
				Maturity	75.00	75.00					352,500			
				Sub-Total	1,272.00	786.00	486.00				5,619,900			
17. Arayat	24	1,950	4,184.00	Growth	689.80	230.00	459.80	78	70					
				Planting stage										
				Vegetative	2,146.70	750.00	1,396.70	75	68		5,362,500			
				Reproductive	552.90	220.00	332.90	80	70		1,683,000			
				Maturity	3,389.40	1,200.00	2,189.40				8,345,000			
				Sub-Total	689.80	230.00	459.80				1,299,500			
18. Candaba/Babay Pare	29	2,878	10,194.04	Growth	2,167.80	1,602.25	565.55	85	70					
				Planting stage										
				Vegetative	3,273.26	2,640.97	632.29	88	70		18,882,935			
				Reproductive	1,186.50	1,070.25	116.25	90	80		8,187,412			
				Maturity	6,627.56	5,313.47	1,314.09				36,123,059			
				Sub-Total	2,167.80	1,602.25	565.55				9,052,712			
19. San Simon	9	299	751.00	Growth	177.50	94.50	83.00	95	75					
				Planting stage										
				Vegetative	560.50	418.40	142.10	90	80		2,363,960			
				Reproductive	177.50	94.50	83.00	95	75		675,675			
				Maturity	738.00	512.90	225.10				3,039,635			
				Sub-Total	560.50	418.40	142.10				2,363,960			

DAMAGE REPORT
Caused by : TYPHOON KADIANG
As of October 22, 1993

Crop : Rice
 Province : Pampanga

GPEP & NON GPEP PROGRAM

MUNICIPALITY	No. of Affected		Area Planted (has.)	Phase of Growth	Area Affected (has.)		Yield/ha.		Actual Production Loss (P)	Value P	Remarks
	Barangay	Farmer			Total	Completely Damaged	Completely w/ changes of Recovery	Before Calamity			
20. San Luis		13	2,661.50	Growth							
				Vegetative	368.10	328.80	39.30	100	50	1,857,720	
				Reproductive	941.00	941.00		100		6,738,150	
				Sub-Total	1,309.10	1,269.80	39.30			8,585,870	
21. Lubao		38	6,420.00	Planting stage	90.00	90.00				423,000	
				Vegetative	307.54	165.30	142.42	80	75	933,945	
				Reproductive	3,563.30	1,445.20	2,118.10	90	75	10,333,180	
				Maturity	1,307.00	493.30	813.70	95	90	3,773,745	
				Sub-Total	5,267.84	2,193.80	3,074.22			15,463,870	

DAMAGE REPORT
Caused by : TYPHOON KADIANG
As of October 22, 1993

Crop : Vegetables
 Province : Pampanga

MUNICIPALITY	No. of Affected		Area Planted (has.)	Phase of Growth	Area Affected (has.)		Yield/ha.		Actual Production Loss (P)	Value P	Remarks
	Barangay	Farmer			Total	Completely Damaged	w/ changes of Recovery	Before Calamity			
Fruit Vegetables	36	399	650.00		359.45	242.70	116.75			1,859,400.00	
Legumes	3	23	25.00		17.25	17.25				124,750.00	
Yellow Corn	1	1	10.50		3.00	3.00				20,100.00	
Root Crops	9	85	379.50		177.00	177.00				1,947,000.00	
Leafy Vegetables	8	26	38.20		8.50	8.00				41,000.00	
Asparagus	2	20	12.00		12.00	9.60	2.40			444,724.35	
Total	59	554	1,115.20		577.20	457.55	119.15			4,436,974.35	
Sta. Rita	2	89	30.00	Reproductive	30.00		30.00			270,000	
Sta. Rita	4	25	22.50	Harvestable	22.50	22.50					
Gungua	4	12	100.00	Harvestable	10.10		10.10			24,000	
Mexico	3	4	14.00	Harvestable	2.00	2.00				1,460,900	
Candaba & Bahay Pare	8	123	208.70	Newly Planted	208.70	208.70				33,000	
Bacolor	1	4	12.80	Vegetative	3.00	3.00	4.40				
Angelen City	2	3	10.00	Vegetative	4.40						
Sta. Ana	8	110	235.50	Vegetative	72.25		72.25			33,000	
Mabalacat	1	15	13.00	Vegetative	3.00	3.00				38,500	
San Simon	3	14	3.50	Vegetative	3.50	3.50					
Total	36	399	650.00		359.45	242.70	116.75			1,859,400	

DAMAGE REPORT
 Caused by : **TYPHOON KADIANG**
 As of October 22, 1993

Crop : Legumes
 Province : Pampanga

MUNICIPALITY	No. of Affected		Area Planted (has.)	Phase of Growth	Area Affected (has.)		Yield/ha.		Actual Production Loss (P)	Value P	Remarks
	Barangay	Farmer			Total	Completely Damaged	w/ changes of Recovery	Before Calamity			
Angeles City Mabalacat Total	1	5	5.00	Vegetative	4.00	4.00				32,000	
	2	18	20	Reproductive	13.25	13.25				92,750	
	3	23	25.00		17.25	17.25				124,750	
<u>Yellow Corn</u>											
Mabalacat	1	1	10.50	Harvestable	3.00	3.00				20,100	
Total	1	1	10.50		3.00	3.00				20,100	
<u>Root Crops</u>											
Angeles City	6	55	100.00	Vegetative	60.50	60.50				665,500	
Mabalacat	3	30	279.50	Vegetative	116.50	116.50				1,281,500	
Total	9	85	379.50		177.00	177.00				1,947,000	
<u>Leafy Vegetables</u>											
Sta. Ana	2	4	0.70	Vegetative	0.55	0.55				2,750	
Bacolor	1	1	0.50	Vegetative	0.50	0.50				2,500	
Angeles City	2	17	35.50	Vegetative	6.45	6.45				32,250	
Magalang	3	4	1.50	Harvestable	1.00	0.50				3,500	
Total	8	26	38.20		8.50	8.00				41,000	
<u>Asparagus</u>											
Mexico	1	18	11.00	Harvestable	11.00	9.10	1.90			421,561.60	
Magalang	1	2	1.00	Harvestable	1.00	0.50	0.50			23,162.75	
Total	2	20	12.00		12.00	9.60	2.40			444,724.35	

DAMAGE REPORT
Caused by : TYPHOON KADIANG
As of October 22, 1993

Crop : Fisheries
 Province : Pampanga

MUNICIPALITY	No. of Affected		Area Planted (has.)	Phase of Growth	Area Affected (has.)		Yield/ha		Actual Production Loss (P)	Value P	Remarks	
	Barangay	Farmer			Total	Completely Damaged	w/ changes of Recovery	Before Calamity				After Calamity
Minatín	6	435	906.00						27,180,000			
Masantol	18		120.00	Bangus Tilapia Prawn	1,068.00				7,571,480			
Arayat	2	7	420.00		20.60			883,000	2,780,000			
Sto. Tomas	7	37	64.00						1,890,000			
Macabebe	9	67	1,093.10						53,702,500			
Sasmuan	12	14	617.00						15,000,000			
Lubao									7,445,750			
Candaba	13	140	478.315						17,635,250			
San Simon	7	35	41.25						4,726,875			
Sta. Ana	5	13	10.10						860,000			
Guagua	5	21	190.00						4,475,000			
San Luis	10	726	104.30						13,974,000			
Total	94	1,495	5,132.67						199,031,137			

DAMAGE REPORT
 Caused by : **TYPHOON KADIANG**
 As of October 22, 1993

 Province : Pampanga

Name of Farmer (A)	Barangay (B)	Crop Farmer (C)	Phase of growth Seedling, Vegetative, Reproductive, Maturity (D)	Area Affected (has.)		Yield/ha.		Actual Production Loss (P) (J)	Value P (K)	Remarks (L)
				Total (E)	Completely Damaged (F)	w/ changes of Recovery (G)	Before Calamity (H)			
12. Candaba (Tag. Reg.)	Summary :	Poultry	- 4,455 has.	-	105,800.00			-	40,000.00	
		Carabao	- 44 has.	-	610,008.00			-	72,000.00	carabao
		Native Chicken	- 1,255 has.	-	62,720.00			-	101,000.00	cattle
		Goats	- 53 has.	-	35,200.00			-	56,350.00	pigtlets
		ducks	- 15,078 has.	-	732,592.00			-	19,000.00	ducks
		Pigtlets	- 641 has.	-	643,000.00			-	15,000.00	weanings
		Turkey	- 70 has.	-	2,100.00			-	20,000.00	growers
		dogs	- 5 has.	-	2,500.00			-	20,000.00	Sow
		Crowers	- 157,005 has.	-	3,199,500.00			-	20,000.00	Patterners
		Batteners	- 466 has.	-	932,000.00			-	6,000.00	gilt-Pregnant
		Sow	- 64 has.	-	377,000.00			-	P	
		cattle	- 20 has.	-	300,000.00			-		
		Fighting Cock	- 170 has.	-	206,000.00			-		
		Caracow	- 1 has.	-	40,000.00			-		
		Calf	- 1 has.	-	6,000.00			-		
Layers	- 5,000 has.	-	600,000.00			-				
Total				P	7,854,420.00				P 7,854,420.00	
									349,350.00	
									P 8,203,770.00	* Grand Total

DAMAGE REPORT
Caused by : TYPHOON KADIANG
As of October 22, 1993

Province : Pampanga

LIVESTOCKS

Name of Farmer (A)	Barangay (B)	Crop Farmer (C)	Phase of growth Seedling, Vegetative, Reproductive, Maturity (D)	Area Affected (has.)		Yield/ha.		Actual Production Loss (P) (J)	Value P (K)	Remarks (L)
				Total (E)	Completely Damaged (F)	w/ changes of Recovery (G)	Before Calamity (H)			
1. Lubao	8	150	ducks	4050 has.					P 141,750.00	
			Fattener	5 has.					10,000.00	
			piglets	348 has.					348,000.00	
			sow	15 has.					45,000.00	
								Sub-Total	544,750.00	
2. Sta. Rita	10	58	Carabao	18 has.					272,000.00	
			Sow	12 has.					39,000.00	
			piglets	34 has.					34,000.00	
			Fatteners	389 has.					778,000.00	
			growers	10 has.					20,000.00	
			Fighting Cock	170 has.					306,000.00	
			Caracow	1 has.					20,000.00	
			Calf	1 has.					6,000.00	
goat	1 has.					400.00				
								Sub-Total	1,475,400.00	
3. Minaala	1	3	Layers	5000 has.					500,000.00	
				300 has.					15,000.00	
4. Magalang	4	12	Piglets	40 has.					40,000.00	
			growers	30 has.					20,000.00	
			sows	5 has.					40,000.00	
								Sub-Total	100,000.00	
6. Gungua	1	3	Piglets	10 has.					10,000.00	
			Sow	2 has.					16,000.00	
								Sub-Total	26,000.00	

DAMAGE REPORT
Caused by : TYPHOON KADIANG
As of October 22, 1993

Province : Pampanga

LIVESTOCKS

Name of Farmer (A)	Barangay (B)	Crop Farmer (C)	Phase of growth Seedling, Vegetative, Reproductive, Maturity (D)	Area Affected (has.)		Yield/ha.		Actual Production Loss (P) (J)	Value P (K)	Remarks (L)
				Total Completely Damaged (F)	w/ changes of Recovery (G)	Before Calamity (H)	After Calamity (I)			
7. Floridablanca	1	1	Poultry	3500 has.					P 52,500.00	
8. Arayat	4	9	Growers	15797.5 has.				Sub-Total	3,159,500.00	
9. Candaba	30	150	ducks Fattener piglets Sow Carabao Cattle	4200 has. 72 has. 125 has. 30 has. 16 has. 20 has.					147,000.00 144,000.00 125,000.00 240,000.00 240,000.00 300,000.00	
								Sub-Total	1,196,000.00	
10. Macabebe	1	3	Carabao Swine	1 has. 2 has.					12,000.00 5,000.00	
11. San Luis	3	35	Carabao Native Chicken Swine/Piglets ducks goats	10 has. 955 has. 84 has. 6828 has. 52 has.				Sub-Total	17,000.00 100,000.00 47,750.00 84,000.00 443,820.00 34,800.00	
12. Candaba (Tagalog Reg.)	14	50	Carabao Cattle Piglets ducks	4 has. 4 has. 119 has. 1,550 has.				Sub-Total	710,370.00 40,000.00 32,000.00 59,500.00 7,750.00 54,250.00	

DAMAGE REPORT
 Caused by : TYPHOON KADIANG
 As of October 22, 1993

Province : Pampanga

LIVESTOCKS

Name of Farmer (A)	Barangay (B)	Crop Farmer (C)	Phase of growth Seedling, Vegetative, Reproductive, Maturity (D)	Area Affected (has.)		Yield/ha.		Actual Production Loss (P) (J)	Value P (K)	Remarks (L)		
				Total (E)	Completely Damaged (F)	Completely w/ changes of Recovery (G)	Before Calamity (H)				After Calamity (I)	
13. San Simon	10	36	Wenning's	19 has.					19,000.00			
			Growers	6 has.					15,000.00			
			Sow	4 has.					20,000.00			
			Cattle	5 has.					40,000.00			
			Piglets	83 has.					41,500.00			
			Fatteners	5 has.					20,000.00			
			Gilt-perguany	1 has.					6,000.00			
			Ducks	60 has.					2,100.00			
											163,600.00	
											Sub-Total	

Updated List of Existing CIS/PIS Affected by Lahar
As of December 31, 1993

Name of CIS/PIS	Location	Service Area (ha)	Affected Area (ha.)	Affected	Remaining
				FB (No. of person)	Area (ha.)
1. Bacolor CIS	Bacolor	112	82	42	30
2. Lower St. Bacolor	-do-	162	162	60	-
3. Macabali CIS	-do-	60	60	30	-
4. Cabatican CI	-do-	55	55	36	-
5. Parulog CIS	-do-	36	36	43	-
6. San Juan Nopo CIS	Guagua	66	42	26	24
7. Macapagal CIS	Sta. Rita	63	63	37	-
8. Lamamana CIS	-do	45	45	28	-
9. Magsaysay CIS	-do-	228	92	43	136
10. Tugtugan CIS	Floridablanca	211	137	121	74
11. Dungang Gainto CIS	Mexico	162	22	16	140
12. Batis San CIS	-do-	103	20	15	83
13. Abacan CIS	-do-	90	90	60	-
14. Anao CIS	-do-	120	36	24	84
15. San Jose Malino CIS	-do-	77	16	9	61
16. Masoup CIS	Mabalacat	460	460	123	-
17. Sapang Balen CIS	-do-	140	140	90	-
18. Quitangil CIS	-do-	114	40	17	74
19. Balen San Roque CIS	Magalang	450	35	23	415
20. Manibaug CIS	Porac	175	175	115	-
21. Porac CIS	-do-	165	165	110	-
22. San Agustin CIS	Sta. Ana	78	32	21	46
23. San Roque CIS	-do-	99	23	21	76
Total		3,271 (has)	2,028 (has)	1,110	1,243 (has)

REPUBLIC OF THE PHILIPPINE
OFFICE OF THE PROVINCIAL AGRICULTURIST
Province of Tarlac

Roots Crops/Legumes Damages Area and Value

Municipality	1991			1992			1993		
	Root Crops		Legumes	Root Crops		Legumes	Root Crops		Legumes
	Area (has.)	Value	Area (has.)	Value	Area (has.)	Value	Area (has.)	Value	
Bacban									
Concepcion	30	P 150.00							
Capas									
Total	30	P 150.00							

REPUBLIC OF THE PHILIPPINE
OFFICE OF THE PROVINCIAL AGRICULTURIST
Province of Tarlac

Corn and Sugarcane Damage Area and value

Municipality	1991						1992						1993					
	Root Crops		Legumes		Root Crops		Legumes		Root Crops		Legumes		Root Crops		Legumes			
	Area (has.)	Value	Area (has.)	Value	Area (has.)	Value	Area (has.)	Value	Area (has.)	Value	Area (has.)	Value	Area (has.)	Value	Area (has.)	Value		
Bamban			900	P 18,000.00			400	P 8,000,000.00							30	P 600,000.00		
Concepcion	15	P 120,000.00	100	2,000.00	150	1,200.00	50	1,000,000							30	600,000.00		
Capas			20	400.00			20	400,000										
Total	15	P 120,000.00	1,020	20,400.00	150.00	1,200.00	470	9,400,000							60	P 1,200,000.00		

REPUBLIC OF THE PHILIPPINE
OFFICE OF THE PROVINCIAL AGRICULTURIST
Province of Tarlac

Rice & Vegetative Damaged Area and Value

Municipality	1991						1992						1993					
	Root Crops			Vegetables			Root Crops			Vegetables			Root Crops			Vegetables		
	Area (has.)	Value	Area (has.)	Value	Area (has.)	Value	Area (has.)	Value	Area (has.)	Value	Area (has.)	Value	Area (has.)	Value	Area (has.)	Value		
Bamban	528	P 7,920.00	10	8,000.00	400	6,000.00	5	40,000	52	780,000.00	5	40,000						
Concepcion	2,850	42,750.00	18	144,000.00	1,700	25,500.00	10	80,000	100	1,500,000.00	7	56,000						
Capas	800	12,000.00	10	80,000.00	600	9,000.00	2	16,000	50	750,000.00	2	16,000						
Total	3,650	P 54,750.00	38	232,000.00	2,700	40,500.00	17	136,000	202	3,030,000.00	14	112,000						

DAMAGE TO AGRICULTURE
 Typhoon cadiang, Province of Tarlac
 As of 8:00 A.M. October 11, 1993

Municipality	Rice	Vegetables	Fisheries	Livestock	Fishpond Facilities	Total
<i>1st District</i>						
Anao	P 4,845,500.00	-	P 500.00	-	-	P 4,846,000.00
Camiling	72,762,120.00	P 1,440,000.00	355,000.00	P 31,500.00	-	74,588,620.00
Mayantoc	32,391,000.00	-	20,000.00	-	-	32,411,000.00
Moncada	74,328,225.00	-	45,250.00	18,500.00	-	74,391,975.00
Paniqui	11,292,000.00	-	2,300,000.00	-	-	13,592,000.00
Pura	14,154,000.00	25,000.00	160,000.00	28,000.00	-	14,367,000.00
Ramos	1,411,950.00	-	5,250.00	-	-	1,417,200.00
San Clemente	19,990,000.00	-	10,000.00	-	-	20,000,000.00
San Miguel	21,967,500.00	30,000.00	2,500.00	-	-	22,000,000.00
Sta. Ignacia	23,515,000.00	-	4,680,000.00	-	-	28,195,000.00
Sub-Total	P 276,657,295.00	P 1,495,000.00	P 7,578,500.00	P 78,000.00		P 285,808,795.00
<i>2nd District</i>						
Gerona	P 10,180,200.00	-	P 50,000.00	-	-	P 10,230,200.00
San Jose	21,532,500.00	-	5,000.00	-	-	21,537,500.00
Tarlac	75,680,700.00	-	30,200.00	-	P 3,000.00	75,713,900.00
Victoria	12,391,500.00	80,000.00	237,500.00	-	8,000.00	12,717,000.00
Sub-Total	P 119,784,900.00	P 80,000.00	P 322,700.00	P 0.00	P 11,000.00	P 120,198,600.00
<i>3rd District</i>						
Bamban	P 3,810,000.00	-	P 15,250.00	-	-	P 3,825,250.00
Capas	10,308,800.00	-	10,000.00	P 1,147,200.00	-	11,466,000.00
Concepcion	32,360,823.00	-	40,250.00	-	-	32,401,073.00
La Paz	33,272,750.00	-	80,250.00	-	P 14,000.00	33,367,000.00
Sub-Total	P 79,752,373.00	P 0.00	P 145,750.00	P 1,147,200.00	P 14,000.00	P 81,059,323.00
Grand Total	P 476,194,568.00	P 0.00	P 145,750.00	P 1,147,200.00		P 81,059,323.00

Republic of the Philippines
Office of the Provincial Agriculturist

Province : Tarlac
Crop : Rice

Terminal Report on Damages
Caused By Typhoon "Cadiang"
As of October 12, 1993
12:00 Noon

Municipality (A)	No. of Affected (B)		Area Planted (Has.) (D)	Stage Of Crop (E)	Total (F)	Area Affected (Ha.) (G)		Estimated Yield/Ha. 50 kg./sack (I)		Production Loss (G*J)/H(I-J) (K)	Value P (L)
	Brgy.	Farmer (C)				Completely Damaged (G)	w/ changes of Recovery (H)	Before Calamity (I)	After Calamity (J)		
1st District Arao	9	523	782.00	82	782.00	700.00	86	73	16.152	4,845,600.00	
Candling	30	199	284.10	0	284.10	284.10	90	15	21,307.50	6,392,250.00	
	290	290	408.75	0	408.75	408.75	90	10	32,700	9,810,000.00	
Mayantoc	879	879	1,241.31	1,241.31	1,241.31	0	90	0	111,717.90	33,515,370.00	
	834	834	1,177.44	0	1,177.44	1,177.44	90	15	88,308	26,492,400.00	
Mondaca	24	859	760	0	760	760	90	35	41,800	12,540,000.00	
	1,105	1,105	1,018	0	1,018	1,018	90	40	50,900	15,270,000.00	
Mondaca	1,365	1,365	1,289	0	1,289	1,289	90	50	15,270	4,581,000.00	
	11	485	1,085.60	85	1,085.60	1,000.60	85	50	42,246	12,673,800.00	
Pangqui	3	17	22.20	0	22.20	22.20	85	80	111	33,300.00	
	9	1,434	1,889.95	0	1,889.95	1,889.95	85	75	18,899.50	5,669,850.00	
Pura	223	223	223.25	223.25	223.25	0.00	85	0	18,976.25	5,692,875.00	
	16	788	1,177	0	1,177	1,177	80	60	23,540.00	7,062,000.00	
Pura	15	471	705	0	705	705	80	60	P 14,100.00	4,230,000.00	
	8	721	660.00	660.00	660.00	660	86	76	P 6,600.00	1,980,000.00	
Pura	8	723	661.65	450	661.65	211.65	86	66	P 42,933.00	12,879,900.00	

Table I.19

1st District Ramos	8	180	237	Ready to Harvest	237	0	237	86	66	4,740	14,220,000.00
San Clemente	16	617	950	Reproductive/ Ready to Harvest	950	500	450	85	31.50	66,575.00	19,972,500.00
San Manuel	06	312	423	Flowering/Maturity	423	373	50	93	10	38,839	11,651,700.00
	09	539	370.49	Booting/Riping	370.49	370.49	0	93	0	34,456	10,336,671.00
Sta. Ignacia	16	650	750	Flowering	750	750	0	88	0	66,000	19,800,000.00
		350	450	Maturity	450	250	200	88	48	30,000	9,000,000.00
Sub-Total	188	13,564	16,565.74		16,565.74	4,325.05	12,240.69			786,170.72	248,649,216.00
2nd District											
Gerona	30	873	893	Flowering/Maturity	893	80	893	88	50	33,934	10,180,200.00
San Jose	13	400	910	-do-	910	0	910	90	45	40,950	12,285,000.00
		842	1,233	Flowering	1,233	0	1,233	90	65	30,825	9,247,500.00
Tarlac	05	75	96	Flowering/Maturity	96	16	80	89	80	2,240	672,000.00
	14	1,230	1,575	Flowering	1,575	0	1,575	90	33	89,775	26,932,500.00
	21	2,100	2,802	Milking	2,802	0	2,802	90	33	159,714	47,914,200.00
		4	6	Maturity	6	6	0	90	0	540	162,000.00
Victoria	06	485	1,085.60	Reproductive	1,085.60	05	1,000.60	85	50	42,246	12,673,800.00
	20	2,529	3,896	Maturity	3,896	0	3,896	87	44	167,528	50,258,400.00
Sub-Total	109	8,538	12,496.60		12,496.60	107	12,389.60			567,752	170,325,600.00
3rd District											
Bamban	07	100	175	Flowering	175	75	100	88	50	12,700	8,810,000.00
Capas	09	850	898	Flowering/Maturity	898	0	898	90	45	35,022	10,506,000.00
Concepcion	33	1,551	4,152.75	Reproductive/Maturity	4,152.75	967	3,185.75	90	65	193,809	58,142,700.00
La Paz	21	507	529	Seeded	529	529	0	89	80	529	193,085.00
		716	1,233.79	Vegetable	1,233.79	0	1,233.79	90	33	12,337.40	3,701,370.00
		1,236	2,129	Reproductive	2,129	500	1,629	90	33	76,080	22,824,000.00
		385	1,020	Maturity	1,020	22	998	90	0	28,860	3,658,000.00

Sub-Total	70	5,345	10,137.54	10,137.54	2,093	8,044.54				359,337.40	107,835,155.00
Grand Total	367	27,447	39,199.88	39,199.88	6,525.05	32,674.83				1,713,260.12	526,809,971.00

Republic of the Philippine
Office of the Provincial Agriculturist
Province of Tarlac

Terminal Report on Damages
Caused By Typhoon "Cadiang"

For Vegetables

Municipality	No. of Brgy. Affected	Area (Has.)	No. of Farmers	Kind	Amount of Damaged	Remark
Pura	14	10.00	40	Assorted	P 25,000.00	Totally
Victoria	10	8.00	25	-do-	80,000	-do-
Camiling	34	200.00	410	-do-	1,440,000.00	-do-
San Manuel	2	3.68	16	-do-	107,500	-do- due wilting
Sta. Ignacia	14	200.00	396	-do-	1,440,000	-do-
Capas	4	20.00	45	-do-	120,000.00	-do-
Concepcion	19	50.00	120	-do-	400,000	-do-
San Jose	1	1.00	1	Turnips	25,000.00	-do-
Total	98	492.68	1,053		P 3,637,500.00	

Republic of the Philippine
Office of the Provincial Agriculturist
Province of Tarlac

Terminal Report on Damages
Caused By Typhoon "Cadiang"
on Livestocks
As of October 12, 1993
12:00 Noon

Municipality	No. of Barangays	Kind	No. of Head	Caused	Value in (P)
Pura	1	Calf/Cattle	3	Grower	P 15,000.00
		Cattle	4	-do-	28,000.00
Mondaca	2	Swine	5	Swept away by flood	17,500.00
		Goat	1	-do-	1,000.00
Camiling	3	Swine	2	-do-	10,000.00
		Broller	100	-do-	6,500.00
		Cattle	1	-do-	15,000.00
Capas	8	Cattle	1	-do-	9,000.00
		Swine	7	-do-	24,500.00
		Goat	13	-do-	13,200.00
		Chicken	500	-do-	32,500.00
		Ducks	8,900	-do-	1,068,000.00
Concepcion	3	Cattle	2	-do-	30,000.00
		Swine	2	-do-	10,000.00
Mayantoc	4	Cattle	2	-do-	30,000.00
		Carabao	3	-do-	66,000.00
		Goat	3	-do-	4,500.00
Total	21		9,549		1,380,700.00

Republic of the Philippine
Office of the Provincial Agriculturist
Province of Tarlac

Terminal Damages Report
on Fisheries
As of October 12, 1993
12:00 Noon

Municipality	Area of Fishpond	No. of Fishpond Optr. Affected	Value of Damage	
			Stock	Facilities
Pura	20	35	P 160,000	0
Victoria	9.5	4	227,500	8,000.00
Sta. Ignacia	50	240	2,680,000	0
Anao	.1	2	850	0
Bamban	3.5	5	13,250	0
Camiling	71	3	1,575,000	0
Capas	2	4	10,000	0
Concepcion	8.5	5	46,250	0
Gerona	10	4	10,000	0
La Paz	16.5	10	80,250	14,000.00
Mayantoo	60	70	1,020,000	0
Moncada	9.5	4	45,250	0
Paniqui	37.0	8	2,100,000	0
Ramos	1.5	5	1,030,000	0
San Clemente	2.0	4	10,000	0
San Jose	1.0	3	5,000	0
San Manuel	.5	4	2,500	0
Tarlac	6.4	6	30,200	3,000.00
Total	309	416	P 9,046,050	25,000.00

PART II

AGRICULTURAL PRODUCTION DATA



GPEP PLANTING TARGET BY PROVINCE BY MONTH

Table II.1

CROP : RICE

80-85 cav/ha. P 350/can (50 kg.)

PERIOD : May to October 1994

Province	May	June	July	August	September	October	Total
1. Bataan	1,051	3,246	5,678	3,546	1,364	371	15,256
2. Bulacan	828	4,601	16,942	14,624	5,424		42,419
3. Nueva Ecija	97	3,096	70,246	78,529	9,621	342	161,931
4. Pampanga	1,621	8,720	22,209	12,987	3,742	4,601	53,880
5. Tarlac	3,256	11,808	16,082	7,062	3,280	2,057	43,545
6. Zambales	444	1,849	3,465	1,016	490	4	7,268
Total	7,297	33,320	134,622	117,764	23,921	7,375	324,299

GPEP PLANTING TARGET BY PROVINCE BY MONTH

CROP : RICE

90-95 cav/ha.

PERIOD : November 1994 to April 1995

Province	November	December	January	February	March	April	Total
1. Bataan	1,468	3,583	5,991	3,691	1,414	370	16,517
2. Bulacan	4,906	12,587	15,592	6,719	110		39,914
3. Nueva Ecija	10,593	28,737	46,082	42,715	9,442	1,079	138,648
4. Pampanga	20,704	22,013	9,025	1,364	401	108	53,615
5. Tarlac	13,820	10,155	6,455	2,519	79		33,028
6. Zambales	2,006	3,451	1,329	110	3		6,899
Total	53,497	80,526	84,474	57,118	11,449	1,557	288,621

GPEP PLANTING TARGET BY PROVINCE BY MONTH

CROP : YELLOW CORN

84 cav/ha.

P 5 kg.

PERIOD : October 1994 to March 1995

Province	October	November	December	January	February	March	Total
1. Pampanga	171	1,045	1,388	760	136		3,500
2. Tarlac	4,096	4,092	3,167	1,050			12,405
Total	4,267	5,137	4,555	1,810	136	0	15,905

FISHERY DATA
PROVINCE OF TARLAC
1993

Table II.2

Municipality	No. of Brgy.	Total Land Area (Has.)	Fishpond Area (Has.)	Production (M.T.)	No. of Fishpond Operators	Communal Water Area (Has.)	Number of Communal Water
1. Arao	18	2,390	1.48	1,184	70	32	2
2. Bamban	15	13,310	6.90	5.52	26	147	2
3. Camiling	61	14,050	11.60	9.28	171	105.2	4
4. Capas	19	44,000	15.35	12.28	49	100	2
5. Concepcion	44	24,570	24.36	19.48	29	80	2
6. Getona	44	14,140	31.10	24.88	356	75	3
7. Lapaz	21	11,450	46.19	36.95	239	200	1
8. Mayantoc	24	35,460	121.05	96.84	292	451	3
9. Moncada	37	8,570	16.61	13.28	64	38.3	5
10. Paniqui	35	10,520	142.12	113.69	356	103	2
11. Pura	16	3,100	5.78	4.62	192	47	3
12. Ramos	9	2,440	6.76	5.40	152	28	2
13. San Clemente	12	4,860	12.30	9.84	13	70	2
14. San Jose	13	57,481	19.25	15.40	94	72	7
15. San Manuel	15	4,210	7.52	6.01	15	19	2
16. Sta. Ignacia	24	7,540	17.43	13.94	65	50	3
17. Tarlac	75	36,119	132.78	106.22	413	403	11
18. Victoria	26	11,150	71.48	57.18	262	314	3
Total	508	305,360	690.06	551,994	2,888	2,334.50	89

Production (M.T.)
Tilapia (Mudfish), (Catfish)
1 ha = 10,000 fingerling
1 fingerling = P 0.45
= 4,500 P /ha.

Communal Irrigation System Data (1/22)

Name of CIS	Location	Service Area (Ha.)		Actual Irrigable Area	
		Design	Present	Wet	Dry
I. Communal Irrigation Systems					
1st District					
1. Banquili CIS	Magalang	66	13	13	-
2. Camias CIS	Magalang	58	48	48	20
3. San Agustin CIS	Magalang	169	65	65	50
4. San Vicente CIS	Magalang	350	275	275	-
5. Sat. Cruz CIS	Magalang	335	335	50	50
6. La Paz CIS	Magalang	250	250	153	92
7. San Pedro CIS	Magalang	229	229	63	43
8. Balen San Roque CIS	Magalang	450	450	0	0
9. Cutup CIS	Angeles City	128	30	21	10
10. Pulong Cacutud CIS	Angeles City	50	50	-	-
11. Tabon CIS	Angeles City	70	70	-	-
12. L. Sapang Biabas CIS	Mabalacat	207	110	50	20
13. Sta. Maria CIS	Mabalacat	237	113	-	-
14. Dau CIS	Mabalacat	206	206	65	65
15. Sapang Balen CIS	Mabalacat	100	140	-	-
16. Masup CIP	Mabalacat	460	460	-	-
17. Mabalacat CIS	Mabalacat	143	143	-	-
18. Camachile CIS	Mabalacat	279	279	-	-
19. Mabiga CIS	Mabalacat	279	279	-	-
20. Quitangil CIS	Mabalacat	114	114	60	30
21. Uper Camachile CIS	Mabalacat	30	30	-	-
22. Mawaque CIS	Mabalacat	102	83	83	25
2nd District					
23. Villamaria CIS	Porac	54	54	-	-
24. Porac CIS	Porac	165	165	-	-
25. Manibaug CIS	Porac	175	175	175	175
26. Lico CIS	Porac	90	90	-	-
27. Senora CIS	Porac	120	113	113	50
28. Dampol CIS	Sta. Rita	110	77	28	0
29. Macapagal CIS	Sta. Rita	120	63	-	-
30. Lusung CIS	Sta. Rita	105	105	105	50
31. Magsaysay CIS	Sta. Rita	228	228	198	198
32. Paliguo Libutad CIS	Sta. Rita	93	93	64	64
33. Dila-Dila CIP	Sta. Rita	85	34	34	34
34. Panganan CIS	Sta. Rita	52	52	48	48
35. Laxamana CIS	Sta. Rita	45	45	-	-
36. Tugtugan CIP	Floridablanca	211	24	-	-
37. Sapang Godio CIS	Floridablanca	105	64	-	-
38. Sapang Matua CIP	Lubao	800	800	-	-
38. Natividad CIS	Guagua	238	140	140	90
40. San Juan Nepo CIS	Guagua	66	66	66	35

Communal Irrigation System Data (2/22)

Name of CIS	Location	Service Area (Ha.)		Actual Irrigable Area	
		Design	Present	Wet	Dry
3rd District					
41. Bacolor CIS	Bacolor	228	112	30	20
42. Macabali CIS	Bacolor	84	60	-	-
43. L. Sta. Barbara CIS	Bacolor	162	162	-	-
44. Cabalantian CIS	Bacolor	150	150	100	20
45. Cabetican CIS	Bacolor	55	55	-	-
46. Parulog CIS	Bacolor	36	36	-	-
47. Calulut CIS	San Fernando	121	55	55	50
48. Telabastagan CIS	San Fernando	125	24	8	-
49. Calulut CIP II	San Fernando	64	36	36	36
50. Santiago CIS	Sta Ana	233	173	-	-
51. San Agustin CIS	Sta Ana	186	78	0	5
52. San Roque CIS	Sta Ana	435	99	73	10
53. San Pablo CIS	Sta Ana	230	54	50	5
54. San Bartolome CIP	Sta Ana	300	300	-	-
55. San Isidro CIS	Sta Ana	160	160	100	100
56. Lacmit CIS	Arayat	261	138	138	-
57. Bitas Libutad CIS	Arayat	265	265	100	7
58. Gatiawin CIS	Arayat	138	62	62	-
59. Buenavista CIS	Arayat	320	30	22	-
60. Inumang Baca CIS	Arayat	306	132	65	-
61. La Paz Turo CIS	Arayat	567	800	-	-
62. Panlinlang CIS	Arayat	216	29	29	10
63. San Roque Bitas CIS	Arayat	417	126	60	4
64. San Juan Bano CIS	Arayat	365	365	199	199
65. Candating CIP	Arayat	429	429	429	349
66. Bano CIP	Arayat	300	300	300	50
67. Pandacaqui CIS	Mexico	280	280	90	20
68. San Antonio CIS	Mexico	68	68	-	-
69. Bungang Guinto CIS	Mexico	325	162	-	-
70. San Jose Malino CIS	Mexico	132	77	61	50
71. Divisoria CIP	Mexico	72	72	72	72
72. Mexico CIS	Mexico	157	157	-	-
73. Abacan CIS	Mexico	90	90	-	-
74. Anao CIS	Mexico	120	120	112	-
75. Nueva Victoria	Mexico	100	100	60	-
76. Betis LPN CIS	Mexico	431	103	-	-
4th District					
77. Sto. Rosario Pajo CIS	Sto. Tomas	60	60	-	-
78. Barangoa CIS	Candaba	285	205	-	-
79. Salapungan CIS	Candaba	688	688	70	-
80. Virgen CIP	Candaba	1,078	1078	-	100
81. Nigui CIS	Masantol	234	234	-	-

Communal Irrigation System Data (3/22)

Name of CIS	Location	Service Area (Ha.)		Actual Irrigable Area	
		Design	Present	Wet	Dry
82. Sagrada CIS	Masantol	241	241	-	-
83. Malauli CIS	Masantol	213	213	-	-
84. San Gabriel CSI	Macabebe	194	194	150	150
85. Batasan CIS	Macabebe	112	112	-	-
86. Telacsan CSI	Macabebe	180	180	-	-
87. San Juan CSI	Macabebe	208	208	-	-
88. San Rafael CIS	Macabebe	238	238	-	-
89. Sapa Libutad CIS	Macabebe	206	206	-	-
90. San Jose CIS	Macabebe	289	289	-	-
91. Tacasan CIS	Macabebe	171	171	-	-
92. Saplad David CIS	Macabebe	376	376	-	-
93. Sta. Maria CIS	Macabebe	271	271	-	-
94. Castule CIS	Macabebe	285	285	-	-
95. San Roque CIS	Macabebe	134	134	-	-
96. Maniago CIS	Minalin	241	241	-	-
97. Sto. Domingo CIS	Minalin	173	173	-	-
98. San Isidro CIS	Minalin	154	154	-	-
99. Dawe CIS	Minalin	199	199	-	-
II. Pump Irrigation Systems					
1. San Miguel PIS	San Simon	200	200	200	140
2. Sta. Cruz PIS	San Simon	126	126	126	126
3. Tagumpay PIS	San Simon	236	236	186	236
4. Bagong Silang PIS	San Simon	160	160	50	160
5. Sta. Monica PIS	San Simon	220	220	220	100
6. Sta. Rita (RIAP) PIS	San Simon	130	130	100	130
7. Sta. Cruz Pambilog PIS	San Luis	315	315	100	315
8. San Sebastian PIS	San Luis	549	549	30	306
9. Matique PIS	San Luis	160	160	50	160
10. PISA (Sta. Rita) PIS	San Luis	314	314	70	314
11. Katubusan PIS	San Luis	180	180	80	180
12. CAbeza PIS	Arayat	90	90	40	-
13. Sta. Cruz Candating PIS	Arayat	202	202	112	202
14. Sto. Rosario PIS	Candaba	219	219	30	219
15. Pansinao PIS	Candaba	163	163	163	163
16. Gulap PIS	Candaba	320	320	41	311
17. Lanang Pasig PIS	Candaba	312	312	200	198
18. Villongoo PIS	Candaba	80	80	20	80
19. Mapanique PIS	Candaba	1200	1200	1200	400
20. Mandasig PIS	Candaba	180	265	50	180
21. SAn Nicolas PIS	Arayat	130	130	-	-
22. Sto. Cristo PIS	Arayat	140	140	20	30
23. San Antonio PIS	Mexico	120	120	-	-
24. San Lorenzo PIS	Mexico	70	70	-	-
Total		27,148	23,670	7,476	6,356

STATUS OF COMMUNAL IRRIGATION SYSTEMS
AS OF December 31, 1992

Province : Pampanga
Region : III

Name of System a) Municipality b) Barangay served c) Name of Association	Category	Service Area (ha.)	Irrigated This Year		Water Source	Average Yield (cav/ha)		Date a) Started b) Complete	Date Turnover	Project Cost		Yearly Amortization	Amortization Collection		Status of IA (Active or Inactive etc.)	Remarks
			Wet	Dry		Wet	Dry			Total Cost	Direct Chargeable Cost		This CY-92	To Date		
A. Amortization																
1. Bacolor CIS a. Bacolor b. San Antonio, San Isidro c. San Antonio Bacolor IA	Participatory	112	30	18	18 (a) 03-15-83 (b) 09-07-83	70	70	70 (a) 03-15-83 (b) 09-07-83	12-27-91	384,355.44	319,180.26	19,500.00	1,200.00	1,200.00	Inactive	System was rehab. Rehab. cost was added to prev. loan Rehab under 30% but not yet comp. Other areas were cov. by Jabar Operational
2. Lacermit CIS a. Amyst b. Lacermit c. Lacermit Planners IA	Participatory	138	138	-	-	70	70	(a) 03-15-90 (b) 06-15-90	08-29-90	615,489.69	561,511.34	51,750.00	5,044.00	5,044.00	Active	
3. Macabali CIS a. Bacolor b. Macabali c. Balar IA	Participatory	60	-	-	-	-	-	(a) 02-07-82 (b) 11-09-82	12-31-83	189,577.03	147,728.27	5,737.50	-	-	Inactive	Non-operational. Totally covered by Jabar
4. Mawaque CIS a. Mabalaca b. Mawaque c. Mawaque IA	Participatory	83	83	83	83	40	40	(a) 09-15-88 (b) 11-15-88	01-20-89	165,387.18	118,395.83	13,781.25	2,965.00	35,964.50	Active	Operational
5. Santiago CIS a. Sta. Ana b. Santiago c. Santiago IA	Participatory	173	173	-	-	-	-	(a) 04-15-83 (b) 10-15-83	12-16-83	255,290.07	196,690.64	11,250.00	-	5,623.80	Inactive	Non-oper. During wet season area is submerged. Insufficient water supply during dry season
6. Sto. Rosario Pajo CIS a. Sto. Tomas b. Sto. Rosario Pajo c. Sto. Rosario Pajo IA	Participatory	60	60	60	60	-	-	(a) 08-15-84 (b) 11-15-84	03-02-85	58,411.75	37,109.07	3,044.02	-	1,000.00	Inactive	Area is affected by saline water
7. Banquil CIS a. Magalang b. San Jose, San Francisco c. Banquil IA	Participatory	13	13	13	13	60	60	(a) 06-07-87 (b) 10-15-87	12-15-87	512,590.92	378,029.05	10,000.00	-	5,750.00	Inactive	Partly oper., area affected by drought. No sufficient IRI supply. Farmers converted to sugarcane
8. Blass Libertad CIS a. Arayat b. San Roque Blass c. Blass Libertad IA	Participatory	265	80	4	4	60	60	(a) 01-15-87 (b) 05-15-87	07-08-88	174,965.19	116,397.04	21,000.00	19,820.15	19,820.15	Active	Operational. Amort. loan of 30% equity on CIS under C & M
9. Lacsamana CIS a. Sta. Rita b. San Isidro c. Lacsamana IA	Participatory	45	-	45	45	-	-	(a) 10-15-85 (b) 11-15-87	12-27-91	946,412.15	740,318.27	28,125.00	3,975.00	4,340.00	Active	Non-oper. Div. damonials network-service area were totally covered by Jabar

Table II.4

Name of System a) Municipality b) Barangay served c) Name of Association	Category	Service Area (ha.)	Irrigated This Year		Water Source	Average Yield (cav/ha)		Date		Date Turnover	Project Cost		Yearly Amortization	Amortization Collection		Status of IA (Active or Inactive etc.)	Remarks
			Wet	Dry		Wet	Dry	a) Started	b) Complete		Total Cost	Direct Chargeable Cost		This CY-92	To Date		
10. Pandacaqui CIS a. Mexico b. Hacienda Pandacaqui c. Pandacaqui IA	Participatory	290	80	20	Sapang Matsuc	70		11-15-87	05-20-88	12-27-88	1,111,746.12	983,171.05	29,400.00	18,133.50	98,136.15	Active	Operational
11. Sapang Godio CIS a. Florida Blanca b. Tabaling c. Lasang Alimpuan Timber ISA	Participatory	64			Sapang Godio			01-07-81	05-15-81	09-29-88	125,089.21	112,931.95	12,400.00		38,041.00	Inactive	Non-oper. Area covered by rainfall/TO has irrigate but thru rainfall
12. Dampol CIS a. Sta. Rita b. Sta. Monica, Sta. Matias c. Dampol IA	Participatory	77	67	35	Librad & Gagu Creek	55		12-15-87	12-15-88	01-31-89	471,920.10	379,716.04	15,750.00	1,280.00	43,998.34	Active	Non-oper./Div. dam covered by labor.
13. L. Sta. Barbara CIS a. Bacolor b. Sta. Barbara c. L. Sta. Barbara IA	Participatory	162			Sapang Matsuc			12-15-87	11-15-88	02-20-88	633,552.20	481,180.01	23,625.00		52,476.25	Inactive	Non-oper. The whole system and irrigable area were covered by labor
14. L. Sapang Babas CIS a. Mahalacat b. S. Babas, Dgal, Sta. Lucia c. L. Sapang Babas & Sta. Lucia IA	Participatory	110	50	40	Quintangil R.	70		04-15-88	12-15-88	03-31-89	1,089,060.51	929,620.76	30,625.00	16,800.80	81,059.30	Active	Partially non-oper. Damaged main canal
15. Gatawin CIS a. Arayat b. Gatawin c. Gatawin IA	Participatory	62	62		Itulandang Creek	60		02-15-89	04-15-89	05-19-89	85,649.11	72,869.64	16,275.00	18,886.86	40,671.21	Active	Operational. No available IZ during dry season. System fully paid (under 30% equity on C&M)
16. Micosagal CIS a. Sta. Rita b. San Isidro c. San Isidro Tabum Librad IA	Participatory	63	7	40	Librad Creek	50		05-15-88	04-15-89	07-15-89	940,515.81	787,534.55	31,850.00		24,702.92	Active	Div. dam, lined MC totally covered by labor.
17. San Agustin CIS a. Sta. Ana b. San Agustin c. Upper San Agustin IA	Participatory	78	15		Danabulwi & Torac Creek	60		04-15-89	10-15-89	12-29-89	715,049.14	573,678.04	35,100.00		5,114.00	Active	Oper. Affected by labor for restoration./No water available during dry season
18. Canuan CIS a. Magalang b. Canaan, Buraocico c. Canaan IA	Participatory	48	48	30	Paranom Creek	55		04-15-89	09-28-89	12-22-89	505,696.03	431,433.97	21,600.00	22,373.50	66,601.32	Active	Operational
19. Natividad CIS a. Otagua b. Natividad c. Natividad IA	Participatory	140	140	140	Silab Creek	80		09-15-81	03-15-82	05-28-82	No obligation under 30% BUP					Active	Operational
20. San Antonio CIS a. Mexico b. Tinajero c. Tinajero, San Antonio IA	Participatory	68			S. Antonio Balas Crk.			02-15-90	04-30-90	06-29-90	348,878.55	258,966.62	25,500.00	687.00	18,127.75	Active	Partly oper. dam is heavily silted with labor

Table II.4

Name of System a) Municipality b) Barangay served. c) Name of Association	Category	Service Area (ha.)	Irrigated This Year		Water Source	Average Yield (cav/ha)		Date Started a) Started b) Complete	Date Turnover	Project Cost		Yearly Amortization	Amortization Collection		Status of IA (Active or Inactive etc.)	Remarks	
			Wet	Dry		Wet	Dry			Total Cost	Direct Chargeable Cost		This CY-92	To Date			
21. Runggang Cuatro CIS a. Mexico b. San Lorenzo, San Antonio c. San Lorenzo-San Antonio IA 22. Luwang CIS a. Sta. Rita b. Becerra, San Mateo c. Becerra, San Mateo IA 23. San Agustin CIS a. Magalang b. San Agustin IA c. San Agustin IA 24. Buenavista CIS a. Ampyt b. Talindoc c. Buenavista IA 25. Ciudad CIS a. Angeles City b. Ciudad Tangle c. Ciudad ISA 26. San Roque CIS a. Sta. Ana b. San Roque c. San Roque ISA 27. Inunang Bata CIS a. Ampyt b. San Nicolas c. Inunang Bata ISA 28. Senora CIS a. Porec b. Senora c. Senora Farmers IA 29. Calulut CIS a. San Fernando b. Calulut, Bulacan c. Calulut IGA 30. Betis LPN CIS a. Mexico b. Sta. Lorenzo, Sta. Pablo, Sta. Nicolas c. Betis LPN ISA 31. San Pablo CIS a. Sta. Ana b. San Pablo, San Roque, Sta. Maria c. San Pablo ISA	Participatory	162	Wet	Dry	Betis River			a) 04-15-90 b) 07-13-90	12-06-90	717,085.84	579,381.74	60,750.00			Inactive	Non-operf. dam is not utilized because water flowing in with lahars	
	Participatory	105	105	70	70	70	70	90 a) 03-15-90 b) 09-21-90	12-27-90	546,455.60	No obligation to settle under 30% EOP	7,009.93	11,665.00	65,017.45		Active	Operational
	NIA-PRSDC	65	65	70	70	70	70	55 a) 03-15-78 b) 02-15-79	06-30-79	No. data	168,238.22	7,009.93	11,665.00	65,017.45		Active	Operational
	-do-	30	10	40	40	40	40	a) 07-15-81 b) 10-07-81	04-15-82	194,718.38	154,901.22	11,250.00	11,762.50	34,396.25		Active	Non-operf. Dam heavily silted/crump sustained through ind. pump & no 1120 available during dry season.
	-do-	30	27	70	70	70	70	60 a) 03-09-80 b) 11-15-80	04-30-81	147,121.82	138,700.39	4,079.42	2,121.00	44,163.74		Active	Operational Div. dam partially damaged
	-do-	99	73	60	60	60	60	40 a) 04-04-80 b) 11-30-80	01-31-81	219,163.00	215,587.57	10,779.37	6,406.00	43,479.50		Active	25 has. w/ 25 FB were covered/affected by lahars. for restoration
	-do-	132	116	65	65	65	65	a) 04-06-88 b) 07-07-88	08-15-89	209,320.18	161,377.57	8,531.25	13,100.00	26,330.00		Active	Operf. No water available during dry season.
	-do-	113	113	70	70	70	70	60 a) 05-15-87 b) 08-20-87	06-09-88	133,209.42	83,662.61	4,921.33	11,500.00	35,594.20		Active	Operational
	-do-	55	55	70	70	70	70	70 a) 11-15-86 b) 02-29-87	12-15-87	414,530.31	274,934.82	15,680.00	12,789.50	75,724.97		Active	Operational
	-do-	103						a) 03-15-81 b) 10-31-81	01-13-82	No data	254,675.91	8,781.92		26,864.25		Inactive	Non-operational. Dam is heavily silted/crump eroded thru rainfall/No available 1120 during dry season.
	-do-	54	54	70	70	70	70	55 a) 11-15-88 b) 02-15-89	10-19-89	450,188.56	362,674.57	21,187.50	9,200.00	38,922.72		Active	Operational

Name of System a) Municipality b) Barangay served c) Name of Association	Category	Service Area (ha.)	Irrigated This Year		Water Source	Average Yield (cav/ha)		Date Started a) Started b) Complete	Date Turnover	Project Cost		Yearly Amortization	Amortization Collection		Status of I/A (Active or inactive etc.)	Remarks
			Wet	Dry		Wet	Dry			Total Cost	Direct Chargeable Cost		This CY-92	To Date		
32. La Paz Turo CIS a. Arayat b. Turo c. La Paz Turo ISA	-do-	800			Turo Creek			a) 01-15-77 b) 11-30-77	12-15-78	No data	320,814.23	11,882.01		4,000.00	Inactive	Non-operational
33. Baranga CIS a. Candaba b. Baranga c. Baranga ISA	-do-	205			Malisk River			a) 11-15-77 b) 06-15-78	11-26-78	No data	401,660.50	25,000.00		25,000.00	Active	Non-oper. System was affected by typhoon & PRC's deepening & widening proj. 120 ha. planted thru raised
34. Telabastagan IA a. San Fernando b. Telabastagan c. Telabastagan CIS	-do-	24			Balinghig Creek			a) 03-15-90 b) 06-30-90	08-31-90	306,496.29	165,935.70	9,000.00	2,000.00	3,500.00	Active	Operational crops planted in sugarcane
35. Sta. Maria CIS a. Mabalacat b. Sta. Maria c. Sta. Maria ISA	-do-	113			Quintang R.			a) 03-15-81 b) 10-15-81	08-28-82	213,936.93	177,217.97	9,990.62		5,100.00	Inactive	Non-operational
36. Pandilang CIS a. Arayat b. Pandilang c. Pandilang ISA	PD-552	29	29	15	Hikilang-Mok Crk.	70		a) 03-15-76 b) 12-15-76	10-12-78	No data	63,432.74	4,068.03	5,500.00	42,461.00	Active	Operational
37. Sta Roque Bites CIS a. Arayat b. San Roque Bites c. San Roque Bites ISA	-do-	126	100	4	San Roque Crk.	60		a) 05-07-77 b) 12-15-77	10-12-78	101,114.60	87,454.85	3,239.06	2,087.00	37,179.25	Active	Operational
38. San Jose Malino CIS a. Narsaco b. San Jose Malino, Pangasinan c. San Jose Malino ISA	-do-	77	61	55	Malino Creek	75		a) 02-15-76 b) 08-31-76	08-14-92	1,329,551.26	903,013.04	36,600.00	520.00	34,267.80	Active	Operational/15.67 has covered w/ labor. Rehab. 01/29/91. Completed 08/01/92
39. San Sebastian PIS a. San Luis b. Sto. Roberto, Sta. Lucia c. Sta. Catalina	NIA-Pilot	549	50	130	Pampang R.	60		a) 08-05-87 b) 12-07-87	07-22-92	5,579,102.24	5,515,329.76	123,600.00		9,560.00	Active	Operational
40. Calulut CIP II a. San Fernando b. San Rafael, Panipunan, Calulut c. Samba Ia, Inc.	-do-	36	36	36	Siquico Creek	75		a) 12-01-91 b) 05-01-92	08-30-92	1,729,956.75	1,592,201.39	63,900.00			Active	Under 30% equity (Equity not yet completed)
41. Cabrera PIS a. Arayat b. Cabrera c. Cabrera ISA	Participatory	90	90	30	Pampang Creek	60		a) 05-22-90 b) 12-15-91	06-30-92	1,282,955.16	1,128,836.47	54,000.00			Active	Operational

Table II.4

Name of System a) Municipality b) Barangay served c) Name of Association	Category	Service Area (ha.)	Irrigated This Year		Water Source	Average Yield (cav/ha)		Date Started a) Started b) Complete	Date Turnover	Project Cost		Yearly Amortization	Amortization Collection		Status of IA (Active or Inactive etc.)	Remarks
			Wet	Dry		Wet	Dry			Total Cost	Direct Chargeable Cost		This CY-92	To Date		
42. Mandang PIS a. Candaba b. Mandang c. Mandang ISA	-do-	265	35	180	Impanga Creek	70		75 a) 12-01-91 b) 05-09-92	11-15-92	1,045,000.00	850,141.52	81,000.00			Active	Under 10% equity, but equity to be gen. an of date of turnover is P12,187.40
Sub-Total			1,832	1,170						24,079,343.60	21,236,682.74	970,263.21	198,625.81	1,214,159.07		
A.1 Individual Pump (various locations) No. of units = 20066			5,692	3,577	2,330											
B. Non-Amortizing																
1. Dero CIS			204	65	65	Quintaji R.	80	75 a) 10-15-66 b) 03-31-67	12-31-67	No record available						farmers used brushland when used deepwells
b. Dero			140	-	-	-do-	-	a) No Record	-	-do-						Non-Operational. The system area totally covered by labor
2. Sapang Bales CIS			460	-	-	Iamban River	-	a) 01-15-85 b) -	Not yet turnover	-do-						Non-operational/Diversin dam was washed out. Totally affected by labor
a. Mabucot			275	275	275	Tanatum Creek	80	a) 01-15-67 b) 05-15-67	02-15-68	-do-						Operational. Farmers used brushland
b. San Vicente			335	50	50	Mabona	80	85 a) 02-15-67 b) 05-31-67	03-25-68	-do-						Operational
c. No registered IA			250	150	150	Quintaji R.	70	75 a) 04-15-67 b) 09-30-67	04-15-68	-do-						Operational - Brushland
3. San Pedro CIS			229	63	43	San Pedro Creek	70	75 a) 11-15-66 b) 05-15-67	12-31-67	No record						Operational - Freshland
a. Magalang			54	-	-	Williamis Creek	-	a) 10-15-74 b) 03-26-75	10-15-75	-do-						Non-operational. Totally affected by Mt. Pinatubo. Other areas converted to orchard.
b. San Pedro																
c. No registered IA																
8. Williamis CIS																
a. Poroc																
b. Williamis																
c. No registered IA																

Table II.4

Name of System a) Municipality b) Barangay served c) Name of Association	Category	Service Area (ha)	Irrigated This Year		Water Source	Average Yield (cav/ha)		Date Turnover	Project Cost		Yearly Amortization	Amortization Collection		Status of IA (Active or Inactive etc.)	Remarks
			Wet	Dry		Wet	Dry		Total Cost	Direct Chargeable Cost		This CY-92	To Date		
9. Magpayay CIS a. Sta. Rita b. San Basilio c. Magpayay IA	-do-	224	198	198	198 Sapang Masao	70	60	1955	-do-	-do-				Active	Operational, but 30 ha. covered by lahar
10. Paligay Livestock CIS a. Sta. Rita b. Dila-Dila c. No registered IA	-do-	90	64	64	64 Sapang Libudad	65	70	02-28-75	-do-	-do-				Active	Operational (29 ha. converted to sugarcane)
11. Tugugan CIP a. Florida Blanca b. Palanag c. Yulo Domic Farmers IA	-do-	211	-	-	Tugugan Creek	-	-	05-20-68	-do-	-do-				Inactive	Totally affected by Mt. Pinatubo eruption. Non-operat.
12. San Juan Bano CIS a. Arnyat b. San Juan Bano c. No registered IA	-do-	365	199	199	199 Bano Creek	70	75	09-30-67	-do-	-do-				Active	Operational
13. Salapangan CIS a. Candaba b. Salapangan c. No registered IA	-do-	688	70	70	No record	-	-	06-07-68	-do-	-do-				Inactive	Non-operational. Area planted in thru rained
14. San Gabriel CIS a. Macabebe b. San Gabriel c. No registered IA	-do-	194	150	150	150 San Gabriel Creek	70	65	1969	-do-	-do-				Inactive	Non-operat. Area submerged 44 ha. converted to fishpond. Irrig. area thru rained.
15. Bataan CIS a. Macabebe b. Bataan c. No registered IA	-do-	112	-	-	Bataan Creek	-	-	01-07-74	-do-	-do-				Inactive	Non-operat. Area is submerged
16. Masapo CIS a. Minalin b. Masapo c. No registered IA	-do-	241	-	-	Palamon creek	-	-	1963	-do-	-do-				Inactive	Non-operational. Totally covered by lahar
17. Dila-dila IA a. Sta. Rita b. Dila-dila c. Gago Dam IA	-do-	34	34	34	34 Gago Creek	-	-	03-15-56	-do-	-do-				Active	Operat system to be rehab. in 93
18. Division CIP a. Merico b. Malibico, San Vicente c. Siniguelas IA	-do-	72	72	72	72 Siniguelas Creek	70	65	-	-do-	-do-				Active	-do-
19. Virgen CIP a. Candaba b. Kabaung Palang c. No registered IA	-do-	1,078	-	-	100 Malibat Creek	-	80	a) not yet started	-do-	-do-				Active	-do-

Table II.4

Name of System a) Municipality b) Barangay served c) Name of Association	Category	Service Area (ha.)	Irrigated This Year		Water Source	Average Yield (cav/ha)		Date Started a) Started b) Complete	Date Turnover	Project Cost		Yearly Amortization	Amortization Collection		Status of IA (Active or Inactive etc.)	Remarks
			Wet	Dry		Wet	Dry			Total Cost	Direct Chargeable Cost		This CY-92	To Date		
20. San Bartolome CIP a. Sta. Ana b. San Bartolome c. San Bartolome MP Coop	-do-	300			Pampanga River										Active	Proposed project under NIA-PDDP-IC
21. Sapang Matsia CIP a. Lutho b. Sta. Rita, S. Miguel, Brongcalina Carmen, S. Francisco, S. Roque	-do-	300			Sapang Matsia Creek										Active	Proposed project under NIA-PDDP-IC
22. Candaring CIP a. Arayat b. Candaring	-do-	429	429	349	Sapang Pictan Crk.	10	90		Not yet turnover	1,811,000.00	1,517,599.90	163,643.20			Active	Scheme, Not yet turnover
23. Bano CIP a. Arayat b. Bano, San Juan c. Bano IA	-do-	300	300	50	Spring	80	80		Not yet turnover							Not yet implementation under PDDP-IC
Sub-total		7,094	2,122	1,466						1,811,000.00	1,517,599.90	163,643.20				
B.1 Individual Pumps (various locations) No. of units = 291		1,816	1,279	1,800												
Pump System																
1. Sto. Rosario PIS a. Candaba b. Sto. Rosario c. Sto. Rosario ISA	-do-	219	70	219	Pampanga R.	60	80		Not yet turnover						Active	Operational
2. Pausaao PIS a. Candaba b. Pausaao c. Pausaao ISA	-do-	163	163	163	-do-	60	70		-do-						Active	Non-oper'l. system under construction
3. Gulap PIS a. Candaba b. Gulap c. Gulap ISA	-do-	320	41	311	-do-	60	80		-do-						Active	Oper'l. for rehab. CY '91
4. Sta. Cruz-Candaring PIS a. Arayat b. Candaring c. Candaring ISA	-do-	202	112	202	-do-	65	80		-do-						Active	Proposed for CY '91
5. Langa-Pang PIS a. Candaba b. Langa-Pang c. Langa Multi-purpose Coop.	-do-	312	200	196	-do-	70	75		-do-						-do-	Proposed for CY '91

Name of System a) Municipality b) Barangay served c) Name of Association	Category	Service Area (ha.)		Irrigated This Year		Water Source	Average Yield (cav/ha)		Date		Turnover	Project Cost		Yearly Amortization	Amortization Collection		Status of IA (Active or Inactive etc.)	Remarks	
		Wet	Dry	Wet	Dry		a) Started	b) Complete	Total Cost	Direct Chargeable Cost		This CY-92	To Date						
6. San Miguel PIS a. San Simon b. San Miguel c. San Miguel Riverside IA	-do-	200	140	200	140	-do-	70	75									-do-	Proposed for CY 93	
7. Sta. Cruz PIS a. San Simon b. Sta. Cruz c. Sta. Cruz Damayan ISA	-do-	126	126	126	126	-do-	70	75										-do-	Proposed for CY 93
8. Sta. Cruz Pamblong PIS a. San Luis b. Sta. Cruz, Sta. Catalina c. Sta. Cruz, Sta. Catalina (Pamblong) IA	-do-	315	315	100	315	-do-	86	100	01-11-93			970,000.00	751,130.02	58,773.87				-do-	Scheme I completed (PDDP-IC)
9. Manique PIS a. San Juan b. San Luis c. Sillio Marequi IA	-do-	160	160	50	160	-do-	75	100	11-25-91			2,180,576.05	1,995,454.09	172,733.04				-do-	Scheme I completed (PDDP-IC)
10. PISA (Sta. Rita) PIS a. San Luis b. Sta. Rita, San Carlos c. PISA IA	-do-	314	314	70	314	-do-	76	100	04-22-92 07-31-92		Not yet turnover	400,000.00	392,049.19					-do-	Scheme I completed for final inspection (PDDP-IC)
11. Tagumpay PIS a. San Simon b. San Isidro c. Damayang Marganaka ng San Isidro	-do-	216	186	186	216	Sta. Monica Creek	70	95	10-01-91			6,672,667.98	3,797,448.96					-do-	Scheme II temporarily suspended (PDDP-IC)
12. Bagong Silang PIS a. San Simon b. San Juan c. Bagong Silang IA	-do-	160	50	50	160	Pampanga R.	71	100	04-20-92 05-30-92		Not yet turnover	1,443,281.89	1,232,115.33	115,718.26				-do-	Scheme I completed for final inspection (PDDP-IC)
13. Sta. Monica (PAGASA) PIS a. San Simon b. Sta. Monica c. PAGASA IA	-do-	220	220	220	220	Sta. Monica Creek	55	55										-do-	For implementation (PDDP-IC)
14. Karubuan PIS a. San Luis b. San Juan c. Karubuan IA	-do-	180	80	80	180	Kasulutan	75	75										-do-	
15. Vilkegco PIS a. Candaba b. San Agustin c. Vilkegco IA	-do-	80	20	20	80													-do-	

Table II.4

Name of System a) Municipality b) Barangay served c) Name of Association	Category	Service Area (ha.)		Irrigated This Year		Water Source	Average Yield (cav/ha)		Date		Turnover	Project Cost		Yearly Amortization	Amortization Collection		Status of IA (Active or Inactive etc.)	Remarks	
		Wet	Dry	Wet	Dry		a) Started	b) Complete	Total Cost	Direct Chargeable Cost		This CY-92	To Date						
16. Sta. Rita (RICAP) PIS a. San Simon b. Sta. Rita, Sta. Cruz, San Pablo c. RICAP IA 17. Mapanique PIS a. Candaba b. Mapanique, Panimlang c. St. Joseph Multi-Purpose Corp. Sub-Total	-do-	130	100	130	100	130	Dry											-do-	-do-
Other Government Agencies		4,537	2,946	3,434								8,168,197.59	347,225.17						
1. Malaboc CIS a. Malaboc b. No record c. No registered IA 2. Camachile CIS a. Malaboc b. Camachile 3. Nabiga CIS a. Malaboc h. Nabiga 4. Quinsang CIS a. Malaboc b. Panayunon, Boodangul c. No registered IA 5. Upper Camachile CIS a. Malaboc b. Upper Camachile c. No registered IA 6. Balen San Roque CIS a. Magalang b. Balen San Roque c. No registered IA 7. Puloog Cleland CIS a. Angeles City b. Cleland c. No registered 8. Tabon CIS a. Angeles City b. Tabon c. No registered	Dole net -do- -do- -do- -do- -do- -do- -do- -do- -do- -do- -do- -do- -do- -do-	143 279 279 114 30 450 50 70 60	Quitangil R. -do- Maliga Quitangil R. -do- Malina Creek Sampang Bau Tabon Creek	65 70 70 70	a) 1914 b) 1924 a) 1927 b) 1927 a) 1938 b) 1939 70 a) 10-15-66 b) 05-31-67 No data a) 02-15-70 b) 07-27-70 No data -do-	1924 1928 1940 01-15-68 01-15-71 -do- -do-	No record -do- -do- -do- -do- -do- -do- -do-								Inactive Inactive Inactive Active Inactive Inactive Inactive Inactive Inactive	Non-operl. area developed into subdivision Non-operl. area developed into subdivision Non-operl. area developed into subdivision System non-operl./brushdam Non-operl. area developed into subdivision Non-operational area affected by lahars Non-operational, system was washed out/area converted into subdivision Non-operational		

Table II.4

Name of System a) Municipality b) Barangay served c) Name of Association	Category	Service Area (ha.)	Irrigated This Year		Water Source	Average Yield (ca/ha)		Date		Date Turnover	Project Cost		Yearly Amortization	Amortization Collection		Status of IA (Active or Inactive etc.)	Remarks
			Wet	Dry		Wet	Dry	a) Started	b) Complete		Total Cost	Direct Chargeable Cost		This CY-92	To Date		
9. Ponce CIS a. Ponce b. Baho Pangabo c. No registered IA	-do-	165	-	-	Spring	-	-	-do-	-do-		-do-					Inactive	Non-operl, affected by Mt. Pinatubo eruption
10. Manibaug CIS a. Ponce b. Manibaug c. No registered IA	-do-	175	175	75	Manibaug Creek	50	75	-do-	-do-		-do-					Active	Non-operl, area restored/ farmers used bushdam
11. Leco CIS a. Ponce b. Leco c. No registered IA	-do-	90	-	-	Ponce River	-	-	-do-	-do-		-do-					Inactive	Non-operational
12. Pangasinan CIS a. Sta. Rita b. San Benito c. No registered IA	-do-	52	48	50	Pampanga	60	50	-do-	-do-		-do-					Active	Operational
13. San Juan Nepo CIS a. Guagua b. San Juan Nepocerno c. San Juan Nepocerno IA	-do-	66	35	20	Reis Creek	65	60	a) 10-15-62 b) 04-26-63	04-15-64		-do-					Active	Operational. Partly affected by labor. A total of 31 ha. was affected by labor
14. Cabalantian CIS a. Bacolor b. Cabalantian c. No registered IA	-do-	150	100	20	Gagu Creek	40	40	No record			-do-					Active	Partly operational/area was restored. Farmers use pumps
15. Calatagan a. Bacolor b. Calatagan c. No registered IA	-do-	55	-	-	Petero Creek	-	-	-do-	-do-		-do-					Inactive	Non-operl. Totally covered by labor
16. Panlog CIS a. Bacolor b. Panlog c. No registered IA	-do-	36	-	-	Tanalog Creek	-	-	-do-	-do-		No record					Inactive	-do-
17. San Isidro CIS a. Sta. Ana b. San Isidro c. No registered IA	-do-	160	100	100	Imbang Bacoa Creek	70	60	a) 1963 b) 1963	1964		-do-					Active	Operational/other areas thru transfer
18. Mexico CIS a. Mexico b. No record c. No registered IA	-do-	157	-	-	Mexico	-	-	a) 01-15-67 b) 06-30-67	03-15-69		-do-					Inactive	Non-operational
19. Abacan CIS a. Mexico b. San Jose c. No registered IA	-do-	90	-	-	Abacan River	-	-	a) 02-15-67 b) 07-31-69	05-25-70		-do-					Inactive	Non-operl, system affected by Mt. Pinatubo eruption/ farmers used deepwell

Table II.4

Name of System a) Municipality b) Barangay served c) Name of Association	Category	Service Area (ha.)	Irrigated This Year		Water Source	Average Yield (cav/ha)		Date Started a) Started b) Complete	Date Turnover	Project Cost		Yearly Amortization	Amortization Collection		Status of IA (Active or Inactive etc.)	Remarks
			Wet	Dry		Wet	Dry			Total Cost	Direct Chargeable Cost		This CY-'92	To Date		
20. Anao CIS a. Mexico b. Aaso c. No registered IA	-do-	120	172	-	Anao Creek	65	Dry	a) 01-02-67 b) 05-31-67	03-20-68	-do-	-do-			Active	Partly Operational/ farmers depend on rainfall	
21. Nueva Victoria CIS a. Mexico b. Nueva Victoria c. No registered IA	-do-	100	60	-	No record	-	-	a) 04-05-59 b) 01-26-60	11-30-60	-do-	-do-			Inactive	Non-operl. Farmers used rainfall method	
22. Sto. Domingo CIS a. Minalin b. Sto Domingo c. No registered IA	-do-	173	-	-	Sudaman Creek	-	-	No record -do-	-	-do-	-do-			Inactive	Non-operational/area submerged	
23. San Isidro CIS a. Minalin b. San Isidro c. No registered IA	-do-	151	-	-	No record	-	-	a) 1977 b) 1977	1978	-do-	-do-			Inactive	-do-	
24. Nigui CIS a. Masantol b. Nigui c. No registered IA	-do-	234	-	-	Pampang R.	-	-	a) 09-15-69 b) 03-30-50	12-31-60	-do-	-do-			Inactive	-do-	
25. Sagrada CIS a. Masantol CIS b. Sagrada c. No registered IA	-do-	241	-	-	-do-	-	-	a) 1954 b) 1954	1955	-do-	-do-			Inactive	Non-Operational/affected by Mt. Pinatubo eruption. Area is submerged.	
26. Malauti CIS a. Masantol b. Malauti c. No registered IA	-do-	213	-	-	-do-	-	-	No record -do-	-	-do-	-do-			Inactive	Non-Operational area is submerged	
27. Telecan CIS a. Macabete b. Telecan c. No registered IA	-do-	180	-	-	Telecan Creek	-	-	a) 1936 b) 1936	1937	-do-	-do-			Inactive	Non-Operational area is submerged	
28. San Juan CIS a. Macabete b. San Juan c. No registered IA	-do-	208	-	-	San Juan Creek	-	-	a) 1938 b) 1938	1939	-do-	-do-			Inactive	Non-Operational area is submerged	
29. San Rafael CIS a. Macabete b. San Rafael c. No registered IA	-do-	238	-	-	San Rafael Creek	-	-	a) 1940 b) 1940	1041	-do-	-do-			Inactive	Non-Operational area is submerged	
30. Sapa Libertad CIS a. Macabete b. Sapa Libertad c. No registered IA	-do-	206	-	-	Sapa Libertad	-	-	a) 1962 b) 1962	1963	-do-	-do-			Inactive	Non-Operational area is submerged	

Table II.4

Name of System a) Municipality b) Barangay served c) Name of Association	Category	Service Area (ha.)	Irrigated This Year		Water Source	Average Yield (cav/ha)		Date		Date Turnover	Project Cost		Yearly Amortization	Amortization Collection		Status of IA (Active or Inactive etc.)	Remarks
			Wet	Dry		Wet	Dry	a) Started	b) Complete		Total Cost	Direct Chargeable Cost		This CY-92	To Date		
31. San Jose CIS a. Macabebe b. San Jose c. No registered IA	-do-	249	-	-	San Jose Creek	-	-	a) 06-30-66 b) 01-29-67	11-30-67	-do-	-do-				Inactive	Non-operational	
32. Tucson CIS a. Macabebe b. Tucson c. No registered IA	-do-	171	-	-	Tucson Creek	-	-	a) 1972 b) 1972	1973	-do-	-do-				Inactive	Non-Operational	
33. Saplad David CIS a. Macabebe b. Saplad David c. No registered IA	-do-	376	-	-	Saplad Creek	-	-	a) 1971 b) 1972	1973	-do-	-do-				Inactive	Non-Operational area is submerged	
34. Sta. Maria CIS a. Macabebe b. Sta. Maria c. No registered IA	-do-	271	-	-	Sta. Maria	-	-	a) 10-15-72 b) 03-31-73	12-15-77	-do-	-do-				Inactive	Non-Operational	
35. Casule CIS a. Macabebe b. Casule c. No registered IA	-do-	265	-	-	Casule Creek	-	-	a) 01-07-73 b) 05-31-73	03-15-74	-do-	-do-				Inactive	Non-Operational	
36. San Roque CIS a. Macabebe b. San Roque c. No registered IA	-do-	134	-	-	San Roque Creek	-	-	No record -do-	-	-do-	-do-				Inactive	Non-Operational	
Sub-Total		6,204	690	393													
Pump System																	
1. San Nicolas PIS, Arayat	-do-	130	No data	-	Pampanga R.	75	-	No record	No record	-do-	-do-				Inactive	Operational	
2. Sto. Cristo PIS, Arayat	-do-	140	20	30	-do-	-do-	-	70	-do-	-do-	-do-				Active	Water source is w/in/ha	
3. San Antonio PIS, Mexico	-do-	120	-	-	Batis R.	-	-	-do-	-do-	-do-	-do-				-do-	-do-	
4. San Lorenzo PIS, Mexico	-do-	70	-	-	-do-	-do-	-	-do-	-do-	-do-	-do-				-do-	-do-	
Sub-Total		460	20	30													
Individual Pump (Land Bank Assisted)																	
No. of units = 7995		13,650															
Private																	
Dawe CIS	Date Out	199	-	-	Dawe Crk	-	-	a) 1958 b) 1958	1959	No record	No record				Inactive	Non-Operational. Area is submerged	
a. Minalin b. Dawe c. No registered IA																	
Total		45,003	12,468	10,383						37,507,469.12	30,922,480.23	1,481,131.56	196,625.81	1,214,159.07			

PART III

UNIT PRICE FOR INFRASTRUCTURES

Table III.1

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
CAPITAL OUTLAYS - AVERAGE UNIT COST

Category/Level of Improvement	Unit of Measure	1987	1988	1989	1990	1991		
						Original	21 Sept. 90 Price Inc.	05 Dec. 90 Price Inc.
National Roads								
Government								
Gravel to cement concrete	per Km	2,500,000	2,500,000	2,900,000	3,000,000	3,500,000	3,800,000	5,200,000
Gravel to asphaltic concrete	-do-	2,200,000	2,400,000	2,500,000	2,600,000	3,000,000	3,300,000	4,500,000
Gravel to DBST (Double Bituminous Surface Treatment)	-do-	1,000,000	1,100,000	1,500,000	1,600,000	1,800,000	2,000,000	2,700,000
Asphalt to cement concrete	-do-	2,000,000	2,200,000	2,300,000	2,400,000	2,800,000	3,000,000	1,400,000
Earth to gravel	-do-	600,000	650,000	800,000	850,000	1,000,000	1,000,000	1,400,000
Rehabilitation								
Cement concrete	per Km	1,200,000	1,400,000	1,500,000	1,600,000	1,800,000	2,200,000	2,800,000
Asphaltic concrete	-do-	1,000,000	1,100,000	1,200,000	1,300,000	1,500,000	1,800,000	2,300,000
Asphalt (DBST)	-do-	800,000	870,000	960,000	1,100,000	1,200,000	1,300,000	1,600,000
Gravel	-do-	300,000	330,000	400,000	450,000	500,000	500,000	600,000
Bridges								
Construction (Permanent)	per LM	80,000	87,000	90,000	95,000	110,000	120,000	180,000
Rehabilitation-Sailey	-do-	32,000	35,000	37,000	40,000	50,000	50,000	75,000
Provincial Municipal Roads - /*/								
Improvement								
a. Gravel to cement concrete	per Km	2,000,000	2,200,000	2,300,000	2,400,000	2,800,000	3,000,000	4,100,000
b. Gravel to asphaltic concrete	-do-	1,000,000	1,100,000	1,200,000	1,300,000	1,500,000	1,600,000	2,200,000
c. Gravel to DBST (Double Bituminous Surface Treatment)	-do-	800,000	870,000	960,000	1,100,000	1,200,000	1,400,000	1,900,000
d. Asphalt to cement concrete	-do-	1,500,000	1,700,000	1,800,000	1,900,000	2,200,000	2,400,000	3,200,000
e. Earth to Gravel	-do-	600,000	650,000	700,000	750,000	850,000	850,000	1,100,000

Note : /*/ - Road Standards	National Roads	Provincial Roads	Barangay Roads	
Carriageway Width (m)	12.00	10.00	6.00	
Pavement Width (m)	6.70	6.00	4.00	F - 1
Shoulder Width (m)	1.50 - 2.50	1.00 - 2.00	0.50 - 1.00	

Table III.1

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
CAPITAL OUTLAYS - AVERAGE UNIT COST

Category/Level of Improvement	Unit of Measure	1987	1988	1989	1990	1991		
						Original	21 Sept. 90 Price Inc.	05 Dec. 90 Price Inc.
Rehabilitation								
Cement concrete	per Km	1,000,000	1,100,000	1,200,000	1,300,000	1,500,000	1,600,000	2,100,000
Asphaltic concrete	-do-	800,000	900,000	1,000,000	1,100,000	1,200,000	1,300,000	1,700,000
Asphalt (DBST)	-do-	600,000	660,000	720,000	800,000	900,000	1,000,000	1,300,000
Gravel	-do-	300,000	330,000	350,000	400,000	450,000	450,000	600,000
Barangay Roads - 1 st								
Construction (Opening of Road)	per Km	300,000	320,000	500,000	550,000	600,000	600,000	800,000
Rehabilitation Improvement	-do-	120,000	125,000	200,000	220,000	250,000	300,000	400,000
Multi-purpose pavement	-do-				1,000,000	1,200,000	1,400,000	1,900,000
Schoolbuildings								
Academic Buildings								
1. One-Story								
a. Construction	per Room	60,000	65,000	100,000	125,000	130,000	160,000	205,000
b. Replacement	-do-	55,000	60,000	70,000	95,000	117,000	120,000	160,000
c. Rehabilitation	-do-	17,000	19,000	20,000	21,000	25,000	32,000	40,000
2. Above One-Story								
a. Construction	per Room	142,000	150,000	215,000	225,000	250,000	280,000	360,000
b. Replacement	-do-	125,000	130,000	135,000	200,000	235,000	250,000	320,000
c. Rehabilitation	-do-	37,000	40,000	45,000	50,000	60,000	65,000	85,000
3. Multi-purpose Workshop								
a. Construction	per Bldg.	120,000	130,000	140,000	155,000	170,000	195,000	250,000
b. Rehabilitation	-do-	36,000	39,000	42,000	45,000	50,000	56,000	72,000
4. Toilet								
a. Construction	per Unit	30,000	33,000	35,000	37,000	40,000	46,000	60,000
Note : 1 st - Roads Standards		National Roads		Provincial Roads		Barangay Roads		
Carriageway Width (m)		12.00		10.00		6.00		
Pavement Width (m)		6.70		6.00		4.00		
Shoulder Width (m)		1.50 - 2.50		1.00 - 2.00		0.50 - 1.00		

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
CAPITAL OUTLAYS - AVERAGE UNIT COST

Category/Level of Improvement	Unit of Measure	1987	1988	1989	1990	1991		
						Original	21 Sept. 90 Price Inc.	05 Dec. 90 Price Inc.
Water Supply - Level I								
a. Construction								
- Deep Well	per well	66,000	72,000	80,000	86,000	90,000	105,000	150,000
- Shallow Well	-do-	5,000	5,500	8,000	8,600	10,000	11,000	15,000
- Spring	-do-	110,000	120,000	250,000	270,000	300,000	350,000	500,000
b. Rehabilitation	-do-	5,000	5,500	6,000	6,500	8,000	8,000	10,000
c. Construction of Communal Faucet (Source Development)	per proj.	110,000	120,000	250,000	270,000	295,000	350,000	500,000
Flood Control								
a. Earth Dike								
	per LM	1,300	1,400	1,500	1,650	1,800	2,100	3,000
b. Revetment of Piles	-do-	16,500	18,000	20,000	22,000	24,000	30,000	42,000
c. Dredging	per cubic meter	28	30	32	35	39	45	100
d. Channel Improvement	-do-	17	18	20	23	24	28	40
e. Small Water Improvement Management (SWIM)	per Dam	550,000	6,000,000	7,000,000	8,500,000	9,200,000	10,500,000	15,000,000
f. Mini-Dams	-do-	34,100	38,000	45,000	63,000	69,000	90,000	110,000
I. Shore Protection								
a. Rubble concrete seawall with wooden piles	per LM	7,200	7,900	8,500	9,400	10,000	12,000	17,000
II. Office Buildings								
a. Construction	per sq. meter	3,300 to 4,400	3,600 to 4,800	4,000 to 5,500	4,600 to 6,800	5,000 to 7,000	6,000 to 9,000	8,000 to 13,000

As of 1994
ESTIMATE COST PER KILOMETERS

<u>National Roads</u>	<u>Cost</u>
a) Concreting	3.5 - P 5.0 Million
b) Asphalt	3.2 - 3.5 Million
c) Asphalt overlay	2.5 Million
d) Gravel	1 Million to 1.5 Million
<u>Provincial Roads</u>	<u>Cost</u>
a) Concreting	3.5 - P 4 Million
b) Asphalt	3 - 3.5 Million
c) Asphalt overlay	2 Million
d) Gravel	800,000 to 1 Million
<u>Barangay Roads</u>	<u>Cost</u>
a) Concreting	2.3 - 3 Million
b) Asphalt	3 - 3.5 Million
c) Asphalt overlay	2 Million
d) Gravel	500,000 to 600,000
<u>Bridges</u>	<u>Cost</u>
a) RCDG (Rainforce Concrete Deck Girder)	120,000 / lm. (Liner Meter)
b) Pre-stressed	150,000 / lm.
c) Timber Trestle	90,000 / lm.
d) Bailey Bridge	90,000 / lm.
e) Pre-Cast	100,000 / lm.

DATABOOK
GIS DATA DICTIONARY
(DB.6)

DATABOOK (DB.6)

GIS DATA DICTIONARY

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PROVINCIAL AND MUNICIPAL/CITY BOUNDARY
DELINEATION

DATA INFORMATION SHEET

ATTRIBUTE DATA DESCRIPTION:

1. COVERAGE NAME: PROVINCIALANDMUNICIPALCITYBOUNDARYDELINEATION

2. DESCRIPTION: This layer contains the delineation of provincial and municipal/city boundaries in the area covered.

3. FILENAME: NEWTOWN

4. FILESIZE: 483.3 KB

5. FEATURE REPRESENTATION: Polygons, lines, annotations

6. SOFTWARE USED: PC ArcInfo was used to build the data base while AutoCad was used to digitize graphic feature.

7. EQUIPMENT USED: The Kurta XLC (36" x 48") with resolution of up to 1279 points per inch and accuracy of ±0.01 inch mm was used to digitize the layer.

8. DATE CREATED: 1992

9. PRODUCER: The MPE-PMO of the Department of Public Works and Highways, and Louis Berger International, Inc.

10. PROPRIETOR: The MPR-PMO of the DPWH which took over the function of the MPE-PMO.

11. AVAILABILITY: The data may be made available at the discretion of the Program Director.

12. AREA COVERAGE: The data covers the province of Pampanga and portions of the provinces of Tarlac, Zambales, Nueva Ecija, Bulacan and Batang. This area corresponds to the features delineated in the 18 Quad Sheets from coordinates 119°45' longitude 14°45' latitude to 121°00' longitude 15°45' latitude.

13. DIGITIZING PROCEDURE: The data was digitized from the administrative boundaries as defined in the quad maps. The data in its original form was digitized using an assumed datum. The coverage, however, was later transformed to UTM Zone 51 coordinate system.

14. SOURCE(S) OF DATA: Provincial and Municipal/city boundaries were based on the delineations from the 1:50,000 scale USDMA maps revised in 1987 and NAMRIA maps updated in 1977.

ARC ATTRIBUTE TABLE (AAT)

LINE_ID	N	I	O	Description
1	-	-	0	Numeric code indicating administrative boundary levels each arc represents. The values are as follows:

- 1 - Provincial Boundary
- 2 - Municipal/City Boundary
- 4 - Shoreline
- 5 - Quad Boundary

Determines the ACAD layer where the feature will be placed when transferred to a CAD station. Also provides textual description to the codes listed above.

DXF_LAYER	C	I	O	Description
PROV_CODE	N	2	0	A user assigned code based on the first two digits of the zip code.
TOWN_CODE	N	4	0	A user assigned code based on the town's postal zip code.
PROV	C	20		Name of province
TOWN	C	25		Name of town/city

POLYGON ATTRIBUTE TABLE (PAT)

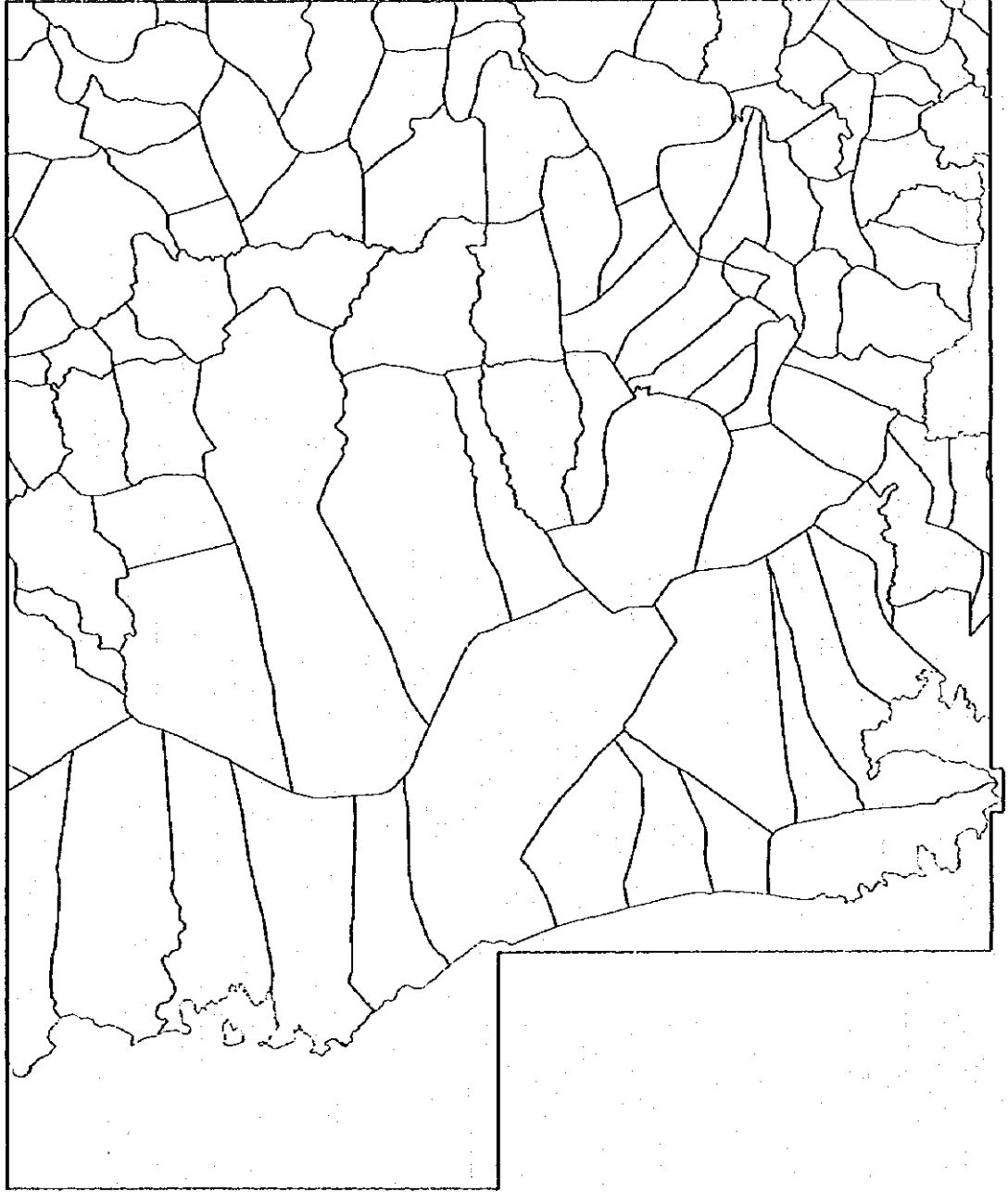
PROV_CODE N 2 0 A user assigned code based on the first two digits of the zip code.

TOWN_CODE N 4 0 A user assigned code based on the town's postal zip code.

PROV C 20 Name of province

TOWN C 25 Name of town/city

PROVINCIAL/TOWN BOUNDARY



BARANGAY BOUNDARY DELINEATION

DATA INFORMATION SHEET

ATTRIBUTE DATA DESCRIPTION:

1. **COVERAGE NAME:** BARANGAY_BOUNDARY_DELINEATION
2. **DESCRIPTION:** This layer contains the delineation of barangay boundaries in each town and cities in the area covered, and can be linked to an external database of population census through relate item "NSOCODE". Not all barangays, however, were accounted for in the source maps and their approximate locations can not be determined from other sources available at the time of the data creation.
3. **FILENAME:** NEUBRGY
4. **FILESIZE:** 3.4 MB
5. **FEATURE REPRESENTATION:** Polygons, lines, annotations
6. **SOFTWARE USED:** PC ArcInfo was used to build the data base while AutoCad was used to digitize graphic feature.
7. **EQUIPMENT USED:** The Kurta XLC (36" x 48") with resolution of up to 1279 points per inch and accuracy of ±0.01 inch mm was used to digitize the layer.
8. **DATE CREATED:** 1992
9. **PRODUCER:** The MPE-PMO of the Department of Public Works and Highways, and Louis Berger International, Inc.
10. **PROPRIETOR:** The MPR-PMO of the DPWH which took over the function of the MPE-PMO.
11. **AVAILABILITY:** The data may be made available at the discretion of the Program Director.
12. **AREA COVERAGE:** The data covers barangays in the province of Pampanga and portions of the provinces of Tarlac, Zambales, Nueva Ecija, Bulacan and Bataan. This area corresponds to the features delineated in the 18 Quad Sheets from coordinates 119°45' longitude 14°45' latitude to 121°00' longitude 15°45' latitude.
13. **DIGITIZING PROCEDURE:** The data was digitized from blueprints of municipal/ city maps. Barangay boundaries were digitized and then fitted within the town boundaries lifted from quad maps. Comments edits were applied since the municipal/ city boundaries as defined by the two sources do not correspond. Approximate boundaries were delineated by the consultant for barangays listed in the 1990 census but not shown in the maps. The original data was digitized using an assumed datum. The coverage, however, was later transformed to UTM Zone 51 coordinate system.
14. **SOURCE(S) OF DATA:** Provincial and Municipal/city boundaries were taken from the USDMA maps revised in 1987 and NAMRIA maps updated in 1977. Barangay boundaries were based 1970 NSO maps. Both sources are in a 1:50,000 scale.

ARC ATTRIBUTE TABLE (AAT)

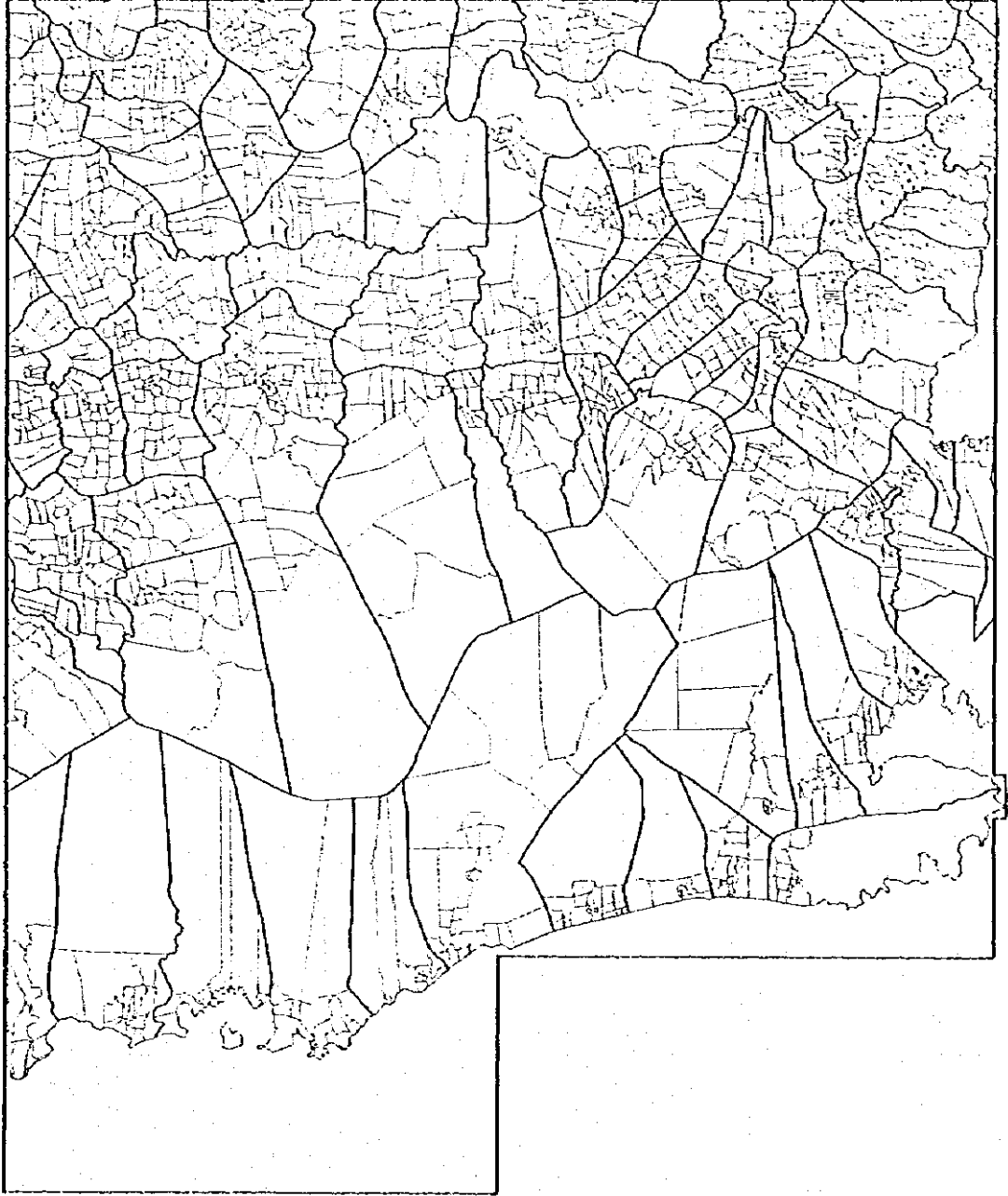
LINE_ID	N	11	0	Numeric code indicating administrative boundary levels each arc represents. The values are as follows:
1	-			Provincial Boundary
2	-			Municipal/City Boundary
3	-			Barangay Boundary
4	-			Shoreline
5	-			Quad Boundary

DXF_LAYER C 10
Determines the ACAD layer where the feature will be placed when transferred to a CAD station. Also provides textual description to the codes listed above.

POLYGON ATTRIBUTE TABLE (PAT)

PROV_CODE	N	2	0	A user assigned code based on the first two digits of the zip code.
TOWN_CODE	N	4	0	A user assigned code based on the town's postal zip code.
BRGY_CODE	N	7	0	A user assigned code with the first 4- digits based on TOWN_CODE and the rest generated by the computer.
PROV	C	20		Name of province
TOWN	C	25		Name of town/city
BRGYNAME	C	30		Name of barangay
NSOCODE	C	8		NSO assigned code which was adopted when they were made available.

BARANGAY BOUNDARY



ROAD NETWORK DELINEATION

DATA INFORMATION SHEET

ATTRIBUTE DATA DESCRIPTION:

1. **COVERAGE NAME:** ROAD_NETWORK_DELINEATION
2. **DESCRIPTION:** This layer contains the delineation of roads within the area covered.
3. **FILENAME:** RDUTM
4. **FILESIZE:** 1.5 MB
5. **FEATURE REPRESENTATION:** Lines
6. **SOFTWARE USED:** PC ArcInfo was used to build the data base while AutoCad was used to digitize graphic feature.
7. **EQUIPMENT USED:** The Kurta XLC (36" x 48") with resolution of up to 1279 points per inch and accuracy of ±0.01 inch mm. was used to digitize the layer.
8. **DATE CREATED:** 1992
9. **PRODUCER:** The MPE-PMO of the Department of Public Works and Highways, and Louis Berger International, Inc.
10. **PROPRIETOR:** The MPR-PMO of the DPWH which took over the function of the MPE-PMO.
11. **AVAILABILITY:** The data may be made available at the discretion of the Program Director.
12. **AREA COVERAGE:** The data covers the province of Pampanga and portions of the provinces of Tarlac, Zambales, Nueva Ecija, Bulacan and Bataan. This area corresponds to the features delineated in the 18 Quad Sheets from coordinates 119°45' longitude 14°45' latitude to 121°00' longitude 15°45' latitude.
13. **DIGITIZING PROCEDURE:** The data was digitized from the roads and highways delineation as defined in the quad maps. The data in its original form was digitized using an assumed datum. The coverage, however, was later transformed to UTM Zone 51 coordinate system.
14. **SOURCE(S) OF DATA:** Roads and highways delineation were taken from the 1:50,000 scale USDMA maps revised in 1987 and NAMRIA maps updated in 1977.

ARC ATTRIBUTE TABLE (AAT)

CLASS	N	I	0	Numeric codes to determine road classification as follows:
				1 - Fair or dry weather, loose surface
				2 - All weather, loose or light surface, one lane wide
				3 - All weather, hard surface, one lane wide
				4 - All weather, loose or light surface, 2 lanes wide
				5 - All weather, hard surface, 2 or more lanes wide
				6 - All weather, hard surface, divided highway with median strip
RDCLASS	N	I	0	Numeric codes use to identify the major road arteries in the area. Values are as follows:
				1 - Major arteries
				2 - Others
DXF_LAYER	C	I	0	Defines the ACAD layer where feature will be placed when transferred to a CAD station. It also provides textual description to the RDCLASS codes listed above.

ROAD NETWORK

