6. Discussion

(i). Field Data

Field assessments were done to identify the erosion level at site. Field visits, interviews etc. and traversing the area along the road network could identify the erosion hazard patches in the study area. After observation of selected area were mapped and it is shown in fig.8. A map based identification of field information systems was found satisfactory. Field identification of land use showed that the major land use in sample areas were in agreement with the field land data. Soils in the area were also checked and compared with the available soil maps and was found to be in agreement.

(ii). USLE Parameters

The parameters of USLE were extracted from various sources. However other than the land use parameters, the rest had single values on literature. Land use parameters were selected as the minimum recommended value. Soil loss from equation using the minimum land use parameters and the other parameters cited in literature indicated a high annual soil loss. Therefore land use factors were kept at the minimum values stated in publications. Soil erodibility values were taken as the values recommended by Joshua(1977). Rainfall erosivity was relation to mean annual rainfall using the regression equation by Premalal (1988).There parameters used in this study showed an average soil loss value of 33 ton/ha/yr

(iii). Aggregating Area Specific Attributes,

Area specific attribute LS factor was incorporated into computation of annual soil loss by taking the weighted average of RKCP in the polygons within each similar LS polygon. This could be done using the map dissolve function in the GIS software. Therefore the hazard polygons did not exactly reflect the true hazard potential ,when the LS polygons were too big. As such for better computations the LS polygons need

to be broken into many smaller ones. However the limitation of breaking into smaller polygons would be the limitation of software to handle large amounts of data.

(iv). Level of Soil Erosion.

Field observation polygons fitted with the computed annual soil loss polygons from USLE showed to vary with different classifications for soil erosion hazard levels. The best fit was obtained for the trial No. 3, classification.(Table-5.4). Comparing the values it could be stated that land use, erodibility and crop management parameters taken for computations, shows good matching of approximating 85% and a poor matching of the remaining polygons. Therefore if USLE is used with standard efficient in literature for Kegalle district, then an average annual soil loss >45 ton/ha/yr could be Classified As severe, 26< loss <45 ton/ha/yr is moderate soil erosion and <26 ton/ha/yr for no or insignificant soil erosion hazard zones and shown in figure 13.

(v). Field Data Collection of Soil erosion, land use, soil types etc. for a project with a spatial extent of this study area (230 sq.km.) is quite large. It needs to be based on spatial coverage of which boundaries are foot paths, cart tracts, and gravel roads not the grid base. The spatial details could be easily mapped on to a scale of 1:10,000 using a pre coding methodology.

(vi) The land use factors in this study did not influence significantly , because, the major portion (76 %) of the area was Rubber plantation. Therefore it may be necessary to carry out a detail sample area study having a variety of land use.

(vii) The comparison of field identified erosion levels with compute erosion level used a trial and error variation of erosion class classification to visually verify the estimation. This proved to be a good method because field identified polygons may not be able to exactly mathematically fit to computations without using a significant number of polygons thus making computer handling a complex issue.

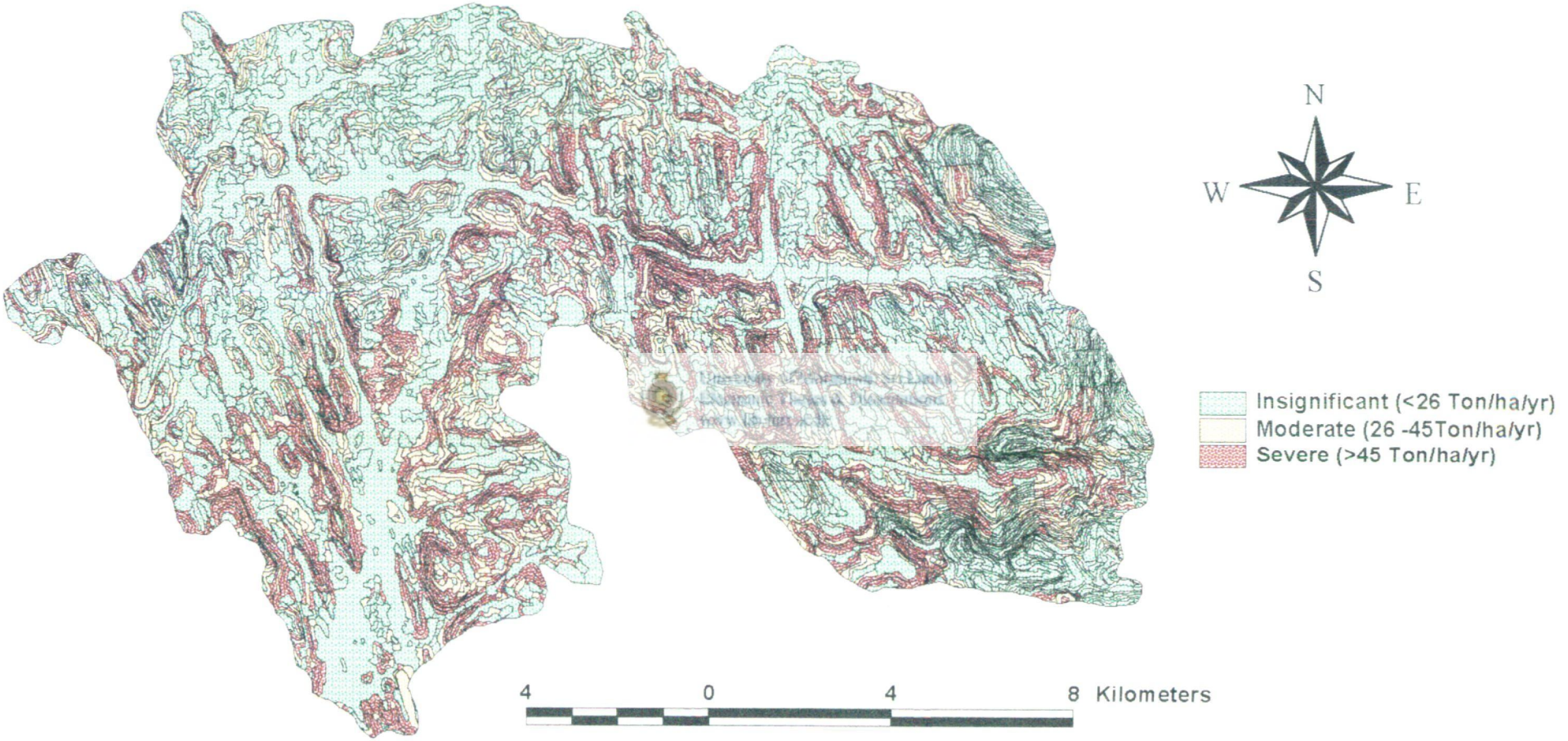

Figure 13: Field Verified Erosion Hazard Classification - Gurugoda Watershed

7. Conclusions and Recommendations

7.1 Conclusions

i. A soil erosion hazard assessment model using GIS as a tool can successfully model the critical zones for watershed management with a 97% of very good or good comparison.

ii. Field verified soil erosion model based on USLE enabled the identification threshold annual soil loss values for erosion hazard zones as indicated below.

Annual soil loss	Erosion hazard zones
<26 ton/ha/yr	Insignificant
26 – 45 ton/ha/yr	Moderate
>45 ton/ha/yr	Severe

iii. Based on the field verified model the watershed managers can easily apply the USLE rationally selecting the parameters and select the cistical soil erosion zones using the above threshold values as guidelines in selecting the priority area for soil conservation watershed.

iv. Actual erosion hazard zones of watershed of this magnitude can easily be recorded using 1:10,000 maps and a pre coded questionnaire.

7.2 Recommendation.

i. The slope class polygons used in this study area quite big and hence proved difficult to match with field observed zones. As such it is necessary to use smaller slope class polygons for better model verifications.

ii. The watershed selected was predominant with Rubber plantations. Therefore the effect of land use may not have reflected well in the results. Therefore it may be necessary to carryout further work with different land use for strengthening results from this study.

Iii .Measurements of soil loss from plots under different scenario needs to be done for calibration of the parameters used in the USLE. This would enable the comparison of threshold values found from literature with the values obtained from present model.

iv. The erosion hazard zoning model indicated that 80% of the watershed was with the threat of moderate or severe soil erosion hazard. This areas are recommended to be implemented for watershed management.

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Appendix 1.

Field Data Collection Sheet For Watershed Management – Kegalle District

A **General**

1. District ..... 2. D.S.Division .....
3. A.S.C. Area ..... 4. Village/(G.S. Division) ..
5. Name of Recorder ..... 7. Extent of Village . .... Ac
6. Name of Interviewer ..... .

6.i. Male/female, ii Age ....

B. **Land use**

Description.	Ac	Land slope classes, (% Average)						If any soil conservation practice used	
		0-7	8-15	16-20	21-30	31-40	>40	Y/N	If yes method
1. Total Extend									
2. Crop i. Tea								Y/N	
ii. Rubber								Y/N	
iii. Coconut								Y/N	
iv. Forest								Y/N	
v. Paddy								Y/N	
vi. Scrub								Y/N	
vii. Others								Y/N	

C. **Soil**

Soil type	Depth cm	Surface texture
1		
2		
3		
4		

D. **Erosion Hazad (type)**

1. High 2. Moderate 3. Negligible

E. Any land slide experienced surrounding the area ;

Yes/No; If yes, where/ when

Appendix 2

ජල පෝෂක ප්‍රදේශ කළමණාකරණය

තොරතුරු වාර්තාව - කැගල්ල දිස්ත්‍රික්කය

අ. සාමාන්‍ය තොරතුරු

1. දිස්ත්‍රික්කය . . . .
2. ප්‍රා.ලේ. කොට්ඨාස - . . . .
3. ගොවිජන කේන්ද්‍රය - . . . . . .
4. ග්‍රාමනිලධාරී කොට්ඨාස - . . . .
5. සටහන් තබන්නාගේ නම - . . . .
6. තොරතුරු ලබාගන්නාගේ නම - . . . .
7. ස්ත්‍රී/පුරුෂ - . . . . .. වයස - අවු . . . .

ආ. වගා තොරතුරු - (තොරතුරු ලබාගන්නාගේ)

විස්තරය	ප්‍රමාණය අක්කර	ඉඩම් වල දල බැවුම් %						පාංශු බාදන වැඩ සටහන් කර ඇති/නැති වග
		0 - 7	8 - 15	16-20	21-30	31-40	40›	
1. මුළු අයිති ඉඩම් ප්‍රමාණය								
2. වගාවන්								
I. වී (කුඹුරු)								
ii. තේ								
iii. රබර්								
iv. පොල්								
v. වෙනත් වගා								
vi. ලදු කැලෑ								
vii කැලැවන්								

ඇ. පසේ තත්ත්වය

පස් වර්ගය	දල ගැඹුර	මතුපිට පෙනුම

ඈ. පාංශු බාදනය වීමේ මට්ටම

1. තදි න්ම බාදනය වේ 2. සාමාන්‍යයෙන් බාදනය වේ 3. සැලකිය යුතු තරම් නැත

ඉ. අවට නාය යෑම් වාර්තා වී ඇත්ද ඔව්/නැත

i ඔව් නම් කෙසේද ? . . . ii. කොයි කාලයේද ? . . . . . .

ඊ . වෙනත් . . . . . .

Appendix :3 **STATION NAME: DEHIOWITA (DUNEDIN)**

LAT:7.03 LON: 80.28E ELEV;122.0M

ELEMEN Precip,Total Mly in Milimeters

Missing data values are coded as -9.9M

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1983	5.6	9.4	4.2	182	244.0	353.1	300.2	342.4	444.5	256.3	367.4	554.9	3063.6
1984	381.7	199.9	675.3	632	470.7	454.0	718.0	42.4	455.2	219.1	956.1	73.1	5277.9
1985	264.8	285.7	401.6	258	458.7	753.9	209.4	446.6	261.4	660.5	504	208.7	4713.1
1986	215.4	251.9	188.7	329	238.8	169.1	100.3	209.6	501.4	464.0	189.7	253.4	3110.9
1987	41.8	0	73.2	511.0	512.7	390.3	13.4	464.8	336.3	957.3	365.7	115.6	3782.1
1988	61.0	239.0	260.3	343	391.0	507.6	565.6	652.7	443.6	193.9	400.1	105.2	4162.8
1989	25.4	0	84.2	280	464.3	796.7	381.2	378.3	310.41	512.7	458.3	-9.9M	3691.4
1990	142.0	7.1	262.5	52.2	481.1	256.0	326.1	41.1	45.1	446.2	539.3	304.0	2902.7
1991	326.6	27.6	155.5	290	466.7	584.9	312.3	139.5	132.6	397.5	361.1	148.8	3342.7
1992	89.7	0	59.7	395.0	453.3	426.7	368.6	205.7	353.0	543.6	365.0	123.5	3383.8
1993	89.0	35.1	163.1	421	493.0	385.2	139.0	128.6	321.4	779.3	492.7	367.3	3814.3
1994	38.7	207.0	187.8	362	464.0	238.6	192.1	134.4	272.6	438.4	582.6	31.6	3149.3
1995	99.6	88.0	47.6	653	579.6	424.9	137.3	388.7	255.2	442.8	348.0	-9.9M	3465.0
1996	94.6	99.6	52.3	295	62.5	391.9	236.0	147.8	566.0	155.4	175.5	28.1	2304.9
1997	34.3	42.7	97.4	249	520.2	177.0	458.4	119.8	667.6	810.0	453.1	316.3	3946.1
1998	232.1	8.1	111.8	334.0	760.9	281.4	451.8	306.0	823.1	509.8	228.6	299.5	4347.1
1999	140.7	184.9	267.2	270	437.3	297.9	235.0	245.3	236.5	581.7	-9.9M	-9.9M	2896.6
AVERAGE	134.3	99.2	181.9	344.4	441.1	405.2	302.6	258.5	378.0	492.3	424.2	209.3	3724.0

Appendix 4

STATIO NAME :AMBANPITIYA
LAT:7.23N LON: ELEV : 201.2M
ELEMENT: Precip,Total Mly in Milimeters
Missing data values are coded as -9.9M

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1983	0	10.9	10.2	57.2	211.1	278.1	103.3	162.8	198.2	132.0	313.4	226.2	1703.4
1984	175.0	122.0	359.8	537	161.1	233.5	343.6	7.5	277.6	164.5	357.5	105.5	2844.2
1985	100.3	99.3	68.8	124	519.5	442.2	236.9	106.3	227.1	414.9	364.4	170.5	2874.1
1986	371.8	139.9	88.9	233	102.6	55.7	58.6	80.4	290.4	334.1	195.8	110.1	2061.4
1987	51.9	0	79.1	380	223.11	200.4	0	254.7	200.7	563.0	95.4	12.6	2061.3
1988	0	195.9	129.5	441.0	265.4	437.1	591.3	429.4	462.8	132.6	385.5	67.0	3537.5
1989	54.2	0	91.6	176	259.6	40.2	295.0	90.5	137.8	196.6	155.7	0.0	1496.9
1990	167.2	38.2	123.5	64.5	252.6	504.9	108.1	27.4	18.7	224.3	146.4	92.0	1767.8
1991	95.1	9.7	149.2	198	111.2	154.0	292.5	65.4	22.2	282.7	394.3	18.2	1792.3
1992	0	0	6.3	157	145.4	144.4	233.0	37.1	126.7	402.1	370.8	28.0	1650.5
1993	0	84.0	69.4	162	241.5	112.2	154.0	138.6	93.2	816.1	599.8	204.9	2675.9
1994	68.0	177.7	40.6	196	255.2	284.4	119.3	86.0	236.8	685.5	435.0	2.0	2586.6
1995	190.0	5	149.5	519	563.9	193.1	96.7	235.5	211.5	286.1	414.5	0	2864.6
1996	75.4	61.1	66.5	353	15.0	133.2	133.2	103.4	440.1	351.0	247.3	17.5	1996.3
1997	0	43.6	178.4	197	401.7	292.3	292.3	57.4	448.1	666.2	459.3	256.1	3292.0
1998	64.2	0.5	53.0	242	401.3	311.7	311.7	307.8	419.3	404.9	300.2	207.3	3024.0
1999	133.1	118.2	67.9	439	427.7	119.6	119.6	122.2	97.1	611.1	-9.9M	-9.9M	2255.3
AVERAGE	91.0	65.1	101.9	263.2	268.1	231.6	205.2	136.0	229.9	392.2	327.2	94.9	2423.0

Appendix :5

STATION NAME:UNDUGODA (YATADERIYA)
LAT:7.13 LON:80 ELEV:*****M
ELEMEN Precip,Total Mly in Milimeters
Missing data values are coded as -9.9M

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1983	11.4	80.8	14.5	55.1	281.5	336.6	136.2	377.5	281.8	289	431.0	432.9	2,728.3
1984	291.5	126.4	414.1	507	431.0	263.1	522.4	60.9	336.4	168.7	535.0	38.0	3,694.0
1985	67.0	39.5	167.7	205	303.1	738.8	281.1	302.3	218.3	561.9	473.4	266.2	3,623.8
1986	202.8	36.2	143.7	496	185.7	202.5	173.0	200.3	362.9	335.2	162.4	22.0	2,522.5
1987	11.7	0	123.8	336	416.6	368.0	0	400.1	365.3	934.7	290.1	150.8	3,396.6
1988	117.6	207.2	203.0	-9.9M	-9.9M	-9.9M	-9.9M	-9.9M	-9.9M	-9.9M	-9.9M	-9.9M	527.8
1992	-9.9M	-9.9M	10.0	284	380.1	533.0	417.5	227.2	-9.9M	773.1	-9.9M	-9.9M	2,624.5
1993	-9.9M	-9.9M	136.5	278	398.9	442.5	250.7	140.5	202.5	862.1	598.0	289.7	3,599.2
													-
AVERAGE	117.0	81.7	151.7	308.4	342.4	412.1	254.4	244.1	294.5	560.7	414.98	199.93	3,381.0

Appendix 6. Comparison Using Standard Deviation as Classification.-Trial .2

Field Observations Polygon No.	Field Observation Ranking	Computed Ranking	Matching	Field Observations Polygon No.	Field Observation Ranking	Computed Ranking	Matching	Field Observations Polygon No.	Field Observation Ranking	Computed Ranking	Matching	Field Observations Polygon No.	Field Observation Ranking	Computed Ranking	Matching
1	1	1	G	17	1	1	G	33	2	1	M	49	1	2	M
2	1	1	G	18	1	3	P	34	1	1	G	50	1	1	G
3	1	1	G	19	1	1	G	35	2	1	M	51	1	1	G
4	1	1	G	20	2	1	M	36	2	1	M	52	1	2	M
5	1	1	G	21	2	3	M	37	1	1	G	53	2	1	M
6	1	1	G	22	1	1	G	38	2	3	M	54	2	1	M
7	2	3	M	23	1	1	G	39	2	3	M	55	2	1	M
8	2	3	M	24	2	2	G	40	1	1	G	56	2	1	M
9	2	3	M	25	1	1	G	41	1	1	G	57	2	1	M
10	1	2	M	26	1	1	G	42	1	1	G	58	2	1	M
11	1	3	P	27	1	1	G	43	1	2	M	59	1	1	G
12	1	1	G	28	1	3	P	44	1	1	G	60	2	1	M
13	1	1	G	29	1	1	G	45	2	1	M	61	2	2	G
14	1	1	G	30	1	1	G	46	2	3	M	62	1	1	G
15	1	1	G	31	1	1	G	47	2	3	M	63	1	1	G
16	1	3	P	32	2	1	M	48	2	2	M				

No of G =33

No of M =26

No of P =4

P -Poor matching - 6.3%

M Good matching - 41.3%

G -V. Good matching - 52.4%

Appendix 7. Comparison Using Standard Deviation as Classification.-Trial .4

Field Observations No.	Field Observation Ranking	Computed Ranking	Matching	Field Observations Polygon No.	Field Observation Ranking	Computed Ranking	Matching	Field Observations Polygon No.	Field Observation Ranking	Computed Ranking	Matching	Field Observations Polygon No.	Field Observation Ranking	Computed Ranking	Matching
1	1	1	G	17	1	1	G	33	2	1	M	49	1	2	M
2	1	1	G	18	1	3	P	34	1	1	G	50	1	1	G
3	1	1	G	19	1	2	M	35	2	1	M	51	1	1	G
4	1	1	G	20	2	2	G	36	2	2	G	52	1	2	M
5	1	2	M	21	2	3	M	37	1	1	G	53	2	3	M
6	1	1	G	22	1	2	M	38	2	3	M	54	2	1	M
7	2	3	M	23	1	1	G	39	2	3	M	55	2	1	M
8	2	3	M	24	2	2	G	40	1	3	P	56	2	1	M
9	2	3	M	25	1	1	G	41	1	2	M	57	2	1	M
10	1	2	M	26	1	1	G	42	1	1	G	58	2	1	M
11	1	3	P	27	1	1	G	43	1	2	M	59	1	1	G
12	1	2	M	28	1	3	P	44	1	2	M	60	2	2	G
13	1	2	M	29	1	1	G	45	2	1	M	61	2	2	G
14	1	1	G	30	1	1	G	46	2	2	G	62	1	3	P
15	1	1	G	31	1	2	M	47	2	3	M	63	1	2	M
16	1	2	M	32	2	1	M	48	2	3	M				

No of G =26

No of M =32

No of P =5

P -Poor matching - 7.9%

M _Good matching - 50.8%

G -V. Good matching - 41.3%

Appendix 8. Comparison Using Standard Deviation as Classification.-Trial .3

Field Observations Polygon No.	Field Observations	Computed Ranking	Matching	Field Observations Polygon No.	Field Observation Ranking	Computed Ranking	Matching	Field Observations Polygon No.	Field Observation Ranking	Computed Ranking	Matching	Field Observations Polygon No.	Field Observation Ranking	Computed Ranking	Matching
1	1	1	G	17	1	1	G	33	2	1	M	49	1	2	M
2	1	1	G	18	1	2	M	34	1	1	G	50	1	1	G
3	1	1	G	19	1	2	M	35	2	1	M	51	1	1	G
4	1	1	G	20	2	1	M	36	2	1	M	52	1	2	M
5	1	1	G	21	2	2	G	37	1	1	G	53	2	2	G
6	1	1	G	22	1	1	G	38	2	3	M	54	2	1	M
7	2	3	M	23	1	1	G	39	2	3	M	55	2	1	M
8	2	2	G	24	2	2	G	40	1	3	P	56	2	1	M
9	2	2	G	25	1	1	G	41	1	1	G	571	2	1	M
10	1	2	M	26	1	1	G	42	1	1	G	58	2	1	M
11	1	2	M	27	1	1	G	43	1	1	G	59	1	1	G
12	1	1	G	28	1	2	M	44	1	2	M	60	2	1	M
13	1	1	G	29	1	1	G	45	2	1	M	61	2	2	G
14	1	1	G	30	1	1	G	46	2	1	M	62	1	3	P
15	1	1	G	31	1	1	G	47	2	2	G	63	1	1	G
16	1	1	G	32	2	1	M	48	2	3	M				

No of G =36

No of M =25

No of P =2

P -Poor matching - 3.2%

M _Good matching - 39.7%

G -V. Good matching - 57.1%

Appendix. 9

Summary of conservation practices for major crops.

	Visited G.N.Division		Total Area	(Acs)	Map	Major	Any cons.
	No.	Name	High Land	Paddy	Reference	Crop	practice Y/N
1	63	Ampe	339	33	3	Scrub/F	N
						Paddy	Y
						Rubber	Y
2	62	Arukgammana	450	15	3	OP	N
						Rubber	Y
						Coconut	N
3	61B	Pothukoladeniya	851	45	3	Scrub/F	N
						Rubber	Y
						Coconut	N
4	91	Udabage	143	53	1	Tea	Y
						Rubber	Y
						Paddy	N
						OP	N
5	93	Madeniya	224	42	1	Tea	Y
						Rubber	Y
						Paddy	Y
						OP	N
6	61C	Hapudeniya	388	24	3	Rubber	Y
						Paddy	Y
						coconut	N
						Rubber	Y
7	87	Kohombadeniya	248	12	1	Tea	Y
						Rubber	Y
						Scurb	N
						OP	N
8		Kinigama	719	56	4	OP	N
						Rubber	Y
						Coconut	N
9	65	Pindeniya	198	20	3	Rubber	N
						Paddy	Y
						OP	N
10	69A	Dematanpitiya	496	53	6	OP	N
						Scrub	N
						Forest	N
						Paddy	Y

11	65B	Boyagoda	591	50	5	Rubber	Y
						Coconut	N
						paddy	Y
						Scrub	N
12	63A	Rukgahatenna	262	10	3	OP	N
						Rubber	Y
						Coconut	Y
13		Karagala	777	50	7	OP	N
						Rubber	Y
						Coconut	N
						Paddy	Y
14	62B	Hatnapitiya	297	5	9	Forest	N
						Rubber	Y
						OP	Y
15	55	Talewela	306	10	7	Rubber	Y
						OP	N
						Coconut	N
16	57A	Eragama	302	55	8	Rubber	Y
						Paddy	Y
						OP	N
17	54	Godigamuwa	198	78	7	OP	N
						Paddy	Y
						Rubber	Y
18	43D	Udamagama	327	40	7	Rubber	Y
						Paddy	Y
						OP	Y
19	48E	Madopola	340	32	7	OP	N
						Rubber	Y
						Paddy	Y
20	55D	Meedeniya South	347	23	7	Rubber	Y
						Paddy	Y
						OP	N
21	54A	Wathura	230	65	7	Rubber	N
						Paddy	Y
						OP	N
22	55C	Meedeniya North	416	120	7	Paddy	Y
						Coconut	N
						OP	N
23	58B	Ganthuna Pallegama	198	48	9	Paddy	Y
						Paddy	
24	56B	Udugoda	400	18	4	OP	
						Rubber	y
25	56C	Hungampola	214	68	7	Coconut	n
						Paddy	
26	57	Athurupane	190	18	8	Forest	
						OP	
27	59	Mabopitiya	140	60	8	OP	
						Paddy	
						Rubber	y
28	49E	Minuwangamuwa	196	43	8	OP	
						Rubber	n
						Paddy	
29	58A	Ganthuna Pallegama	166	46	9	Rubber	n
						Paddy	

Field Visit Details
D.S. Division : Galigamuwa.

Appendix 10.

	Date of Field Visit	Persons who met at the field	Visited G.N.Division No.	Visited G.N.Division Name	Officers who accompanied visit	Total Area High Land	(Acs) Paddy	Mostly Affected Area (Acs)	Map Refere	Major Crop
		Yattegoda ASC Area								
1	22/2/2000	K.P.Sunil,P.Ranjith, N. Podinona S.Siyadooris,M .Beebihamy.	63	Ampe	D.Dias Gunawardhana ,Senior Technical Officer. Agriculture Instructor(AI),Divisional Officer(DO) Technical Officer(TA)	339	33	21	3	Scrub/F
2	22/2/2000	K.Thilakaratna, M.Abbubaker, K.Priyantha,D.R.M.S.Yaso.	62	Arukgammana	R.A. Indrani Siriyalatha ,STA	450	15	34	3	OP
			61B	Pothukoladeniya	K.K. Ranjanee,TA	851	45	8	3	Scrub/F
3	3/1/00	S.Wijesiri, S.H.Karunaratna.	91	Udabage	K.P.G.A. Jayatissa,Divisional Officer (DO) ,Agriculture Instructor(AI)	143	53	21	1	Tea
4	3/2/00	.A..Wijekoon. ,K.M.Piyaseeli.	61C	Hapudeniya	R.A.L.Wijesekara ,Divisional Officer (DO) ,Agriculture Instructor(AI) Technical Officer(TA)	388	24	28	3	Rubber
5	3/9/00	H.H..Gunawardana.,H.A.Jayasena.		Kinigama	H.H.A.Gunasekara,DO,STA	719	56	8	4	OP
6	3/10/00	K.R.Martin, D.M.Hendric	65	Pindeniya	S.M.R.T. Kumarihamy,DO,STA Nandani ,STA	198	20	9	3	Rubber
7	3/25/00	P.G.Karunawathi. , L.M.Siyadoris	69A	Dematanpitiya	D.R. Sanath Kumara,STA	496	53	2	6	OP
8	4/28/00	E.P.Hapuwita. ,E.P. Piyadasa.	65B	Boyagoda	M.A. Ananda Chandrasiri,TA ,DO	591	50	4	5	Rubber
9	4/29/00	P.Sirisoma. ,P.R.Nandasena.	63A	Rukgahatenna	R. Gamini Rajapaksha ,TA , DO	262	10	8	3	OP
10	6/9/00	M.Gunasinha., V.Sirisena		Karagala	E. Somaratne ,TA ,DO	777	50	8	7	OP
11	6/10/00	D.M.Samaneris, D.M.Ratnasekara	62B	Hatnapitiya	M.W. I.S. Mawaththa ,TO,DO,STA	297	5	10	9	Forest
		Paragammana ASC Area.								
12	6/20/00	K.G.Wimalawathi , K.Dayawathi	55	Talewela	L.A. Pathmaseeli ,DO,TA	306	10	7	7	Rubber
13	6/29/00	D.Priyantha, L.Chandralal	57A	Eragama	W.A.S. Wijesinghe,AI,DO,TA	302	55	4	8	Rubber
14	6/30/00	W.M. Gunapala, T.W. Sumanawathi	54	Godigamuwa	D. Nayanakanthi ,AI , TA	198	78	5	7	OP

Appendix 10.

7/7/00	M.K.Dingiri Banda, R.A. Nawaratne	43D	Udamagama	M.K.S.D. Bandara	327	40	2	7	Rubber
7/8/00	H.R. Abeyratne, P. Sislsoma	48E	Madopola	P. Prasanna Pathirana	340	32	3	7	OP
7/19/00	J. Joseph, A.B. Perera	55D	Meedeniya South	W.M.S. Amarathilake ,TA	347	23	3	7	Paddy
7/20/00	M.G. Jayasinhe, J.P. Jayatissa	54A	Wathura	N.a. Wijaya Kumara ,TA	230	65	8	7	Rubber
8/1/00	S.P. Simon, M. Gunapala	55C	Meedeniya North	K.G. A.M. Kiriella ,DO,STA,TA	416	120	5	7	Paddy
8/4/00	M.L. Premaratne, M.R. Upali	58B	Ganthuna Pallegam	K.L. Dammika Senarathne ,TA,Engineer	198	48	1.5	9	Rubber
8/5/00	L.G. Dassanayake, K. Suwaris	56B	Udugoda	N.P. Newlan	400	18	4	4	OP
8/18/00	M.P. Piyasisi, P.D. Kumaradasa	56C	Hungampola	R.Asoka Katunathilake ,DO,STA,AC	214	68	7	7	Coconut
9/1/00	K.Lalitha., M.Podimenike, B.Jayantha.	57	Athurupane	M.Nimal Jayantha, STA	190	18	11	8	Forest
9/2/00	K.R.P. Bandara, Upul Ranjith	59	Mabopitiya	K.R.S. Nilanthi Kumari ,DO	140	60	9	8	OP
9/15/00	G.B.R. Gunathilake, G.B.R. Nandawath	49E	Minuwangamuwa	W. Wimaladasa ,TA ,AI, DO	196	43	6	8	OP
9/16/00	U. R. wickramasinghe, R.M. Jayantha	58A	Ganthuna Pallegam	H. Podiralahami	166	46	5	9	Rubber
9/22/00	D. Seneviratne, M.A. Karunaratne		Pothukoladeniya(N)	R.P. Subasinhe ,DO ,STA	279	15	8	3	OP

DO _Divisional Officer

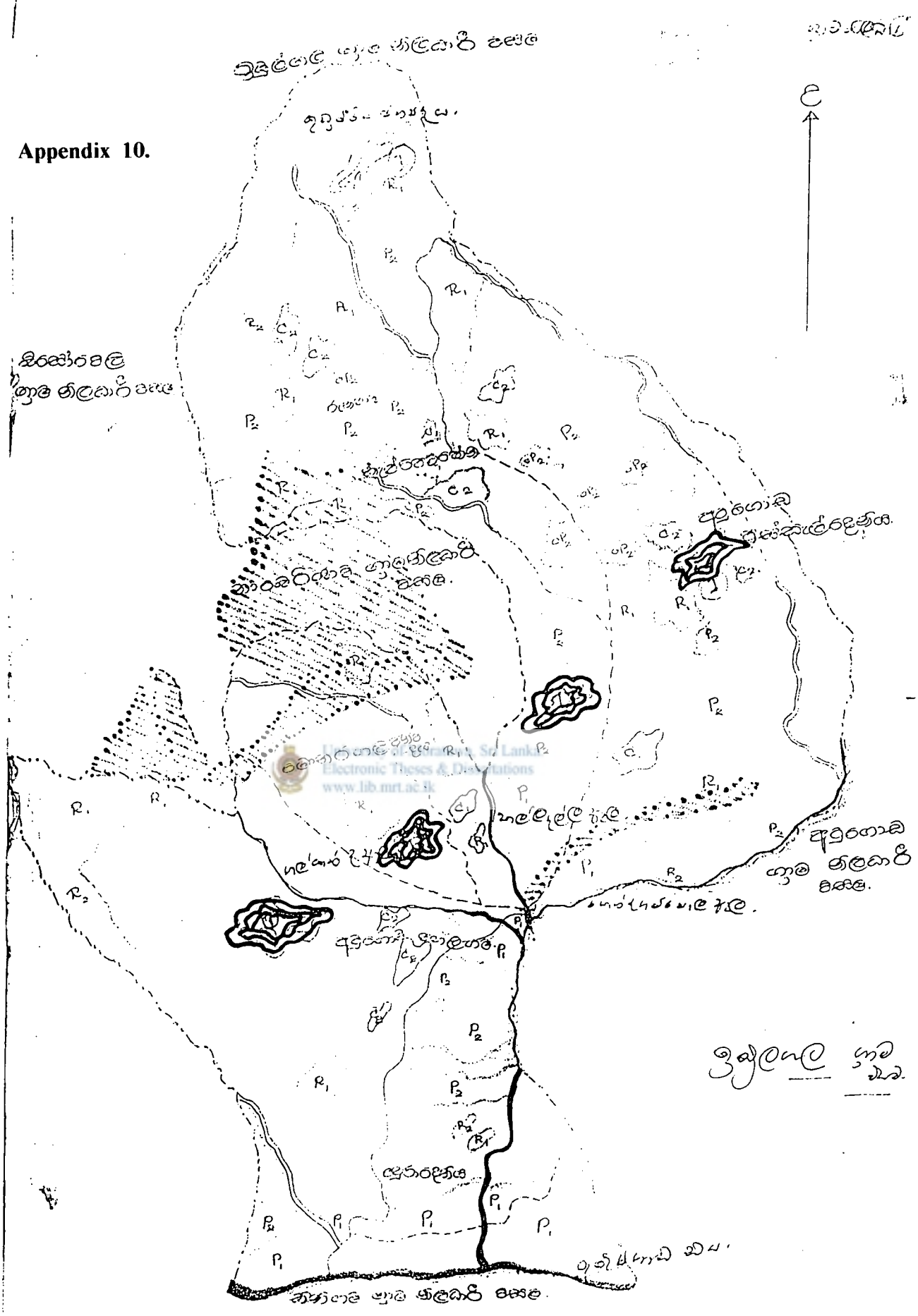
OP _ Other Plantation

TA -Technical Officer

AI _ Agricultural Instructor

STA - Seneior Technical Officer

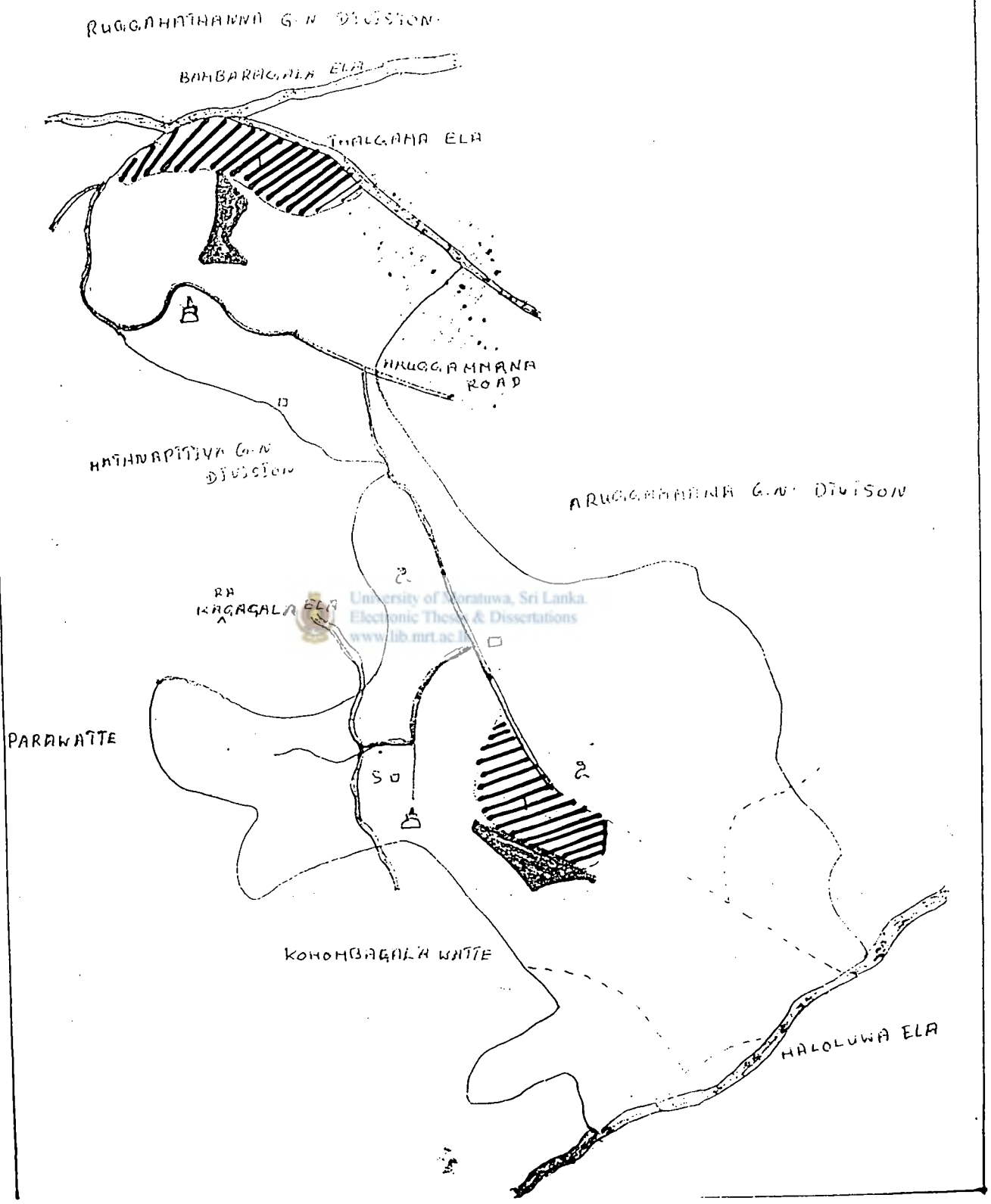
Appendix 10.



Observed Erosion Hazard Location (1:10,000)

A 11

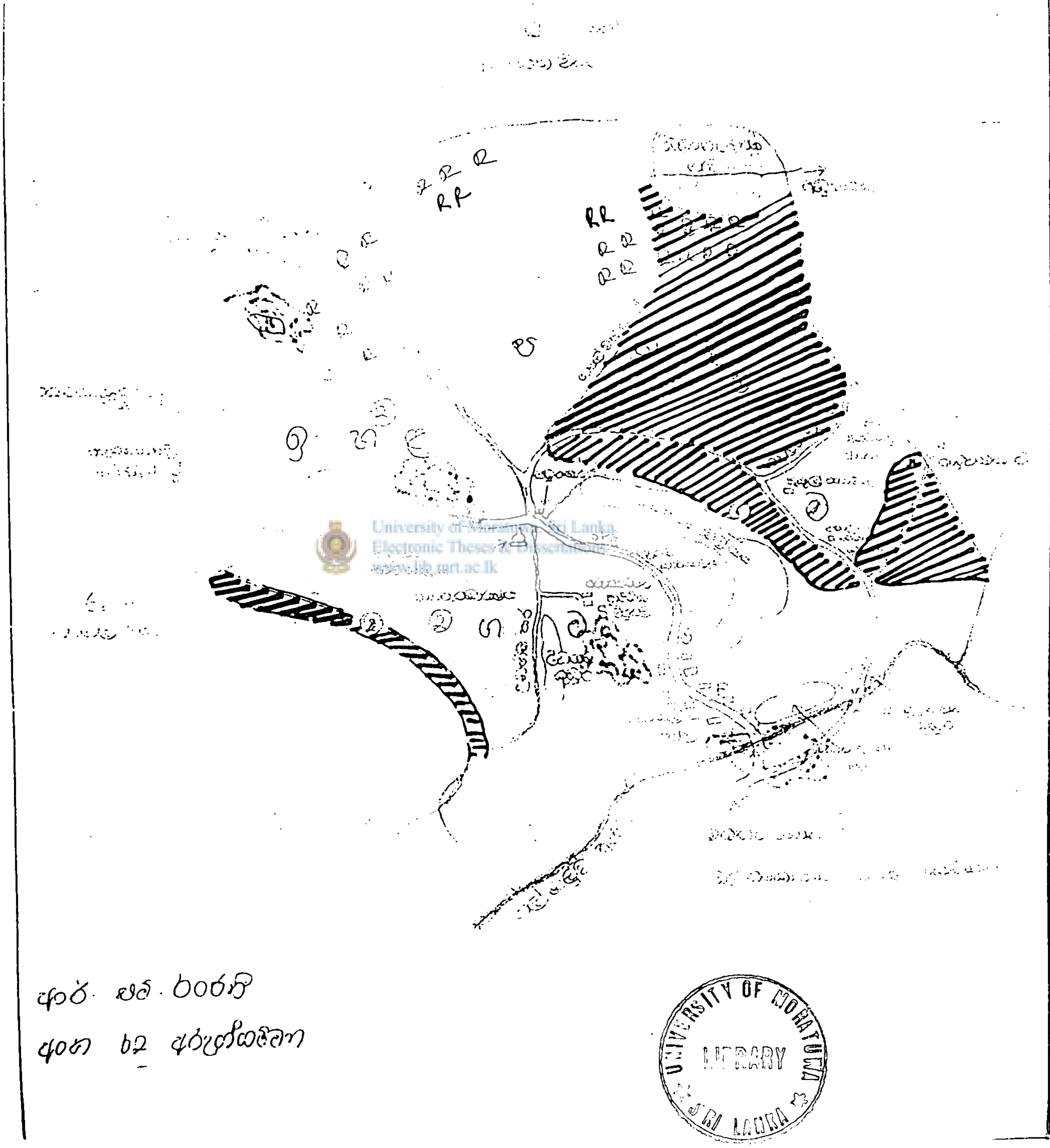
Appendix 10.



Observed Erosion Hazard Location (1:10,000)

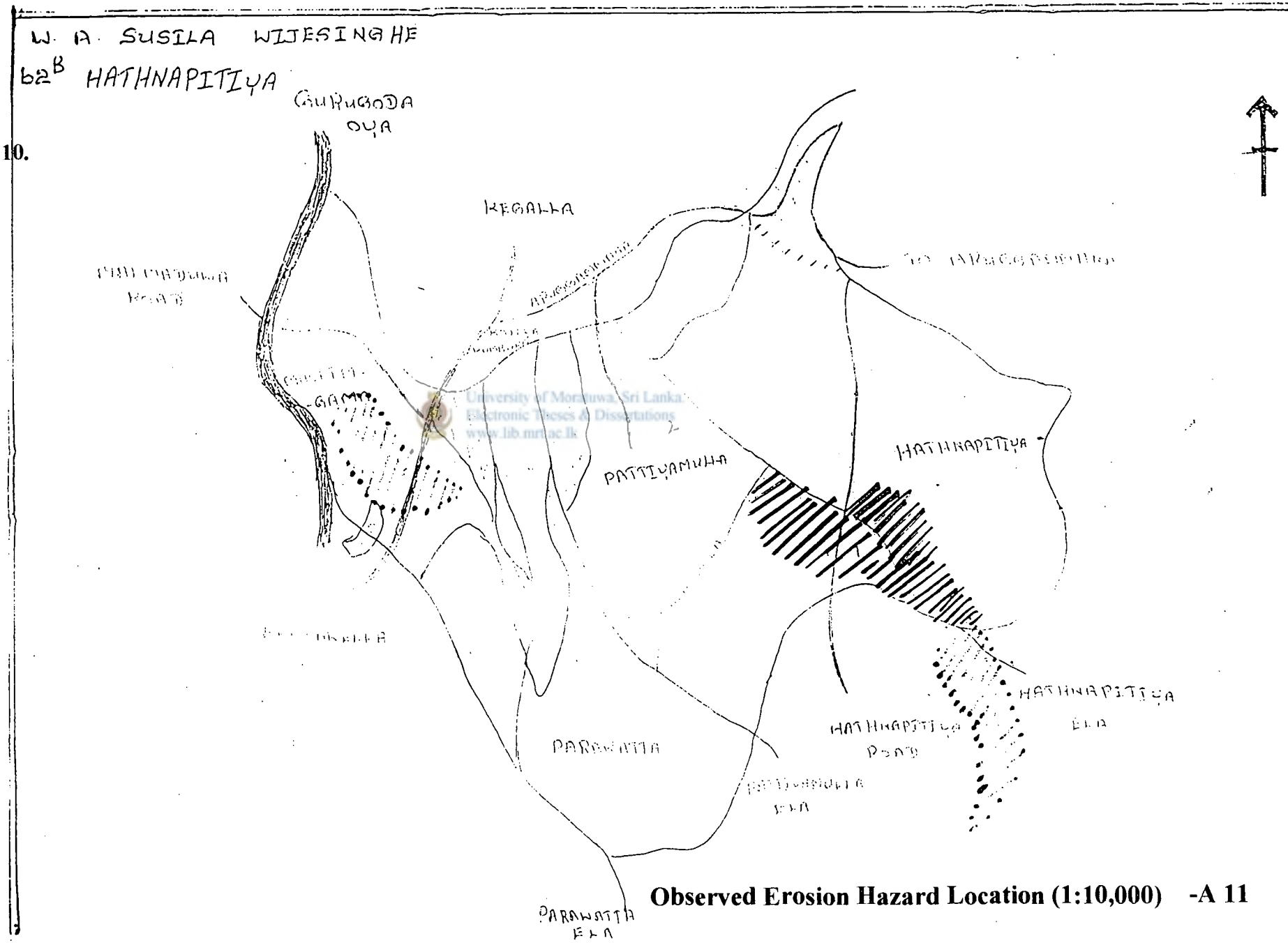
A 11

Appendix 10.



Observed Erosion Hazard Location (1:10,000)

Appendix 10.

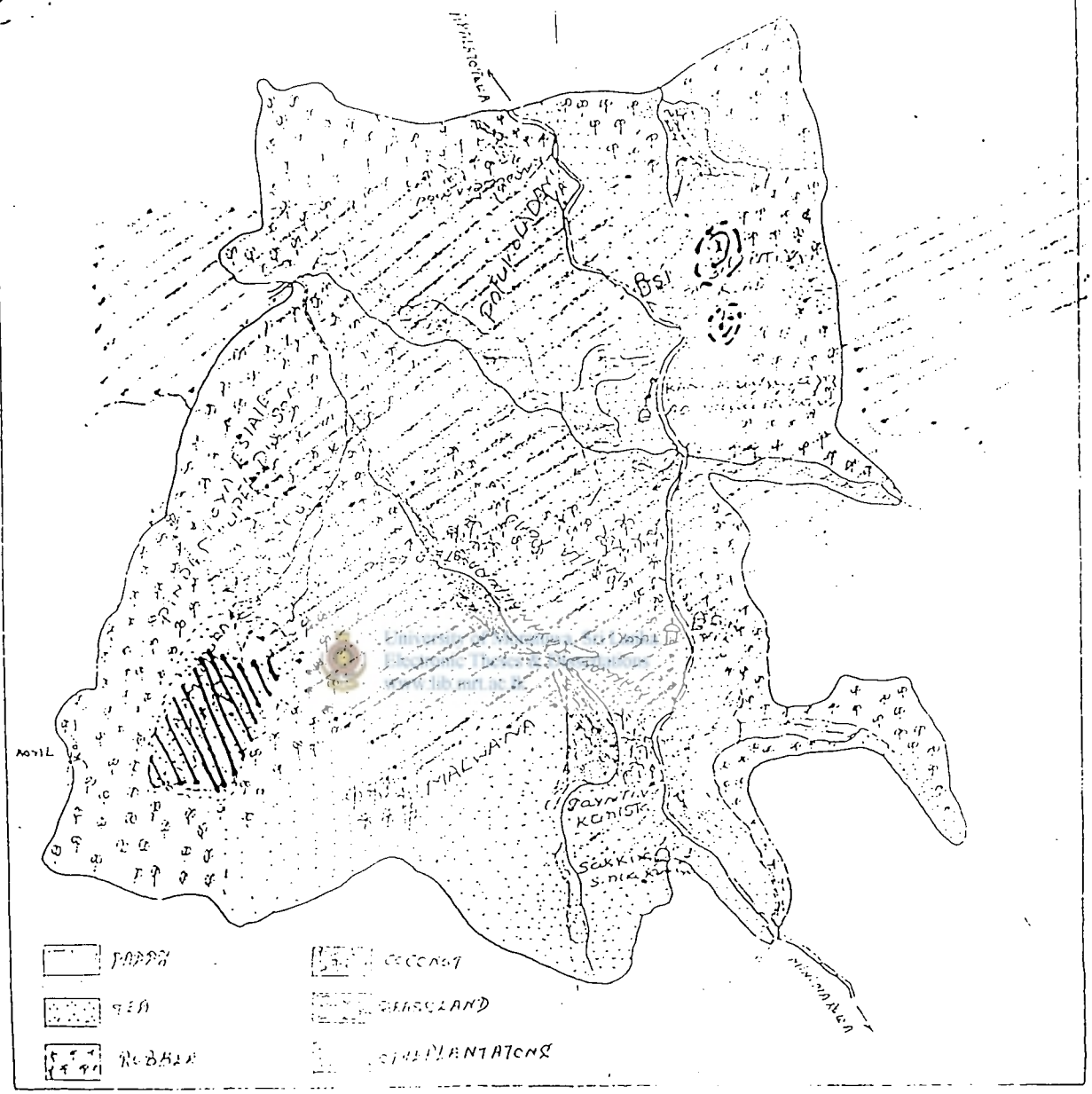


Observed Erosion Hazard Location (1:10,000) -A 11

Appendix 10.

POTUKOLA DEMIYA GRAMA... PART

AREA MAP (NO 01)

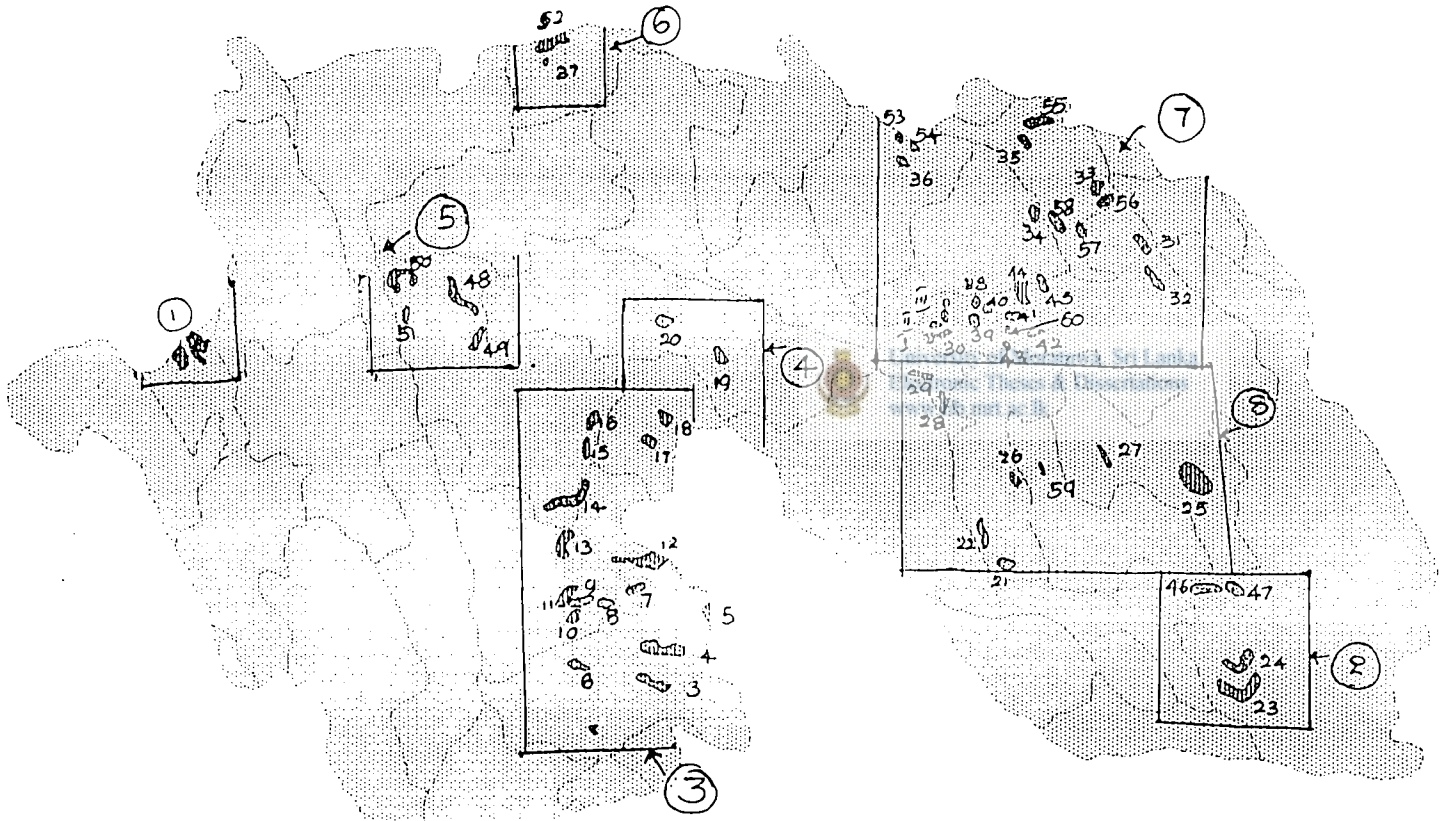


E Samaratunga
Bibliography
Potukola demiya

Observed Erosion Hazard Location (1:10,000)

A 11

Appendix 13



Admin Boundry

Severe
Moderate
Negligible

N
W
E
S

Identified Field Erosion Levels