

mentioned above. A list of necessary projects and programs is shown in Table 5.6-2 by each district.

### 5.6.3 Farm Land Conservation Plan

#### (1) Land to be Treated in the Up-country Area

The land to be treated is defined the area classified by the following three classes in accordance with the Indicative Land Use Map prepared by the Land Use Policy and Planning Division (LUPPD).

- Class-2 : areas where are now intensively used and careful soil conservation management s needed with slope of 30-60 %,
- Class-3 : areas which are now intensively used, but these should not normally be used with slope of more than 60 %, and
- Class-8 : areas where are now under-utilized, but these are unsuitable for smallholder settlement and most parts suitable for forestry plantations or tree crops under supervised estate conditions with slope of 30-60 %.

According to the Indicative Land Use Map, the area being categorized by Class-2 is 161,300 ha or 8 % of the total Study area, and it is distributed largely in Kandy and Kegalla districts. The area of Class-3 is 79,700 ha or 4 % of the total Study area, and it is distributed mostly in Ratnapura and Kandy districts. While, the area of Class-8 is 82,500 ha or 4 % of the total Study area, and it is distributed mostly in Kandy and Badulla districts. Totally, almost 323,500 ha of the land (about 17 % of the Up-country area) are to be treated with appropriate land conservation measures in the Study area as shown below.

District	Lands to be Treated in the Up-country Area (ha)			
	Class-2	Class-3	Class-8	Total
A. Matale	16,500	3,300	10,200	30,000
B. Kandy	34,500	15,200	16,800	66,500
C. Nuwara Eliya	23,000	5,200	5,100	33,300
D. Badulla	23,300	11,000	22,500	56,800
E. Moneragala	12,300	8,000	9,300	29,600
F. Kegalla	29,400	7,700	7,500	44,600
G. Ratnapura	22,300	29,300	11,100	62,700
Up-country Total	161,300	79,700	82,500	323,500

source: Calculated by JICA Study Team based on the Indicative Land Use Map

#### (2) Actual Target of the Project

As mentioned above, the total 323,500 ha of land are to be treated with appropriate land conservation measures in the Up-country area. However, this figure includes plantation estates to be excluded in this Project, and it contains fragmentary scattered lands to be treated being not likely to suitable for formulation of proper schemes. Therefore, the actual land area to be treated in the Up-country is determined by formulation of farm land conservation schemes as extent as possible excluding the plantation estates.

By overlaying mesh data of the current land use conditions on the Indicative Land Use Map, 110 farm land conservation schemes are identified in the Up-country area. Its total area is about 123,000 ha, and covers 38% of the total area to be treated which is shown by the Indicative Land Use Map. Thus, the actual land area to be treated is 123,600 ha in the Up-country as shown below. A list and location of the identified schemes is shown in Table 5.6-3 (1)-(3) and Fig. 5.6-2 (1)-(7).

District	No. of Schemes	Covered Area(ha)
A. Matale	19	21,000
B. Kandy	23	32,200
C. Nuwara Eliya	12	10,300
D. Badulla	19	22,900
E. Moneragala	8	9,700
F. Kegalla	7	5,200
G. Ratnapura	22	22,300
Up-country Total	110	123,600

source: JICA Study Team

### (3) Priority Divisions of Farm Land Conservation

Based on the Indicative Land Use Map, the acreage of Class-2, Class-3 and Class-8 is calculated by each administrative division for preliminary selection of the priority areas, and its result is shown in Table 5.6-4 (1)-(2). Divisions which have the widest area to be treated are Uda Dumbara (Kandy D.), Haldummulla (Badulla D.) and Ratnapura (Ratnapura D.) as shown below. Since the divisions listed below could include the priority areas to be treated, this result should be considered for determination of the Case Study Area of the Project.

Rank	Name of Division	Area to be Treated(ha)
1st.	Uda Dumbara (Kandy D.)	14,200
2nd.	Haldummulla (Badulla D.)	10,200
3rd.	Ratnapura (Ratnapura D.)	10,100
4th.	Deraniyagala (Kegalla D.)	9,900
5th.	Meda Dumbara (Kandy D.)	9,800
6th.	Laggala (Matale D.)	8,700
7th.	Yatiantota (Kegalla D.)	8,600
8th.	Madulla (Moneragala D.)	8,500
9th.	Kalawana (Ratnapura D.)	8,200
10th.	Imbulpe (Ratnapura D.)	8,100
Total		96,300

source: JICA Study Team

### (4) The Master Plan of Farm Land Conservation

The final goal of farm land conservation is to attain sustainable development conditions on farm lands in the Up-country area by completion of a land conservation treatment on the areas being seriously degraded. Although 110 farm land conservation schemes covering 123,600 ha of land to be treated are identified, it would be too much ambitious to set this whole figure as a target of the 10-years Master Plan (1994-2003). Therefore, the Master Plan is formulated by the schemes which are located in the priority divisions (25 divisions) having the area to be treated more than 5,000 ha. In the 25 priority divisions, 52 farm land conservation schemes are identified and these schemes

cover 69,000 ha of lands to be treated as summarized below. The list of farm land conservation schemes to be implemented during the Master Plan period is shown in Table 5.6-5.

District	Name of Division	Covered Area(ha)
A. Matale	4	8,300
B. Kandy	13	24,200
C. Nuwara Eliya	12	10,300
D. Badulla	9	10,900
E. Moneragala	4	5,100
F. Kegalla	3	2,200
G. Ratnapura	7	8,000
Up-country Total	52	69,000

source: JICA Study Team

The total investment costs for implementation of these 52 schemes are estimated about Rs. 4,652 million indicatively based on the collected data related to unit price of farm land conservation.

#### (5) Executive Agency of the Master Plan

The executive agency of the Master Plan is the National Agricultural Diversification and Settlement Authority (NADSA) in the Ministry of Agriculture Development and Research (M/AD&R). The NADSA is established in 1978 under the State Agriculture Corporations Act No.11 of 1972, and its functions are as follows;

- i) Formulation of plans for agricultural diversification, settlement development and integrated watershed management, and coordination and execution of such plans by the Corporation or through government or non-government agencies in such areas that may be specified by the Minister from time to time,
- ii) Management of all lands vested in, or transferred to the Corporation with a view to ensuring optimum productivity, environment protection, land and water resource conservation, and settlement development,
- iii) Processing and marketing of agricultural produce,
- iv) Establishment, maintenance and operation of plant, equipment and machinery for agricultural diversification and settlement development, and
- v) Carrying out of all such measures, as are deemed necessary in the execution of agricultural diversification, settlement development and watershed management in the areas specified in paragraph i).

The NADSA has its own administrative and technical offices, and has dealt with about 3,200 ha of forest lands and 2,800 ha of farm lands including about 7,000 households in Kandy and Kegalla districts so far. At present, the NADSA plans to cope with about 20,000 ha of lands including about 47,000 households in whole districts of the Project area. Thus, it is considered that the NADSA has the enough capability for implementation of the Master Plan as the responsible executive agency.

## *TABLES*



Table 5.2-1 POTENTIAL LAND FOR DEVELOPMENT

	Central			Uva			Sabalagamuwa			Total (km2)
	Matale	Kandy	Nuwara	Badulla	Monaragala	Kegalla	Ratnapura			
Class 4										
Sparcey Used Cropland	212	0	0	115	899	0	160		1,386	
Open Forest	14	0	3	112	206	0	6		341	
Scrubland	118	0	2	51	134	0	17		322	
Grassland	9	0	0	2	32	0	2		45	
Sub-Total	353	0	5	280	1,271	0	185		2,094	
Class 5										
Sparcey Used Cropland	27	5	5	10	40	5	76		168	
Open Forest	3	5	4	4	55	0	5		76	
Scrubland	4	4	4	3	29	0	4		48	
Grassland	1	0	1	0	15	0	1		18	
Sub-total	35	14	14	17	139	5	86		310	
Total										
Total	388	14	19	297	1,410	5	271		2,404	

Table 5.2-2

## MONTHLY RUNOFF AND SPECIFIC DISCHARGE

River Basin	Kalu Ganaga	Station Illigawa 0305					Drainage Area 1,393 km2									Total
Description		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Precipitation	mm	148	178	334	334	484	454	301	322	309	488	347	210			3909
Run-off	m3/sec	51.90	41.20	50.60	102.80	175.90	184.70	134.70	106.50	136.30	179.20	176.00	101.90			
	mm	100	72	97	191	338	344	259	205	254	345	327	196			2728
Specific Discharge	m3/s/km2	0.037	0.030	0.036	0.074	0.126	0.133	0.097	0.076	0.098	0.129	0.126	0.073			
Runoff Ratio	%	67.57%	40.45%	29.04%	57.19%	69.83%	75.77%	86.05%	63.66%	82.20%	70.70%	94.24%	93.33%			69.79%

River Basin	Kirindi Oya	Station Wellawaya 2203					Drainage Area 160 km2									Total
Description		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Precipitation	mm	126	112	227	310	158	81	58	49	66	234	329	230			1980
Run-off	m3/sec	4.93	4.23	4.22	7.23	5.54	2.43	2.12	1.71	2.39	4.95	9.20	7.36			
	mm	83	64	71	117	93	39	35	29	39	83	149	123			925
Specific Discharge	m3/s/km2	0.031	0.026	0.026	0.045	0.035	0.015	0.013	0.011	0.015	0.031	0.058	0.046			
Runoff Ratio	%	65.87%	57.14%	31.28%	37.74%	58.86%	48.15%	60.34%	59.18%	59.09%	35.47%	45.29%	53.48%			46.72%

River Basin	Menik Ganga	Station Katangama 2601					Drainage Area 787 km2									Total
Description		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Precipitation	mm	165	42	174	133	52	38	13	50	75	366	259	193			1560
Run-off	m3/sec	8.28	4.03	4.65	11.39	6.60	1.22	1.33	0.82	1.56	9.17	20.91	16.61			
	mm	28	12	16	38	22	4	5	3	5	31	69	57			290
Specific Discharge	m3/s/km2	0.011	0.005	0.006	0.014	0.008	0.002	0.002	0.001	0.002	0.012	0.027	0.021			
Runoff Ratio	%	16.97%	28.57%	9.20%	28.57%	42.31%	10.53%	38.46%	6.00%	6.67%	8.47%	26.64%	29.53%			18.59%

River Basin	Kumbukkan Oya	Station Nakkala 3102					Drainage Area 216 km2 not reliable									Total
Description		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Precipitation	mm	194	101	109	83	70	27	52	28	85	179	132	220			1280
Run-off	m3/sec	8.58	6.27	5.54	6.13	5.28	3.30	3.23	2.38	2.90	4.82	7.79	9.77			65.99
	mm	106	70	69	74	65	40	40	30	35	60	93	121			803
Specific Discharge	m3/s/km2	0.040	0.029	0.026	0.028	0.024	0.015	0.015	0.011	0.013	0.022	0.036	0.045			
Runoff Ratio	%	54.64%	69.31%	63.30%	89.16%	92.86%	148.15%	76.92%	107.14%	41.18%	33.52%	70.45%	55.00%			62.73%

River Basin	Wila Oya	Station Wedagama 3501					Drainage Area 404 km2									Total
Description		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Precipitation	mm	139	118	179	84	125	48	65	62	112	270	177	222			1601
Run-off	m3/sec	13.64	4.69	2.6	2.86	1.13	0.19	0.05	0	0	0.26	4.1	8.4			
	mm	90	28	17	18	7	1	0	0	0	2	26	56			245
Specific Discharge	m3/s/km2	0.034	0.012	0.006	0.007	0.003	0.000	0.000	0.000	0.000	0.001	0.010	0.021			
Runoff Ratio	%	64.75%	23.73%	9.50%	21.43%	5.60%	2.08%	0.00%	0.00%	0.00%	0.74%	14.69%	25.23%			15.30%

River Basin	Heda Oya	Station Siyambalanduwa 3601					Drainage Area 295 km2									Total
Description		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Precipitation	mm	179	152	230	108	161	62	84	80	144	347	227	286			2060
Run-off	m3/sec	17.96	10.17	4.77	9.24	2.63	0.58	0.52	0.3	0.29	1.78	9.2	16.7			
	mm	163	83	43	81	24	5	5	3	3	16	81	152			659
Specific Discharge	m3/s/km2	0.061	0.034	0.016	0.031	0.009	0.002	0.002	0.001	0.001	0.006	0.031	0.057			
Runoff Ratio	%	91.06%	54.61%	18.70%	75.00%	14.91%	8.06%	5.95%	3.75%	2.08%	4.61%	35.69%	53.15%			31.99%

River Basin	Gel Oya	Station Inginiyagala 4401					Drainage Area 995 km2									Total
Description		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Precipitation	mm	321	172	114	169	103	53	98	34	172	294	198	472			2200
Run-off	m3/sec	51.2	77.4	38.3	36.8	18.8	7.7	6.3	7	5.8	26.8	56.4	76.9			
	mm	138	188	103	96	51	20	17	19	15	72	147	207			1073
Specific Discharge	m3/s/km2	0.051	0.078	0.038	0.037	0.019	0.008	0.006	0.007	0.006	0.027	0.057	0.077			
Runoff Ratio	%	42.99%	109.30%	90.35%	56.80%	49.51%	37.74%	17.35%	55.88%	8.72%	24.49%	74.24%	43.86%			48.77%

River Basin	Unnichenai	Station Periy Aru 5101					Drainage Area 119 km2									Total
Description		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Precipitation	mm	314	200	96	81	35	21	43	70	54	200	321	484			1919
Run-off	m3/sec	11.49	6.78	2.44	0.62	0.34	0.08	0.13	0.09	0.33	0.64	3.79	12.05			
	mm	259	138	55	14	8	2	3	2	7	14	83	271			856
Specific Discharge	m3/s/km2	0.097	0.057	0.021	0.003	0.003	0.001	0.001	0.001	0.003	0.005	0.032	0.101			
Runoff Ratio	%	82.48%	69.00%	57.29%	17.28%	22.86%	9.52%	6.98%	2.86%	12.96%	7.00%	25.86%	55.99%			44.61%

River Basin	Mundeni Aru	Station Weragoda 5201					Drainage Area 225 km2									Total
Description		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Precipitation	mm	332	212	101	86	37	23	45	74	57	212	339	512			2030
Run-off	m3/sec	16.33	7.57	3.08	1.70	0.70	0.29	0.16	0.28	0.26	1.51	4.74	15.77			
	mm	194	81	37	20	8	3	2	3	3	18	55	188			612
Specific Discharge	m3/s/km2	0.073	0.034	0.014	0.008	0.003	0.001	0.001	0.001	0.001	0.007	0.021	0.070			
Runoff Ratio	%	58.43%	38.21%	36.63%	23.26%	21.62%	13.04%	4.44%	4.05%	5.26%	8.49%	16.22%	36.72%			30.15%

Table 5.2-3 POTENTIAL DEVELOPMENT AREA OF ABANDONED IRRIGATION SCHEMES (1/2)

<i>Minor Schemes</i>							
No.	Name of Project	District	Division	Command Area (ha)	Numbers of Farm Family	Estimated Cost Rs.	Year of Study Made
1	Elle Kandura	Badulla	Mapakada	28.32	35	2,400,000	1992
2	Pussella Kandura	Badulla	Mapakada	40.46	50	1,900,000	1992
3	Udubadana Tank	Badulla	Wellimada	60.00	70	4,000,000	1992
4	Kumbalwela Dambagolla Wewa Scheme	Badulla	Bandarawela	40.00	250	2,000,000	1993
5	Elhenthalawa-Aluketiyawa	Badulla	Ridimaliyadda	25.00	20	1,750,000	1993
6	Dikulpotha Tank Scheme	Badulla	Wellimada	40.00	210	1,500,000	
7	Karawila Landa Anicut	Badulla	Meegahakiula	20.00	20	2,000,000	
8	Uda Wewa	Badulla	Mahiyangana	30.00	30	2,000,000	
	<i>sub-total</i>			283.78			
9	Wanahapuwa Wewa	Kandy	Pathahewaheta	24.47	45	2,000,000	1988
10	Gal Mal Oya Amuna	Kandy	Meda Dumbara	12.00	30	400,000	
11	Kirigalpotta Amuna	Kandy	Uda Dumbara	20.00	50	650,000	
	<i>sub-total</i>			56.47			
12	Korakahagolla Tank	Matale	Dambulla	60.00	150	3,200,000	1989
13	Ridie Ella Scheme	Matale	Dambulla	60.00	120	2,000,000	
14	Bambaragaha Meewalapitiya Wewa	Matale	Naula	22.00	40	1,000,000	
15	Godaulpotha Mailapitiya Wewa	Matale	Wilgamuwa	14.22	25	500,000	
16	Topwalapitiya Wewa	Matale	wilgamuwa	60.98	98	3,650,000	
	<i>sub-total</i>			217.20			
17	Wattarama Anicut Scheme	Monaragala	Siyambalanduwa	72.87	60	3,000,000	1988
18	Manungala Wewa	Monaragala	Monaragala	40.00	100	2,800,000	1989
19	Morabedda Wewa	Monaragala	Medagama	60.00	100	3,500,000	1990
20	Moragollagama Tank	Monaragala	Medagama	60.00	100	3,500,000	1990
21	Sepala Wewa	Monaragala	Wellawaya	16.19	40		
22	Malewana Wewa	Monaragala	Wellawaya	16.19	40		
23	Ethili Wewa	Monaragala	Wellawaya	17.00	42		
24	Kohombakote Wewa	Monaragala	Wellawaya	30.36	75		
25	Matalu Wewa	Monaragala	Wellawaya	72.87	180		
26	Koonwelana Wewa	Monaragala	Wellawaya	40.49	100		
27	Uda Wewa	Monaragala	Buttala	12.15	30		
28	Akkaravissa Wewa	Monaragala	Tanamalwila	12.15	30		
29	Juigahakanatta Wewa	Monaragala	Wellawaya	26.72	36		
30	Batala Ara Wewa	Monaragala	Wellawaya	15.38	18		
31	Galkada Ara Wewa	Monaragala	Monaragala	66.00	66	2,100,000	
32	Khedetta Wewa	Monaragala	Wellawaya	20.24			
	<i>sub-total</i>			578.61			
33	Uma Oya Flood Protection	Nuwara Eliya	Nuwara Eliya	30.00	70	800,000	
	<i>sub-total</i>			30.00			
	<i>Total</i>			1,166.06			



Table 5.2-3 POTENTIAL DEVELOPMENT AREA OF ABANDONED IRRIGATION SCHEMES (2/2)

<i>Major/Minor Schemes</i>							
No.	Name of Project	District	Division	Command Area (ha)	Numbers of Farm Family	Estimated Cost Rs.	Year of Study Made
1	Lake Gregory-Silmiyapura Reservoir	Badulla	Welimada	110.00	175	15,000,000	1992
2	Kuda-Oya Wewa	Badulla	Ridimaliyadda	112.00	140	9,500,000	1992
3	Kowarika Scheme Improvement	Badulla	Kandaketiya	120.00	250	6,000,000	
4	Ranpulawala Wewa-Badulu Oya Scheme	Badulla	Migahakivula	685.00	1,000	20,000,000	
5	Barnunu Ella Wewa	Badulla	Mahiyangana	125.00	150	12,000,000	
	<i>sub-total</i>			<i>1,152.00</i>			
6	Dungolla Amuna	Kandy	Hasalaka	82.92	250	1,600,000	1992
7	Hunuketa Degalah Amuna	Kandy	Udadumbara	81.30	200	5,000,000	1992
8	Bandane Amuna	Kandy	Naula Laggala	146.34	200	6,750,000	1992
	<i>sub-total</i>			<i>310.56</i>			
9	Morogalla Anicut	Matale	Laggala Palegama	81.30	200	7,500,000	1992
10	Moragahaulpotha Anicut	Matale	Wilgamuwa	81.30	45	1,600,000	
	<i>sub-total</i>			<i>162.60</i>			
11	Kirioruwa Tank	Monaragala	Bibile	142.00	250	24,000,000	1978
12	Putupana Tank	Monaragala	Bibile	202.00	300	30,000,000	1978
13	Mallipotha Tank	Monaragala	Bibile	243.00	250	45,000,000	1979
14	Welioya Diversion Anicut	Monaragala	Tanamalwila	1,560.00	1,500	200,000,000	1992
15	Alugalge Tank	Monaragala	Wellawaya	120.00	120	9,870,000	1993
16	Maila Wewa	Monaragala	Siyambalanduwa	80.00	100		
17	Mcaye Kuruwa Ara Wewa	Monaragala	Siyambalanduwa	120.00	120		
18	Kammal Badi Kandiya Wewa	Monaragala	Siyambalanduwa	324.00	324		
19	Mulleagama Wewa	Monaragala	Bibile	324.00	250	48,000,000	
20	Maha Ara Amuna	Monaragala	Wellawaya	83.40	50		
21	Monerakanda Wewa	Monaragala	Wellawaya	na	na		
22	Maharanawaranawa Wewa	Monaragala	Tanamalwila	na	na		
	<i>sub-total</i>			<i>3,198.40</i>			
23	Medakumbura Tank And Augmentation Channel	Nuwara Eliya	Kotmale	203.50	200	20,000,000	1992
	<i>sub-total</i>			<i>203.50</i>			
24	Katupath Oya Anicut	Ratnapura	Balangoda	304.87	600	30,000,000	1992
25	Ethgala Tank	Ratnapura	Embilipitiya	325.20	300	75,000,000	
	<i>sub-total</i>			<i>630.07</i>			
	<i>Total</i>			<i>5,657.13</i>			

Table 5.3-1

## IMPLEMENTATION PROGRAMME OF NEW REHABILITATION PROJECT

Priority	Name of Project	District	Division	Command Area ha	Farm Family No. Nos	Area per Family ha	Project Cost x 1,000 Rs.	Cost per Area ha	Commencement Year
1	Wellawa Anicut	Ratnapura	Anakalanpanna	243.90	200	1.22	30,000	123.00	1994
2	Damne Ela	Ratnapura	Elapatha	162.60	150	1.08	15,000	92.25	1994
3	Aran Amuna	Moneragala	Bibile	60.00	150	0.40	5,000	83.33	1994
4	Walagoda Anicut	Ratnapura	Kolome	182.90	300	0.61	15,000	82.01	1994
5	Hulandawa Oya Anicut	Ratnapura	Embitipitiya	121.95	100	1.22	10,000	82.00	1994
6	Horabokka Amuna	Moneragala	Wellawaya	101.21	250	0.40	7,500	74.10	1994
7	Halmillapitiya Wewa	Moneragala	Buttala	81.00	200	0.41	5,000	61.73	1994
8	Pahala Erula Wewa	Matale	Dambulla	81.30	300	0.27	5,000	61.50	1994
9	Radagapotha Anicut	Matale	Laggala	81.30	100	0.81	5,000	61.50	1994
10	Baugedare Anicut	Ratnapura	Pelimadura	87.80	75	1.17	5,000	56.95	1994
11	Debara Ara Wewa	Moneragala	Wellawaya	97.17	240	0.40	5,000	51.46	1994
12	Komarika Anicut	Badulla	Migathakivula	120.00	250	0.48	6,000	50.00	1994
Sub-Total 1994				1,421.13			113,500		
13	Paragaha Arawa Anicut	Nuwara Eliya	Walapane	81.30	300	0.27	4,000	49.20	1995
14	Taldena Ela Scheme	Badulla	Soranota	130.00	260	0.50	5,500	42.31	1995
15	Mallathawela Radapola Amuna	Moneragala	Wellawaya	121.46	300	0.40	5,000	41.17	1995
16	Keerawela Anicut	Nuwara Eliya	Walapane	106.50	200	0.53	4,000	37.56	1995
17	Badulu Oya Wewa	Moneragala	Bibile	241.00	130	1.85	8,000	33.20	1995
18	Kazavila Mallagama Delagamuwa Wewa	Moneragala	Tanamalwila	161.94	400	0.40	5,000	30.88	1995
19	Badulu Oya Anicut	Badulla	Kandakeriya	685.00	1,000	0.69	20,000	29.20	1995
20	Bodhi Ela Anicut	Nuwara Eliya	Hanguranketa	147.56	532	0.28	4,000	27.11	1995
21	Pelwatta Amuna	Moneragala	Buttala	121.46	300	0.40	3,000	24.70	1995
22	Dambarawa Wewa	Badulla	Mahiyangana	428.86	900	0.48	10,000	23.32	1995
23	Kandiyeppia Wewa	Moneragala	Tanamalwila	145.75	360	0.40	3,000	20.58	1995
24	Mapakada Wewa	Badulla	Mahiyangana	376.00	600	0.63	7,500	19.95	1995
25	Debigama Reservoir	Badulla	Ridimaliyadda	154.47	160	0.97	3,000	19.42	1995
Sub-Total 1995				2,901.30			82,000		
26	Lamasuriyagama Anicut	Nuwara Eliya	Hanguranketa	138.00	400	0.35	2,000	14.49	1996
27	Bolagandawela Anicut	Nuwara Eliya	Walapane	144.71	120	1.21	2,000	13.82	1996
28	Mulhalela Anicut	Nuwara Eliya	Walapane	173.17	160	1.08	2,000	11.55	1996
29	Kahakurullapelessa Wewa	Moneragala	Tanamalwila	101.21	250	0.40	1,000	9.88	1996
30	Demodara Perani Kandiya	Badulla	Ridimaliyadda	160.00	160	1.00	1,500	9.38	1996
31	Sorabora Wewa	Badulla	Mahiyangana	1,278.00	800	1.60	10,000	7.82	1996
32	Uma Ela	Badulla	Uva Paranagama	813.00	4,400	0.18	6,000	7.38	1996
33	Bowadenna Anicut	Matale	Laggal	117.80	246	0.48	750	6.37	1996
Sub-Total 1996				2,925.89			25,250		
Total				7,248.32			220,750.00		

Table 5.3-2  
IMPLEMENTATION PROGRAMME ON POTENTIAL DEVELOPMENT AREA

MINOR SCHEMES

Priority	Name of Project	District	Division	Command Area (ha)	Numbers of Farm Family	Estimated Cost Rs. 1,000	Year of Study Made	Area/Family (Rs./ha)	Cost/Area (Rs./ha)	Commencement Year
1	Watarana Aricut Scheme	Monaragala	Siyambaladuwa	72.87	60	3,000	1988	1.21	41	1999
2	Pussella Kandura	Badulla	Mapakada	40.46	50	1,900	1992	0.81	47	1999
3	Kumbalwela Dambagolla Wewa Scheme	Badulla	Bandarawela	40.00	250	2,000	1993	0.16	50	2000
4	Korakugolla Tank	Maale	Dambulla	60.00	150	3,200	1989	0.40	53	2000
5	Morabedda Wewa	Monaragala	Medagama	60.00	100	3,500	1990	0.60	58	2001
6	Monagollaganna Tank	Monaragala	Medagama	60.00	100	3,500	1990	0.60	58	2001
7	Udubadana Tank	Badulla	Wellimada	60.00	70	4,000	1992	0.86	67	2002
8	Manungala Wewa	Monaragala	Monaragala	40.00	100	2,800	1989	0.40	70	2002
9	Elthahalawa-Alukeniya	Badulla	Ridimaliyadda	25.00	20	1,750	1993	1.25	70	2003
10	Wanahapuwu Wewa	Kandy	Pathawaheta	24.47	45	2,000	1988	0.54	82	2003
11	Elle Kandura	Badulla	Mapakada	28.32	35	2,400	1992	0.81	85	2003
Total				511.12		30,050				

MAJOR/MEDIUM SCHEMES

Priority	Name of Project	District	Division	Command Area (ha)	Numbers of Farm Family	Estimated Cost Rs. 1,000	Year of Study Made	Area/Family (Rs./ha)	Cost/Area (Rs./ha)	Commencement Year
1	Dugolla Amuna	Kandy	Hasalaka	82.92	250	1,600	1992	0.33	19	1999
2	Bandane Amuna	Kandy	Naula Laggala	146.34	200	6,750	1992	0.73	46	1999
3	Henuketa Degalah Amuna	Kandy	Udumbura	81.30	200	5,000	1992	0.41	62	1999
4	Alugalle Tank	Monaragala	Wellawaya	120.00	120	9,870	1993	1.00	82	1999
5	Kuda-Oya Wewa	Badulla	Ridimaliyadda	112.00	140	9,500	1992	0.80	85	1999
6	Monogalla Aricut	Maale	Laggala Pallegama	81.30	200	7,500	1992	0.41	92	1999
7	Medakumbura Tank And Augmentation Channel Nuwara Eliya Korrale			203.50	200	20,000	1992	1.02	98	2000
8	Kanupath Oya Aricut	Ranapura	Balangoda	304.87	600	30,000	1992	0.51	98	2000
9	Weloya Diversion Aricut	Monaragala	Tanamalwila	1,560.00	1,500	200,000	1992	1.04	128	2000
10	Lake Gregory-Slimiyapura Reservoir	Badulla	Wellimada	110.00	175	15,000	1992	0.63	136	2003
11	Purupana Tank	Monaragala	Bibile	202.00	300	30,000	1978	0.67	149	2003
12	Kiroruwa Tank	Monaragala	Bibile	142.00	250	24,000	1978	0.57	169	2003
13	Malipotha Tank	Monaragala	Bibile	243.00	250	45,000	1979	0.97	185	2003
Total				3,389.23		404,220				

Table 5.3-3

## ESTIMATED COST OF MAJOR/MEDIUM REHABILITATION

		Rs. 1,000				
District	Year	1993	1994	1995	1996	Total
Matale	NIRP	0	5,000	5,000	2,000	12,000
	Others	0	0	0	0	0
	New Project	0	10,000	0	750	10,750
	Total	0	15,000	5,000	2,750	22,750
Kandy	NIRP	38,765	0	0	15,000	53,765
	Others	0	0	0	0	0
	New Project	0	0	0	0	0
	Total	38,765	0	0	15,000	53,765
Nuwara Eliya	NIRP	0	0	9,000	6,000	15,000
	Others	0	0	0	0	0
	New Project	0	0	12,000	6,000	18,000
	Total	0	0	21,000	12,000	33,000
Badulla	NIRP	0	72,000	12,500	1,225	85,725
	Others	12,000	0	0	0	12,000
	New Project	0	6,000	46,000	17,500	69,500
	Total	12,000	78,000	58,500	18,725	167,225
Moneragala	NIRP	37,162	14,000	10,000	0	61,162
	EEC	56,100	30,500	27,500	0	114,100
	Others	31,500	0	0	0	31,500
	New Project	0	22,500	24,000	1,000	47,500
	Total	124,762	67,000	61,500	1,000	254,262
Ratnapura	NIRP	80,000	0	0	0	80,000
	Others	0	0	0	0	0
	New Project	0	75,000	0	0	75,000
	Total	80,000	75,000	0	0	155,000
Total	NIRP	155,927	91,000	36,500	24,225	307,652
	EEC	56,100	30,500	27,500	0	114,100
	Others	43,500	0	0	0	43,500
	New Project	0	113,500	82,000	25,250	220,750
	Total	255,527	235,000	146,000	49,475	686,002

Table 5.3-4

## ESTIMATED COST OF MINOR SCHEMES REHABILITATION (1/4)

													Rs. 1,000
Year		1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
<b>Matale</b>													
NIRP	Over 30 ha	4,760	280	280	210	0	0	0	0	0	0	0	5,530
	5 to 30 ha	13,510	7,105	7,105	7,105	0	0	0	0	0	0	0	34,825
	Below 5 ha	0	0	0	0	0	0	0	0	0	0	0	0
	sub-total	18,270	7,385	7,385	7,315	0	0	0	0	0	0	0	40,355
IRDP	Over 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	5 to 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	Below 5 ha	0	0	0	0	0	0	0	0	0	0	0	0
	sub-total	0	0	0	0	0	0	0	0	0	0	0	0
New Scheme	Over 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	5 to 30 ha	0	1,330	1,330	1,330	3,220	3,220	3,220	3,220	3,220	3,220	3,500	26,810
	Below 5 ha	0	1,715	1,715	1,715	4,130	4,130	4,130	4,130	4,130	4,130	4,375	34,300
	sub-total	0	3,045	3,045	3,045	7,350	7,350	7,350	7,350	7,350	7,350	7,875	61,110
Total	Over 30 ha	4,760	280	280	210	0	0	0	0	0	0	0	5,530
	5 to 30 ha	13,510	8,435	8,435	8,435	3,220	3,220	3,220	3,220	3,220	3,220	3,500	61,635
	Below 5 ha	0	1,715	1,715	1,715	4,130	4,130	4,130	4,130	4,130	4,130	4,375	34,300
	sub-total	18,270	10,430	10,430	10,360	7,350	7,350	7,350	7,350	7,350	7,350	7,875	101,465
<b>Kandy</b>													
NIRP	Over 30 ha	1,855	735	735	805	0	0	0	0	0	0	0	4,130
	5 to 30 ha	20,545	8,295	8,295	8,260	0	0	0	0	0	0	0	45,395
	Below 5 ha	0	0	0	0	0	0	0	0	0	0	0	0
	sub-total	22,400	9,030	9,030	9,065	0	0	0	0	0	0	0	49,525
IRDP	Over 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	5 to 30 ha	0	2,275	2,275	2,275	2,275	2,275	2,275	2,275	2,275	2,275	2,275	22,750
	Below 5 ha	0	2,275	2,275	2,275	2,275	2,275	2,275	2,275	2,275	2,275	2,275	22,750
	sub-total	0	4,550	4,550	4,550	4,550	4,550	4,550	4,550	4,550	4,550	4,550	45,500
New Scheme	Over 30 ha	0	1,820	1,820	1,820	4,375	4,375	4,375	4,375	4,375	4,375	4,655	36,365
	5 to 30 ha	0	2,940	2,940	2,940	7,000	7,000	7,000	7,000	7,000	7,000	7,560	58,380
	Below 5 ha	0	2,590	2,590	2,590	6,195	6,195	6,195	6,195	6,195	6,195	6,580	51,520
	sub-total	0	7,350	7,350	7,350	17,570	17,570	17,570	17,570	17,570	17,570	18,795	146,265
Total	Over 30 ha	1,855	2,555	2,555	2,625	4,375	4,375	4,375	4,375	4,375	4,375	4,655	40,495
	5 to 30 ha	20,545	13,510	13,510	13,475	9,275	9,275	9,275	9,275	9,275	9,275	9,835	126,525
	Below 5 ha	0	4,865	4,865	4,865	8,470	8,470	8,470	8,470	8,470	8,470	8,855	74,270
	sub-total	22,400	20,930	20,930	20,965	22,120	22,120	22,120	22,120	22,120	22,120	23,345	241,290

Table 5.3-4

## ESTIMATED COST OF MINOR SCHEMES REHABILITATION (2/4)

		Rs. 1,000											
Year		1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
<b>Nuwara Eliya</b>													
NIRP	Over 30 ha	6,440	2,590	2,590	2,625	0	0	0	0	0	0	0	14,245
	5 to 30 ha	8,330	3,360	3,360	3,395	0	0	0	0	0	0	0	18,445
	Below 5 ha	0	0	0	0	0	0	0	0	0	0	0	0
	sub-total	14,770	5,950	5,950	6,020	0	0	0	0	0	0	0	32,690
IRDP	Over 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	5 to 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	Below 5 ha	0	0	0	0	0	0	0	0	0	0	0	0
	sub-total	0	0	0	0	0	0	0	0	0	0	0	0
New Scheme	Over 30 ha	0	490	490	490	1,225	1,225	1,225	1,225	1,225	1,225	1,295	10,115
	5 to 30 ha	0	2,170	2,170	2,170	5,215	5,215	5,215	5,215	5,215	5,215	5,740	43,540
	Below 5 ha	0	1,855	1,855	1,855	4,445	4,445	4,445	4,445	4,445	4,445	4,795	37,030
	sub-total	0	4,515	4,515	4,515	10,885	10,885	10,885	10,885	10,885	10,885	11,830	90,685
Total	Over 30 ha	6,440	3,080	3,080	3,115	1,225	1,225	1,225	1,225	1,225	1,225	1,295	24,360
	5 to 30 ha	8,330	5,530	5,530	5,565	5,215	5,215	5,215	5,215	5,215	5,215	5,740	61,985
	Below 5 ha	0	1,855	1,855	1,855	4,445	4,445	4,445	4,445	4,445	4,445	4,795	37,030
	sub-total	14,770	10,465	10,465	10,535	10,885	10,885	10,885	10,885	10,885	10,885	11,830	123,375
<b>Badulla</b>													
NIRP	Over 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	5 to 30 ha	11,410	7,210	7,210	7,245	0	0	0	0	0	0	0	33,075
	Below 5 ha	0	0	0	0	0	0	0	0	0	0	0	0
	sub-total	11,410	7,210	7,210	7,245	0	0	0	0	0	0	0	33,075
IRDP	Over 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	5 to 30 ha	1,925	1,925	1,925	1,925	1,925	1,925	1,925	0	0	0	0	13,475
	Below 5 ha	2,100	2,100	2,100	2,100	2,100	2,100	2,100	0	0	0	0	14,700
	sub-total	4,025	4,025	4,025	4,025	4,025	4,025	4,025	0	0	0	0	28,175
New Scheme	Over 30 ha	0	280	280	280	630	630	630	630	630	630	630	5,250
	5 to 30 ha	0	1,155	1,155	1,155	2,800	2,800	2,800	2,800	2,800	2,800	3,045	23,310
	Below 5 ha	0	1,575	1,575	1,575	3,815	3,815	3,815	3,815	3,815	3,815	4,060	31,675
	sub-total	0	3,010	3,010	3,010	7,245	7,245	7,245	7,245	7,245	7,245	7,735	60,235
Total	Over 30 ha	0	280	280	280	630	630	630	630	630	630	630	5,250
	5 to 30 ha	13,335	10,290	10,290	10,325	4,725	4,725	4,725	2,800	2,800	2,800	3,045	69,860
	Below 5 ha	2,100	3,675	3,675	3,675	5,915	5,915	5,915	3,815	3,815	3,815	4,060	46,375
	sub-total	15,435	14,245	14,245	14,280	11,270	11,270	11,270	7,245	7,245	7,245	7,735	121,485

Table 5.3-4

## ESTIMATED COST OF MINOR SCHEMES REHABILITATION (3/4)

Rs. 1,000													
Year		1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
Moneragala													
NIRP	Over 30 ha	3,745	1,645	1,645	1,575	0	0	0	0	0	0	0	8,610
	5 to 30 ha	11,445	7,980	7,980	7,910	0	0	0	0	0	0	0	35,315
	Below 5 ha	0	0	0	0	0	0	0	0	0	0	0	0
	sub-total	15,190	9,625	9,625	9,485	0	0	0	0	0	0	0	43,925
IRDP	Over 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	5 to 30 ha	0	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	10,500
	Below 5 ha	0	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	175	9,625
	sub-total	0	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	1,225	20,125
New Scheme	Over 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	5 to 30 ha	0	280	280	280	665	665	665	665	665	665	735	5,565
	Below 5 ha	0	0	0	0	0	0	0	0	0	0	0	0
	sub-total	0	280	280	280	665	665	665	665	665	665	735	5,565
Total	Over 30 ha	3,745	1,645	1,645	1,575	0	0	0	0	0	0	0	8,610
	5 to 30 ha	11,445	9,310	9,310	9,240	1,715	1,715	1,715	1,715	1,715	1,715	1,785	51,380
	Below 5 ha	0	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	175	9,625
	sub-total	15,190	12,005	12,005	11,865	2,765	2,765	2,765	2,765	2,765	2,765	1,960	69,615
Kegalle													
NIRP	Over 30 ha	980	980	980	980	0	0	0	0	0	0	0	3,920
	5 to 30 ha	8,085	3,080	3,080	3,115	0	0	0	0	0	0	0	17,360
	Below 5 ha	0	0	0	0	0	0	0	0	0	0	0	0
	sub-total	9,065	4,060	4,060	4,095	0	0	0	0	0	0	0	21,280
IRDP	Over 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	5 to 30 ha	2,730	2,730	0	0	0	0	0	0	0	0	0	5,460
	Below 5 ha	10,745	10,745	0	0	0	0	0	0	0	0	0	21,490
	sub-total	13,475	13,475	0	0	0	0	0	0	0	0	0	26,950
New Scheme	Over 30 ha	0	70	70	70	140	140	140	140	140	140	105	1,155
	5 to 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	Below 5 ha	0	245	245	245	595	595	595	595	595	595	665	4,970
	sub-total	0	315	315	315	735	735	735	735	735	735	770	6,125
Total	Over 30 ha	980	1,050	1,050	1,050	140	140	140	140	140	140	105	5,075
	5 to 30 ha	10,815	5,810	3,080	3,115	0	0	0	0	0	0	0	22,820
	Below 5 ha	10,745	10,990	245	245	595	595	595	595	595	595	665	26,460
	sub-total	22,540	17,850	4,375	4,410	735	735	735	735	735	735	770	54,355

Table 5.3-4

## ESTIMATED COST OF MINOR SCHEMES REHABILITATION (4/4)

Rs. 1,000													
Year		1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
Ratnapura													
NIRP	Over 30 ha	3,185	1,435	1,435	1,365	0	0	0	0	0	0	0	7,420
	5 to 30 ha	17,675	7,910	7,910	7,875	0	0	0	0	0	0	0	41,370
	Below 5 ha	0	0	0	0	0	0	0	0	0	0	0	0
	sub-total	20,860	9,345	9,345	9,240	0	0	0	0	0	0	0	48,790
IRDP	Over 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	5 to 30 ha	0	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	70	12,670
	Below 5 ha	0	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	2,730	15,330
	sub-total	0	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	28,000
New Scheme	Over 30 ha	0	210	210	210	455	455	455	455	455	455	490	3,850
	5 to 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	Below 5 ha	0	420	420	420	980	980	980	980	980	980	1,050	8,190
	sub-total	0	630	630	630	1,435	1,435	1,435	1,435	1,435	1,435	1,540	12,040
Total	Over 30 ha	3,185	1,645	1,645	1,575	455	455	455	455	455	455	490	11,270
	5 to 30 ha	17,675	9,310	9,310	9,275	1,400	1,400	1,400	1,400	1,400	1,400	70	54,040
	Below 5 ha	0	1,820	1,820	1,820	2,380	2,380	2,380	2,380	2,380	2,380	3,780	23,520
	sub-total	20,860	12,775	12,775	12,670	4,235	4,235	4,235	4,235	4,235	4,235	4,340	88,830
Overall													
NIRP	Over 30 ha	20,965	7,665	7,665	7,560	0	0	0	0	0	0	0	43,855
	5 to 30 ha	91,000	44,940	44,940	44,905	0	0	0	0	0	0	0	225,785
	Below 5 ha	0	0	0	0	0	0	0	0	0	0	0	0
	sub-total	111,965	52,605	52,605	52,465	0	0	0	0	0	0	0	269,640
IRDP	Over 30 ha	0	0	0	0	0	0	0	0	0	0	0	0
	5 to 30 ha	4,655	9,380	6,650	6,650	6,650	6,650	6,650	4,725	4,725	4,725	3,395	64,855
	Below 5 ha	12,845	17,570	6,825	6,825	6,825	6,825	6,825	4,725	4,725	4,725	5,180	83,895
	sub-total	17,500	26,950	13,475	13,475	13,475	13,475	13,475	9,450	9,450	9,450	8,575	148,750
New Scheme	Over 30 ha	0	2,870	2,870	2,870	6,825	6,825	6,825	6,825	6,825	6,825	7,175	56,735
	5 to 30 ha	0	7,875	7,875	7,875	18,900	18,900	18,900	18,900	18,900	18,900	20,580	157,605
	Below 5 ha	0	8,400	8,400	8,400	20,160	20,160	20,160	20,160	20,160	20,160	21,525	167,685
	sub-total	0	19,145	19,145	19,145	45,885	45,885	45,885	45,885	45,885	45,885	49,280	382,025
Total	Over 30 ha	20,965	10,535	10,535	10,430	6,825	6,825	6,825	6,825	6,825	6,825	7,175	100,590
	5 to 30 ha	95,655	62,195	59,465	59,430	25,550	25,550	25,550	23,625	23,625	23,625	23,975	448,245
	Below 5 ha	12,845	25,970	15,225	15,225	26,985	26,985	26,985	24,885	24,885	24,885	26,705	251,580
	sub-total	129,465	98,700	85,225	85,085	59,360	59,360	59,360	55,335	55,335	55,335	57,855	800,415



Table 5.3-5

## ESTIMATED COST OF ABANDONED SCHEMES REHABILITATION

		Unit : Rs. 1,000					
District	Year	1999	2000	2001	2002	2003	Total
Matale	Major/Medium	7,500	0	0	0	0	7,500
	Minor	0	3,200	0	0	0	3,200
	Total	7,500	3,200	0	0	0	10,700
Kandy	Major/Medium	13,350	0	0	0	0	13,350
	Minor	0	0	0	0	2,000	2,000
	Total	13,350	0	0	0	2,000	15,350
Nuwara Eliya	Major/Medium	0	20,000	0	0	0	20,000
	Minor	0	0	0	0	0	0
	Total	0	20,000	0	0	0	20,000
Badulla	Major/Medium	9,500	0	0	0	15,000	24,500
	Minor	1,900	2,000	0	4,000	4,150	12,050
	Total	11,400	2,000	0	4,000	19,150	36,550
Moneragala	Major/Medium	9,870	0	200,000	0	99,000	308,870
	Minor	3,000	0	7,000	2,800	0	12,800
	Total	12,870	0	207,000	2,800	99,000	321,670
Ratnapura	Major/Medium	0	30,000	0	0	0	30,000
	Minor	0	0	0	0	0	0
	Total	0	30,000	0	0	0	30,000
Kegalle	Major/Medium	0	0	0	0	0	0
	Minor	0	0	0	0	0	0
	Total	0	0	0	0	0	0
Total	Major/Medium	40,220	50,000	200,000	0	114,000	404,220
	Minor	4,900	5,200	7,000	6,800	6,150	30,050
	Total	45,120	55,200	207,000	6,800	120,150	434,270

**Table 5.4-1 FORECAST OF REHABILITATION PROGRAM FOR RURAL ROAD BY IRDP**

District	Actual Results			Rehabilitation Program			Forecast	
	Total Length	Period(year)	Per Year	Total Length	Period(year)	Per Year	Per Year	Per Year
Kandy	17.6 km	1	17.6 km		Not prepared			18 km
Nuwara Eliya	Foot Path only				No Rehabilitation Programme			0 km
Matale	331.0 km	10	33.1 km		IRDP over			0 km
<b>Central Province</b>								
Ratnapura	112.5 km	8	14.1 km		Not prepared			14 km
Kegalle	164.7 km	7	23.5 km	153.0 km	2	76.5 km		24 km
<b>Sabaragamuwa Province</b>								
Badulla	291.0 km	10	29.1 km	130.0 km	7	18.6 km		18 km
Moneragala	93.0 km	8	11.6 km		Not prepared			12 km
<b>Uva Province</b>								
								30 km
<b>Study Area</b>								
								86 km

**Table 5.4-2 COMPUTATION OF MASTER PLAN VOLUME FOR RURAL ROAD**

District	Class C				Class D				Class E			
	Existing Length (km)	Need Rehabilitation Length (km)	Percent (%)	Proposed Volume (km)	After Rehabilitation Length (km)	Percent (%)	Existing Length (km)	Need Rehabilitation Length (km)	Percent (%)	Proposed Volume (km)	After Rehabilitation Length (km)	Percent (%)
<b>Central</b>												
Kandy	808	549	67.9%	246	303	37.5%	633	293	46.4%	116	177	28.0%
Nuwara Eliya	381	194	51.0%	72	122	32.1%	225	146	64.7%	60	85	37.9%
Matale	339	177	52.1%	66	111	32.7%	237	197	83.2%	108	89	37.5%
<b>Sub-total</b>	<b>1,528</b>	<b>920</b>	<b>60.2%</b>	<b>384</b>	<b>536</b>	<b>35.1%</b>	<b>1,095</b>	<b>636</b>	<b>58.1%</b>	<b>284</b>	<b>352</b>	<b>32.2%</b>
<b>Sabaragamuwa</b>												
Ratnapura	495	233	47.0%	84	148	30.0%	379	198	52.3%	77	121	32.0%
Kegalle	377	43	11.3%	1	42	11.1%	350	119	34.1%	41	78	22.3%
<b>Sub-total</b>	<b>872</b>	<b>275</b>	<b>31.6%</b>	<b>85</b>	<b>190</b>	<b>21.8%</b>	<b>728</b>	<b>317</b>	<b>43.6%</b>	<b>118</b>	<b>199</b>	<b>27.4%</b>
<b>Uva</b>												
Badulla	570	292	51.2%	124	168	29.5%	480	248	51.6%	109	138	28.8%
Monaragala	395	71	17.8%	14	57	14.4%	459	98	21.4%	41	57	12.5%
<b>Sub-total</b>	<b>965</b>	<b>362</b>	<b>37.5%</b>	<b>138</b>	<b>225</b>	<b>23.3%</b>	<b>939</b>	<b>346</b>	<b>36.8%</b>	<b>150</b>	<b>196</b>	<b>20.8%</b>
<b>Total</b>	<b>3,366</b>	<b>1,558</b>	<b>46.3%</b>	<b>607</b>	<b>951</b>	<b>28.3%</b>	<b>2,763</b>	<b>1,299</b>	<b>47.0%</b>	<b>552</b>	<b>747</b>	<b>27.0%</b>
							<b>7,351</b>	<b>1,407</b>	<b>19.1%</b>	<b>1,408</b>	<b>0</b>	<b>0.0%</b>

**Table 5.4-3 MASTER PLAN REHABILITATION VOLUME FOR RURAL ROAD**

Class	District	Need Rehabilitation	To be rehabilitated in 1993		Volume of Master Plan	Implementation Plan (1994-2003)			(Unit : km)
			PC Budget	IRDP Budget		PC Budget	IRDP Budget	New Project	
Class C	Kandy	246	10		236	100		136	
	Nuwara Eliya	72	3		69	30		39	
	Matale	66	3		63	30		33	
	Ratnapura	84	3		81	30		51	
	Kegalle	1	0		1	0		1	
	Badulla	124	5		119	50		69	
	Monaragala	14	1		13	10		3	
Sub-total		607	25		582	250		332	
Class D	Kandy	116	5		111	50		61	
	Nuwara Eliya	60	2		58	20		38	
	Matale	108	5		103	50		53	
	Ratnapura	77	4		73	40		33	
	Kegalle	41	2		39	20		19	
	Badulla	109	5		104	50		54	
	Monaragala	41	2		39	20		19	
Sub-total		552	25		527	250		277	
Class E	Kandy	220		18	202		180	22	
	Nuwara Eliya	71		0	71		0	71	
	Matale	146		0	146		0	146	
	Ratnapura	283		14	269		140	129	
	Kegalle	269		24	245		240	5	
	Badulla	200		18	182		180	2	
	Monaragala	219		12	207		120	87	
Sub-total		1,408		86	1,322		860	462	
Total		2,567	50	86	2,431	500	860	1,071	

**Table 5.4-4 PROJECT COST OF MASTER PLAN FOR RURAL ROAD**

District	Class C			Class D			Class E			Total Cost (MILRS.)
	Volume of Master Plan Length (km)	Public Investment Length (km)	Cost (Mil.Rs.)	Volume of Master Plan Length (km)	Public Investment Length (km)	Cost (Mil.Rs.)	Volume of Master Plan Length (km)	IRDP Length (km)	New Project Length (km)	
<b>Central</b>										
Kandy	236	100	354.0	111	50	133.2	202	180	22	689.2
Nuwara Eliya	69	30	103.5	58	20	69.6	71	0	71	244.1
Matale	63	30	94.5	103	50	123.6	146	0	146	364.1
<b>Sub-total</b>	<b>368</b>	<b>160</b>	<b>552.0</b>	<b>272</b>	<b>120</b>	<b>326.4</b>	<b>419</b>	<b>180</b>	<b>239</b>	<b>1,297.4</b>
<b>Sabaragamuwa</b>										
Ratnapura	81	30	121.5	73	40	73.0	269	140	129	463.5
Kegalle	1	0	1.5	39	20	39.0	245	240	5	285.5
<b>Sub-total</b>	<b>82</b>	<b>30</b>	<b>123.0</b>	<b>112</b>	<b>60</b>	<b>112.0</b>	<b>514</b>	<b>380</b>	<b>134</b>	<b>749.0</b>
<b>Uva</b>										
Badulla	119	50	178.5	104	50	104.0	182	180	2	464.5
Monaragala	13	10	19.5	39	20	39.0	207	120	87	265.5
<b>Sub-total</b>	<b>132</b>	<b>60</b>	<b>198.0</b>	<b>143</b>	<b>70</b>	<b>143.0</b>	<b>389</b>	<b>300</b>	<b>89</b>	<b>730.0</b>
<b>Total</b>	<b>582</b>	<b>250</b>	<b>873.0</b>	<b>527</b>	<b>250</b>	<b>581.4</b>	<b>1,322</b>	<b>860</b>	<b>462</b>	<b>2,776.4</b>

**Table 5.4-5 COMPUTATION OF MASTER PLAN VOLUME FOR WATER SUPPLY**

**At Present**

District	Total Families	Piped Scheme		Hand Pump		Dug Well		Total Beneficiaries	Others (Unprotected)
		Families	% of Schemes	Families	% Hand Pumps	Public Families	Private Families		
Kandy	244,750	30,134	17.8%	191	22.3%	37,820	2,304	16.4	75,126
Nuwara Eliya	139,571	13,230	24.3%	101	0.0%	0	0	0	85,175
Matale	96,416	11,031	15.3%	58	34.1%	24,695	1,778	13.9	24,086
Ratnapura	192,561	26,149	20.3%	141	6.1%	7,909	515	15.4	63,480
Kegalle	171,644	13,783	11.4%	90	2.8%	3,385	149	22.7	50,967
Badulla	156,254	30,132	34.9%	274	10.1%	8,710	346	25.2	69,991
Monaragala	75,832	4,298	9.8%	22	21.1%	9,220	524	17.6	32,048
<b>Total</b>	<b>1,077,028</b>	<b>128,757</b>	<b>19.0%</b>	<b>874</b>	<b>13.6%</b>	<b>91,739</b>	<b>5,616</b>	<b>16.3</b>	<b>400,873</b>

**In 2003**

District	Total Families	Target Families	Piped Scheme		Hand Pump		Dug Well		Total Beneficiaries	Others (Unprotected)
			Families	% of Schemes	Families	% Hand Pumps	Public Families	Private Families		
Kandy	273,714	104,090	18,492	17.8%	97	22.3%	23,208	1,414	16.4	0
Nuwara Eliya	155,332	54,336	13,216	24.3%	131	0.0%	0	0	0	45,600
Matale	107,399	35,069	5,348	15.3%	28	34.1%	11,973	862	13.9	0
Ratnapura	213,655	84,574	17,133	20.3%	92	6.1%	5,182	337	15.4	0
Kegalle	190,889	70,212	8,019	11.4%	52	2.8%	1,969	87	22.7	0
Badulla	173,763	87,500	30,564	34.9%	278	10.1%	8,835	351	25.2	0
Monaragala	84,322	40,538	3,979	9.8%	20	21.1%	8,536	485	17.6	0
<b>Total</b>	<b>1,199,074</b>	<b>476,319</b>	<b>96,751</b>	<b>20.3%</b>	<b>699</b>	<b>12.5%</b>	<b>59,704</b>	<b>3,536</b>	<b>16.9</b>	<b>46,600</b>

Table 5.4-6 PROJECT COST OF MASTER PLAN FOR RURAL WATER SUPPLY

District	DDP by	Target Year	Piped Scheme		Hand Pump		Dug Well			Total Cost (Mil.Rs.) Upto Year 2003
			Families	Number of Schemes	Families	Number of Pumps	Public Families	Private Families	Total Number Of Wells	
Kandy	This Study	2003	18,492	97	23,208	1,414	62,390	26,642	89,032	375.8
Nuwara Eliya	This Study	2003	13,216	131	0	0	41,121	13,345	54,466	186.6
Matale	This Study	2003	5,348	28	11,973	862	17,747	9,194	26,941	142.5
Ratnapura	UNDP	2001	22,058	N.A.	23,460	N.A.	50,920	-	N.A.	307.0
Kegalle	ADB	2010	9,410	N.A.	N.A.	357	N.A.	-	19,730	167.0
Badulla	UNDP	2001	15,000	N.A.	27,800	N.A.	24,838	-	N.A.	260.0
Monaragala	ADB	2010	17,530	N.A.	N.A.	965	N.A.	-	11,510	229.0
Total			101,054	-	86,441	3,598	-	-	-	1,667.9

**Table 5.4-7 MASTER PLAN VOLUME FOR RURAL ELECTRIFICATION**

District	At Present						In 2003				ADB Number of ADB Proposed Schemes	
	Total Families (a)	Domestic Consumer (b)	Rate % (c) (100 x b/a)	Rate (d)	Electrification Available Families (e) (b/d)	Number of Sub-stations (f) (km) (g)	Estimated Total Families(h)	Proposed Electrified Rate % (i)	Proposed Families to be Electrified (j) (h x i/100 - e)	Necessary No. of RESS Schemes (k) (j/200)		Proposed LV line Length(km) (k x g/f)
Central												
Kandy	244,750	85,327	34.9%	0.565	151,021	483	273,714	72.5%	47,421	237	1,104	424
Nuwara Eliya	139,571	22,176	15.9%	0.530	41,842	342	155,332	66.5%	61,454	307	623	194
Matale	96,416	18,555	19.2%	0.449	41,325	182	107,399	59.8%	22,899	114	452	129
Sub-total	480,737	126,058	26.2%		234,188	1,007	536,445		131,775	659	2,178	747
Sabaragamuwa												
Ratnapura	192,561	40,926	21.3%	0.509	80,405	251	213,655	59.0%	45,652	228	1,093	373
Kegalle	171,644	31,083	18.1%	0.481	64,622	253	190,889	59.4%	48,766	244	1,244	267
Sub-total	364,205	72,009	19.8%		145,026	504	404,544		94,418	472	2,337	640
Uva												
Badulla	156,254	44,311	28.4%	0.535	82,824	361	173,763	64.5%	29,253	146	584	274
Monaragala	75,832	8,252	10.9%	0.399	20,682	98	84,322	52.4%	23,503	118	525	103
Sub-total	232,086	52,563	22.6%		103,506	459	258,085		52,756	264	1,109	377
Total	1,077,028	250,630	23.3%		482,720	1,970	1,199,074		278,949	1,395	5,625	1,764



Table 5.5-1 ANTICIPATED YIELD LEVELS OF SELECTED CROPS

Crop	Varities	Agro-region	Potential Yield	Actual Yield	Possible Yield
Paddy	BG 400-1, BG 94-1, H-4, BG 272-6 B, BG 34-8, BG 379-2, BG 276-5	All	6.8	3.3	5.0
Maize	Bhadra-1	DL; IL; IM	4.4-4.5	1.1	2.0
Kurakkan	(finger millet)	DL	2.4		
Cowpea	MI-35; Bombay	DL; IL; WL;IM	1.8-2.3	0.75	1.9
	Iita; Arlington	WM			
Greengram	MI-5; Type 77	DL; IL; WL;IM	2.1-2.2	0.72	2.0
Blackgram	MI-1	DL; IL; WL;IM	2.0	0.63	1.6
Groundnut	MI-1; No.45; X-14; Red Spanish	DL; IL; WL;IM	2.3-3.2	1.1	1.9-2.4
Soybean	PB-1; Bossier	DL; IL; WL;IM	3.5-4.5	0.83	2.5-2.8
Bush Bean	Wade; Top Crop	All except WU	6-10	3.0	5.0
Pole Bean	Kentucky Wonder	All except WU	9-12	4.5	8.0
	Green & Wax				
Beet	Crimson Globe	All	25-30	15	20.0
	Detroit Dark Red				
Brinjal	SM-164; Tinnavelly Purple; Jaffna Purple	DL; IL; WL; WM; IM	20-25	13.8	15.0
Capsicum	CA-8; Hungarian	DL; IL; WL;IM	10-15	1.3	7.0
	Yellow Wax	WM			
Cabbage	K-Y Cross; Talix	All	40-60	22	30.0
	Exotic FI				
Carrot	Lanka Gova				
	Cape Market;	WU; IU	35-40	12.3	20.0
	Top Weight				
	Cape Market;	WM; IM	15-20	8	14.0
	Nantes Half Long				
Cauliflower	Early Phenomena	WU; IU	6-9	n.a	
	Early Patna	WM; IM	6-9	n.a	
Cucumber	LY-58	Wet/Dry Zone	20-25	12.5	15.0
Leek	Large Long	WU; IU	30-40	18.6	30.0
	Summer				
Okra	MI-5; MI-7; VT	DL; IL; WL	16-18	4.0	10.0
	Keystone	IM; WM			
Raddish	Japanese Ball;	All	40-50	7.5	10.0
	Beeralu Rabu				
Tomato	T-62; Roma;	WL; IL; DL	20-30	10.6	16.0
	Maglobe				
	T-146; T-245	DM			
	T-62				
	T-146; T-245;	IU			
	T.89				
Chilli	MI-1; MI-2	DL (Irrigated)	2.5-3.5 (dry)	1.4	1.8
		(Rainfed)	1.5-2.0 (dry)	0.7	1.0
Big Onion	Pusa Red;	DL	20-30	11.9	18.0
	Bombay Red				
	Rampur Red				
	Red Creole				
Red Onion	Jaffna Local	DL	15-20	11.5	13.0
	Vethalan				
Potato	Arka; Vikero;	WU; IW; DL	15-25	11.5	15.0
	Cardinal; Isna;				
	Desiree; Seta;				
	Krushii; SEI				

Source: Crop Recommendations Technoguide, 1990, DOA.  
Technology Transfer Division, DOA  
Agricultural Implementation Programme, 1993, MADR

Table 5.5-2 CROP INTENSITY IN THE STUDY AREA

CENTRAL PROVINCE					SABARAGAMUWA PROVINCE					UVA PROVINCE					Unit: ha)			
Division	Annual Cropped Area (X)	Extent Yala Cropped Area (Y)	(X-Y)	X/(X-Y)	Division	Annual Cropped Area (X)	Extent Yala Cropped Area (Y)	(X-Y)	X/(X-Y)	Division	Annual Cropped Area (X)	Extent Yala Cropped Area (Y)	(X-Y)	X/(X-Y)				
KANDY DISTRICT(1,891.3 sqkm)																		
Minipe	5,510	290	5,220	105.6%	Pelmadulla	2,771	1,310	1,461	189.7%	BADULLA DISTRICT (2,822.0 sqkm)							3,951	159.5%
Udadumbara	4,498	1,647	2,851	157.8%	Openayaka	1,172	546	626	187.2%	Uvaparana	6,378	2,421	3,957	161.2%				
Medadumbara	3,023	1,348	1,675	180.5%	Balangoda	4,226	1,991	2,235	189.1%	Ella	1,192	429	763	156.2%				
Pathadumbara	1,742	983	759	229.5%	Imbulpe	3,234	1,555	1,679	192.6%	Bandarawel	1,227	303	924	132.8%				
Penwila	423	226	197	214.7%	Weligapola	4,003	2,076	1,927	207.7%	Passara	2,731	860	1,871	146.0%				
Kundasale	1,300	647	653	199.1%	Kahawatta	1,132	563	569	198.9%	Ridimaliyac	6,619	697	5,922	111.8%				
Kandy	473	236	237	199.6%	Godakawela	2,764	1,124	1,640	168.5%	Meegahakiti	2,586	673	1,913	135.2%				
Pathahewaheta	3,888	1,777	2,111	184.2%	Eheliyagoda	2,982	1,395	1,587	187.9%	Mahiyangar	7,355	2,424	4,931	149.2%				
Halspathuwa	1,525	644	881	173.1%	Kuruwita	5,987	2,866	3,121	191.8%	Kandeketiye	4,174	1,031	3,143	132.8%				
Akurana	700	355	345	202.9%	Ratanapura	2,317	1,087	1,230	188.4%	Hallela	3,044	1,040	2,004	151.9%				
Pujapitiya	2,007	1,019	988	203.1%	Elapatha	1,662	810	852	195.1%	Haputale	914	285	629	145.3%				
Thunpance	2,704	1,374	1,330	203.3%	Ayagama	856	415	441	194.1%	Haldummul	2,387	954	1,433	166.6%				
Yainuwara	3,042	1,546	1,496	203.3%	Nivithigala	1,741	829	912	190.9%	Badulla	809	341	468	172.9%				
Udunuwara	3,021	1,507	1,514	199.5%	Kalawana	3,199	1,529	1,670	191.6%	Soranatoia	1,696	476	1,220	139.0%				
Udupalatha	2,245	1,055	1,190	188.7%	Embilipitiya	11,650	4,953	6,697	174.0%	MONERAGALA DISTRICT (5,659.3 sqkm)							33,129	143.1%
Passage	582	252	330	176.4%	Kolonna	5,519	1,433	4,086	135.1%	Madalla	2,063	96	1,967	104.9%				
Gangaihal K.	1,334	680	654	204.0%			55,215	24,482	30,733	179.7%	Wellassa	4,183	600	3,583	116.7%			
				22,431					1,641.1 sqkm	Medagama	2,258	234	2,024	111.6%				
				169.5%					1,227	Badalkumbi	2,253	533	1,720	131.0%				
				173.8%					1,971	Moneragala	1,802	126	1,676	107.5%				
				211.5%					2,300	Siyambalan	7,550	1,448	6,102	123.7%				
				161.4%					1,504	Buttala	5,166	1,287	3,879	133.2%				
				172.5%					1,348	Wellawaya	5,810	1,163	4,647	125.0%				
				160.1%					1,889	Thanamalw	13,188	2,959	10,229	128.9%				
				185.2%					610			44,273	35,827	123.6%				
				129.4%					626									
				137.6%					512									
				146.4%					12,191									
				133.2%					198.9%									
				153.8%														
				147.1%														
				170.3%														
NUWARA-ELIYA DISTRICT (1703.4 sqkm)																		
NUWARA-ELIYA DISTRICT (1703.4 sqkm)																		
N'Eliya	5,191	2,814	2,377	218.4%	Kegalle	2,427	1,200	1,227	197.8%	Rambukkan	3,947	1,976	1,971	200.3%				
Komale	1,788	736	1,052	170.0%	Mawanella	4,561	2,261	2,300	198.3%	Aranayake	2,994	1,490	1,504	199.1%				
Walapane	8,813	3,534	5,279	166.9%	Galigamuvi	2,654	1,306	1,348	196.9%	Warakapola	3,728	1,839	1,889	197.4%				
Ginigathena	721	259	462	156.1%	Ruwanwella	1,210	600	610	198.4%	Deraniyagala	1,262	636	626	201.6%				
Hangurankel	8,432	2,954	5,478	153.9%	Yaiyanthoti	2,288	228	2,060	211.8%	Dehiwita	1,034	522	512	202.0%				
				170.3%					24,249									
				170.3%					12,058									

Table 5.6-1 ENVIRONMENT PRESERVATION AND CONTROL PLAN (1/4)

Item		Causes and Effects	Target of Conservation	Strategy for Conservation	Legal Structure												
Environmental Issues					National Environmental Action Plan (1990)	National Conservation Strategy (1990)	National Environment Act (1980, amended 1988)	National Heritage and Wilderness Act (1987)	National Aquatic Resources Act (1981)	Pesticides Control Act (1980)	Agrarian Services Act (1978)	Mines and Minerals Law (1973)	State Gem Corporation Act (1951)	Crown Lands Encroachment Ordinance (1947)	Forest and Flora Protection Ordinance (1937)	Forest Ordinance (1937)	Land Development Ordinance (1935)
Soil Erosion	Land Resources	(1) Degradation of farm lands by inappropriate agricultural activities  (2) Acceleration of sediment loads of rivers and dams due to deforestation and encroachment of reserves	(a) Reduction of the area to be treated	(i) Promotion of farm land conservation and watershed management	○	○						○		○	○		
			(b) Implementation of soil conservation projects and programs	(ii) Enhancement of the on-going projects such as SALT Project	○	○						○					
			(c) Establishment of appropriate land use plan and its management	(iii) Introduction of participation of local people to soil erosion control projects and programs	○	○						○					
				(iv) Formulation of watershed management projects	○	○	○							○			
				(v) Control of shifting cultivation and inappropriate agricultural practices	○	○					○					○	
Shifting Cultivation		(1) Acceleration of deforestation and soil erosion  (2) Encroachment of reserved areas  (3) Degradation of marginal lands	(a) Control of shifting cultivation	(i) Establishment of land use plan	○	○		○					○	○	○		
			(b) Establishment of proper land use plan and its management	(ii) Enhancement of agro-forestry	○	○					○				○		
				(iii) Promotion of settlement or transmigration of local people	○	○											
				(iv) Introduction of live stock and other agricultural activities	○	○								○			
				(v) Promotion of IRDP	○	○										○	

Table 5.6-1 ENVIRONMENT PRESERVATION AND CONTROL PLAN (2/4)

Item	Causes and Effects	Target of Conservation	Strategy for Conservation	Legal Structure												
				National Environmental Action Plan (1990)	National Conservation Strategy (1990)	National Environment Act (1980, amended 1988)	National Heritage and Wilderness Act (1987)	National Aquatic Resources Act (1981)	Pesticides Control Act (1980)	Agricultural Services Act (1978)	Mines and Minerals Law (1973)	State Gem Corporation Act (1951)	Crown Lands Encroachment Ordinance (1947)	Fauna and Flora Protection Ordinance (1937)	Forest Ordinance (1937)	Land Development Ordinance (1990)
Environmental Issues	(1) Damages to human life and social infrastructure (2) Impacts on regional economy	(a) Implementation of structural and non-structural prevention measures in the landslide prone areas  (b) Achievement of sustainable production of tobacco and sugar cane (c) Establishment of proper land use plan	(i) Delineation of landslide prone areas	○	○											○
			(ii) Establishment of warning and evacuation system	○	○											
			(iii) Resettlement of people living in landslide prone areas	○	○											
			(iv) Implementation of prevention measures	○	○							○				
			(v) Reconstruction of infrastructure in the damaged area	○	○											
Land Resources	(1) Acceleration of soil erosion, declining fertility of land and deforestation (2) Water pollution by utilization of fertilizers and agrochemicals (3) Confliction between man and wildlife		(i) Establishment of land use plan	○	○		○				○		○	○	○	○
			(ii) Implementation of farm land conservation measures	○	○							○		○		
			(iii) Change of agricultural practices	○	○							○				
			(iv) Control of utilization of fertilizers and agrochemicals	○	○			○								

Table 5.6-1 ENVIRONMENT PRESERVATION AND CONTROL PLAN (3/4)

Item	Causes and Effects	Target of Conservation	Strategy for Conservation	Legal Structure												
				National Environmental Action Plan (1990)	National Conservation Strategy (1990)	National Environment Act (1980, amended 1988)	National Heritage and Wilderness Act (1987)	National Aquatic Resources Act (1981)	Pesticides Control Act (1980)	Agriculture Services Act (1978)	Mines and Minerals Law (1973)	State Gem Corporation Act (1951)	Crown Lands Encroachment Ordinance (1947)	Fauna and Flora Protection Ordinance (1937)	Forest Ordinance (1937)	Land Development Ordinance (1990)
Environmental Issues	Gem Mining	(1) Acceleration of ground subsidence, slope instability and lowering groundwater table (2) Siltation of river water	(a) Extinction of illegal gem mining (b) Introduction of environmentally sound gem mining methods (c) Introduction of proper land use plan	○	○						○				○	○
				○	○			○			○		○		○	○
				○	○							○				
Forest Resources	Deforestation	(1) Acceleration of soil erosion (2) Degradation of forest resources and water resources (3) Encroachment of wildlife reserves	(a) Freeze of development of existing dense forests	○	○		○						○	○	○	○
			(b) Conversion of open forests into agricultural lands with careful environmental management	○	○					○					○	○
			(c) Reafforestation of marginal lands covered by open forests	○	○			○						○	○	
			(d) Enhancement of sustainable use of forest plantation areas	○	○							○		○	○	
			(v) Promotion of community forestry	○	○										○	

Table 5.6-1 ENVIRONMENT PRESERVATION AND CONTROL PLAN (4/4)

Item	Causes and Effects	Target of Conservation	Strategy for Conservation	Legal Structure												
				(1990) National Environmental Action Plan	(1990) National Conservation Strategy	(1980, amended 1988) National Environment Act	(1987) National Heritage and Wilderness Act	(1981) National Aquatic Resources Act	(1980) Pesticides Control Act	(1978) Agricultural Services Act	(1973) Mines and Minerals Law	(1951) State Game Corporation Act	(1947) Crown Lands Encroachment Ordinance	(1937) Fauna and Flora Protection Ordinance	(1937) Forest Ordinance	(1990) Land Development Ordinance
Environmental Issues Encroachment of Reserves	(1) Degradation of forest, land, water and tourism resources (2) Destruction of habitats of wildlife (3) Confliction between man and wildlife	(a) Extinction of encroachment of reserves (b) Establishment of proper management of reserves	(i) Establishment of management plan of reserves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			(ii) Delineation of specific zones for wildlife conservation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			(iii) Control of encroachment of reserves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			(iv) Implementation of protection measures of farm lands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biodiversity and Wildlife																

Table 5.6-2 LIST OF PROJECTS AND PROGRAMS TO BE IMPLEMENTED (1/4)

A. Matale District

- 1) Etipola Kanda Conservation Programs of Etipola Kanda and Knuckeles Range: FD, LUPPD, DEA and CEA.
  - development and implementation of comprehensive conservation programs.
  - establishment and execution of a long term integrated conservation plan.
- 2) Poppaham Arboretum Management Project, FD, LUPPD, DEA and CEA.
  - establishment and execution of conservation plan of fauna and flora.
- 3) District Land Use Planning Project: District Government, FD, LUPPD, DEA and CEA.
  - establishment of a long term integrated land use plan.
- 4) Programs for Promotion and Dissemination of Physical, Vegetative and Agronomic Soil Conservation Measures: NADSA, M/AR&D and DEA.
  - promotion of soil erosion control measures among the local people,
  - enforcement of capacity building for effective dissemination of control measures.
- 5) Environmental Impact Assessment Study for the Moragahakanda Dam Project: the Project Executing Agency, DEA and CEA.
  - implementation of an overall impact assessment of the Project,
  - preparation of appropriate mitigation measures against the negative impacts.
- 6) Landslide Prone Area Mapping Project: National Building and Research Organization (NBRO).
  - mapping of landslide prone area and establishment of warning system,
  - relocation of people living in landslide prone area.
- 7) Forest Management Program: FD.
  - establishment of management plan of forestry,
  - control of shifting cultivation and deforestation,
  - enforcement of capability of forest management,
  - capacity building and staff training system.
- 8) Reforestation Project around Reservoir: FD, LUPPD and DEA.
  - reafforestation of the catchment area of tanks and reservoirs.
- 9) Fuel Wood Development Program for Tobacco Production: Ceylon Tobacco Company (CTC) and FD.
  - research and development of fuel wood for tobacco production.
- 10) Programs for Capacity Building of District Environmental Management and Land Use Planning Unit: FD, LUPPD, DEA and CEA.
  - establishment and implementation of control and monitoring plan of environmental issues,
  - enhancement of environmental management capability.
- 11) Programs for Environmental Education of the Local People: DEA, CEA and Department of Education.
  - establishment and implementation of environmental education programs.

B) Kandy District

- 1) District Land Use Planning Project: District Government, FD, LUPPD, DEA and CEA.
  - establishment of a long term integrated land use plan.
- 2) Programs for Promotion and Dissemination of Physical, Vegetative and Agronomic Soil Conservation Measures: NADSA, M/AR&D and DEA.
  - development of effective erosion control measures for tobacco growers,
  - promotion of soil erosion control measures among the local people,
  - enforcement of capacity building for effective dissemination of control measures.

Table 5.6-2 LIST OF PROJECTS AND PROGRAMS TO BE IMPLEMENTED (2/4)

- 3) Agricultural Land Extension Control Programs in Steep Slope Area: NADSA, M/AR&D, LUPPD and DEA.
  - control of inadequate expansion of agricultural lands in steep slope area,
  - curtailing of existing cultivation activities in steep slope area.
- 4) Reforestation Project of Degraded Forest Area: FD, LUPPD and DEA.
  - control of shifting cultivation and deforestation,
  - reafforestation of degraded area and marginal lands.
- 5) Programs for Capacity Building of District Environmental Management and Land Use Planning Unit: FD, LUPPD, DEA and CEA.
  - establishment and implementation of control and monitoring plan of environmental issues,
  - enhancement of environmental management capability.
- 6) Programs for Environmental Education of the Local People: DEA, CEA and Department of Education.
  - establishment and implementation of environmental education programs.

C) Nuwara Eliya District

- 1) Agricultural Land Extension Control Programs in Steep Slope Area: NADSA, M/AR&D, LUPPD and DEA.
  - control of inadequate expansion of agricultural lands in steep slope area,
  - curtailing of existing cultivation activities in steep slope area.
- 2) Programs for Management of Encroachment Activities in Forest Area: FD, LUPPD, DEA and CEA.
  - control of encroachment of forest areas.
- 3) District Land Use Planning Project: District Government, FD, LUPPD, DEA and CEA.
  - establishment of a long term integrated land use plan.
- 4) Programs for Promotion and Dissemination of Physical, Vegetative and Agronomic Soil Conservation Measures: NADSA, M/AR&D and DEA.
  - promotion of soil erosion control measures among the local people,
  - enforcement of capacity building for effective dissemination of control measures.
- 5) Reforestation Project of Degraded Forest Area: FD, LUPPD and DEA.
  - reafforestation of degraded area and marginal lands.
- 6) Programs for Enforcement of the Crown Land Ordinance: FD, LUPPD and DEA.
  - preservation of forest area destruction by enforcement of regulations.
- 7) Landslide Prone Area Mapping Project: NBRO.
  - mapping of landslide prone area and establishment of warning system,
  - relocation of people living in landslide prone area,
  - improvement of drains and other preventive structures.
- 8) Programs for Capacity Building of District Environmental Management and Land Use Planning Unit: FD, LUPPD, DEA and CEA.
  - establishment and implementation of control and monitoring plan of environmental issues,
  - enhancement of environmental management capability.



Table 5.6-2 LIST OF PROJECTS AND PROGRAMS TO BE IMPLEMENTED (3/4)

D) Badulla District

- 1) Programs for Stabilization of Activities of Shifting Cultivation: FD, LUPPD, DEA and M/AR&D.
  - change shifting cultivation to more stable forms of cropping.
- 2) Programs for Promotion of Community Forestry: FD and DEA.
  - supplying fuel wood and timber to local people.
- 3) Agricultural Land Extension Control Programs in Steep Slope Area: NADSA, M/AR&D, LUPPD and DEA.
  - control of inadequate expansion of agricultural lands in steep slope area,
  - curtailing of existing cultivation activities in steep slope area.
- 4) Programs for Promotion and Dissemination of Physical, Vegetative and Agronomic Soil Conservation Measures: NADSA, M/AR&D and DEA.
  - promotion of soil erosion control measures among the local people,
  - enforcement of capacity building for effective dissemination of control measures.
- 5) Landslide Prone Area Mapping Project: NBRO.
  - mapping of landslide prone area and establishment of warning system,
  - relocation of people living in landslide prone area,
  - improvement of drains and other preventive structures.
- 6) Programs for Capacity Building of DEA: DEA and CEA.
  - enhancement of environmental management capability,
  - promotion of supervision and monitoring,
  - enforcement of coordination capability.
- 7) Programs for Environmental Education of the Local People: DEA, CEA and Department of Education.
  - establishment and implementation of environmental education programs,
  - promotion of participation of local people to environmental management.

E) Moneragala District

- 1) Programs for Involvement of Small Farmers to Soil Conservation; Provincial and District agencies, DEA, LUPP, NADSA and M/AD&R.
  - control soil erosion with participation of local people.
- 2) Programs for Promotion of Community Forestry: FD and DEA.
  - supplying fuel wood and timber to local people.
- 3) Programs for Stabilization of Activities of Shifting Cultivation: FD, LUPPD, DEA and M/AR&D.
  - change shifting cultivation to more stable forms of cropping.
- 4) Programs for Capacity Building of DEA: DEA and CEA.
  - enhancement of environmental management capability,
  - promotion of supervision and monitoring,
  - enforcement of coordination capability.
- 5) Programs for Environmental Education of the Local People: DEA, CEA and Department of Education.
  - establishment and implementation of environmental education programs,
  - promotion of participation of local people to environmental management.
- 6) Conservation and Management Project of Fauna and Flora: FD, DEA, CEA and M/AD&R.
  - management of confliction between man and elephant,
  - establishment and implementation of a plan for conservation plan of fauna and flora.

Table 5.6-2 LIST OF PROJECTS AND PROGRAMS TO BE IMPLEMENTED (4/4)

F) Kegalla District

- 1) Programs for Natural Hazard Prevention: NBRO and DEA.
  - mapping of landslide and flood prone area and establishment of warning system,
  - relocation of people living in landslide prone area,
  - improvement of drains and other preventive structures.
- 2) Programs for Promotion and Dissemination of Physical, Vegetative and Agronomic Soil Conservation Measures: NADSA, M/AR&D and DEA.
  - promotion of soil erosion control measures among the local people,
  - enforcement of capacity building for effective dissemination of control measures.
- 3) Reforestation Project of Degraded Forest Area: FD, LUPPD and DEA.
  - reafforestation of degraded area and marginal lands.
- 4) Programs for Capacity Building of Environmental Management: DEA and CEA.
  - enhancement of environmental management capability,
  - promotion of supervision and monitoring,
  - enforcement of coordination capability.
- 5) Programs for Environmental Education of the Local People: DEA, CEA and Department of Education.
  - establishment and implementation of environmental education programs,
  - promotion of participation of local people to environmental management.
- 6) Programs for Promotion of Community Forestry: FD and DEA.
  - supplying fuel wood and timber to local people.
- 7) Reforestation Project of Degraded Forest Area: FD, LUPPD and DEA.
  - reafforestation of degraded area and marginal lands.

G) Ratnapura District

- 1) Programs for Preparation of Long Term Environmental Management Plan: DEA and CEA.
  - guidelines for environmental protection,
  - introduction of EIA system,
  - establishment of institutional framework.
- 2) Environmental Management Project for Gem Mining: SGC, FD, LUPPD, DEA and CEA.
  - establishment of monitoring system, mapping of gem bearing areas,
  - development of environmentally sound gem mining methods,
  - rehabilitation of degraded lands.
- 3) Programs for Promotion and Dissemination of Physical, Vegetative and Agronomic Soil Conservation Measures: NADSA, M/AR&D and DEA.
  - promotion of soil erosion control measures among the local people,
  - enforcement of capacity building for effective dissemination of control measures.
- 4) Landslide Prone Area Mapping Project: NBRO.
  - mapping of landslide prone area and establishment of warning system,
  - relocation of people living in landslide prone area,
  - improvement of drains and other preventive structures.
- 5) Programs for Capacity Building of Environmental Management Unit in Provincial Council: Provincial Council, DEA and CEA.
  - enhancement of environmental management capability,
  - promotion of supervision and monitoring,
  - enforcement of coordination capability.
- 6) Programs for Environmental Education of the Local People: DEA, CEA and Department of Education.
  - establishment and implementation of environmental education programs,
  - promotion of participation of local people to environmental management.

Table 5.6-3 LIST AND PROFILE OF THE IDENTIFIED FARM LAND CONSERVATION SCHEMES IN THE UP-COUNTRY AREA (1/3)

Name of Scheme	Division	Class2 (30-60%)				Class3 (>60%)				Class8 (30-60%)				Total	Priority	
		H	S	F	Others	H	S	F	Others	H	S	F	Others	Area (ha)		
I. Central Province																63,500
A. Matale																
Ma-1 Erawalagala FLC Scheme	Dambulla	0	0	100	200	0	0	0	0	0	0	0	0	300	L	
Ma-2 Nuwaraagolla FLC Scheme	Dambulla	0	200	600	0	0	0	0	0	0	0	0	0	800	L	
Ma-3 Mukulana FLC Scheme	Dambulla/Naula	0	0	200	0	0	0	500	100	0	100	700	0	1,600	L	
Ma-4 Dambagolla FLC Scheme	Naula	0	100	400	0	0	0	0	0	0	0	0	0	500	M	
Ma-5 Nikula FLC Scheme	Naula	0	0	0	0	0	0	0	0	0	300	500	100	900	M	
Ma-6 Naula FLC Scheme	Naula	0	0	200	0	0	0	0	0	0	100	400	100	800	M	
Ma-7 Melegala FLC Scheme	Naula/Galewela	0	0	0	0	0	0	0	0	0	500	300	0	800	M	
Ma-8 Galboda FLC Scheme	Naula	0	100	200	0	0	0	100	0	0	500	0	0	900	M	
Ma-9 Opalgala FLC Scheme	Naula	100	100	100	0	0	0	0	0	0	100	100	0	500	M	
Ma-10 Andawala FLC Scheme	Naula	0	300	0	100	0	0	0	0	100	300	0	0	800	M	
Ma-11 Kiulewadiya FLC Scheme	Lagalla	0	100	200	0	0	0	0	0	0	100	100	0	500	H	
Ma-12 Puwakpitiya FLC Scheme	Lagalla	0	0	1,500	0	0	0	0	0	0	800	500	0	2,800	H	
Ma-13 Katupana FLC Scheme	Lagalla	0	400	1,200	0	0	100	1,000	0	0	1,000	400	200	4,300	H	
Ma-14 Mousakanda FLC Scheme	Lagalla	0	0	200	0	0	100	200	0	0	100	100	0	700	H	
Ma-15 Gammasaduwa FLC Scheme	Ambanganga Korale	100	100	300	100	0	0	0	0	0	0	100	300	1,000	L	
Ma-16 Dangakanda FLC Scheme	Rattota	200	0	600	200	0	100	400	0	0	200	0	0	1,700	M	
Ma-17 Neluwakanda FLC Scheme	Rattota	300	0	0	0	0	0	0	0	0	0	0	0	300	M	
Ma-18 Matale FLC Scheme	Matale	100	100	300	0	0	0	200	0	200	0	0	0	900	L	
Ma-19 Ukuwela FLC Scheme	Ukuwela	600	0	0	0	0	0	0	0	300	0	0	0	900	L	
Sub Total		1,400	1,500	6,100	600	0	300	2,400	100	600	4,100	3,200	700	21,000	-	
B. Kandy																
Ka-1 Kandegama FLC Scheme	Minipe	0	100	400	0	0	0	500	0	0	500	1,300	200	3,000	H	
Ka-2 Kikaweta FLC Scheme	Ududumbara	0	400	2,200	100	0	100	2,900	0	0	0	100	100	5,900	H	
Ka-3 Madugoda FLC Scheme	Ududumbara	400	300	300	200	100	200	100	0	200	900	300	700	3,700	H	
Ka-4 Dewahandiya FLC Scheme	Ududumbara	0	100	100	0	0	0	100	0	0	1,100	1,000	200	2,600	H	
Ka-5 Kosgama FLC Scheme	Panwila	0	0	700	0	0	0	200	0	0	0	0	0	900	H	
Ka-6 Rengala FLC Scheme	Medadumbara	500	0	0	0	100	0	0	0	0	0	0	0	600	H	
Ka-7 Mirisketiya FLC Scheme	Medadumbara	0	0	600	0	200	200	100	0	0	0	0	0	1,100	H	
Ka-8 Urugala FLC Scheme	Medadumbara	0	200	0	0	100	0	0	0	0	100	0	0	400	H	
Ka-9 Pitigoda FLC Scheme	Medadumbara	100	200	0	0	0	0	0	0	0	1,000	600	300	2,200	H	
Ka-10 Narepassawa FLC Scheme	Kundasale	200	0	0	0	600	0	0	0	0	0	0	0	800	L	
Ka-11 Kurudugahala FLC Scheme	Akurana	500	0	0	0	200	0	0	0	0	0	0	0	700	L	
Ka-12 Damunupola FLC Scheme	Turnpane	400	0	0	0	300	0	0	0	0	200	0	0	900	L	
Ka-13 Kolugala FLC Scheme	Turnpane	600	0	0	0	100	0	0	0	0	0	0	0	700	L	
Ka-14 Udawela FLC Scheme	Yatinuwara	100	100	0	0	0	0	0	0	100	200	0	0	500	L	
Ka-15 Sooriyagoda FLC Scheme	Yatinuwara/Kandy	200	0	100	0	200	0	0	0	0	100	0	0	600	L	
Ka-16 Elkewela FLC Scheme	Pathahewaheta	400	0	0	100	500	400	0	0	0	200	0	0	1,600	M	
Ka-17 Bopitiya FLC Scheme	Udaparatha	100	100	0	0	200	100	0	0	0	200	0	0	700	H	
Ka-18 Pussellawa FLC Scheme	Udaparatha	300	200	0	0	300	0	0	0	100	400	0	0	1,300	H	
Ka-19 Keragala FLC Scheme	Gangaihalu Korale	0	0	0	0	200	200	200	0	0	100	0	0	700	M	
Ka-20 Udahentenna FLC Scheme	Gangaihalu Korale	100	0	0	0	400	100	0	0	0	100	0	0	700	M	
Ka-21 Pattitalawa FLC Scheme	Gangaihalu Korale	200	100	0	0	200	0	0	0	0	300	0	0	800	M	
Ka-22 Hangranoya FLC Scheme	Pasbage Korale	200	100	0	100	0	0	0	100	0	0	0	200	700	H	
Ka-23 Templestowe FLC Scheme	Pasbage Korale	0	300	200	0	0	200	0	0	0	400	0	0	1,100	H	
Sub Total		4,300	2,200	4,600	500	3,700	1,500	4,100	100	400	5,800	3,300	1,700	32,200	-	

Table 5.6-3 LIST AND PROFILE OF THE IDENTIFIED FARM LAND CONSERVATION SCHEMES IN THE UP-COUNTRY AREA (2/3)

Name of Scheme	Division	Class2 (30-60%)				Class3 (>60%)				Class8 (30-60%)				Total Area (ha)	Priority
		H	S	F	Others	H	S	F	Others	H	S	F	Others		
C. Nuwara Eliya District															
Nu-1 Teripeha FLC Scheme	Walapane	0	0	0	0	0	0	0	0	0	0	200	1,100	1,300	II
Nu-2 Pannala FLC Scheme	Walapane	0	0	0	0	0	0	0	0	0	200	300	500	1,000	II
Nu-3 Yatimadura FLC Scheme	Walapane	300	0	0	0	0	200	200	100	0	0	0	0	800	II
Nu-4 Ragala FLC Scheme	Walapane	200	0	0	200	200	100	0	0	0	0	0	0	700	II
Nu-5 Valikadatenna FLC Scheme	Hanguranketa	0	300	0	0	0	0	0	0	100	300	0	0	700	II
Nu-6 Happpuwara FLC Scheme	Hanguranketa	0	0	0	0	0	0	0	0	0	0	100	300	400	II
Nu-7 Ubawatta FLC Scheme	Hanguranketa	300	0	0	0	0	0	0	0	600	0	100	0	1,000	II
Nu-8 Eliamulle FLC Scheme	Hanguranketa	200	200	400	0	0	0	600	0	100	0	0	0	1,500	II
Nu-9 Maturata FLC Scheme	Hanguranketa	300	0	0	0	0	0	0	200	0	0	0	0	500	II
Nu-10 Bogawana FLC Scheme	Nuwara Eliya	0	0	700	100	0	0	0	100	0	0	0	0	900	II
Nu-11 Galaboda FLC Scheme	Ambagamuwa	0	0	900	0	0	0	0	0	0	0	0	0	900	II
Nu-12 Bulatwatta FLC Scheme	Ambagamuwa	100	100	200	200	0	0	0	0	0	0	0	0	600	II
Sub Total		1,400	600	2,200	500	200	300	800	400	800	500	700	1,900	10,300	-

	Class2 (30-60%)				Class3 (>60%)				Class8 (30-60%)				Total Area (ha)	Priority	
	H	S	F	Others	H	S	F	Others	H	S	F	Others			
II. Uva Province															
D. Badulla District															
Ba-1 Bkiriyanakumbura FLC Scheme	Ridimaliyadda	0	0	0	0	0	0	0	0	0	500	500	0	1,000	L
Ba-2 Galigamuwa FLC Scheme	Ridimaliyadda	0	0	0	0	0	0	0	0	200	400	900	300	1,800	L
Ba-3 Migahakivula FLC Scheme	Migahakivula	200	0	0	0	0	0	0	0	200	1,000	300	300	2,000	L
Ba-4 Taldena FLC Scheme	Soranatota	100	100	0	0	100	0	0	100	100	1,000	200	200	1,900	M
Ba-5 Galbokkegama FLC Scheme	Soranatota/Haliela	600	100	0	0	0	0	0	0	0	0	0	0	700	M
Ba-6 Kandaketiya FLC Scheme	Kandaketiya	100	100	0	0	0	0	0	0	200	1,500	100	200	2,200	H
Ba-7 Pathagala FLC Scheme	Kandaketiya	0	0	0	0	0	0	0	0	0	1,300	600	500	2,400	H
Ba-8 Ketawela FLC Scheme	Haliela	400	100	0	0	0	0	0	0	100	100	0	0	700	II
Ba-9 Kairatnagama FLC Scheme	Haliela	200	200	0	0	200	0	0	0	0	0	0	0	600	II
Ba-10 Edandupola FLC Scheme	Haliela	300	100	0	0	0	0	0	0	100	100	0	0	600	II
Ba-11 Yalagamuwa FLC Scheme	Uvaparanagama	300	200	0	0	300	100	0	0	200	100	0	0	1,200	M
Ba-12 Galgewela FLC Scheme	Uvaparanagama	400	0	0	0	400	0	0	0	0	0	0	0	800	M
Ba-13 Nawalagama FLC Scheme	Ella	500	100	0	0	100	100	0	0	0	0	0	0	800	L
Ba-14 Dodangolla FLC Scheme	Ella	0	0	0	0	0	0	300	300	0	300	100	200	1,200	L
Ba-15 Hakgala FLC Scheme	Welimada	400	0	0	0	300	100	0	0	0	100	0	0	900	H
Ba-16 Ohiya FLC Scheme	Welimada	200	0	0	700	100	0	0	200	100	0	0	0	1,300	H
Ba-17 Manikawatte FLC Scheme	Bandarawela	600	0	0	0	0	0	0	0	0	0	0	0	600	L
Ba-18 Harankadawa FLC Scheme	Halduummulla	300	0	0	0	0	0	0	0	100	600	0	0	1,000	II
Ba-19 Baduludela FLC Scheme	Halduummulla	0	0	0	0	0	0	0	0	0	0	1,200	0	1,200	H
Sub Total		4,600	1,000	0	700	1,500	300	300	600	1,300	7,000	3,900	1,700	22,900	-

Table 5.6-3 LIST AND PROFILE OF THE IDENTIFIED FARM LAND CONSERVATION SCHEMES IN THE UP-COUNTRY AREA (3/3)

Name of Scheme	Division	Class2 (30-60%)				Class3 (>60%)				Class8 (30-60%)				Total Area (ha)	Priority
		H	S	F	Others	H	S	F	Others	H	S	F	Others		
III. Sabaragamuwa Province		27,500													
F. Kegalla															
Ke-1 Mawela FLC Scheme	Mawanela	500	0	0	0	0	0	0	0	300	0	0	0	800	M
Ke-2 Golinda FLC Scheme	Kegalla	500	0	0	0	200	0	0	0	0	0	0	0	700	L
Ke-3 Aranayaka FLC Scheme	Aranayaka	200	100	0	0	100	0	0	0	0	300	0	0	700	L
Ke-4 Kanangomuwa FLC Scheme	Galigamuwa	500	100	0	0	100	0	0	0	0	100	0	0	800	L
Ke-5 Pelanpitiya FLC Scheme	Yatiantola	0	0	0	0	900	0	0	0	0	0	0	0	900	H
Ke-6 Dodawatta FLC Scheme	Deraniyagala	200	100	0	0	0	0	0	0	300	200	0	0	800	H
Ke-7 Tembilyana FLC Scheme	Dehiowita	200	100	0	0	200	0	0	0	0	0	0	0	500	H
Sub Total		2,100	400	0	0	1,500	0	0	0	600	600	0	0	5,200	-

G. Ratnapura District		Class2 (30-60%)				Class3 (>60%)				Class8 (30-60%)				Total Area (ha)	Priority
		H	S	F	Others	H	S	F	Others	H	S	F	Others		
Ra-1 Halpe FLC Scheme	Imbulpe	0	400	0	300	0	200	400	100	0	0	0	0	1,400	H
Ra-2 Medawela FLC Scheme	Imbulpe	200	300	100	0	0	0	100	200	0	0	0	0	900	H
Ra-3 Halwaturakanda FLC Scheme	Ratnapura	0	100	100	0	0	200	300	0	0	0	0	0	700	H
Ra-4 Kirigola FLC Scheme	Kuruwita	0	100	0	0	0	0	0	0	100	900	0	0	1,100	M
Ra-5 Nugadanda FLC Scheme	Kuruwita	100	0	0	0	600	100	0	0	100	0	0	0	900	M
Ra-6 Openayaka FLC Scheme	Openayaka	200	0	100	0	0	300	400	0	0	0	100	0	1,100	L
Ra-7 Kuttapitiya FLC Scheme	Pelmadulla	0	200	200	0	200	400	1,100	0	0	300	0	200	2,600	H
Ra-8 Dela FLC Scheme	Pelmadulla	0	0	0	0	100	0	300	100	0	0	0	0	500	H
Ra-9 Ayagama FLC Scheme	Ayagama	0	100	0	0	300	500	0	100	0	200	0	0	1,200	M
Ra-10 Gendagala FLC Scheme	Ayagama/Kalawana	0	100	0	0	0	200	300	0	100	0	100	0	800	M
Ra-11 Galpaya FLC Scheme	Weligapola	0	0	0	0	0	0	0	0	500	900	0	0	1,400	L
Ra-12 Tittawelpola FLC Scheme	Embilipitiya	0	0	0	0	0	0	0	0	300	100	0	0	400	L
Ra-13 Welenevatta FLC Scheme	Embilipitiya	0	0	0	0	0	0	0	0	0	800	0	0	800	L
Ra-14 Dondonell FLC Scheme	Godakawela	0	0	0	0	0	400	300	0	0	0	0	0	700	L
Ra-15 Delwala FLC Scheme	Nivitigala	0	0	200	0	100	200	300	100	0	0	0	0	900	L
Ra-16 Rambuka FLC Scheme	Kahawatta/Kalawana	0	200	100	0	0	300	1,100	100	0	200	0	0	2,000	L
Ra-17 Mipagama FLC Scheme	Kalawana	0	0	0	0	0	0	300	0	0	400	0	0	700	H
Ra-18 Denuwakanda FLC Scheme	Kalawana	100	100	0	0	0	400	500	0	0	0	100	0	1,200	H
Ra-19 Pallekanda FLC Scheme	Kolonna	0	0	0	0	0	100	0	0	0	700	0	0	800	L
Ra-20 Gilgarron FLC Scheme	Kolonna	0	100	100	0	0	0	300	0	0	0	100	0	600	L
Ra-21 Ittekanda FLC Scheme	Kolonna	0	0	0	0	0	500	200	0	0	200	0	0	900	L
Ra-22 Morawadiya FLC Scheme	Kolonna	200	100	0	0	400	0	0	0	0	0	0	0	700	L
Sub Total		800	1,800	900	300	1,700	3,800	5,900	700	1,100	4,700	400	200	22,300	-
Up-country Total		14,700	7,900	17,000	2,600	8,600	6,400	16,600	2,300	4,800	23,700	12,400	6,600	123,600	-

note: 1) Land Use

H: Homestead; Paddy, continuous plots of annual and tree crops excluding plantation estates, and residential units surrounded by gardens.

S: Sparsely used; Shifting cultivation, abandoned tea and rubber land, and sparsely used rainfed crop land such as tobacco and other annual crops.

F: Forest; Dense and open forest including man-made forest.

O: Others; Scrub land, grass land and barren land.

2) Priority

H: Scheme which has relatively high priority and is included in the Master Plan.

M: Scheme which has relatively medium priority and is not included in the Master Plan.

L: Scheme which has relatively low priority and is not included in the Master Plan.

source: JICA Study Team

Table 5.6-4 AREAS TO BE CONSERVED BY DIVISION AND ITS PRIORITY (1/2)

Item	Total Area (km2)	Areas to be Conserved						Total (km2) (%)		Pri'ty Division
		Class 2 (km2) (%)		Class 3 (km2) (%)		Class 8 (km2) (%)				
Division										
I. Central Province	5,590	739	13	237	4	322	6	1,298	23	-
A) Matale District	1,995	165	8	33	2	102	5	300	15	-
1 Galewela	188	3	2	1	1	10	5	14	8	L
2 Dambulla	443	16	4	4	1	12	3	32	7	M
3 Naula	335	24	7	5	1	20	6	49	15	M
4 Pallepola	73	4	5	0	0	6	8	10	13	L
5 Yatawatta	63	9	14	1	2	2	3	12	19	L
6 Matale	69	4	6	1	1	1	1	6	8	L
7 Ambanganga Korale	51	14	28	1	2	5	10	20	40	L
8 Laggala	331	38	11	15	5	34	10	87	26	H
9 Wilgamuwa	270	2	1	0	0	2	1	4	1	L
10 Rattota	87	34	39	4	5	5	6	44	50	M
11 Ukuwela	85	17	20	0	0	6	7	23	27	M
B) Kandy District	1,891	345	18	152	8	169	9	665	35	-
1 Pujapitiya	55	11	20	1	2	0	0	12	22	L
2 Akurana	32	10	31	0	0	0	0	10	31	L
3 Pata Dumbara	45	5	11	0	0	0	0	5	11	L
4 Panwila	95	32	34	23	24	3	3	58	61	H
5 Udadumbara	290	60	21	31	11	51	18	142	49	H
6 Minipe	223	18	8	12	5	23	10	53	24	H
7 Medadumbara	180	59	33	14	8	25	14	98	55	H
8 Kundasale	83	7	8	2	2	1	1	10	12	L
9 Kandy	45	7	16	0	0	2	4	9	20	L
10 Harispattuwa	46	4	9	0	0	0	0	4	9	L
11 Tumpane	113	21	19	16	14	2	2	39	35	M
12 Yatinuwar:	70	5	7	2	3	6	9	13	19	L
13 Udunuwar:	65	3	5	2	3	2	3	7	11	L
14 Pathahewz ieta	156	29	19	10	6	7	4	46	29	M
15 Udalapata	180	23	13	15	8	17	9	55	31	H
16 Gangaihaia Korale	95	24	25	14	15	8	8	46	49	M
17 Pasbage Korale	120	25	21	11	9	23	19	59	49	H
C) Nuwara Eliya District	1,703	230	13	53	3	51	3	333	20	-
1 Kotmale	212	50	24	3	1	0	0	53	25	H
2 Hanguranketa	230	42	18	11	5	17	7	70	31	H
3 Walapane	306	22	7	23	8	23	8	68	22	H
4 Nuwara Eliya	479	61	13	6	1	5	1	72	15	H
5 Ambagamuwa	477	55	12	9	2	6	1	70	15	H
II. Uva Province	8,481	356	4	190	2	319	4	865	10	-
D) Badulla District	2,822	233	8	110	4	225	8	569	20	-
1 Mahiyangana	620	0	0	0	0	8	1	8	1	L
2 Ridimaliyadda	424	0	0	0	0	42	10	42	10	M
3 Migahakiwula	101	2	2	0	0	23	23	25	25	L
4 Kandaketiya	157	6	4	5	3	47	30	58	37	H
5 Uva Paranagama	133	19	14	8	6	6	5	33	25	M
6 Haliela	166	47	28	6	4	6	4	59	35	H
7 Sorannatota	68	11	16	3	4	15	22	29	42	L
8 Passara	270	27	10	19	7	9	3	55	20	H
9 Badulla	52	19	37	11	21	0	0	30	58	M
10 Ella	106	19	18	11	10	5	5	35	33	M
11 Bandarawela	70	11	16	5	7	3	4	19	27	L
12 Haputale	43	17	39	5	12	3	7	25	58	L
13 Welimada	180	33	18	8	4	8	4	49	27	H
14 Haldummulla	431	22	5	30	7	50	12	102	24	H

Table 5.6-4 AREAS TO BE CONSERVED BY DIVISION AND ITS PRIORITY (2/2)

Item	Total Area (km2)	Areas to be Conserved						Total (km2) (%)		Pri'ty Division
		Class 2 (km2)	(%)	Class 3 (km2)	(%)	Class 8 (km2)	(%)			
E) Moneragala District	5,659	123	2	80	1	93	2	296	5	-
1 Madulla	723	41	6	33	5	11	2	84	12	H
2 Bibile	484	8	2	6	1	19	4	33	7	M
3 Medagama	254	2	1	0	0	27	11	28	11	L
4 Badalkumbura	255	14	5	0	0	17	7	31	12	M
5 Moneragala	255	14	5	9	4	9	4	32	13	M
6 Siyabalanduwa	1,049	17	2	22	2	2	0	41	4	M
7 Buttala	564	3	1	0	0	0	0	3	1	L
8 Wellawaya	719	15	2	5	1	8	1	28	4	L
9 Tanamalwila	1,357	11	1	5	0	0	0	16	1	L
III. Sabaragamuwa Provi	4,917	516	10	370	8	186	4	1,072	22	-
F) Kegalle District	1,641	294	18	77	5	75	5	445	27	-
1 Rambukkana	125	15	12	5	4	0	0	20	16	L
2 Mawanelle	108	18	17	7	6	1	1	26	24	L
3 Aranayake	117	8	7	4	3	4	3	16	13	L
4 Galigamuwa	148	25	17	3	2	5	3	33	22	M
5 Kegalle	105	14	13	0	0	1	1	15	14	L
6 Warakapola	197	16	8	5	3	2	1	23	12	L
7 Ruwanwella	145	38	26	8	6	4	3	50	35	M
8 Yatiyantota	246	41	17	22	9	23	9	86	35	H
9 Deraniyagala	218	61	28	13	6	25	11	99	45	H
10 Dehiowita	233	59	25	9	4	11	5	79	34	H
G) Ratnapura District	3,275	223	7	294	9	111	3	627	19	-
1 Eheliyagoda	128	15	12	11	9	0	0	26	21	L
2 Kuruwita	259	17	7	19	7	11	4	47	18	M
3 Ratnapura	319	41	13	52	16	8	3	101	32	H
4 Imbulpe	231	34	15	39	17	8	3	81	35	H
5 Balangoda	272	6	2	6	2	5	2	17	6	L
6 Pelmadulla	145	22	15	22	15	9	6	53	37	H
7 Niyitigala	155	13	8	14	9	2	1	29	18	L
8 Kahawatta	105	5	5	8	8	0	0	13	13	L
9 Elapatha	95	9	9	11	12	0	0	20	21	L
10 Ayagama	150	11	7	20	13	8	5	39	26	M
11 Kajakawana	398	23	6	50	13	9	2	82	21	H
12 Godakawela	167	3	2	8	5	0	0	11	7	L
13 Opanayaka	77	8	10	13	17	3	4	24	31	L
14 Weligapola	204	6	3	5	2	20	10	31	15	M
15 Embilipitiya	376	0	0	0	0	19	5	19	5	L
16 Kolonna	194	9	5	15	8	9	5	33	17	M
Grand Total	18,988	1,611	8	797	4	827	4	3,235	17	-

note: Class 2: Areas where are now intensively used and careful soil management is needed with slope of 30-60 %.

Class 3: Areas where are now intensively used, but these should not normally used with slope of more than 60 %.

Class 8: Areas where now under-utilized, but these are unsuitable for smallholder settlement and most parts suitable for forestry plantations or tree crops under supervised estate conditions with slope 30- 60%.

source: Land Use Policy Planning Division modified by the JICA Study Team

Table 5.6-5 FARM LAND CONSERVATION SCHEME AND ITS INDICATIVE COST FOR THE MASTER PLAN

Name of Scheme	Division	Total Area (ha)	Ind'v Cost (mil. Rs.)
I. Central Province		42,800	2,523
A. Matale		8,300	131
Ma-11	Kiulewadiya FLC Scheme	500	21
Ma-12	Puwakpitiya FLC Scheme	2,800	9
Ma-13	Katupana FLC Scheme	4,300	97
Ma-14	Mousakanda FLC Scheme	700	3
B. Kandy		24,200	1,493
Ka-1	Kandegama FLC Scheme	3,000	38
Ka-2	Kalkawata FLC Scheme	5,900	110
Ka-3	Madugoda FLC Scheme	3,700	292
Ka-4	Dewahandiya FLC Scheme	2,600	33
Ka-5	Kosgama FLC Scheme	900	3
Ka-6	Rangala FLC Scheme	600	270
Ka-7	Mirisketiya FLC Scheme	1,100	42
Ka-8	Urugala FLC Scheme	400	60
Ka-9	Pitigoda FLC Scheme	2,200	99
Ka-17	Bopitiya FLC Scheme	700	111
Ka-18	Pussellawa FLC Scheme	1,300	251
Ka-22	Hangranoya FLC Scheme	700	123
Ka-23	Templestowe FLC Scheme	1,100	62
C. Nuwara Eliya District		10,300	899
Nu-1	Teripeha FLC Scheme	1,300	10
Nu-2	Pannala FLC Scheme	1,000	7
Nu-3	Yatimadura FLC Scheme	800	153
Nu-4	Ragala FLC Scheme	700	141
Nu-5	Valikadenna FLC Scheme	700	61
Nu-6	Happuwara FLC Scheme	400	3
Nu-7	Ubawatta FLC Scheme	1,000	152
Nu-8	Eliamulle FLC Scheme	1,500	146
Nu-9	Maturata FLC Scheme	500	152
Nu-10	Bogawana FLC Scheme	900	2
Nu-11	Galaboda FLC Scheme	900	2
Nu-12	Bulatwatta FLC Scheme	600	71
II. Uva Province		16,000	1,204
D. Badulla District		10,900	1,161
Ba-6	Kandaketiya FLC Scheme	2,200	34
Ba-7	Pathagala FLC Scheme	2,400	11
Ba-8	Ketawela FLC Scheme	700	220
Ba-9	Kairatnagama FLC Scheme	600	180
Ba-10	Edandupola FLC Scheme	600	170
Ba-15	Hakgala FLC Scheme	900	260
Ba-16	Ohiya FLC Scheme	1,300	123
Ba-18	Harankadawa FLC Scheme	1,000	151
Ba-19	Baduludela FLC Scheme	1,200	10
E. Moneragala		5,100	43
Mo-1	Blungoda FLC Scheme	1,300	5
Mo-2	Idambowa FLC Scheme	1,100	4
Mo-3	Dambagala FLC Scheme	1,400	9
Mo-4	Rathugala FLC Scheme	1,300	25
III. Sabaragamuwa Province		10,200	926
F. Kegalla		2,200	461
Ke-5	Pelanpitiya FLC Scheme	900	180
Ke-6	Dodawatta FLC Scheme	800	121
Ke-7	Tembiliyana FLC Scheme	500	160
G. Ratnapura District		8,000	465
Ra-1	Halpe FLC Scheme	1,400	85
Ra-2	Medawela FLC Scheme	900	163
Ra-3	Halwaturakanda FLC Scheme	700	23
Ra-7	Kuttapitiya FLC Scheme	2,600	92
Ra-8	Dela FLC Scheme	500	23
Ra-17	Mipagama FLC Scheme	700	3
Ra-18	Denuwakanda FLC Scheme	1,200	76
Up-country Total		69,000	4,652

source: JICA Study Team





## *FIGURES*



# Strengthening of Institution Capacity

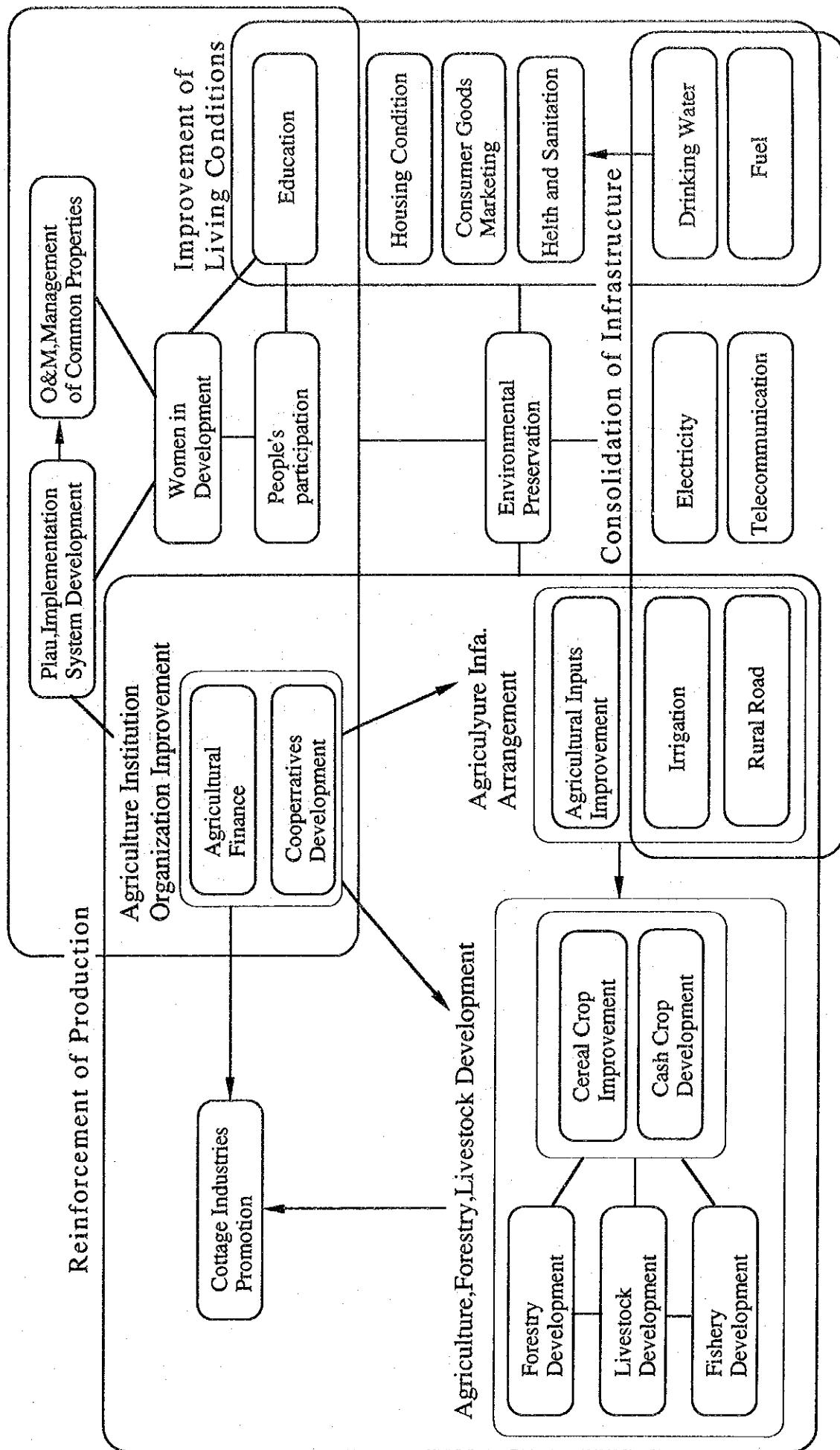
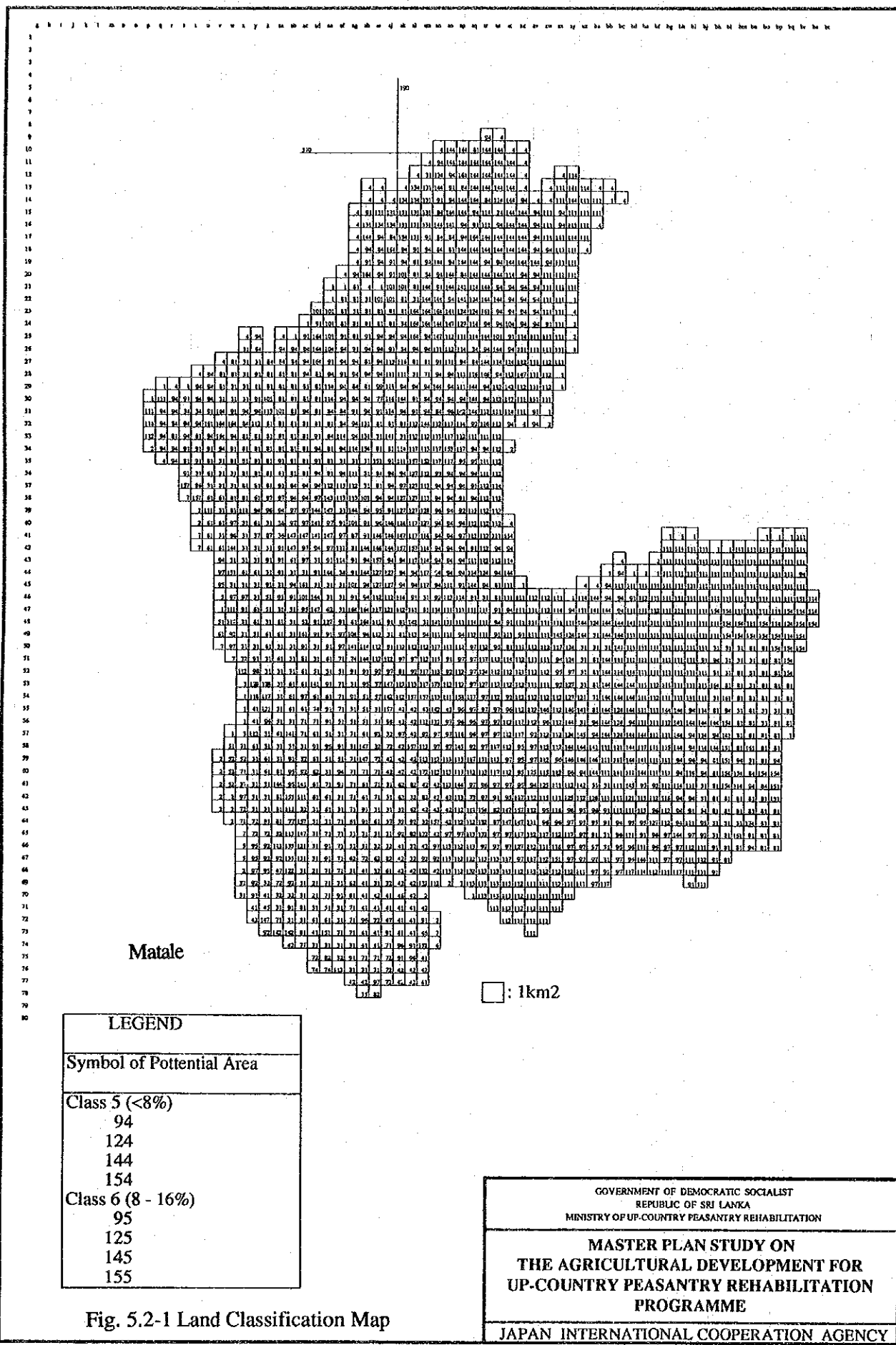
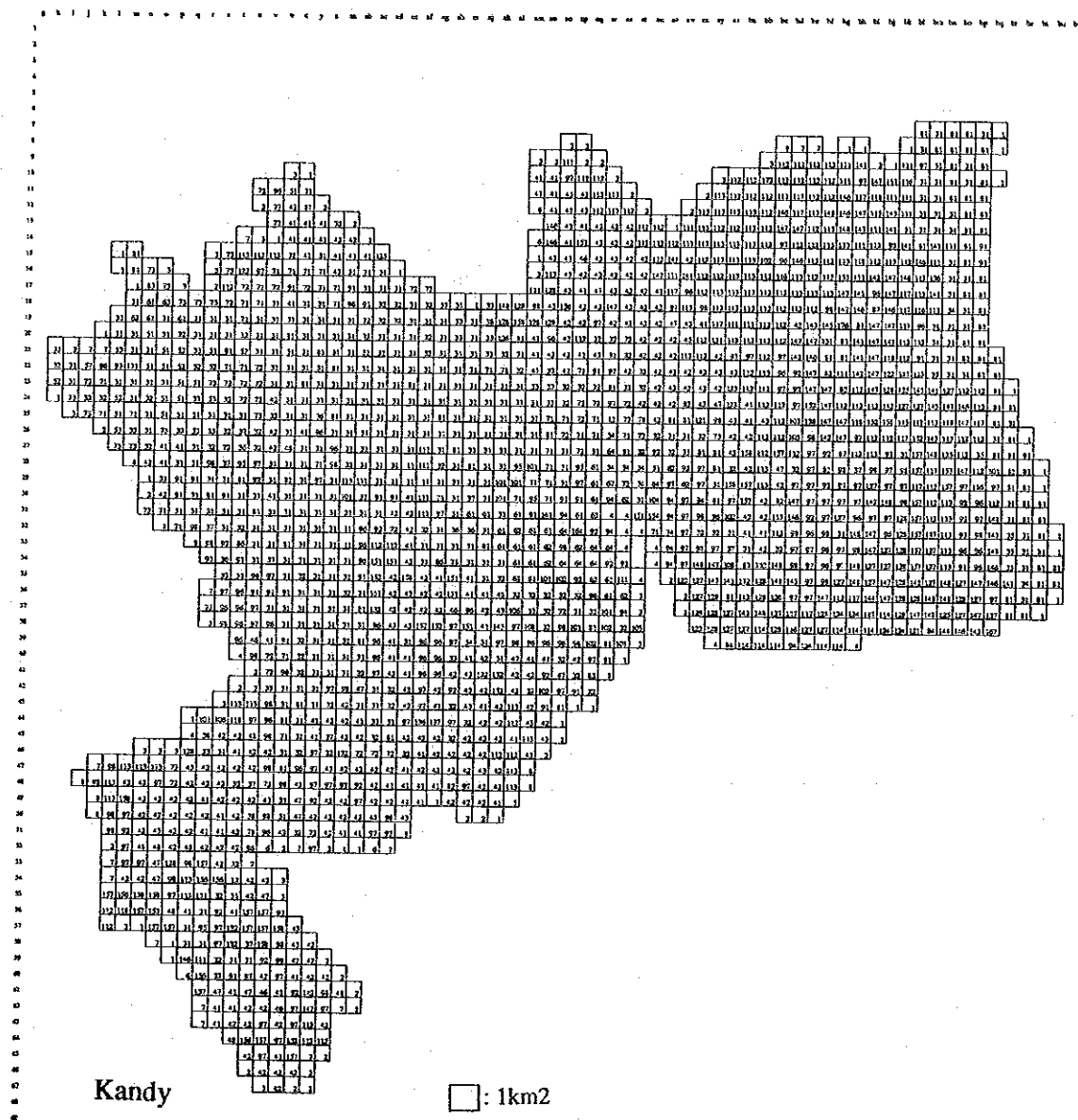


Fig. 5.1-1 Conceptual Picture of the Master Plan

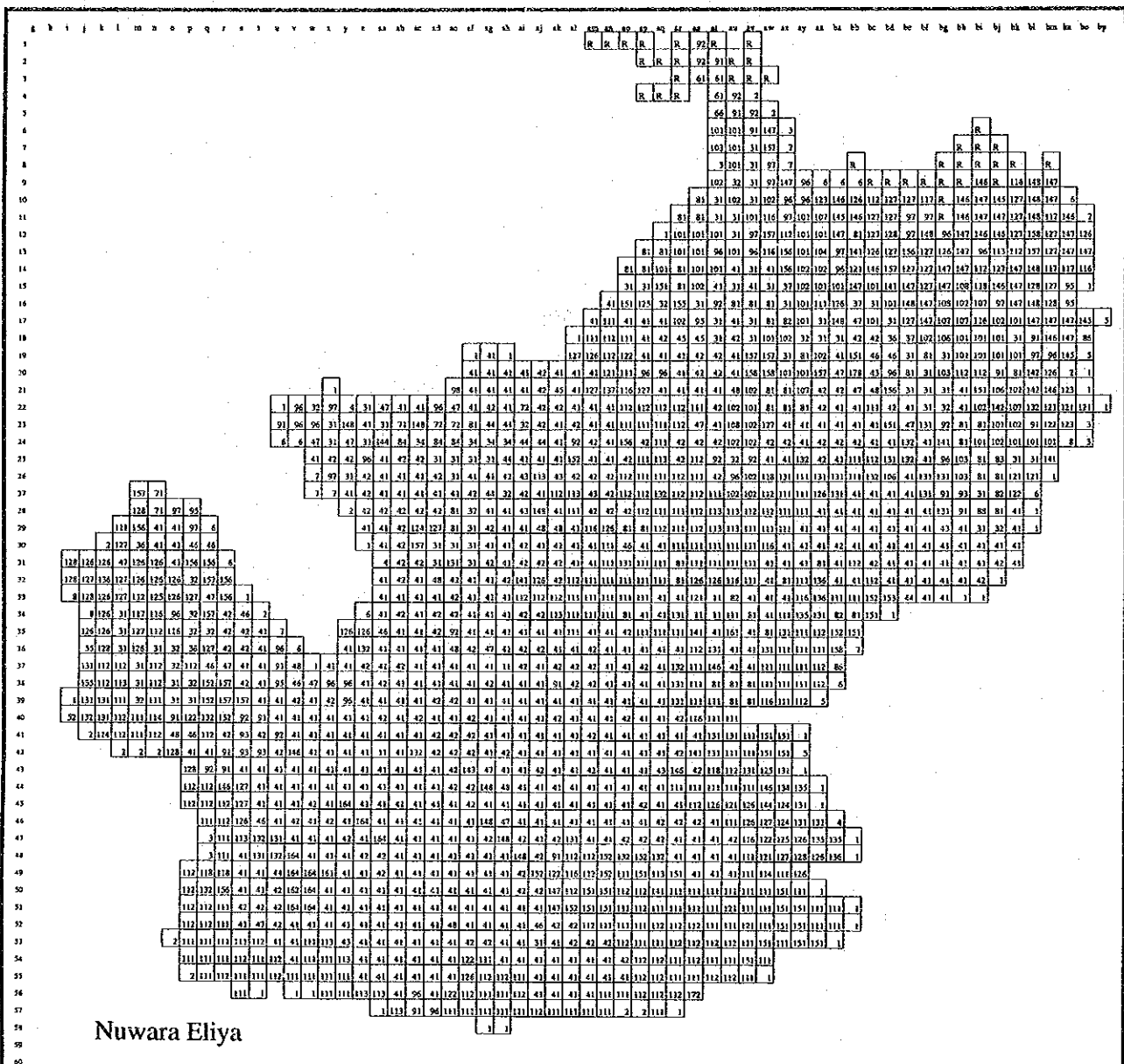




LEGEND	
Symbol of Potential Area	
Class 5 (<8%)	
94	
124	
144	
154	
Class 6 (8 - 16%)	
95	
125	
145	
155	

Fig. 5.2-1 Land Classification Map

GOVERNMENT OF DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA MINISTRY OF UP-COUNTRY PEASANTRY REHABILITATION
<b>MASTER PLAN STUDY ON          THE AGRICULTURAL DEVELOPMENT FOR          UP-COUNTRY PEASANTRY REHABILITATION          PROGRAMME</b>
JAPAN INTERNATIONAL COOPERATION AGENCY



Nuwara Eliya

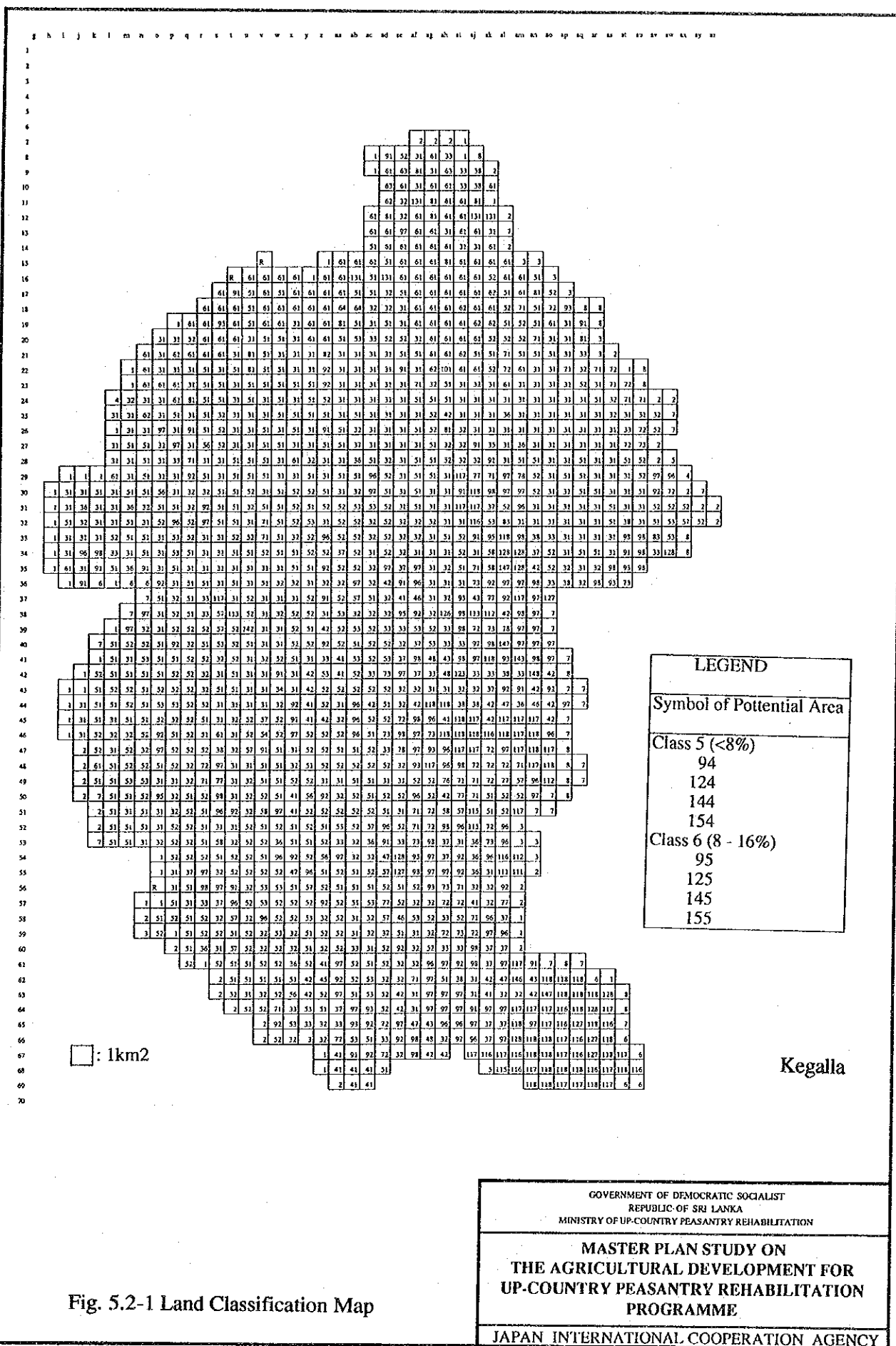
□ : 1km<sup>2</sup>

Fig. 5.2-1 Land Classification Map

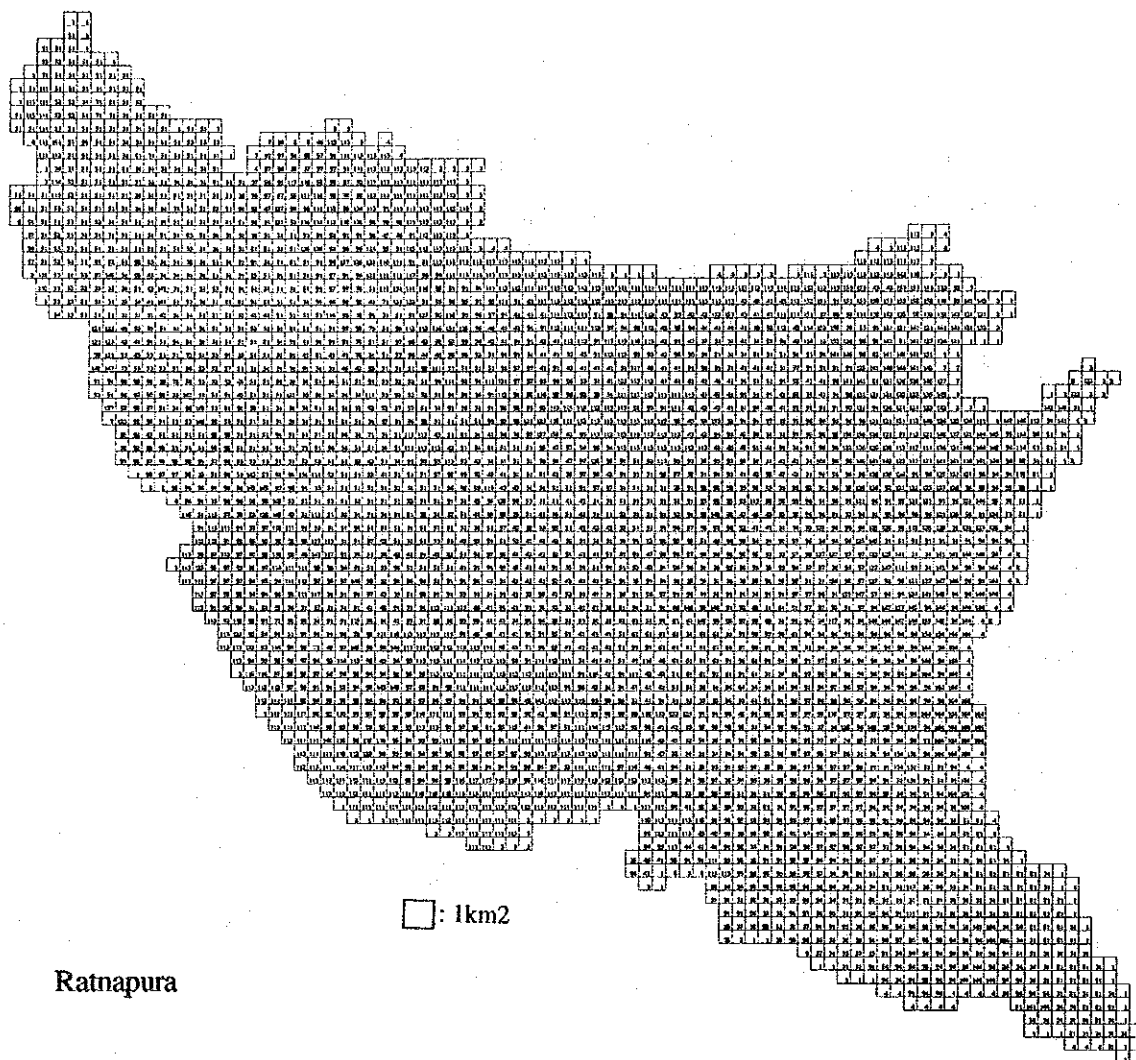
GOVERNMENT OF DEMOCRATIC SOCIALIST  
REPUBLIC OF SRI LANKA  
MINISTRY OF UP-COUNTRY PEASANTRY REHABILITATION

**MASTER PLAN STUDY ON  
THE AGRICULTURAL DEVELOPMENT FOR  
UP-COUNTRY PEASANTRY REHABILITATION  
PROGRAMME**

JAPAN INTERNATIONAL COOPERATION AGENCY







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155	

Fig. 5.2-1 Land Classification Map

GOVERNMENT OF DEMOCRATIC SOCIALIST  
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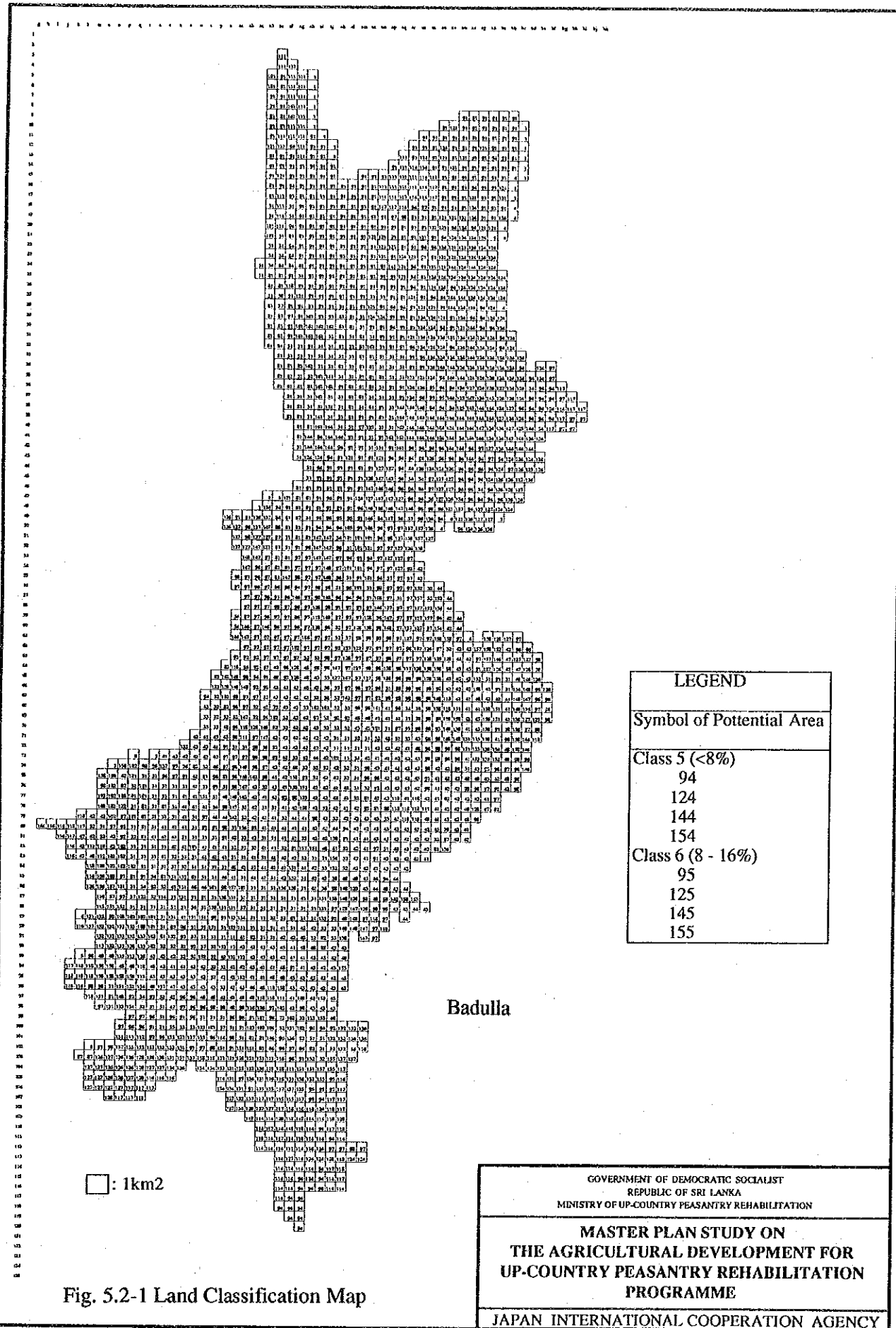


Fig. 5.2-1 Land Classification Map

LEGEND	
Symbol of Pottential Area	
Class 5 (<8%)	
94	
124	
144	
154	
Class 6 (8 - 16%)	
95	
125	
145	
155	

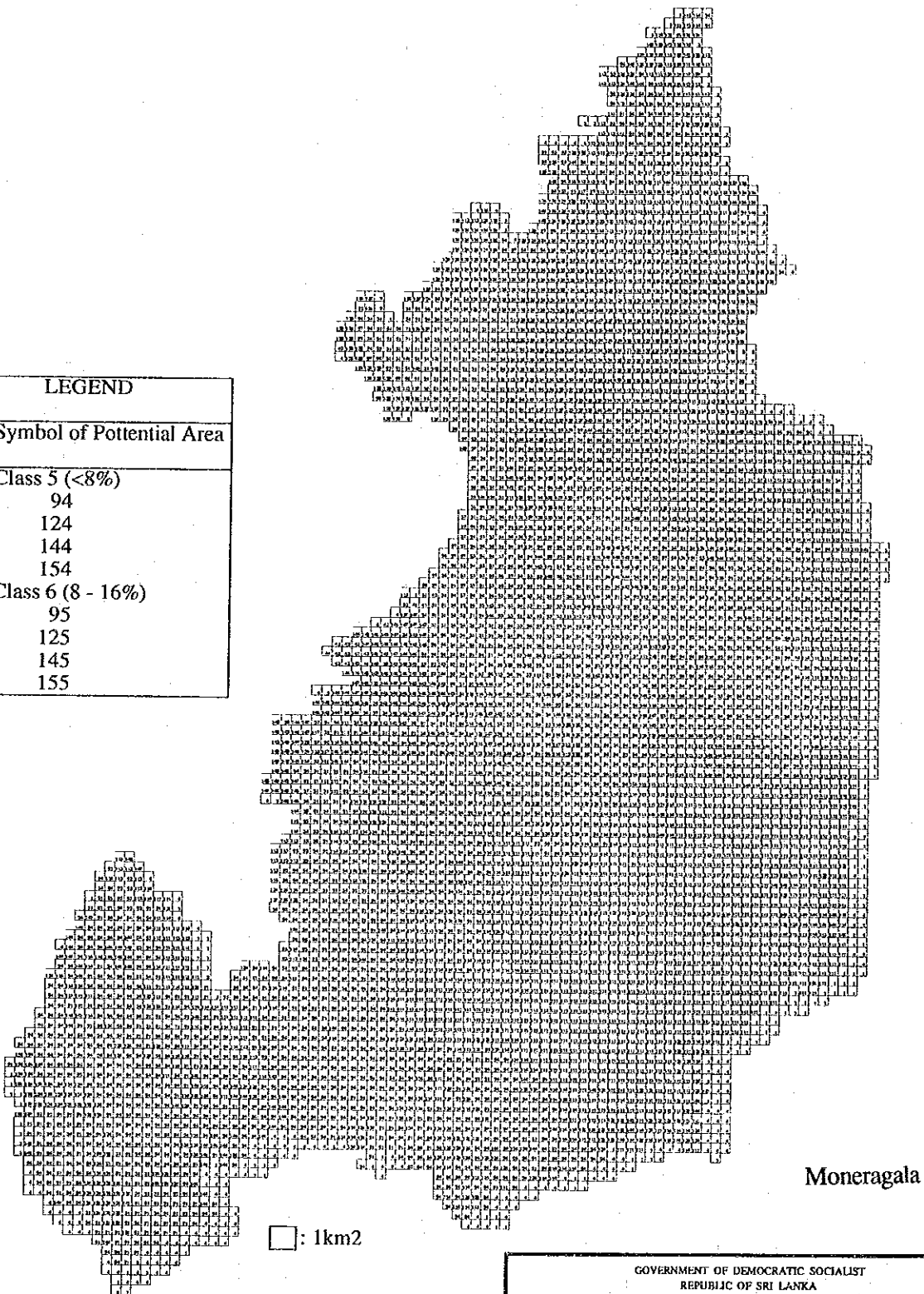


Fig. 5.2-1 Land Classification Map

GOVERNMENT OF DEMOCRATIC SOCIALIST  
REPUBLIC OF SRI LANKA  
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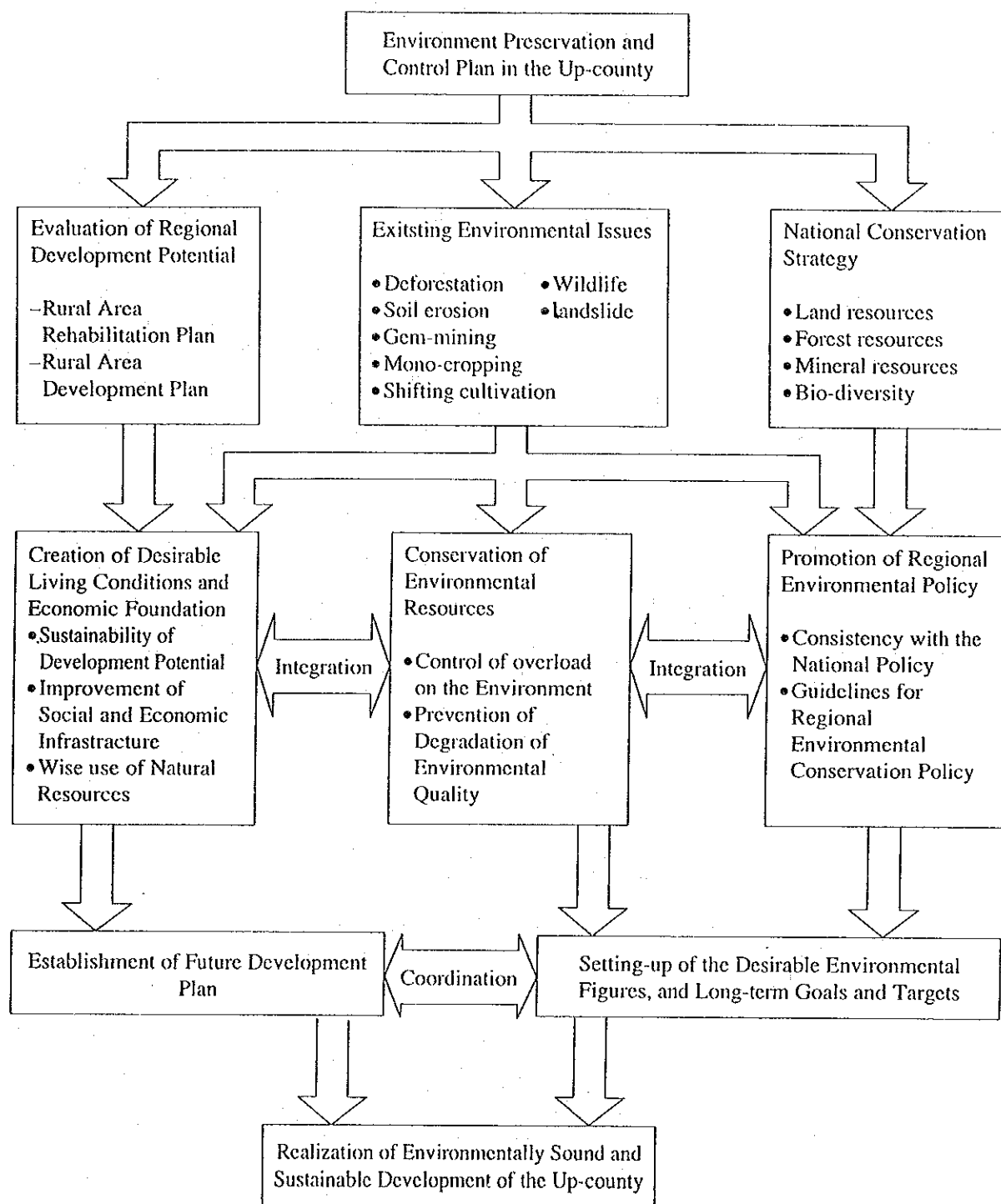


Fig. 5.6-1 Conceptual Diagram of Environment Preservation and Control Plan

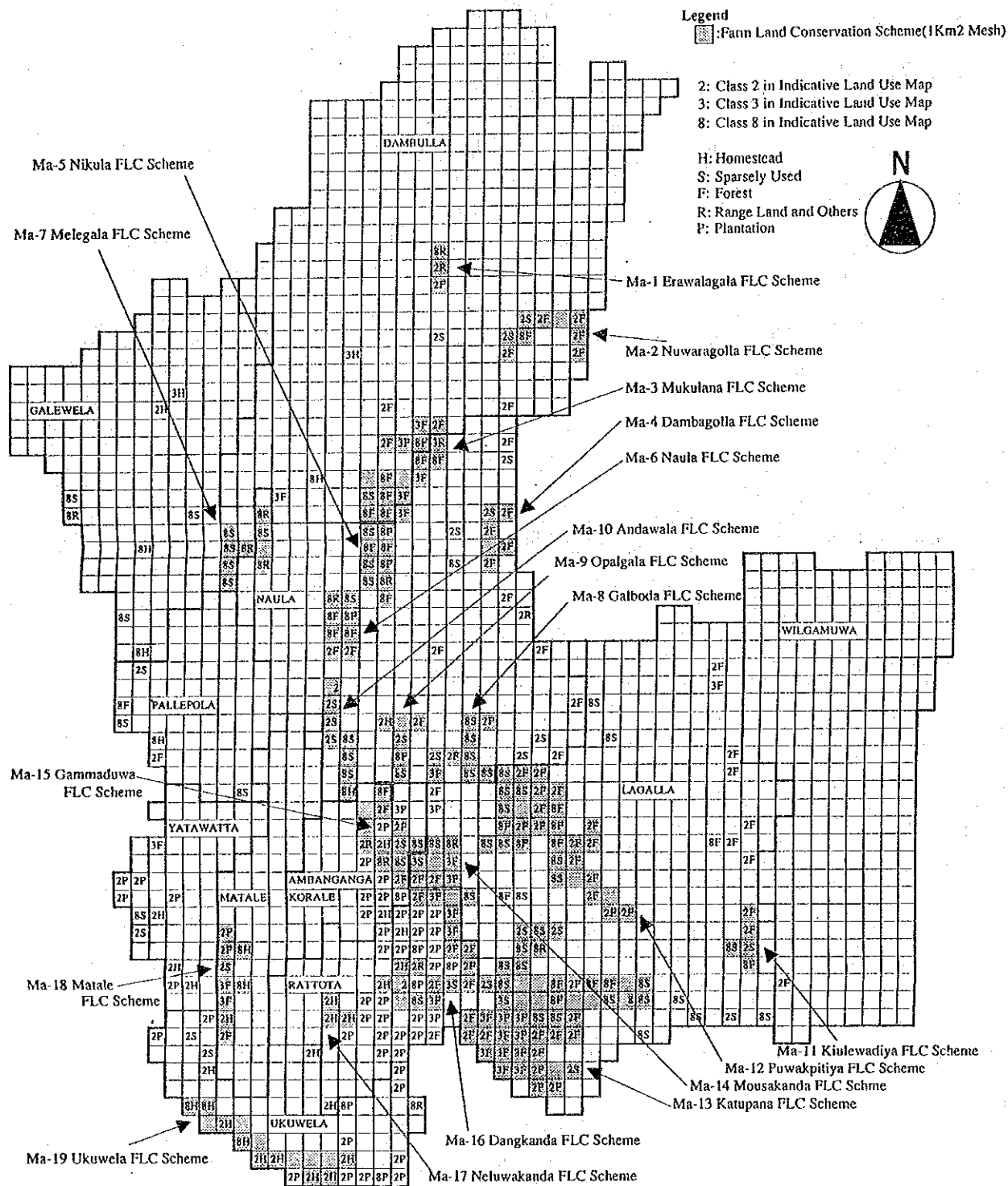


Fig. 5.6-2 Location of Farm Land Conservation Scheme (1/7)  
(Matale District)

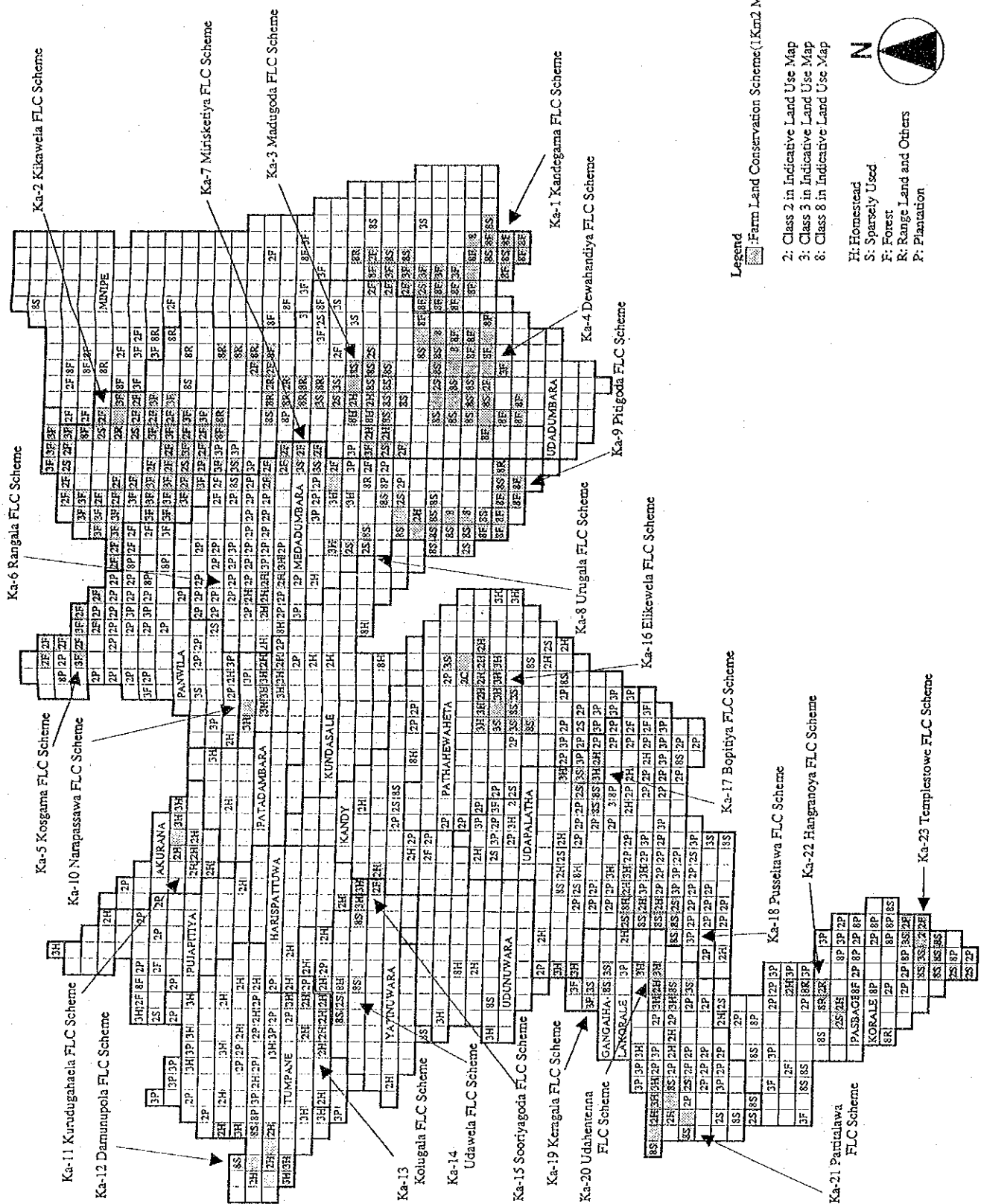


Fig. 5.6-2 Location of Farm Land Conservation Scheme (2/7)  
(Kandy District)

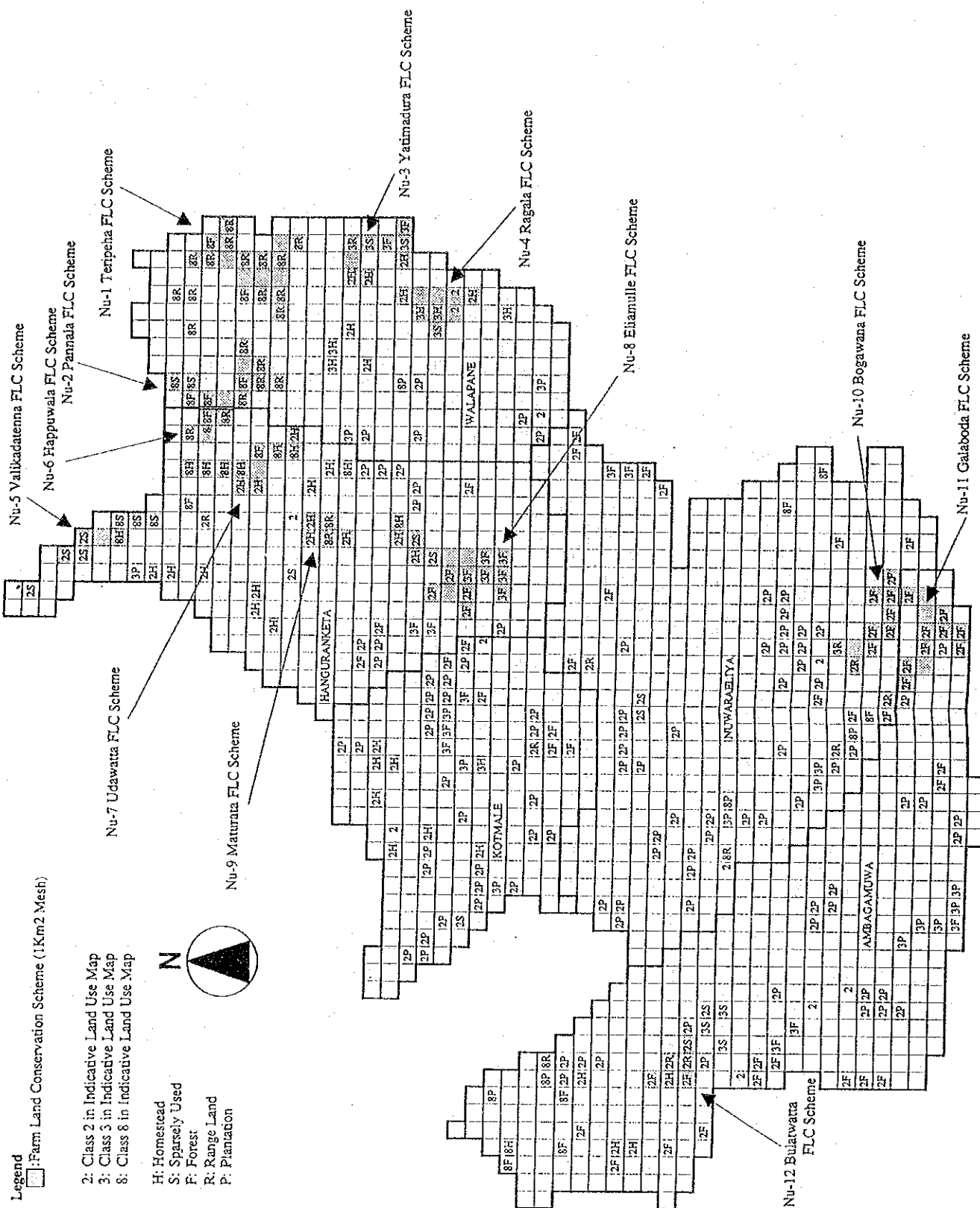
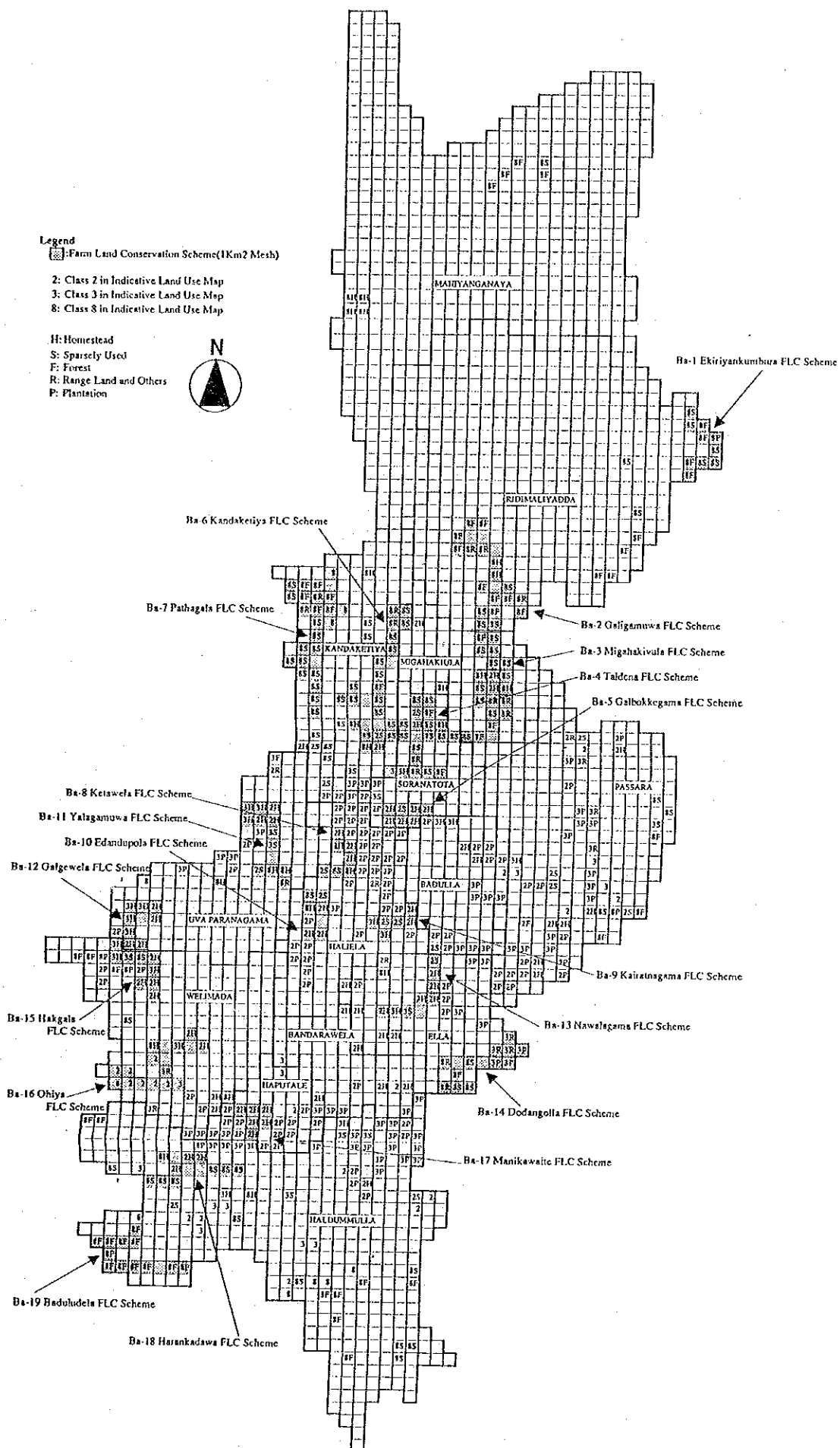


Fig. 5.6-2

Location of Farm Land Conservation Scheme (3/7)  
 (Nuwara Eliya District)





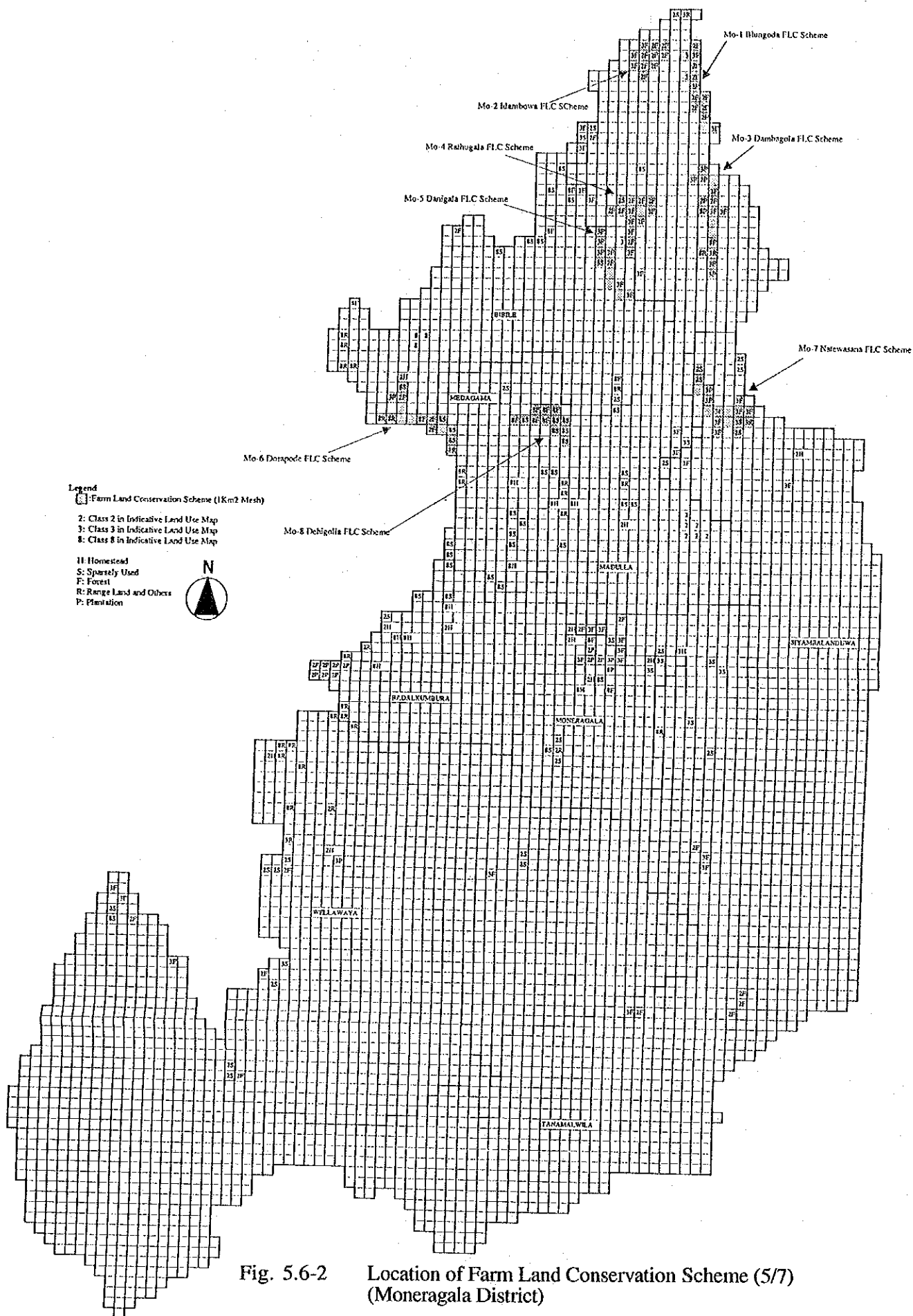


Fig. 5.6-2 Location of Farm Land Conservation Scheme (5/7)  
(Moneragala District)

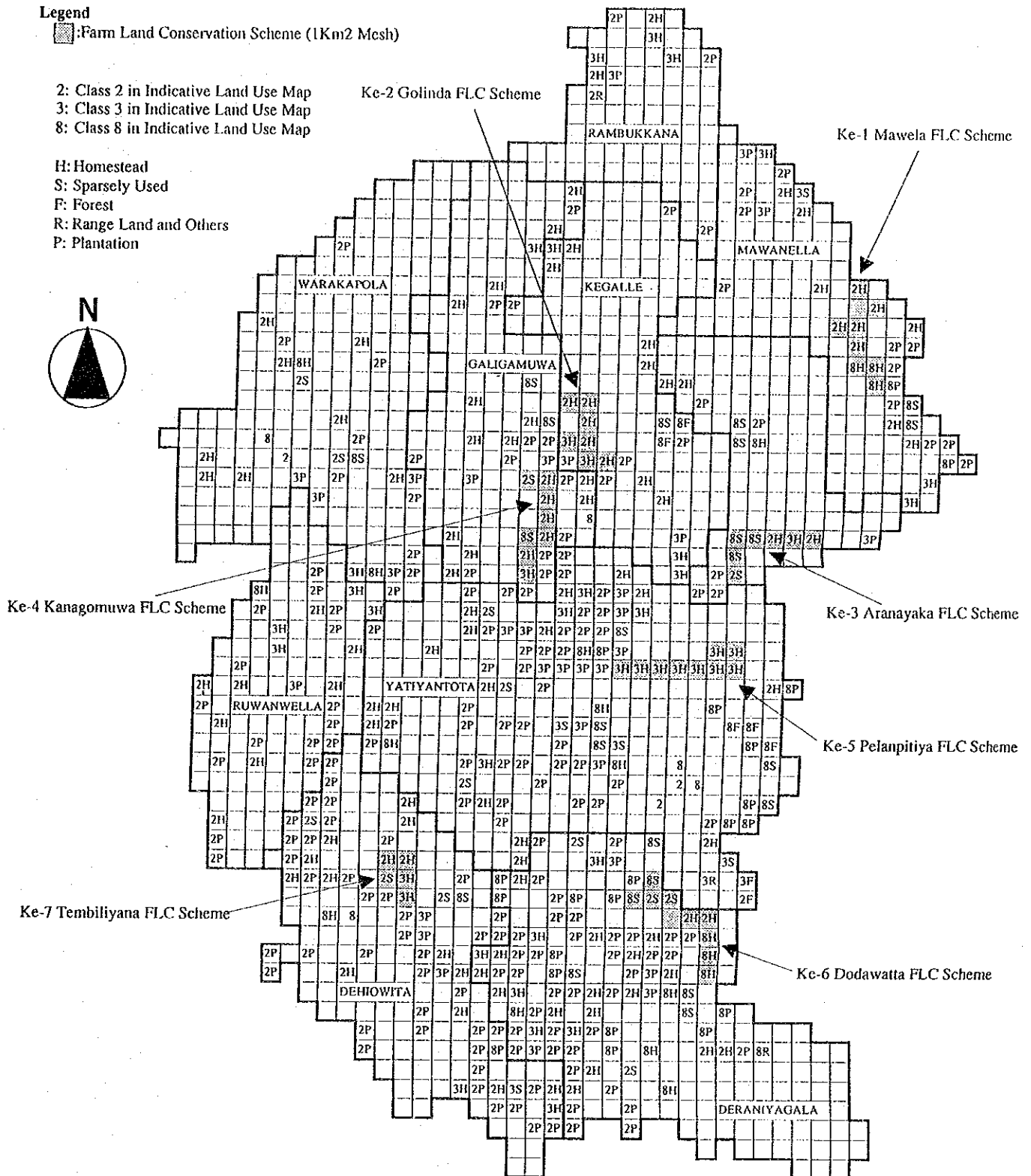


Fig. 5.6-2 Location of Farm Land Conservation Scheme (6/7)  
 (Kegalle District)

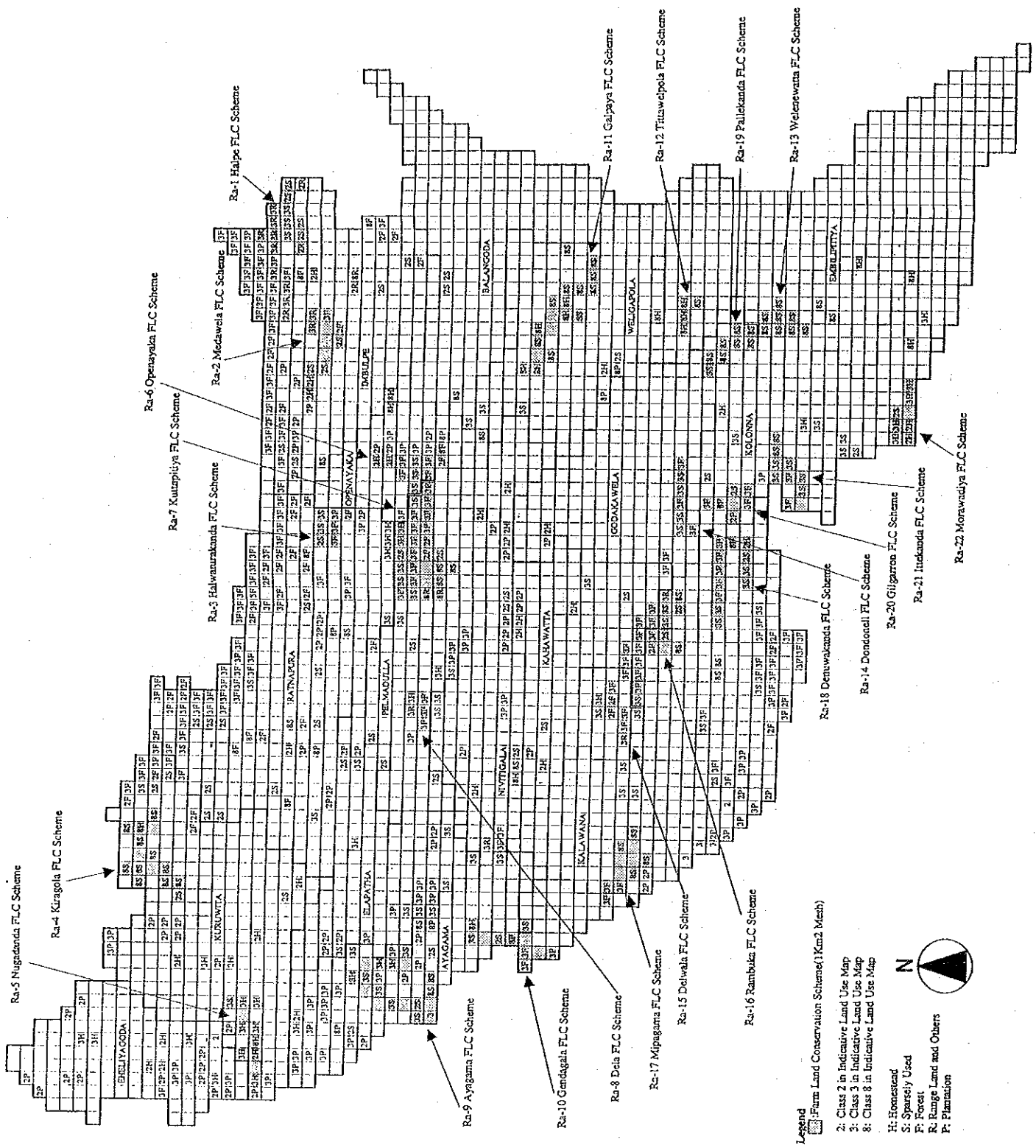


Fig. 5.6-2 Location of Farm Land Conservation Scheme (7/7)  
(Ratnapura District)





## CHAPTER 6 IMPLEMENTATION PROGRAMME AND COST

### 6.1 Project Components and Project Quantity

The components, quantities and implementation agencies of the Master Plan are listed below:

Component	Description	Quantity	Implementation Agency	Project Name	Funding Agency
1. Irrigation	1. R.Major Irr. Scheme	4,250ha	ID	NIRP	WB/EEC
	2. - ditto -	1,660ha	ID	MICDP	EEC
	3. - ditto -	7,250ha	ID	-	to be decided
	4. Recon.Major Irr.Scheme	3,390ha	ID	-	to be decided
	Sub-total	16,550ha			
	5. R.Minor Irr. Scheme	4,500ha	ID/DAS	NIRP	WB/EEC
	6. - ditto -	3,750ha	MPPI	IRDP	German,Dutch, Norway, IFAD
			ID/DAS		
	7. - ditto -	10,920ha	DAS/PC	-	to be decided
	8. Recon.Minor Irr.Scheme	510ha	ID	-	to be decided
	Sub-total	19,680ha			
	Total	36,230ha			
2. Rural Road	1. R.Class C Road	250km	PC	-	the Government
	2. - ditto -	375km	PC	-	to be decided
	Sub-total	582km			
	3. R.Class D Road	250km	PC		the Government
	4. - ditto -	277km	PC	-	to be decided
	Sub-total	527km			
	5. R.Class E Road	860km	MPPI/PC	IRDP	German,Dutch, Norway, IFAD
	6. - ditto -	462km	PC	-	to be decided
	Sub-total	1,322km			
	Total	2,431km			
3. Rural Water Supply	1. Kandy WS	-	NWSDB	NWSDB	FINNIDA
	2. Badulla WS	-	NWSDB	NWSDB	UNDP
	3. Moneragale WS	-	NWSDB	NWSDB	ADB
	4. Ratnapura WS	-	NWSDB	NWSDB	UNDP
	5. Kegalle WS	-	NWSDB	NWSDB	ADB
	6. Matale :Piped WS	28 Scheme s	NWSDB/PC	-	the Government
	:TW 8,625 Scheme s		PC	-	- ditto -
	:DW 1,796 Scheme s		PC	-	- ditto -
	7. N. Eliya:Pipe WS	131 Scheme s	NWSDB/PC	-	- ditto -
	:DW 3,631 Schemes		PC	-	- ditto -
4. Rural Electrification	1. MV/LV wire	1,394 Schemes	CEB	Project	ADB
5. Agricultural Promotion and Support	1. R. Seed&Fertilizer	178ASC	DAS	-	to be decided
	2. Production Storehouse	53 Sites	DAS	-	to be decided
	3. R.Pola	55 Nos.	DAS	-	to be decided
	4. C. Sabaragamuwa	1 Site	DA	2nd AEP	WB/IDA
	5. R. DATC & ISTI 7 DATC, 3 ISTI		DA	2nd AEP	WB/IDA
	6. Imp. CAIC	1 Centre	DAPH	-	to be decided
	7. Imp. DVSS	7 Sites	DAPH	-	to be decided
6. Farmland Conservation	1. Farmland Conservation	69,000ha	NADSA	-	to be decided

<Note> R.: Rehabilitation, Recon.: Reconstruction, C.: Construction, Imp.: Implementation

### 6.2 Organization of Project Implementation

The implementation agency of the Master Plan is the Ministry of Up-Country Peasantry Rehabilitation (MUPR). The MUPR will coordinate and monitor the implementation of the projects in cooperation with the Ministries and agencies concerned

who will be the project executing agencies. Accordingly, it is desired to establish a "Steering Committee" at the national level and "Coordination Committee" at the provincial level for the purpose.

The MUPR, in this set-up, is requested to secure and allocate the budgets, negotiate with the funding agencies and to coordinate and monitor the on-going programmes and projects.

The project system flow with MUPR as the core is shown in Fig. 6.2-1.

### **6.3 Implementation Programme**

The goals of infrastructure rehabilitation for agriculture and rural development under the Master Plan are summarized in Table 6.3-1. To achieve the targeted level, the implementation programme is established as follows.

The Master Plan includes the on-going projects as well as projects scheduled for implementation in the near future. These projects shall be implemented according to their own schedules.

#### **(1) Irrigation**

In the irrigation sector, there are some on-going projects such as those under NIRP, MICP (Moneragala) and IRDP programmes. Through these projects, 18,680 ha of major/medium and 11,950 ha of minor irrigation schemes will be rehabilitated by 2003, and remaining 7,248 ha of major/medium and 10,920 ha of minor irrigation scheme will be rehabilitated under the new project.

Concerning the minor irrigation scheme, rehabilitation works is partially scheduled under the AGA Project using the construction machinery and materials supplied to the Divisional Secretaries' Offices. The portion to be rehabilitated through this project is not considered since detailed implementation programmes have not been made as yet.

Greater parts of minor irrigation schemes to be rehabilitated under the new projects are schemes below 30 ha in extent, and schemes that are less than 5 ha occupies more than 50 % in term of numbers. Rehabilitation of these small sized scheme will be made principally by the beneficiary farmers themselves. Accordingly, it is recommended to execute the rehabilitation works by the farmers under technical and financial assistance of the Irrigation Department and Department of Agrarian Services.

For the rehabilitation of these minor schemes, it is necessary, in principle, to establish the farmers organizations, and the Irrigation department and Department of Agrarian Services to take the initiative for the project implementation. In planning the project, it is important to ensure direct involvement of beneficiaries as organizations who would contribute a certain construction cost as they do in other rehabilitation programmes.

#### **(2) Rural Roads**

The length of rural roads (Class C, D and E) requiring rehabilitation is 4,270 km. This is about 30% of the total road length of 13,480 km. Under the Master Plan, 2,431 km out of the 4,270 km will be rehabilitated, with the goal of rehabilitating 60% of Class C and D roads and 100% of Class E roads. About 50.0 km/year of Class C and D roads will be rehabilitated by own budget estimated from 1992-1996 Public Investment, and 86.0 km/year of Class E roads are expected to be rehabilitated by IRDP.

The remaining required rehabilitation length of 1,204 km will be executed as a new project. The 1,071 km road length breaks down into 332 km of Class C roads, 277 km of Class D roads and 462 km of Class E roads.

Concerning the rural roads rehabilitation, the works is partially scheduled under the AGA Project using the construction machinery and materials supplied to the Provincial Councils and the Divisional Secretaries' Offices. The portion to be rehabilitated through this project is not considered since no detailed implementation programme has yet been made.

### (3) Rural Water Supply

Rural water-supply projects have just been commenced in Ratnapura and Badulla districts financed by UNDP/WB, and in Moneragala and Kagalle districts financed by ADB. 100 % of protected water will be supplied by year 2000 under UNDP/WB programme and by 2010 under the ADB programme.

In the Kandy district, the water-supply project, financed by FINNIDA since 1980, is expected to continue.

In the Matale district, water-supply project was completed in 1991 financed by DANIDA. However, it is estimated that the actual supply rate is 75 %.

In the Nuwara Eliya district, though several water supply projects are implemented by IRDP, the present water supply rate is low at 39%. This is because the District is situated in a water-rich area of Sri Lanka, where comparatively clean surface water is readily available.

In the Ratnapura, Badulla, Moneragala, Kegalle and Kandy districts, water supply projects are being implemented with the cooperation of their respective funding agencies. In the Matale and Nuwara Eliya districts, which have no funding agencies at present, new project are required for rural water supply.

### (4) Rural Electrification

Rural electrification is promoted by CEB through the Rural Electrification Project financed by ADB. It aims for 62% electrification in rural areas and a national average of 70%.

The present electrification rate is 45% (though actually in terms of number of households is 23.3%). The plan and goal of CEB is considered to be appropriate. A new project for rural electrification will not be necessary, since the ADB project could be cover the requirement.

### (5) Agricultural Promotion and Supports

As for agricultural promotion plan, several measures such as rehabilitation of exiting irrigation schemes, agricultural extension service, improvement of training facilities etc. could be planned. Rehabilitation plan on irrigation schemes will be executed as described in this section and DOA is hoped to continue the activities on agricultural extension and research. As for improvement of training facilities, development programme will be carried out under the Second Agricultural Extension Project financed by IDA/WB.

As for agricultural supporting plan, the following supporting project are formulated;

- 1) Improvement of storage facilities including transportation facilities,