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Malawi Accuracy Report 1990 Scheme I

Overall Classification Accuracy = (1047/1193) 87.76%

Overall Kappa Statistics = 0.8219

Accuracy Summary

Class Name	Reference Totals	Classified Totals	Number Correct	Producers Accuracy	Users Accuracy
Forestland	540	551	499	92.41%	90.56%
Grassland	137	104	86	62.77%	80.37%
Cropland	225	239	188	83.56%	78.66%
Wetland	272	239	270	99.26%	92.47%
Settlement	12	2	2	16.67%	100%
Otherland	7	2	2	28.57%	100%
Totals	1193	1193	1047		
Overall Classification Accuracy = 85.81%					

Error Matrix

Reference Data

Classified Data	Forestland	Grassland	Cropland	Wetland	Settlement	Otherland	Totals
Forestland	499	31	17	2	0	2	551
Grassland	7	86	14	0	0	0	107
Cropland	19	20	188	0	10	2	239
Wetland	15	0	6	270	0	1	292
Settlement	0	0	0	0	2	0	2
Otherland	0	0	0	0	0	2	2
Column Total	540	137	225	272	12	7	1193

Malawi Accuracy Report 1990 Scheme II

Overall Classification Accuracy = (936/1193) 78.4577%

Overall Kappa Statistics = 0.7352

Accuracy Summary

Class Name	Reference Total	Classified Totals	Number Correct	Producers Accuracy	Users Accuracy
Dense Forest	41	39	22	53.66%	56.41%
Moderate Forest	160	129	98	61.25%	75.97%
Sparse Forest	339	383	288	84.96%	75.2%
Closed Grassland	11	11	10	90.91%	90.91%
Open Grassland	7	4	2	28.57%	50%
Closed Shrubland	70	47	35	50%	74.47%
Open Shrubland	49	45	21	42.86	46.67%
Perennial Cropland	5	5	5	100%	100%
Annual Cropland	220	234	183	83.18%	78.21%
Water Body	41	60	38	92.68%	63.33%
Wetland	231	232	230	99.57%	99.14%
Settlement	12	2	2	16.67%	100%
Otherland	7	2	2	28.57%	100%
Totals	1193	1193	936		
Overall Classification Accuracy = 73.52%					

Error Matrix

Reference Total														
Classified Data	Dense Forest	Moderate Forest	Sparse Forest	Closed Grassland	Open Grassland	Closed Shrubland	Open Shrubland	Perennial Cropland	Annual Cropland	Water Body	Wetland	Settlement	Otherland	Total
Dense Forest	22	16	1	0	0	0	0	0	0	0	0	0	0	39
Moderate Forest	15	98	12	0	0	0	1	0	3	0	0	0	0	129
Sparse Forest	4	43	288	1	4	16	9	0	14	2	0	0	2	383
Closed Grassland	0	0	0	10	1	0	0	0	0	0	0	0	0	11
Open Grassland	0	0	1	0	2	0	0	0	1	0	0	0	0	4
Closed Shrubland	0	1	3	0	0	35	6	0	2	0	0	0	0	47
Open Shrubland	0	0	2	0	0	11	21	0	11	0	0	0	0	45
Perennial Cropland	0	0	0	0	0	0	0	5	0	0	0	0	0	5
Annual Cropland	0	1	18	0	0	8	12	0	183	0	0	10	2	234
Water Body	0	1	14	0	0	0	0	0	5	38	1	0	1	60
Wetland	0	0	0	0	0	0	0	0	1	1	230	0	0	232
Settlement	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Otherland	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Column Total	41	160	339	11	7	70	49	5	220	41	231	12	7	1193

Malawi Accuracy Report 2000 Scheme I

Overall Classification Accuracy = (1016/1197) 84.8789%

Overall Kappa Statistics = 0.7945

Accuracy Summary

Class Name	Reference Totals	Classified Totals	Number Correct	Producers Accuracy	Users Accuracy
Forestland	380	413	348	91.58%	84.26%
Grassland	217	148	114	52.53%	77.03%
Cropland	327	360	290	88.69%	80.56%
Wetland	266	270	260	97.74%	96.30%
Settlement	3	3	3	100.00%	100.00%
Otherland	4	3	1	25.00%	33.33%
Totals	1197	1197	1016		
Overall Classification Accuracy = 84.8789%					

Error Matrix

Reference Data							
Classified Data	Forestland	Grassland	Cropland	Wetland	Settlement	Otherland	Total
Forestland	348	47	13	5	0	0	413
Grassland	12	114	22	0	0	0	148
Cropland	14	52	290	1	0	3	360
Wetland	5	4	1	260	0	0	270
Settlement	0	0	0	0	3	0	3
Otherland	1	0	1	0	0	1	3
Column Total	380	217	327	266	3	4	1197

Malawi Accuracy Report 2000 Scheme II

Overall Classification Accuracy = (928/1197) 77.5272%

Overall Kappa Statistics = 0.7216

Accuracy Summary

Class Name	Reference Total	Classified Totals	Number Correct	Producers Accuracy	Users Accuracy
Dense Forest	21	36	18	85.71%	50.00%
Moderate Forest	53	86	48	90.57%	55.81%
Sparse Forest	306	291	230	75.16%	79.04%
Closed Grassland	7	7	2	28.57%	28.57%
Open Grassland	12	14	5	41.67%	35.71%
Closed Shrubland	66	71	37	56.06%	52.11%
Open Shrubland	132	56	34	25.76%	60.71%
Perennial Cropland	4	4	4	100.00%	100.00%
Annual Cropland	323	356	286	88.54%	80.34%
Water Body	231	231	231	100.00%	100.00%
Wetland	35	39	29	82.86%	99.62%
Settlement	3	3	3	100.00%	100.00%
Otherland	4	3	1	25.00%	33.33%
Totals	1197	1197	928		
Overall Classification Accuracy = 77.52%					

Error Matrix

Reference Data														Total
Classified Data	Dense Forest	Moderate Forest	Sparse Forest	Closed Grassland	Open Grassland	Closed Shrubland	Open Shrubland	Perennial Cropland	Annual Cropland	Water Body	Wetland	Settlement	Otherland	
Dense Forest	18	4	14	0	0	0	0	0	0	0	0	0	0	36
Moderate Forest	2	48	32	0	0	0	1	0	2	0	1	0	0	86
Sparse Forest	0	0	230	1	2	16	27	0	11	0	4	0	0	291
Closed Grassland	0	0	1	2	0	2	1	0	1	0	0	0	0	7
Open Grassland	0	0	5	3	5	0	1	0	0	0	0	0	0	14
Closed Shrubland	0	0	5	0	0	37	23	0	6	0	0	0	0	71
Open Shrubland	0	0	1	1	1	4	34	0	15	0	0	0	0	56
Perennial Cropland	0	0	0	0	0	0	0	4	0	0	0	0	0	4
Annual Cropland	0	1	13	0	4	6	42	0	286	0	1	0	3	356
Water Body	0	0	0	0	0	0	0	0	0	231	0	0	0	231
Wetland	0	0	5	0	0	1	3	0	1	0	29	0	0	39
Settlement	0	0	0	0	0	0	0	0	0	0	0	3	0	3
Otherland	1	0	0	0	0	0	0	0	1	0	0	0	1	3
Column Total	21	53	306	7	12	66	132	4	323	231	35	3	4	1197

Malawi Accuracy Report 2010 Scheme I

Overall Classification Accuracy = (1461/1739) 84.01%

Overall Kappa Statistics = 0.7824

Accuracy Summary

Class Name	Reference Totals	Classified Totals	Number Correct	Producers Accuracy	Users Accuracy
Forestland	461	486	397	86.12%	81.69%
Grassland	196	207	127	64.80%	61.35%
Cropland	667	644	553	82.91%	85.87%
Wetland	331	309	305	92.15%	98.71%
Settlement	73	79	70	95.89%	88.61%
Otherland	11	13	9	81.82%	69.23%
Totals	1739	1738	1461		
Overall Classification Accuracy = 84.01%					

Error Matrix

Reference Data							
Classified Data	Forestland	Grassland	Cropland	Wetland	Settlement	Otherland	Total
Forestland	397	21	53	13	0	2	486
Grassland	22	127	52	5	1	0	207
Cropland	37	46	553	7	1	0	644
Wetland	3	1	0	305	0	0	309
Settlement	2	0	6	1	70	0	79
Otherland	0	0	3	0	1	9	13
Column Total	461	196	667	331	73	11	1739

Malawi Accuracy Report 2010 Scheme II

Overall Classification Accuracy = (1340/1739) 77.0%

Overall Kappa Statistics = 0.7180

Accuracy Summary

Class Name	Reference Total	Classified Totals	Number Correct	Producers Accuracy	Users Accuracy
Dense Forest	72	78	57	79.17%	73.08%
Moderate Forest	160	128	89	55.63%	69.53%
Sparse Forest	229	280	146	63.76%	52.14%
Open Grassland	17	25	12	70.59%	48.00%
Open Shrubland	107	113	55	51.4%	48.67%
Closed Grassland	14	15	9	64.29%	60.00%
Closed Shrubland	57	54	42	73.68%	77.78%
Perennial Cropland	49	45	37	75.51%	82.22%
Annual Cropland	619	600	508	82.07%	84.67%
Water Body	68	48	44	64.71%	91.67%
Wetland	263	261	261	99.24%	100.0%
Settlement	73	79	70	95.89%	88.61%
Otherland	11	13	9	81.82%	69.23%
Totals	1739	1739	1340		
Overall Classification Accuracy = 77.0%					

Error Matrix

Reference Data														
Classified Data	Dense Forest	Moderate Forest	Sparse Forest	Open Grassland	Open Shrubland	Closed Grassland	Closed Shrubland	Perennial Cropland	Annual Cropland	Water Body	Wetland	Settlement	Otherland	Total
Dense Forest	57	10	9	1	0	0	0	0	0	1	0	0	0	78
Moderate Forest	0	89	25	0	5	0	1	0	3	5	0	0	0	128
Sparse Forest	13	48	146	0	11	0	3	6	44	7	0	0	2	280
Open Grassland	0	4	0	12	1	1	1	0	2	4	0	0	0	25
Open Shrubland	0	0	14	0	55	0	2	0	42	0	0	0	0	113
Closed Grassland	0	1	0	0	0	9	2	0	2	1	0	0	0	15
Closed Shrubland	0	0	3	0	2	0	42	0	6	0	0	1	0	54
Perennial Cropland	1	4	0	0	0	0	0	37	3	0	0	0	0	45
Annual Cropland	0	4	28	4	32	4	6	6	508	5	2	1	0	600
Water Body	1	0	2	0	1	0	0	0	0	44	0	0	0	48
Wetland	0	0	0	0	0	0	0	0	0	0	261	0	0	261
Settlement	0	0	2	0	0	0	0	0	6	1	0	70	0	79
Otherland	0	0	0	0	0	0	0	0	3	0	0	1	9	13
Column Total	72	160	229	17	107	14	57	49	619	68	263	73	11	1739

