Net Biomass growth and removals (from NBS report)

5.3.4 Net Biomass (Growth and Removals)

As mentioned above the net biomass growth on the ground is influenced by both human activities and natural factors (natural growth, in growth and death). This was assessed through re-measurements of approximately 1179 field plots 2 to 4 years after the first measurements in 1995. The findings are presented in Table **Error! No text of specified style in document.**-1.

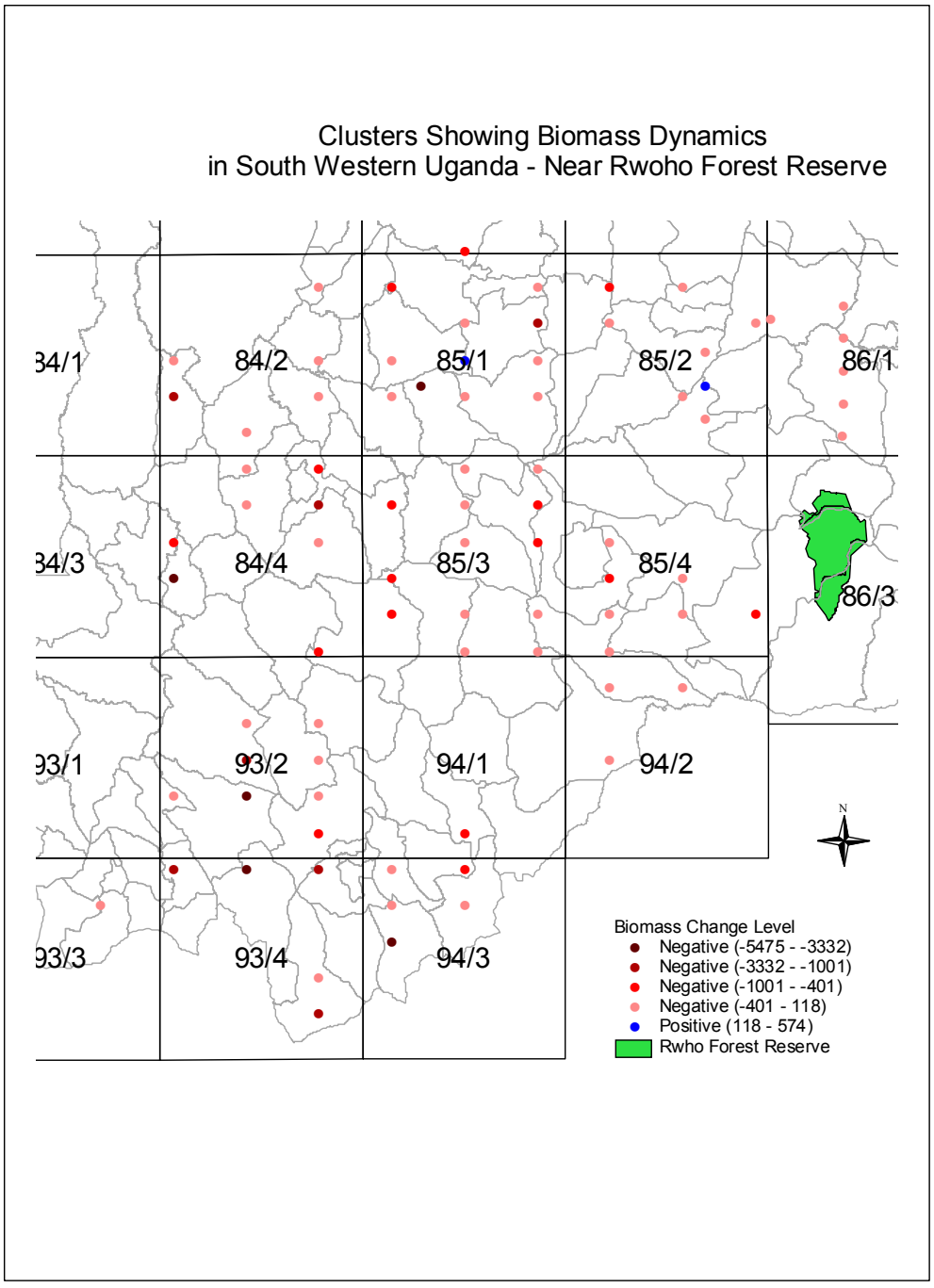
Table Error! No text of specified style in document.**-1 Over all biomass trends (tonnes air-dry /ha)**

Land Cover/Use	Predicted Weight 1st Visit(Tons/ Ha Airdry)	Predicted Weight 2nd Visit(Tons/Ha Airdry)	Difference between the 1st and 2nd Visit	Duration in Decimal Years	Rate of annual change (Tons/Ha Airdry)	Rate of annual change (%)
CLASS	VistA (TON-HA)	VistB (TON-HA)	Difference	YEARS	change	Change in %
Plantations (Hardwoods)	46	38	-7.8	2	-3.4	-7%
Tropical High Forest THF	189	110	-79.0	3	-24.3	-13%
THFDegraded	119	87	-31.2	4	-8.3	-7%
Woodland	39	33	-6.3	3	-1.9	-5%
Bushland	15	12	-2.3	4	-0.6	-4%
Grassland	8	7	-0.2	3	0.0	-1%
Wetlands	0	0	0.0	2	0.0	
Subsistence Farmland	8	8	0.2	3	0.1	1%
Commercial Farms	0	0	0.0	4	0.0	-25%
Built up Area	4	5	0.4	3	0.1	3%

Normal tropical high forests have the highest net biomass decline of 24 tonnes (air-dry biomass)/ha/year, followed by degraded tropical high forest with a net reduction of 8 tonnes/ha/yr. Biomass stock in Eucalyptus plantations declined by about 3 tonnes air-dry biomass/ha/yr. While woodlands, bush land and commercial farmlands had a net reduction of about 2 tonnes/ha/year, 0.8 tonnes/ha/year and commercial farms respectively.

These estimates when multiplied by the corresponding area of each land cover gave the net biomass growth (dynamics) which was grouped into protected and private lands. **Error! Reference source not found.** presents the national summary while Appendix 15 presents the details by districts.

Issues;
1) **RECPA** were changed from 50 years to 60 years.
2) Reference to NBS report. Not all details are available in the NBS reports (1992 and 2002). However area specific data sets can be derived from NBS data sets. For example the map below shows that there has been a general biomass decline in areas near Rwoho the last five to 8 years (i.e., 1995-199 to 2004).



The average annual per hectare biomass decline near Rwoho forest reserve in areas of Mbarara and Ntungamo district is between 140 kg in subsistence farmlands and 204 kg in grasslands.

Vegetation Class	Average /ha Annual Change (kg)	Min / ha Annual_change (kg)	Max / ha Annual_change	Standard Deviation	Number of Plots
Grass land	-241	-1,408	219	440	25
Farm land	-140	-1,234	290	303	24