



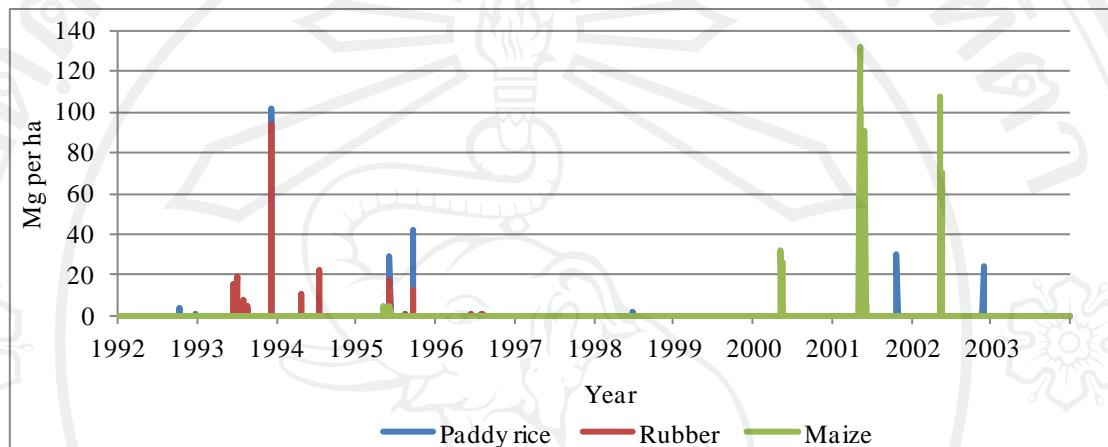
APPENDICES

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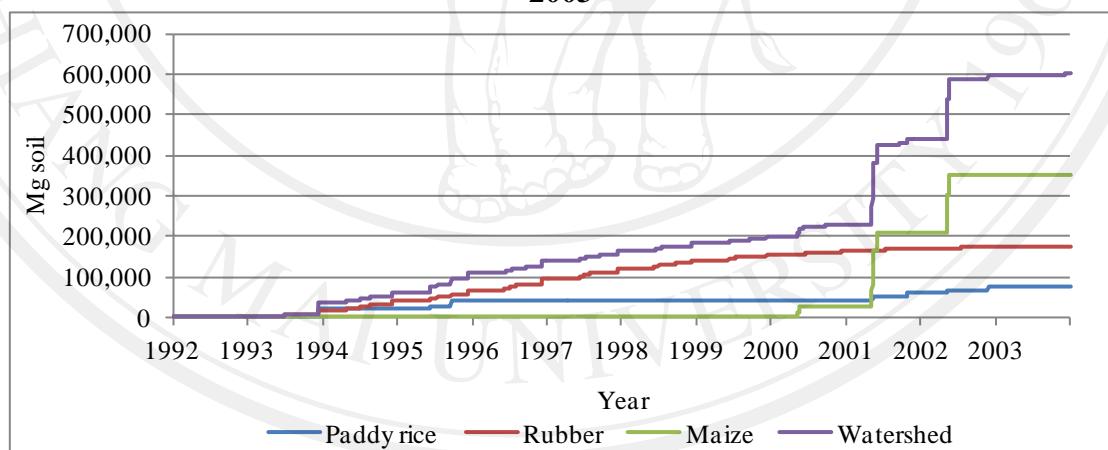
APPENDIX A

Appendix A contains graphs of the model outputs that were used to support the analysis of the results of Chapter Six.

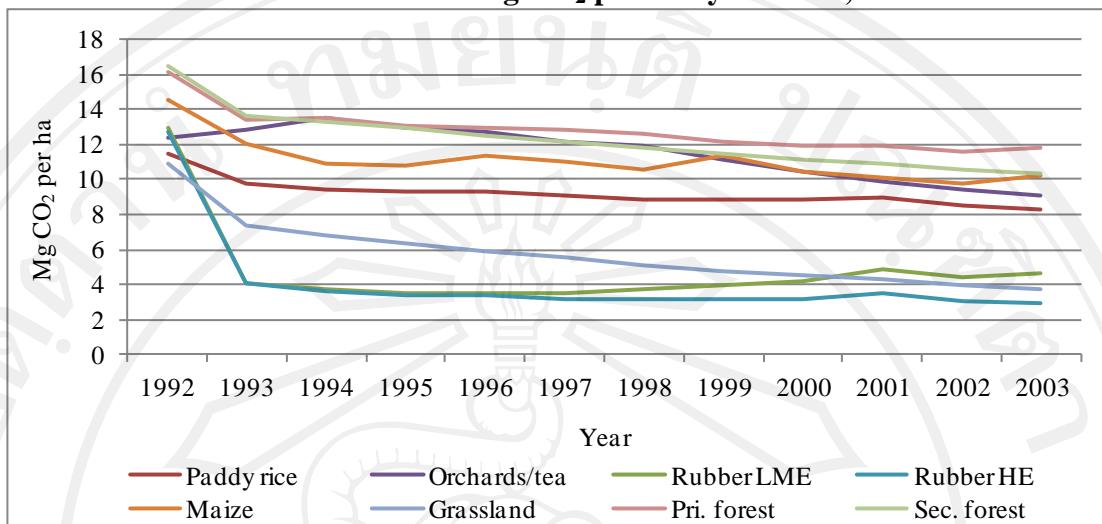
Daily soil erosion of paddy rice, rubber and maize in Mg soil per ha, 1992 to 2003



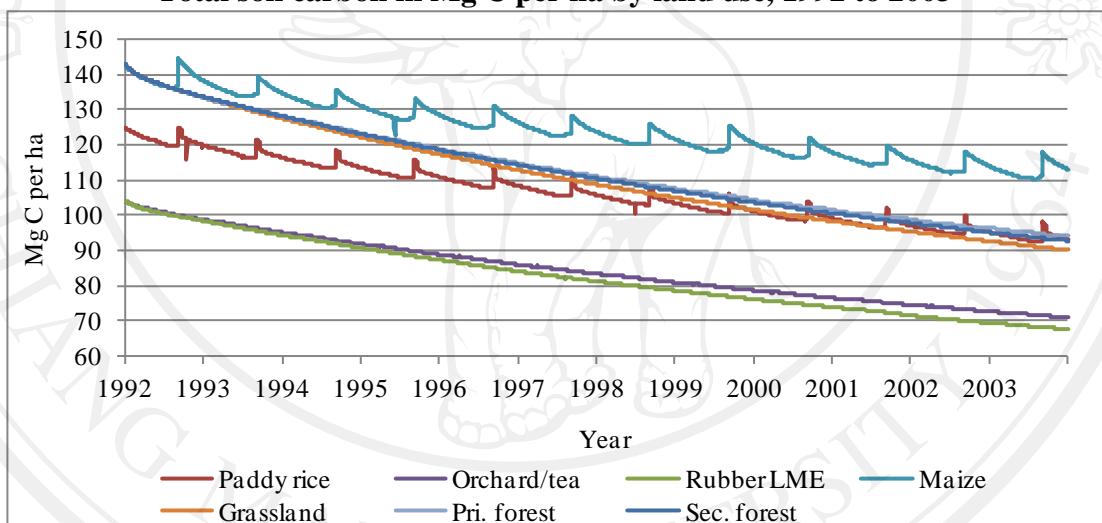
Cumulative soil erosion in Mg soil by land use area and sub-watershed, 1992 to 2003



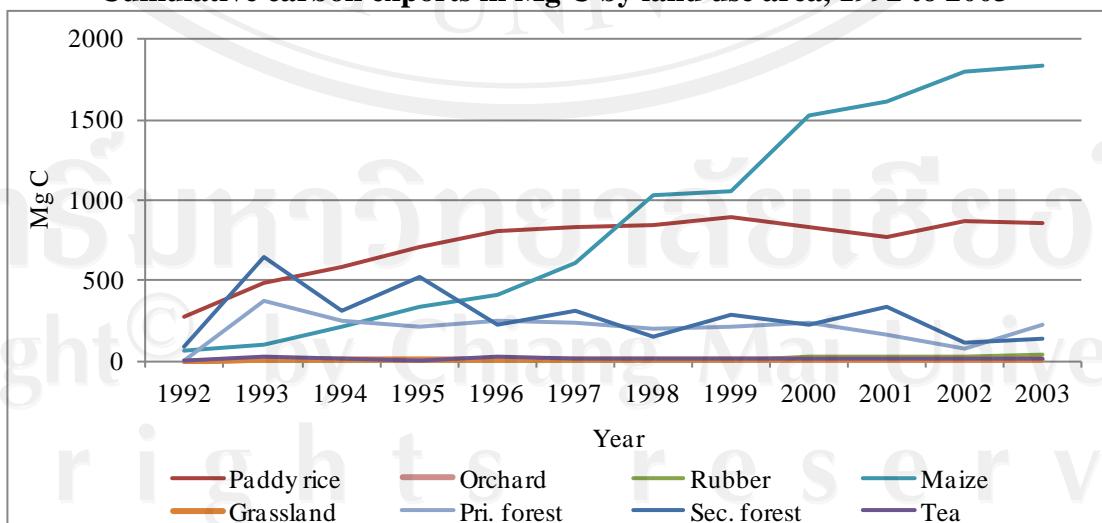
Cumulative soil emissions in Mg CO₂ per ha by land use, 1992 to 2003



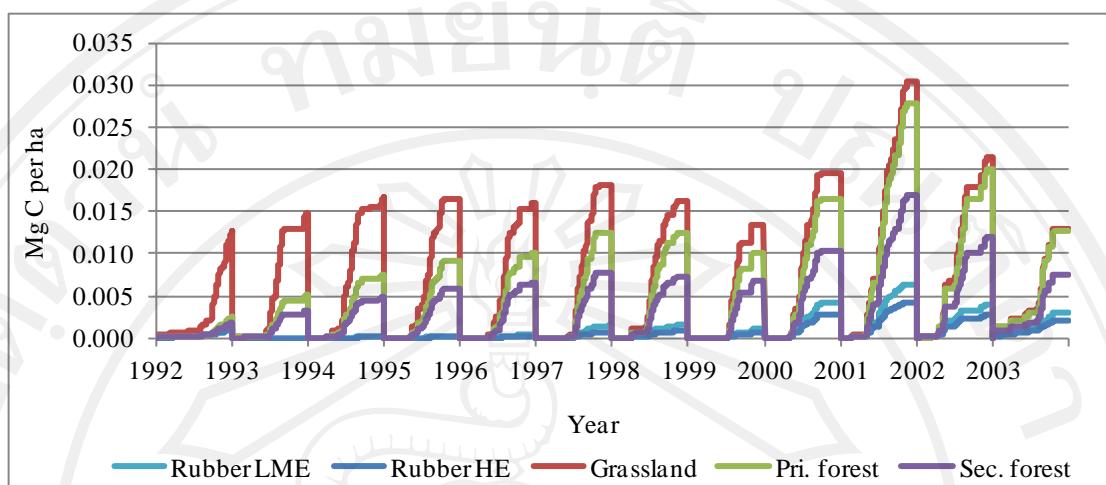
Total soil carbon in Mg C per ha by land use, 1992 to 2003



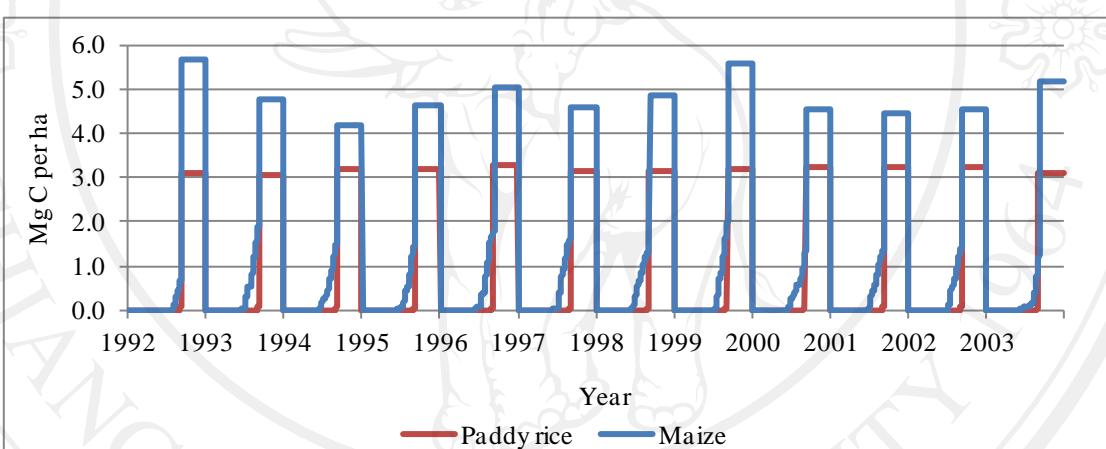
Cumulative carbon exports in Mg C by land use area, 1992 to 2003



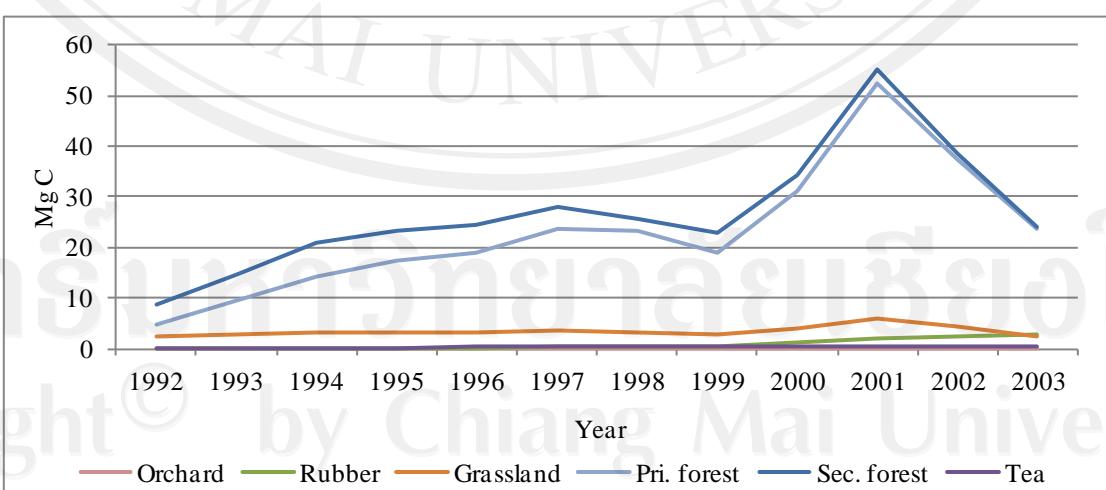
Cumulative litter inputs in Mg C per ha by land use, 1992 to 2003

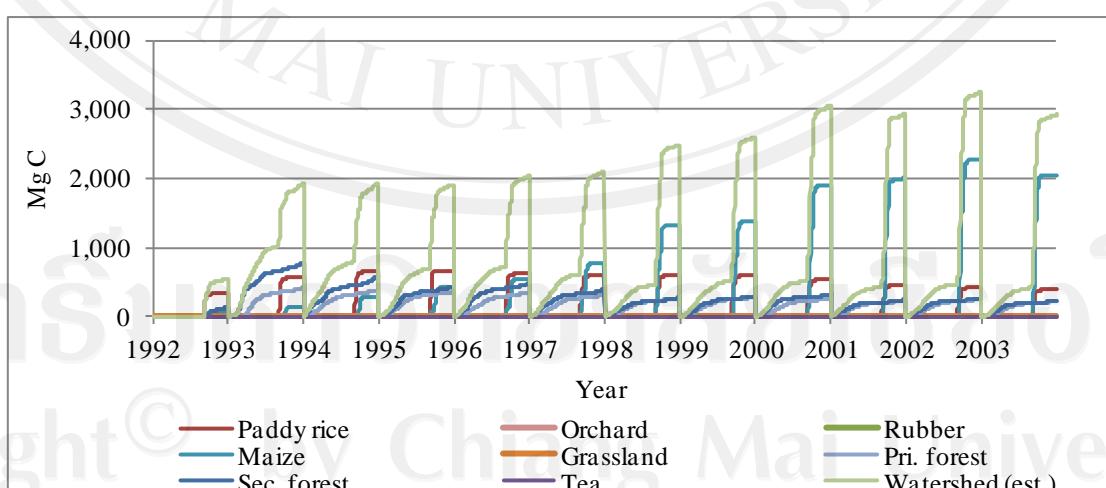
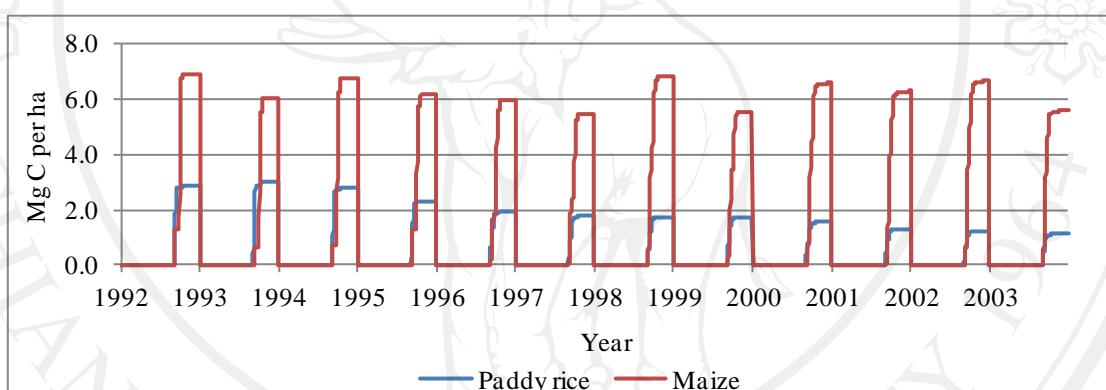
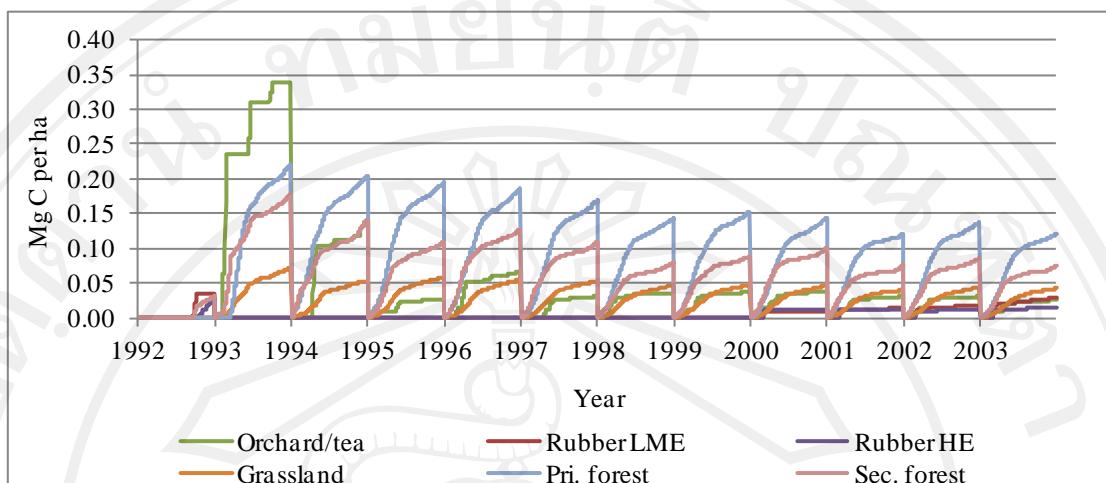


Cumulative litter inputs in Mg C per ha of paddy rice and maize, 1992 to 2003



Cumulative litter inputs in Mg C by land use area, 1992 to 2003





APPENDIX B

LUCIA Model Parameters

Management

	Annual vegetation?	Present vegetation ?	Planting day 1 [yyyy-mm-dd]	Planting day 2 [yyyy-mm-dd]	Planting day 3 [yyyy-mm-dd]	Slashing day [yyyy-mm-dd]	Burn?	Plough?	Apply fertiliser?	Apply manure?	Irrigate?	Terrestrial?
Maize	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1999-05-01	0	0	1999-01-02	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Secondary forest LME	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1999-01-01	0	0	1999-01-02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Grassland	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1999-01-01	0	0	1999-01-02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Orchard	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1999-01-03	0	0	1999-01-02	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Paddy rice	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1999-06-01	0	0	1999-01-02	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Primary forest	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1999-01-01	0	0	1999-01-02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rubber LME	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1999-01-03	0	0	1999-01-02	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tea	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1999-01-03	0	0	1999-01-02	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Secondary forest HE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1999-01-01	0	0	1999-01-02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rubber HE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1999-01-03	0	0	1999-01-02	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Village	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1999-01-01	0	0	1999-01-02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Fertilizer

	Day 1 dd.mm.yy	Type []	Amount [kg/ha ⁻¹]	N [kg/ha ⁻¹]	P [kg/ha ⁻¹]	K [kg/ha ⁻¹]	Day 2 dd.mm.yy	Type []	Amount [kg/ha ⁻¹]	N [kg/ha ⁻¹]	P [kg/ha ⁻¹]	K [kg/ha ⁻¹]
Maize	1999-05-01	13-5-7	400	52	20	28	1999-07-01	13-5-7	400	52	20	28
Orchard	1999-04-01	13-5-7	300	39	15	21	1999-09-01	13-5-7	300	39	15	21
Paddy rice	1999-06-01	13-5-7	400	52	20	28	1999-08-01	13-5-7	400	52	20	28
Rubber LME	1999-04-01	13-5-7	300	39	15	21	1999-04-01	Urea	225	104.4	0	0
Tea	1999-04-01	13-5-7	300	39	15	21	1999-09-01	13-5-7	300	39	15	21
Rubber HE	1999-04-01	13-5-7	300	39	15	21	1999-04-01	Urea	225	104.4	0	0
	Day 3 dd.mm.yy	Type []	Amount [kg/ha ⁻¹]	N [kg/ha ⁻¹]	P [kg/ha ⁻¹]	K [kg/ha ⁻¹]	Day 4 dd.mm.yy	Type []	Amount [kg/ha ⁻¹]	N [kg/ha ⁻¹]	P [kg/ha ⁻¹]	K [kg/ha ⁻¹]
Maize	0	Select ...	0	0	0	0	1999-11-01	Urea	0	0	0	0
Orchard	0	Select ...	0	0	0	0	1999-01-01	Select ...	0	0	0	0
Paddy rice	0	Select ...	0	0	0	0	1999-01-01	Select ...	0	0	0	0
Rubber LME	1999-11-01	13-5-7	300	39	15	21	1999-11-01	Urea	225	104.4	0	0
Tea	0	Select ...	0	0	0	0	1999-01-01	Select ...	0	0	0	0
Rubber HE	1999-11-01	13-5-7	300	39	15	21	1999-11-01	Urea	225	104.4	0	0

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Manure

	Day_1 dd.mm.yy	Type []	Amount [kg/ha ⁻¹]	Day_2 dd.mm.yy	Type []	Amount [kg/ha ⁻¹]
Maize	1999-02-10	Pig manure	0	1999-11-01	Pig manure	0
Orchard	1999-04-01	Pig manure	750	1999-01-01	Select ...	0
Paddy rice	1999-05-03	Pig manure	0	1999-01-01	Select ...	0
Rubber LME	1999-04-01	Pig manure	2000	1999-11-01	Pig manure	2000
Tea	1999-04-01	Pig manure	750	1999-01-01	Select ...	0
Rubber HE	1999-04-01	Pig manure	2000	1999-11-01	Pig manure	2000

Land Cover I

	Land cover	LAI initial []	LAI max []	Root max [cm]	RWD fine [Mg.m ⁻³]	Root shape []	N Fix []	kC []	Drought Adaption []	WUE [l.kgDM ⁻¹]
Maize	Maize	0.001	5	75	0.006	2.5	0	1	2	524
Secondary forest LME	Secondary Forest LME	0.001	7	500	0.003	1.3	0.05	1	4	400
Grassland	Grassland	0.001	6	500	0.003	1.3	0.05	1	4	400
Orchard	Orchard	0.001	5.33	350	0.004	1.5	0	1	4	500
Paddy rice	Paddy rice	0.001	6.2	80	0.002	2.5	0.01	1	4	1333
Primary forest	Primary forest	0.001	8.79	500	0.003	1.3	0.05	1	4	400
Rubber LME	Rubber LME	0.001	6	500	0.001	0.5	0	0...	2	350
Tea	Tea	0.001	5.33	350	0.004	1.5	0	1	4	500
Secondary forest HE	Secondary Forest HE	0.001	7	500	0.003	1.3	0.05	1	4	400
Rubber HE	Rubber HE	0.001	6	500	0.001	0.5	0	0...	2	350
Village	Village	0.001	0.01	500	0.003	1.3	0.05	1	4	400

Land Cover II

	TBase [°C]	TMax1 [°C]	TMax2 [°C]	DD2 Flower [degree day]	DD2 Harvest [degree day]	Day 1st Flower [d]	Start FlowPer [yyyy-mm-dd]	End FlowPer [yyyy-mm-dd]	Albedo Plant []	Fodding Leaf []	Fodding Stem []	Maint Resp [kgCO2.ha ⁻¹ .d ⁻¹]	Planting dens [ha ⁻¹]
Maize	8	35	42	1125	2110	1	1	365	0.2	0	0	0.02	12900
Secondary forest LME	8	35	42	2500	4000	1	1	365	0.1	0	0	0.005	800
Grassland	8	35	42	2500	4000	1	1	365	0.1	0	0	0.002	800
Orchard	15	35	42	1500	2500	1	1	365	0.18	0	0	0.022	400
Paddy rice	10	35	42	1200	1500	1	1	365	0.2	0	0	0.02	1e+06
Primary forest	8	35	42	2500	4000	1	1	365	0.1	0	0	0.004	800
Rubber LME	10	34	43	631	3199	2614	59	109	0.15	0	0	0.002	450
Tea	15	35	42	1500	2500	1	1	365	0.18	0	0	0.022	400
Secondary forest HE	8	35	42	2500	4000	1	1	365	0.1	0	0	0.005	800
Rubber HE	10	34	43	631	3199	2614	59	109	0.15	0	0	0.002	450
Village	20	35	42	2500	4000	1	1	365	0.1	0	0	0.1	1

Present Vegetation

	LAI max []	Estimation method	W [Mg.ha ⁻¹]	Dbh [cm]	a []	b []	Plant density [ha ⁻¹]	Shoot ratio []	Max biomass [Mg.ha ⁻¹]	exp k	Stand age [a]	Init weight [Mg.ha ⁻¹]	μ_0 []	Decay rate []
Secondary forest LME	7	Plateau	100	35	2	2.2	400	0.79	145	0.1	60	0.1	0.1	0.2
Grassland	6	Plateau	100	35	2	2.2	400	0.6	35	0.1	15	0.1	0.1	0.2
Orchard	5.33	Plateau	100	30	3	2.6	400	0.6	24	0.1	15	0.1	0.1	0.2
Primary forest	8.79	Plateau	100	35	2	2.2	400	0.79	247	0.1	50	0.1	0.1	0.2
Rubber LME	6	Gompertz	100	4	2	2.2	450	0.81	120	0.1	1	0.1	0.1	0.2
Tea	5.33	Plateau	100	30	3	2.6	400	0.6	24	0.1	15	0.1	0.1	0.2
Secondary Forest HE	7	Plateau	100	35	2	2.2	400	0.79	145	0.1	90	0.1	0.1	0.2
Rubber HE	6	Gompertz	100	4	2	2.2	450	0.81	120	0.1	1	0.1	0.1	0.2

Assimilates

	Root D1 []	Root P1 [], i.e. proportion of 1	Root D2 []	Root P2 [], i.e. proportion of 1	Leaf D1 []	Leaf P1 [], i.e. proportion of 1	Leaf D2 []	Leaf P2 [], i.e. proportion of 1
Maize	0	0.4	1.1	0	0.48	0.62	1.25	0.2
Secondary forest LME	0	0.35	1.2	0.3	0	0.55	1.3	0.3
Grassland	0	0.35	1.2	0.3	0	0.55	1.3	0.3
Orchard	1.3	0.3	1.75	0.2	0.65	0.7	1.85	0.1
Paddy rice	0	0.5	1	0	0.3	0.56	1.2	0.2
Primary forest	0	0.35	1.2	0.3	0	0.55	1.3	0.3
Rubber LME	0.5	0.35	2	0.3	0	0.1	2	0.05
Tea	1.3	0.3	1.75	0.2	0.65	0.7	1.85	0.1
Secondary forest HE	0	0.35	1.2	0.3	0	0.55	1.3	0.3
Rubber HE	0.5	0.35	2	0.3	0	0.1	2	0.05
Village	0	0.35	1.2	0.3	0	0.55	1.3	0.3

	Harv D1 []	Harv P1 [], i.e. proportion of 1	Harv D2 []	Harv P2 [], i.e. proportion of 1	AMD D1 []	AMD P1 [kg CH ₂ O .ha ⁻¹ .d ⁻¹]	AMD D2 []	AMD P2 [kg CH ₂ O .ha ⁻¹ .d ⁻¹]	SLA D1 []	SLA P1 [m ² .kg ⁻¹]	SLA D2 []	SLA P2 [m ² .kg ⁻¹]
Maize	0.9	0	1.37	0.8	1.25	60	2	40	0	35	1	16
Secondary forest LME	1	0	1.8	0.1	0	6	2	14	0	30	2	30
Grassland	1	0	1.8	0.1	0	2	2	3	0	30	2	30
Orchard	1	0	1.3	0.9	0.25	13	2	21	0.5	20	1.6	28
Paddy rice	0.7	0	1.22	0.6	0	40	2	40	0.17	60	1.3	25
Primary forest	1	0	1.8	0.1	0	4	2	16	0	30	2	30
Rubber LME	1	0.01	2	0.01	0	6	2	9	0	30	2	30
Tea	1	0	1.3	0.9	0.25	13	2	21	0.5	20	1.6	28
Secondary forest HE	1	0	1.8	0.1	0	4	2	13	0	30	2	30
Rubber HE	1	0.01	2	0.01	0	6	2	6	0	30	2	30
Village	1	0	1.8	0.1	0	2	2	3	0	30	2	30

Plant NPK I

	N Leaf D1 []	N Leaf P1 [], i.e. [g g-1]	N Leaf D2 [],	N Leaf P2 [], i.e. [g g-1]	N Root D1 []	N Root P1 [], i.e. [g g-1]	N Root D2 []	N Root P2 [], i.e. [g g-1]	N Stem D1 []	N Stem P1 [], i.e. [g g-1]	N Stem D2 [],	N Stem P2 [], i.e. [g g-1]	N Harv D1 []	N Harv P1 []	N Harv D2 []	N Harv P2 []
Maize	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007
Secondary forest LME	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007
Grassland	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007
Orchard	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007
Paddy rice	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007
Primary Forest	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007
Rubber LME	0	0.04	2	0.0367	0	0.012	2	0.03	0	0.0071	2	0.025	1	0.0028	2	0.0028
Tea	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007
Secondary forest HE	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007
Rubber HE	0	0.04	2	0.0367	0	0.012	2	0.03	0	0.0071	2	0.025	1	0.0028	2	0.0028
Village	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007	0	0.007	2	0.007
	P Leaf D1 []	P Leaf P1 [], i.e. [g g-1]	P Leaf D2 []	P Leaf P2 [], i.e. [g g-1]	P Root D1 []	P Root P1 [], i.e. [g g-1]	P Root D2 []	P Root P2 [], i.e. [g g-1]	P Stem D1 []	P Stem P1 [], i.e. [g g-1]	P Stem D2 [],	P Stem P2 [], i.e. [g g-1]	P Harv D1 []	P Harv P1 []	P Harv D2 []	P Harv P2 []
Maize	0	0.001	2	0.001	0	0.001	2	0.001	0	0.001	2	0.001	0	0.002	2	0.002
Secondary forest LME	0	0.001	2	0.001	0	0.001	2	0.001	0	0.001	2	0.001	0	0.002	2	0.002
Grassland	0	0.001	2	0.001	0	0.001	2	0.001	0	0.001	2	0.001	0	0.002	2	0.002
Orchard	0	0.001	2	0.001	0	0.001	2	0.001	0	0.001	2	0.001	0	0.002	2	0.002
Paddy rice	0	0.001	2	0.001	0	0.001	2	0.001	0	0.001	2	0.001	0	0.002	2	0.002
Primary Forest	0	0.001	2	0.001	0	0.001	2	0.001	0	0.001	2	0.001	0	0.002	2	0.002
Rubber LME	0	0.04	2	0.0025	0	0.0017	2	0.01	0	0.0009	2	0.0065	1	0.0011	2	0.0011
Tea	0	0.001	2	0.001	0	0.001	2	0.001	0	0.001	2	0.001	0	0.002	2	0.002
Secondary forest HE	0	0.001	2	0.001	0	0.001	2	0.001	0	0.001	2	0.001	0	0.002	2	0.002
Rubber HE	0	0.04	2	0.0025	0	0.0017	2	0.01	0	0.0009	2	0.0065	1	0.0011	2	0.0011
Village	0	0.001	2	0.001	0	0.001	2	0.001	0	0.001	2	0.001	0	0.002	2	0.002

Plant NPK II

	K Leaf D1 []	K Leaf P1 [], i.e. [g g-1]	K Leaf D2 []	K Leaf P2 [], i.e. [g g-1]	K Root D1 []	K Root P1 [], i.e. [g g-1]	K Root D2 []	K Root P2 [], i.e. [g g-1]	K Stem D1 []	K Stem P1 [], i.e. [g g-1]	K Stem D2 []	K Stem P2 [], i.e. [g g-1]	K Harv D1 []	K Harv P1 []	K Harv D2 []	K Harv P2 []
Maize	0	0.004	2	0.004	0	0.004	2	0.004	0	0.002	2	0.002	0	0.005	2	0.005
Secondary forest LME	0	0.004	2	0.004	0	0.004	2	0.004	0	0.002	2	0.002	0	0.005	2	0.005
Grassland	0	0.004	2	0.004	0	0.004	2	0.004	0	0.002	2	0.002	0	0.005	2	0.005
Orchard	0	0.004	2	0.004	0	0.004	2	0.004	0	0.002	2	0.002	0	0.005	2	0.005
Paddy rice	0	0.004	2	0.004	0	0.004	2	0.004	0	0.002	2	0.002	0	0.005	2	0.005
Primary forest	0	0.004	2	0.004	0	0.004	2	0.004	0	0.002	2	0.002	0	0.005	2	0.005
Rubber LME	0	0.0194	2	0.0134	0	0.007	2	0.0069	0	0.0055	2	0.0051	1	0.003	2	0.003
Tea	0	0.004	2	0.004	0	0.004	2	0.004	0	0.002	2	0.002	0	0.005	2	0.005
Secondary forest HE	0	0.004	2	0.004	0	0.004	2	0.004	0	0.002	2	0.002	0	0.005	2	0.005
Rubber HE	0	0.0194	2	0.0134	0	0.007	2	0.0069	0	0.0055	2	0.0051	1	0.003	2	0.003
Village	0	0.004	2	0.004	0	0.004	2	0.004	0	0.002	2	0.002	0	0.005	2	0.005

Litter Initialization

	Amount surface litter [Mg/ha]	Lignin litter surface []	N litter surface []	P litter surface []	K litter surface []	Amount litter topsoil [Mg/ha]	Lignin litter topsoil []	N litter topsoil []	P litter topsoil []	K litter topsoil []	Amount litter subsoil [Mg/ha]	Lignin litter subsoil []	N litter subsoil []	P litter subsoil []	K litter subsoil []
Maize	1.5	0.32	0.013	0.0009	0.001	2	0.15	0.01	0.001	0.005	2	0.15	0.015	0.001	0.005
Secondary forest LME	2	0.15	0.01	0.001	0.005	2	0.15	0.01	0.001	0.005	2	0.15	0.015	0.001	0.005
Grassland	2	0.15	0.01	0.001	0.005	2	0.15	0.01	0.001	0.005	2	0.15	0.015	0.001	0.005
Orchard	2	0.15	0.015	0.001	0.005	2	0.15	0.01	0.001	0.005	2	0.15	0.01	0.001	0.005
Paddy rice	2	0.15	0.015	0.001	0.005	2	0.15	0.01	0.001	0.005	2	0.15	0.01	0.001	0.005
Primary forest	2	0.15	0.01	0.001	0.005	2	0.15	0.01	0.001	0.005	2	0.15	0.015	0.001	0.005
Rubber LME	3.7	0.32	0.013	0.0009	0.001	2	0.15	0.01	0.001	0.005	2	0.15	0.015	0.001	0.005
Tea	2	0.15	0.015	0.001	0.005	2	0.15	0.01	0.001	0.005	2	0.15	0.01	0.001	0.005
Secondary forest HE	2	0.15	0.01	0.001	0.005	2	0.15	0.01	0.001	0.005	2	0.15	0.015	0.001	0.005
Rubber HE	3.7	0.32	0.013	0.0009	0.001	2	0.15	0.01	0.001	0.005	2	0.15	0.015	0.001	0.005
Village	2	0.15	0.01	0.001	0.005	2	0.15	0.01	0.001	0.005	2	0.15	0.015	0.001	0.005

Plant Quality

	Lignin conc leaf []	Lignin conc stem []	Lignin conc root []	Polyphenols conc leaf []	Polyphenols conc stem []	Polyphenols conc root []	Remob Eff N []	Remob Eff P []	Remob Eff K []
Maize	0.1	0.23	0.2	0.03	0.01	0	0.59	0.73	0.86
Secondary forest LME	0.1	0.2	0.15	0.05	0.15	0.1	0.5	0.5	0.5
Grassland	0.1	0.2	0.15	0.05	0.15	0.1	0.5	0.5	0.5
Orchard	0.1	0.2	0.15	0.05	0.15	0.1	0.5	0.5	0.5
Paddy rice	0.1	0.2	0.15	0.05	0.15	0.1	0.5	0.5	0.5
Primary forest	0.1	0.2	0.15	0.05	0.15	0.1	0.5	0.5	0.5
Rubber LME	0.1	0.23	0.2	0.03	0.01	0	0.59	0.73	0.86
Tea	0.1	0.2	0.15	0.05	0.15	0.1	0.5	0.5	0.5
Secondary forest HE	0.1	0.2	0.15	0.05	0.15	0.1	0.5	0.5	0.5
Rubber HE	0.1	0.23	0.2	0.03	0.01	0	0.59	0.73	0.86
Village	0.1	0.2	0.15	0.05	0.15	0.1	0.5	0.5	0.5

Soil

	Soil Unit	Thickness Top [cm]	Thickness Sub [cm]	Stones Top []	Stones Sub []	BD Top [Mg.m ⁻³]	BD Sub [Mg.m ⁻³]	Sand Top []	Sand Sub []	Clay Top []	Clay Sub []	SOC Top [%]	SOC Sub [%]	Nt Top [g.kg ⁻¹]	Nt Sub [g.kg ⁻¹]			
	Gleysol	10	70	0	0.05	1.21	1.42	0.38	0.41	0.29	0.25	1.24	1.08	1.11	0.8			
	Ferralsol	Ferralsol	15	80	0	0.05	0.9	1.29	0.42	0.36	0.39	0.48	4.28	0.8	2.38	0.8		
	Acrisol 3	Acrisol 3	10	80	0.01	0.05	1.2	1.21	0.14	0.11	0.43	0.57	1.81	1.09	1.55	1.07		
	Acrisol 4	Acrisol 4	7	83	0.01	0.05	1.05	1.18	0.28	0.22	0.38	0.4	3.17	0.8	1.75	0.81		
	Nt Top [g.kg ⁻¹]	Nt Sub [g.kg ⁻¹]	N min Top [g.kg ⁻¹]	N min Sub [g.kg ⁻¹]	P Bray Top [mg.kg ⁻¹]	P Bray Sub [mg.kg ⁻¹]	K av Top [g.kg ⁻¹]	K av Sub [g.kg ⁻¹]	pH Top []	pH Sub []	Ksat parent [mm.d ⁻¹]	Theta Top []	Theta Sub []	P sorption []	P Weathered [mg.kg.d ⁻¹]	K Weathered [mg.kg.d ⁻¹]		
	Gleysol	1.11	0.8	0.016	0.006	64	33	0.1	0.1	5.18	6.05	30	0.6	0.6	0.8	0.01	0.01	
	Ferralsol	Ferralsol	2.38	0.8	0.016	0.007	8	3	0.08	0.03	4.5	4.75	30	0.6	0.6	0.8	0.01	0.01
	Acrisol 3	Acrisol 3	1.55	1.07	0.016	0.007	8	3	0.08	0.03	4.5	4.75	30	0.6	0.6	0.8	0.01	0.01
	Acrisol 4	Acrisol 4	1.75	0.81	0.016	0.007	8	3	0.08	0.03	4.5	4.75	30	0.6	0.6	0.8	0.01	0.01
	Soil Unit	TPV Top []	TPV Sub []	FC Top []	FC Sub []	PWP Top []	PWP Sub []	Lambda Top []	Lambda Sub []	Ksat Top [mm.d ⁻¹]	Ksat Sub [mm.d ⁻¹]	Psi E Top [kPa]						
	Gleysol	Gleysol	0.44	0.42	0.31	0.28	0.18	0.16	0.14	0.16	122.76	205.71	5.47					
	Ferralsol	Ferralsol	0.48	0.47	0.37	0.41	0.25	0.29	0.11	0.1	70.84	15.3	3.56					
	Acrisol 3	Acrisol 3	0.5	0.54	0.4	0.46	0.26	0.33	0.12	0.08	65.66	5.02	7.55					
	Acrisol 4	Acrisol 4	0.49	0.47	0.37	0.38	0.24	0.24	0.12	0.12	97.16	75.18	5.29					

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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