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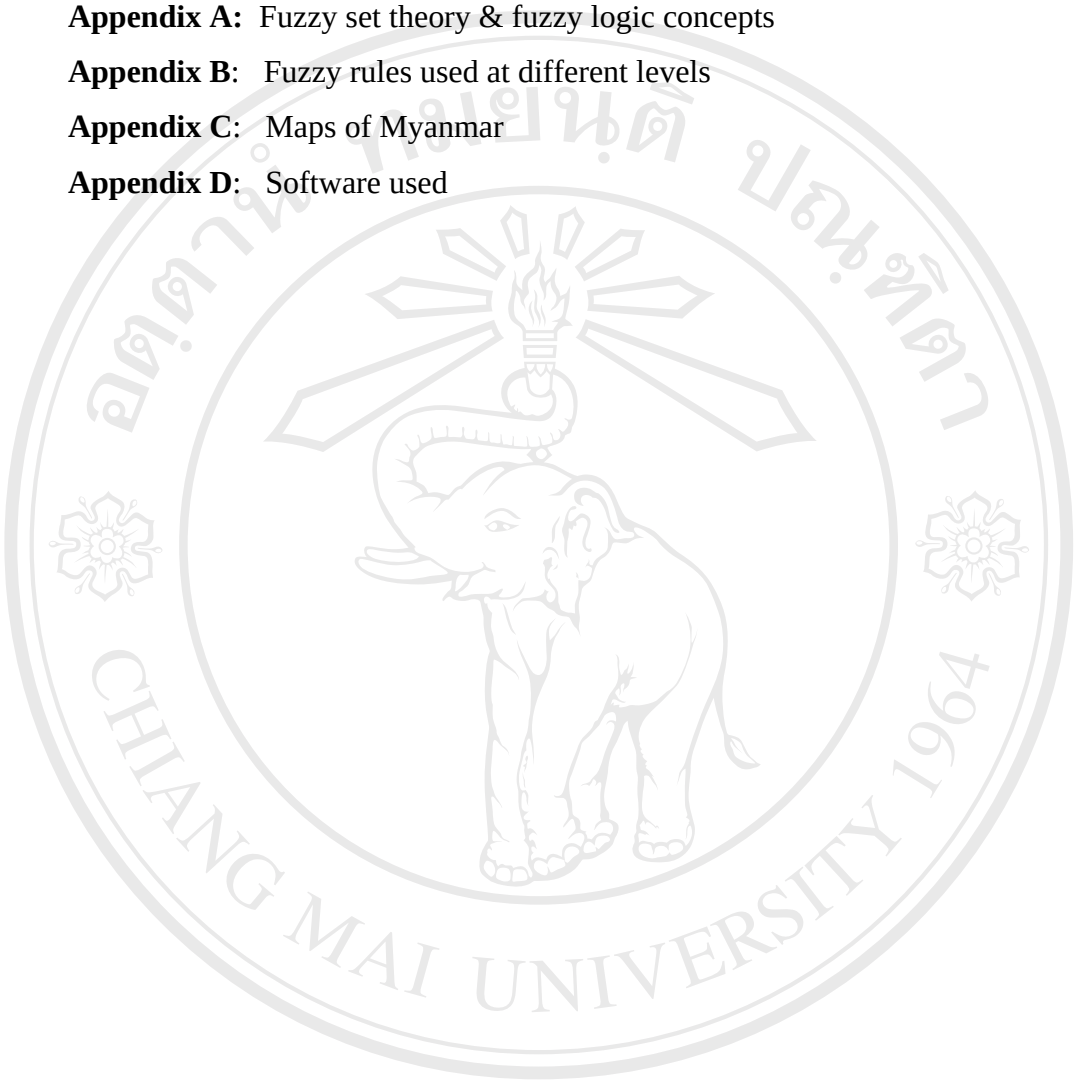
Appendix A: Fuzzy set theory & fuzzy logic concepts

Appendix B: Fuzzy rules used at different levels

Appendix C: Maps of Myanmar

Appendix D: Software used



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List of Abbreviations

° ' "	Degree-Minute-Second
° C	Degree of Celcius
%	Percent
a.m.s.l	Above mean sea level
km	Kilometer
Sq-km	Square Kilometer
m	Meter
cm	Centimeter
ha	hectare
kg	Kilogram
EM	Effective Microorganism
SAFE	Sustainability Assessment by Fuzzy Evaluation
MCE	Multi-criteria Evaluation
SIA	Sustainability Indicator Analysis
FL	Fuzzy Logic
MCDM	Multi-criteria Decision Making
N	Non-sustained
C	Conditional sustained
S	Sustained
NS	North-South
SW	South-West
NE	North-East
S-R-L	Sesame-Rice-Legume
R-R	Rice-Rice
R-L	Rice-Legume system
Kyat	Myanmar Currency Unit
Tsuper	Triple Superphosphate

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N	Nitrogen
P	Phosphorus
K	Potassium
t/ha	Ton/hectare
NFM	Number of Family Members
NFL	Number of Family Labors
TA	Total Area
UCF	Usage of Chemical Fertilizer
UOF	Usage of Organic fertilizer
CLC	Cultivation of Legume Crops
CCuse	Chemical Control usage
CY	Crop Yield
Ystab	Yield Stability
GM	Gross Margin
GR	Gross Revenue
ISS	Input Self Sufficiency
FFS	Family Food Sufficiency
CS	Cropping System
MF	Membership Function
Trimf	Triangular Membership Function
Gaussmf	Gaussian Membership Function
ECOLsus	Ecological Sustainability
ECONsus	Economical Sustainability
SOCsus	Social Sustainability
Osus	Overall Sustainability
CS1	Cropping System 1
CS2	Cropping System 2
CS3	Cropping System 3
SI	Sustainability Index
Equivalent:	1 USD= 900 Kyats (in 2004)
	1 basket= 20.8 kg

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