LAND REQUIRMENTS FOR SOYA BEAN

LAND QUALITY	LAND CHARACTERSTICS	LIMITING VALUES FOR LAND CHARACTERSTICS			
		Most Suitable	**Moderately Suitable**	**Marginally Suitable**	**Not Suitable**
TEMPERTURE REGIME	ELEVATION, m	400-1000	1000-1800,0-400	1000-18000,0-400	>1800
	MEN ANNUAL TEMP. C^0	22-25	18-22,25-30	18-22,25-30	<18,>30
GROWING PERIOD	DAYS	150-190	120-150	90-120	<90
CONDITIONS FOR RIPENING	Growing Period, Days	<190	190-300	300-330	>330
WATER AVILABILITY	Mean Annual Rainfall, mm	>1200	1000-1200	800-1000	<800
	75% Probability Rainfall, mm	>600	500-600	400-500	<400
	Minimum Soil Depth , cm	75	50-75	50	<50
	Subsoil Texture	L,CL	L,CL,SL,SC,SCL,C	LS,S	Any
DRAINAGE	Soil Drainage Class	Well	Moderately Well	Imperfect	Poor, Excessive
NUTRIENTS	Soil pH	6-7	7-7.5,5,5-6	5-5.5,7.5-8	<5, >8
	Soil Type Sri Lanka	1,5,10,14	4,7,8,9,12,22,26	2,6,16,17,18,19,20, 23	3,13,15,25-31
SALINITY	EC_e mS cm^{-1}	<5	5-6	6-8	>8
EROSION HAZARD	Slope Angle, %	<5	5-10	10-25	>25
	Previous Erosion	Nil	Slight	Moderate	Severe
EASE OF CULTIVATION	Rocks and Stones, %	Nil	1-10	10-25	>25

KEY TO TABLES OF LAND USE REQUIRMENTS

Key to Sri Lanka Soil Classes

1. Reddish brown earths with moderate amount of gravel in subsoil and low humic gley soils,undulating terrain.
2. Reddish brown earths with high amount of gravel in subsoil and low humic gley soils, undulating terrain.
3. Reddish brown earths and solodized solonetz undulating terrain.
4. Reddish brown earths,noncalcic brown soils and low humic gley soils, undulating terrain.
5. Reddish brown earths and immature brown loams, rolling , hilly and steep terrain.
6. Noncalcic brown soils and low humic gley soils, undulating terrain.
7. Noncalcic brown soils ,Soils on old alluvium and solodized, solonetz, undulating terrain.
8. Red- Yellow latosols,flat to slightly undulating terrain
9. Calcic red-yellow tatosols, flat terrain.
10. Solodized solonetz and solonchacks, flat terrain.
11. Grumusols , flat terrain.
12. Soils on recent marine calcareous sediments, flat terrain.
13. Alluvial soils of variable drainage and texture, flat terrain.
14. Regosols on recent beach and dune sands, flat terrain.
15. Red-yellow podzolic soils and mountain regosols, mountainous terrain.
16. Red-yellow podzolic soils , steeply dissected,hilly and rolling terrain.
17. Red-yellow podzolic soils with strongly mottled subsoil and low humic gley soils, rolling and undulating terrain.
18. Red-yellow podzolic soils with soft and hard laterite, rolling and undulating terrain.
19. Red-yellow podzolic soils with dark B horizon and red-yellow podzoilc soils with prominent A1 horizon, rolling terrain.
20. Red-yellow podzolic soils with semi prominent A1 horizon,hilly to rolling terrain.
21. Redish brown latosolic soils,steeply dissected,hilly and rolling terrain.
22. Immature brown loams,steeply dissected,hilly and rolling terrain.
23. Bog and half-bog soils,flat terrain.
24. Latosols and regosols on old red and yellow sands,flat terrain.
25. Alluvial soils of variable drainage and texture,flat terrain.
26. Regosols on recent beach sands,flat terrain.
27. Rock knob plain.
28. Eroded land.
29. Erosinal remnants(inselbergs)
30. Steep rockland and lithosols.

SOILS TEXTURE

LS	Loamy Sand	**CL**	Clay Loam
SL	Sandy Loam	**ZCL**	Silty Clay Loam
L	Loam	**SC**	Sandy Clay
SCS	Sandy Clay Loam	**ZiC**	Silty Caly
ZL	Silt Loam	**C**	Clay
Z	Silt		