

LAND REQUIRMENTS FOR COTTON

LAND QUALITY	LAND CHARACTERSTICS	LIMITING VALUES FOR LAND CHARACTERSTICS			
		Most Suitable	Moderately Suitable	Marginally Suitable	Not Suitable
TEMPERTURE REGIME	ELEVATION, m	0-800	800-1400	1400-2200	>220
	MEN ANNUAL TEMP. C ^o	23-27	20-23,27-31	16-20, >31	<16
GROWING PERIOD	DAYS	150-200	120-150	90-120	>90
CONDITIONS FOR RIPENING	GROWING PERIOD,DAYS	150-200	200-270	270-330	>330
WATER AVILABILITY	Mean Annual Rainfall, mm	>1300	1100-1300	900-1100	<900
	75% Probability Rainfall, mm	>700	600-700	400-600	<400
	Soil Depth , cm	>100	>100-75	75-50	<50
DRAINAGE	Soil Texture	Heavier than SL	SL, Heavier than SL,LS	SL, Heavier than SL,LS	All
	Soil Drainage Class	Well Drained	Well to Moderately	Imperfectly Drained,	Excessively, Or Poorly Drained
	Depth to Ground Water, cm	>100	100-75	75-50	<50
NUTRIENTS AVAILABILITY	Soil PH at 50 cm	7-7.5	7.5-8,6-7	8-8.5,5.5-6	>8.5, <5.5
	Soil Type Sri Lanka	5,10,12,13,14	1,8,9	2,4,6,7	3,15,16-31
SALINITY	EC _e mS cm ⁻¹ at 1 m	<8	8-13	13-17	>17
EROSION HAZARD	Slope Angle,%	<5	5-10	10-20	>20
	Past Erosion	Nil	Slight	Moderate	Severe
EASE OF CULTIVATION	Rocks and Stones, %	Nil	1-5	5-10	>10

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	SCL	Silty Clay Loam
L	Loam	SC	Sandy Clay
SCS	Sandy Clay Loam	ZiC	Silty Caly
ZL	Silt Loam	C	Clay
Z	Silt		