

LAND REQUIRMENTS FOR SUGAR CANE

LAND QUALITY	LAND CHARACTERSTICS	LIMITING VALUES FOR LAND CHARACTERSTICS			
		Most Suitable	Moderately Suitable	Marginally Suitable	Not Suitable
TEMPERTURE REGIME	MEN ANNUAL TEMP. C ⁰	24-28	22-24,28-31	20-22,31-35	<20
GROWING PERIOD	DAYS	270-330	240-270	210-240,>330	<210
WATER AVAILABILITY	Mean Annual Rainfall, mm	>2500	2000-2500	1500-2000	<1500
	75% Probability Rainfall, mm	>1900	1400-1900	900-1400	<900
	Minimum Soil Depth , cm	>100	100-75	75-50	<50
	Subsoil Texture	L to C	SL , L to C	SL,LS, L to C	All
DRAINAGE	Soil Drainage Class	Well to Moderately Well	Well to Moderately Well	Imperfect	Poor, Excessive
	Depth to Ground Water	>100	60-100	40-60	<40
NUTRIENTS	Soil pH	6-7	5,5-6,7-7.5	5-5.5, 7.5-8.5	<5, <8.5
	Soil Type Sri Lanka	1,4,7,8,14,26	5,9,12,22,23	2,4,10,16,17,18,19,20,25	3,11,13,15,24
SALINITY	EC _e mS cm ⁻¹	<2	2-6	6-9	>9
EROSION HAZARD	Slope Angle, %	<8	8-16	16-24	>24
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, noncalcareous brown soils and low humic gley soils, undulating terrain.
5. Reddish brown earths and immature brown loams, rolling, hilly and steep terrain.
6. Noncalcareous brown soils and low humic gley soils, undulating terrain.
7. Noncalcareous brown soils, soils on old alluvium and solodized, solonetz, undulating terrain.
8. Red- Yellow latosols, flat to slightly undulating terrain
9. Calcic red-yellow latosols, 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 podzolic soils with prominent A1 horizon, rolling terrain.
20. Red-yellow podzolic soils with semi prominent A1 horizon, hilly to rolling terrain.
21. Reddish 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. Erosional 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		