

## APPENDIX-IV

### Different soil parameters and their codes

(a) Soil textural classes and their codes:

Family Class	Textural Class(USDA)	Clay distribution (%)	Code	
			SCS	Surface phase
<b>Fine Textured</b>	Clayey			
Very fine	Cay	60 or more	O	o
Fine	Sandy clay(finier), clay, silty clay	41 to 60	C	c
Moderately fine	Sandy clay(coarser), clay loam and silty clay loam(finier)	35-40	E	e
<b>Medium textured</b>	Loamy			
Fine loamy	Sandy clay loam(finier),clay loam and silty clay loam(coarser)	27-35	M	m
Moderately fine loamy	Sandy loam(very fine), loam and silty loam(finier)	18-27	L	l
Coarse loamy	Sandy loam, loam and silty loam (coarser)	<18 >15 fine sand	R	r
Fine silty	Silty clay loam(coarser), and silty loam(finier)	15-18 >15 fine sand	Y	y
<b>Coarse textured</b>	Sandy			
Sandy	Loamy sand	<15	S	s
Coarsy sandy	Sand	<10	Z	z

(b) Soil depth classes and their codes

Classes	Depth (cm)	Code
Extremely shallow	<10	0
Very shallow	10-25	1
Shallow	25-50	2
Moderately shallow	50-75	3
Moderately deep	75-100	4
Deep	100-150	5
Very deep	>150	6

## (c) Soil Drainage classes and their codes

Classes	Code
Extremely poor	0
Very poor	1
Poor	2
Imperfect	3
Moderately well	4
Well	5
Somewhat excessive	6
Excessive	7

## (d) Slope classes and their codes

Classes	Percentage of slope	Code
Level to nearly level	0-1	A
Very gentle sloping	1-3	B
Gentle sloping	3-8	C
Moderately sloping	8-15	D
Moderately steep sloping	15-30	E
Steep sloping	30-50	F
Very steep sloping	>50	G

## (e) Erosion classes and their codes

Classes	Code
None to very slight	0
Slight	1
Moderate	2
Severe	3
Very severe	4

## (f) Flooding classes and their codes

Classes	Code
Nil	f <sub>0</sub>
Slightly flooded	f <sub>1</sub>
Moderately flooded	f <sub>2</sub>
Severely flooded	f <sub>3</sub>
Very severely flooded	f <sub>4</sub>

## (g) Ground water depth classes and their codes

Classes	Depth(meter)	Code
Shallow	1	w
Moderately shallow	1-2	w
Moderately deep	2-5	w
Deep	>5	w-

(h) Soil P<sup>H</sup> classes and their ranges

Classes	P <sup>H</sup> range
Extremely acidic	<4.5
Very strongly acidic	4.5-5.0
Strongly acidic	5.1-5.5
Medium acidic	5.6-6.0
Slightly acidic	6.1-6.5
Neutral	6.6-7.3
Mildly alkaline	7.4-7.8
Moderately alkaline	7.9-8.4
Strongly alkaline	8.5-9.0
Very strongly alkaline	>9.1