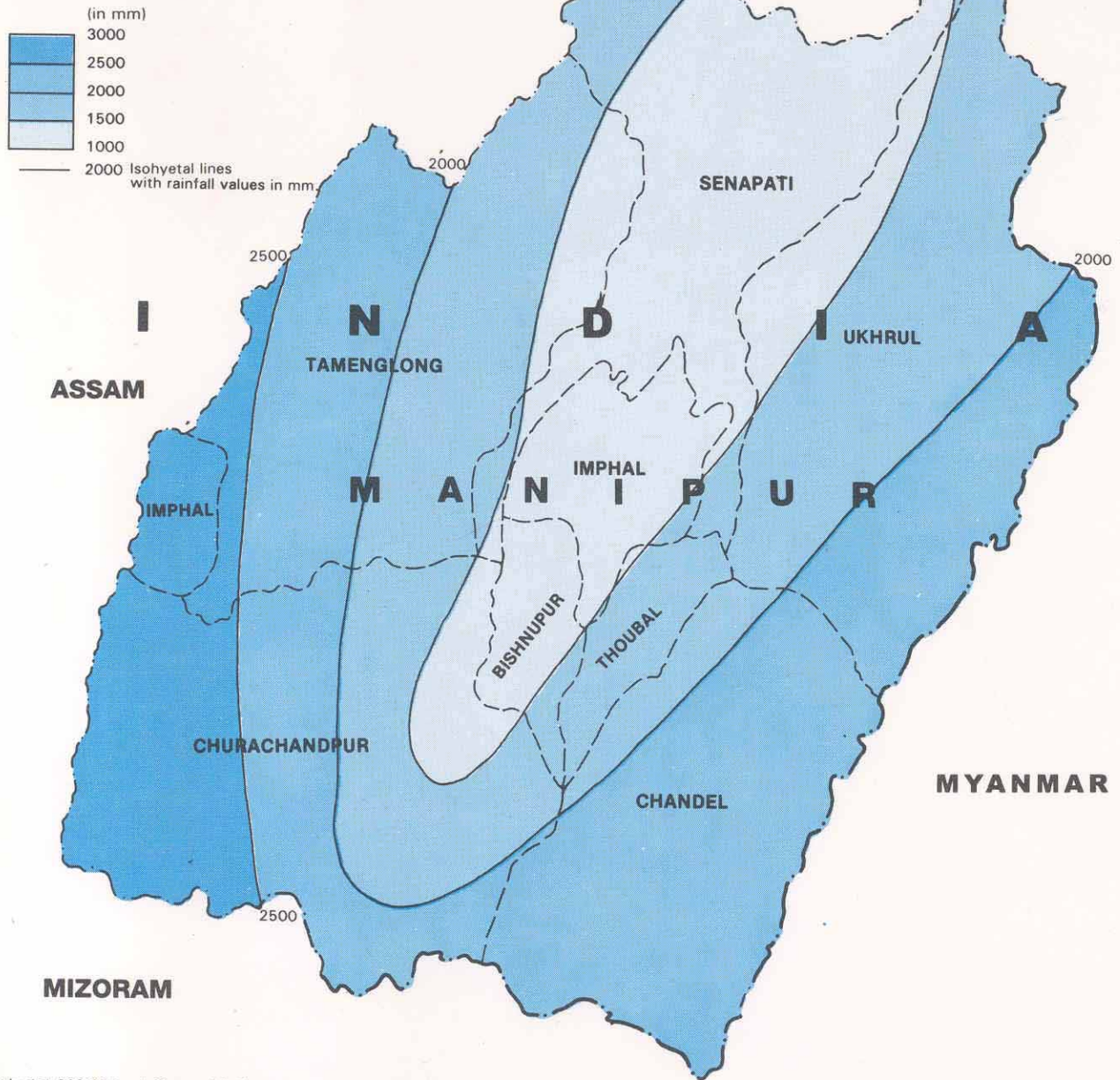


ANNUAL RAINFALL



Scale 1:1,200,000 1 Cm = 12 Kms

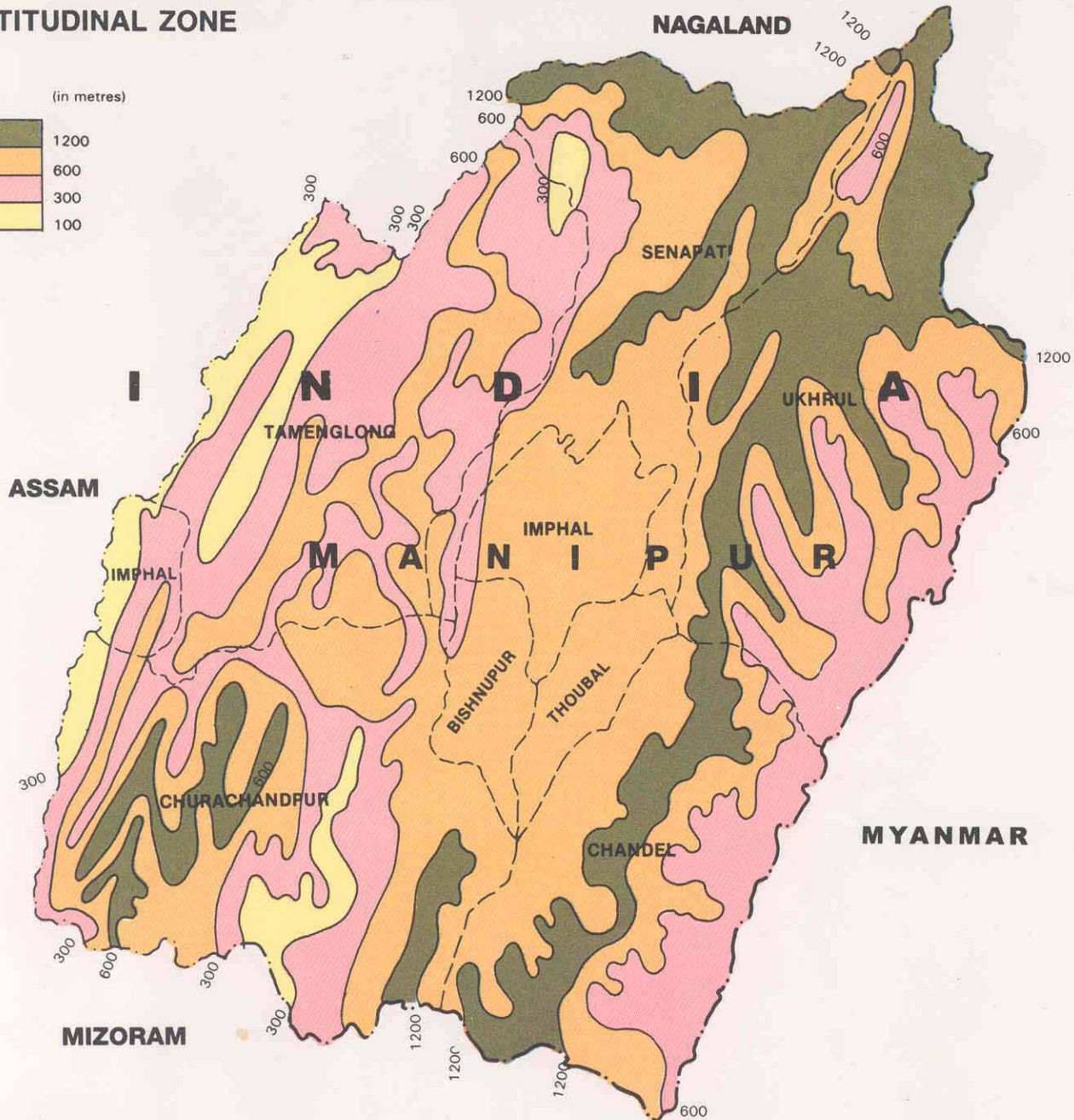
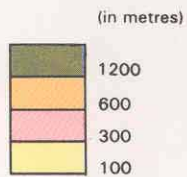
ADMINISTRATION

NAGALAND



Scale 1:1,200,000 1 Cm = 12 Kms

ALTITUDINAL ZONE

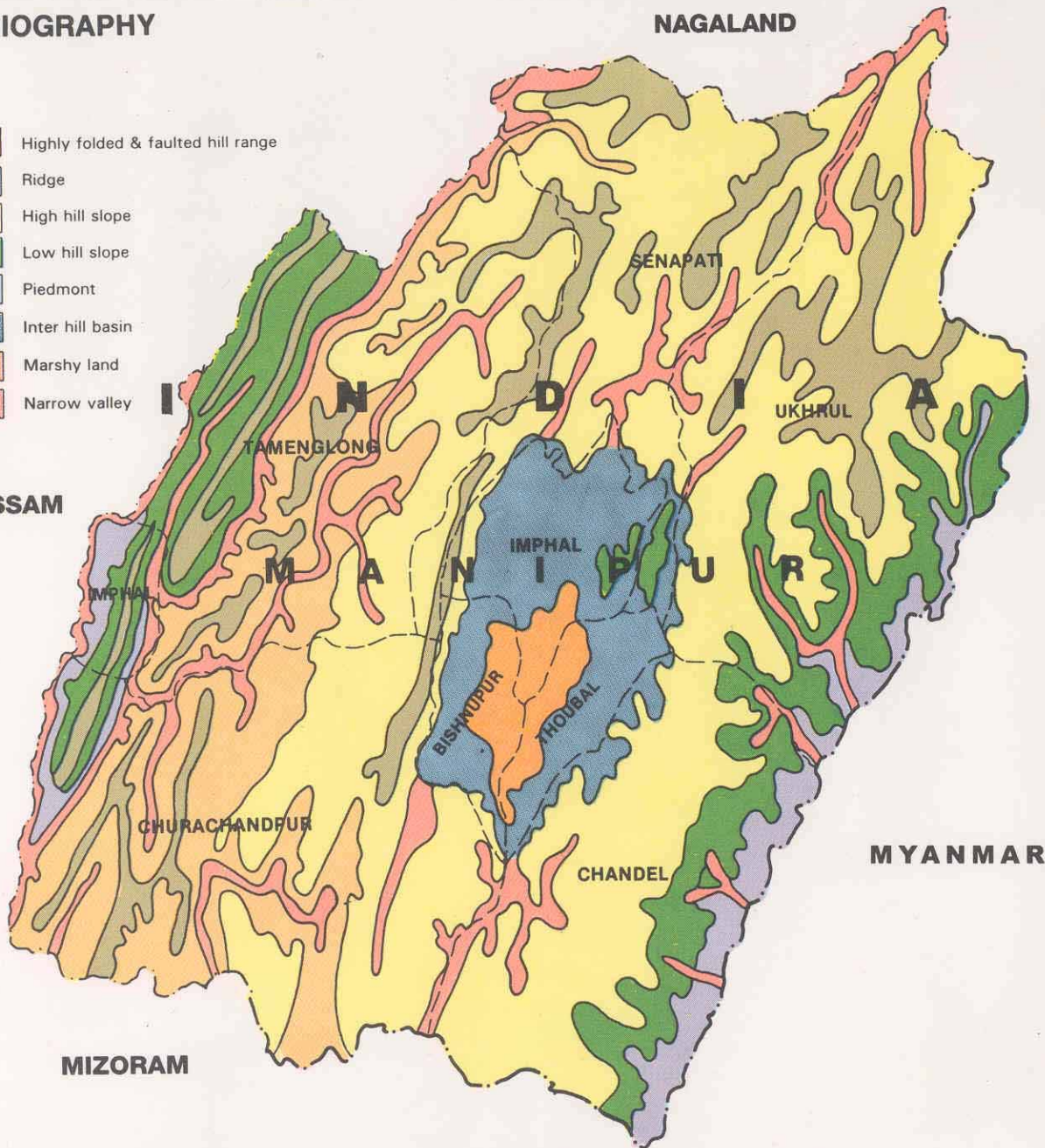


PHYSIOGRAPHY

NAGALAND

- Highly folded & faulted hill range
- Ridge
- High hill slope
- Low hill slope
- Piedmont
- Inter hill basin
- Marshy land
- Narrow valley














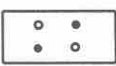
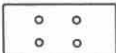
ASSAM



MIZORAM

MYANMAR

REFERENCES

	International Boundary
	State Boundary
	District Boundary
IMPHAL ■	State Headquarters
THOUBAL ●	District Headquarters
Sibong ●	Other Towns
	River and Stream
	Road
	National Highway Number
	Map Unit Boundary
	Marshes
	Sheet Rock, Rocky Slope/Cliff Rock Outcrop, Boulders, Gravel
	Escarpment
	Waterlogged Area
	Moderate Surface Flooding
	Slight Surface Flooding
	Moderate Surface Stoniness
	Slight Surface Stoniness

NOMENCLATURE

MAJOR SOILS

- Inceptisols** — Soils with weakly developed horizons showing definite alteration of parent material in the form of developing of soil structure or soil colour.
- Aquepts** — Soils occurring in aquic moisture regime of valley land.
- Ochrepts** — Soils with ochric, umbric or mollic epipedon. (<25 cm).
- Umbrepts** — Soils with umbric or mollic epipedon (>25 cm).
- Ultisols** — Soils having clay-enriched B horizon with poor base status (<35% throughout).
- Humults** — Soils with 0.9 percent organic carbon in the upper 15 cm of the argillic horizon.
- Udults** — Ultisols that have a udic moisture regime.
- Entisols** — Soils without any pedogenic horizon except an epipedon, the soils retain their original (parent material) structure.
- Orthents** — Common of typical soils occurring on steep to very steep hill slopes of erosional surface.
- Alfisols** — Soils having clay-enriched B horizon with medium base status (>35%).

FLOODING

- Moderate** — Accumulation of water due to seasonal precipitation for <3 months and occasional overflow.

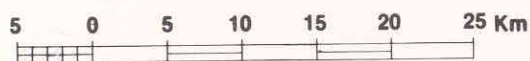
STONINESS

- Slight** — Covering <15% area.
- Moderate** — Covering 15% to 40% area.

Manipur

SOILS

Scale 1:500,000 1 cm = 5 km



HOW TO READ THE SOIL MAP

The **Soil Map of Manipur** is published on 1:500,000 scale in one sheet. The Index Map given as first inset provides the location of districts in the state.

In order to know the soils of an area, first locate with the help of index map, in which the area of one's interest falls. After locating the area see the soil map unit numbers appearing in that area. The details of each soil map unit is given in the legend. The soil map unit is an association of soil families with dominant phases (if any).

The legend provides brief description of the dominant and associated (subdominant) soil families within a particular map unit, highlighting the soil depth, drainage, texture, slope, erosion, etc. The taxonomy of soils, as per USDA System of classification, and the extent of the area covered by each mapped unit along with its percentage of the total area of the state are given in separate columns. The dominant soils occupy 50 per cent or more, whereas the subdominant soils occupy more than 20 per cent but less than 50 per cent area of the unit.

The methodology adopted in the preparation of the soil map is given in NBSS publication 13 (Sehgal et al., 1987 2nd edition). The soil mapped units have been coloured at subgroup level to give a broad idea of major soils and their distribution pattern in the state.

The general information on annual rain fall, physiography and altitudinal zone have been presented in the inset Maps.

The soil map is accompanied by a soils bulletin (**Executive Summary; NBSS Publ. 56-B**) containing salient features of the mapped soils and information for land users and planners. A comprehensive account of soils has been given in the **Detailed Version** of Soils Bulletin (**NBSS Publ. 56-A**) which contains detailed descriptions of physical features, climate, physical and chemical soils properties, landform and soil relationship, interpreted information on alternative land uses, etc. The third publication on soils is **database** on soil-site characteristics of all the soil profiles, auger-holes and other observations, which are given in **NBSS Publ. 56-C**.

SOILS OF NORTH EASTERN HILL RANGES

PURVACHAL : HIGH AMPLITUDINAL HILLS

5	Deep, excessively drained, fine soils ² on moderately steep side slopes of hills, having clayey surface with moderate erosion; <i>associated with</i> : Deep, well drained, fine soils ³ on moderately sloping side slopes of hills with moderate erosion and slight stoniness.	<ul style="list-style-type: none"> ○ Fine, Umbric Dystrochrepts ○ Fine, Typic Haplohumults 	83.9 (3.8)
6	Deep, well drained, fine soils ³ on gently sloping side slopes of hills having clayey surface with moderate erosion; <i>associated with</i> : Deep, well drained, fine soils ³ on moderately sloping side slopes of hills with slight erosion and slight stoniness.	<ul style="list-style-type: none"> ○ Fine, Typic Kanhapludults ○ Fine, Ultic Hapludalfs 	153.0 (6.9)
7	Deep, well drained, fine soils ³ on moderately sloping side slopes of hills having loamy surface with moderate erosion; <i>associated with</i> : Moderately deep, excessively drained, fine loamy soils ² on moderately steep side slopes of hills with moderate erosion and slight stoniness.	<ul style="list-style-type: none"> ○ Fine, Typic Haplohumults ○ Fine loamy, Umbric Dystrochrepts 	100.9 (4.5)
8	Deep, excessively drained, fine soils ³ on strongly sloping side slopes of hills having loamy surface with moderate erosion and slight stoniness; <i>associated with</i> : Deep, well drained, fine soils ² on strongly sloping side slopes of hills with moderate erosion.	<ul style="list-style-type: none"> ○ Fine, Typic Hapludults ○ Fine, Typic Haplumbrepts 	86.9 (3.9)
9	Deep, excessively drained, fine loamy soils ² on strongly sloping to moderately steep side slopes of hills having loamy surface with severe erosion; <i>associated with</i> : Deep, excessively drained, clayey skeletal soils ³ on moderately steep side slopes of hills with moderate erosion and slight stoniness.	<ul style="list-style-type: none"> ○ Fine loamy, Typic Dystrochrepts ○ Clayey-skeletal, Typic Haplohumults 	170.6 (7.6)
10	Deep, well drained, fine soils ³ on gently to moderately sloping side slopes of hills having clayey surface with moderate erosion; <i>associated with</i> : Moderately deep, excessively drained, clayey skeletal soils ¹ on moderately steep side slopes of hills with severe erosion and slight stoniness.	<ul style="list-style-type: none"> ○ Fine, Typic Paleudults ○ Clayey-skeletal, Typic Udorthents 	197.0 (8.8)
11	Deep, somewhat excessively drained, fine soils ³ on moderately steep side slopes of hills having loamy surface with moderate erosion; <i>associated with</i> : Deep, excessively drained, clayey skeletal soils ¹ on steeply sloping side slopes of hills with severe erosion and slight stoniness.	<ul style="list-style-type: none"> ○ Fine, Typic Palehumults ○ Clayey-skeletal Typic Udorthents 	100.7 (4.5)
12	Deep, excessively drained, clayey skeletal soils ¹ on gently to moderately sloping side slopes of hills having clayey surface with moderate to severe erosion and moderate stoniness; <i>associated with</i> : Deep, excessively drained, fine loamy soils ³ on moderately steep side slopes of hills with moderate erosion.	<ul style="list-style-type: none"> ○ Clayey-skeletal, Typic Udorthents ○ Fine loamy, Typic Hapludults 	306.5 (13.7)
13	Deep, well drained, fine silty soils ¹ on moderately steep side slopes of hills having loamy surface with severe erosion and slight stoniness; <i>associated with</i> : Deep, well drained, clayey-skeletal soils ² on moderately sloping side of hills with moderate erosion and slight stoniness.	<ul style="list-style-type: none"> ○ Fine silty, Typic Udorthents ○ Clayey-skeletal, Fluventic Umbric Dystrochrepts 	209.1 (9.4)
14	Deep, poorly drained, fine silty soils ² on nearly level to gently sloping valleys having clayey surface with slight erosion, ground water table below one meter of the surface and slight flooding; <i>associated with</i> : Deep, well drained, fine soils ² on gently sloping side slopes of hills with slight erosion.	<ul style="list-style-type: none"> ○ Fine silty, Typic Haplaquepts ○ Fine, Aquic Dystrochrepts 	58.4 (2.6)

