

1) Check the service limit & Phylognomy.

Check legend

2) Check the appropriateness of

black symbols for phylognomy

3) Decode the columns to be used

individually &  
in combination.

---

✓ 1) Give RF details with heading etc to Krishnaswamy.

2) ✓ Edit the Published by ... & Author sheet!

3) ✓ Check sheet 4 with TR. Petrus.

4) ✓ Suggest reduction of service limits to 1:500,000 or 1 million!

5) ✓ Check the names of places from SOI topsheet for  
② & ③.

6) ✓ Mark the Topsheet names of Map ④ to be included.

7) ✓ Check scrub-woodland symbol.?

Sheet (2)

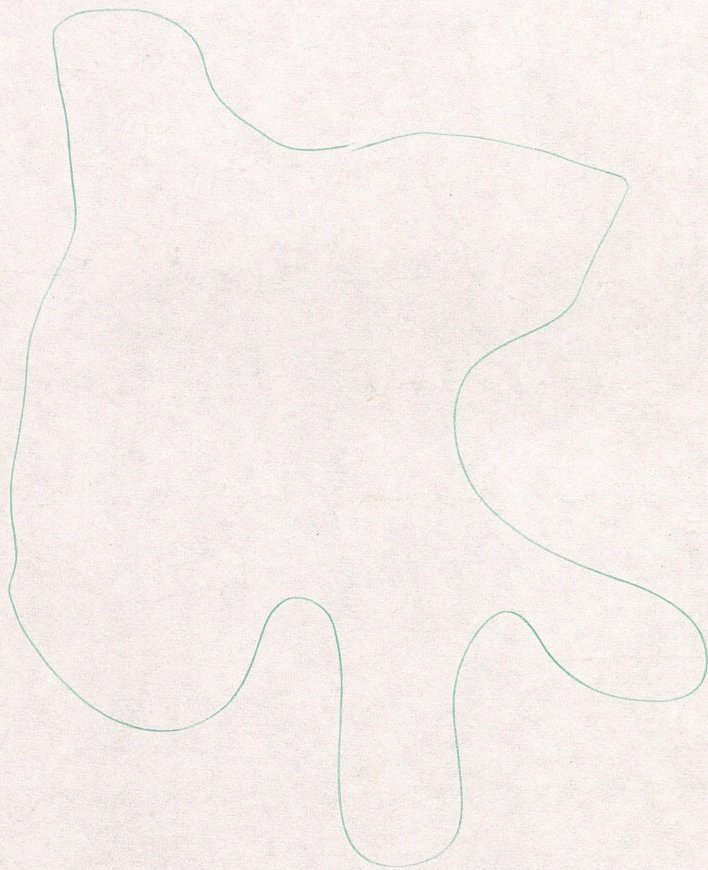
SSA/11

- ① Put the Reservoir boundaries from Satellite Image
- ② Put the tea / coffee estate boundaries from Satellite Image & - O'Valley Area.
- ③ There should be no ~~RF~~ Tea or Agriculture in RF limits. - Adjust accordingly.
- ④ Choncona Plantations: Use the Satellite Interpretation data, but mark Choncona limits.

---

State Boundaries to be drawn

Separate the series types



Based on topography &

rainfall &

vegetation

2A/5/93

list of ~~box~~ sheets deposited at

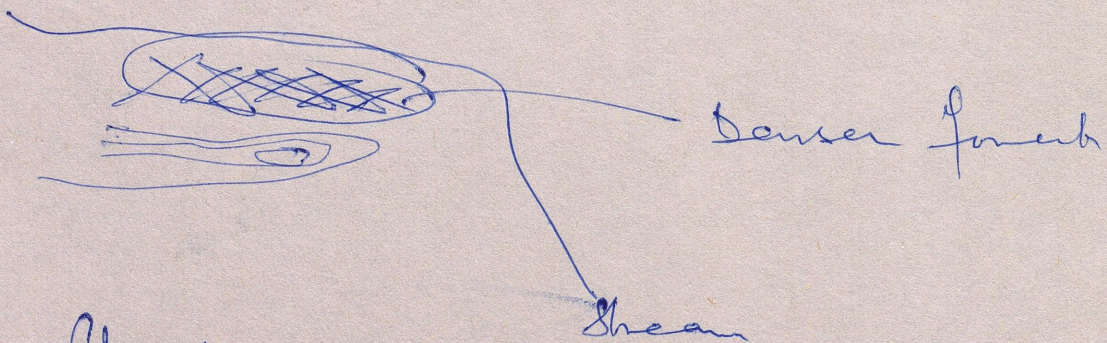
PT :

58 B 1 to 16 except 9 58 B 9

---

18/5/93

Slopes facing north and more  
densely forested than slopes facing  
south



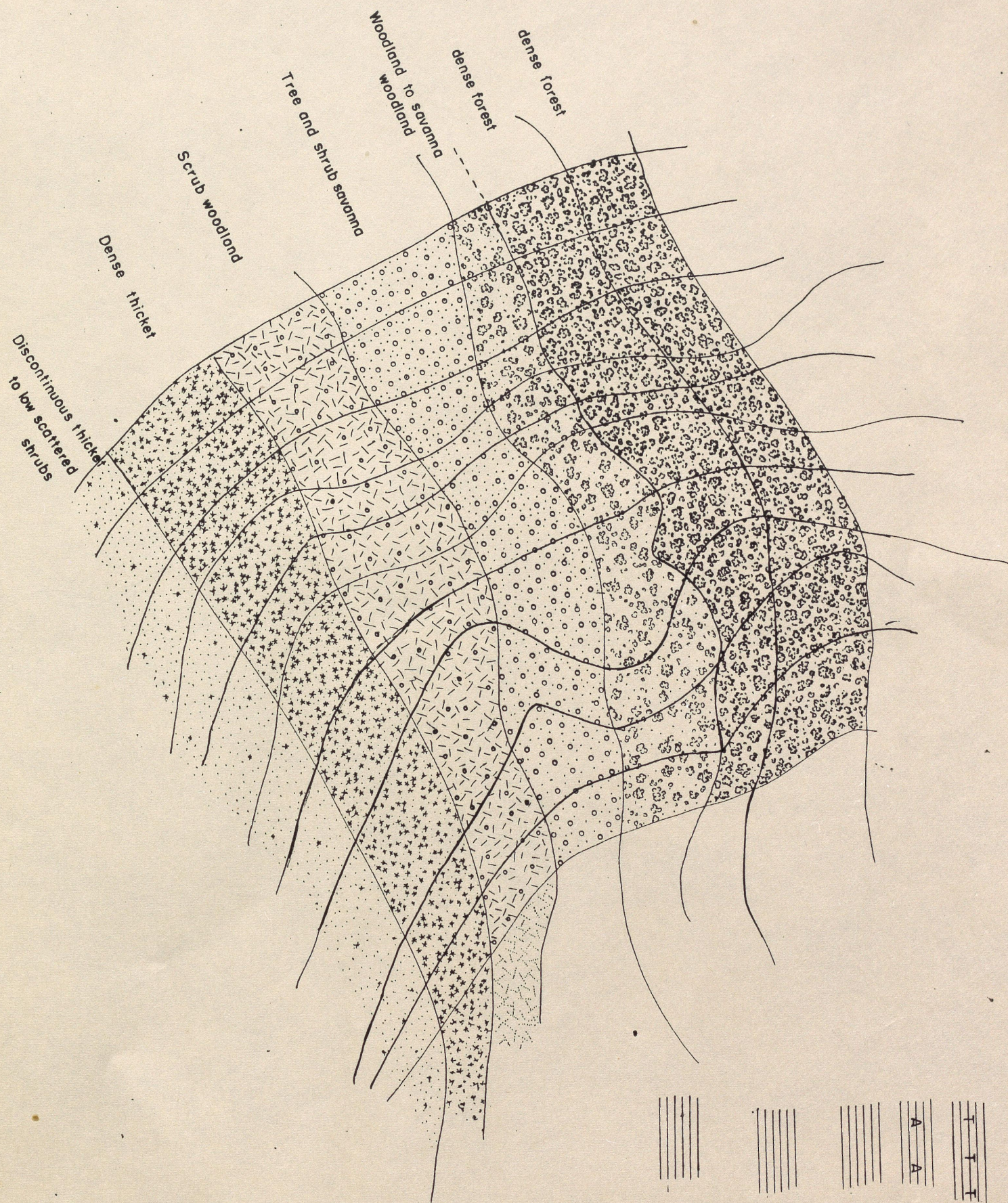
Check

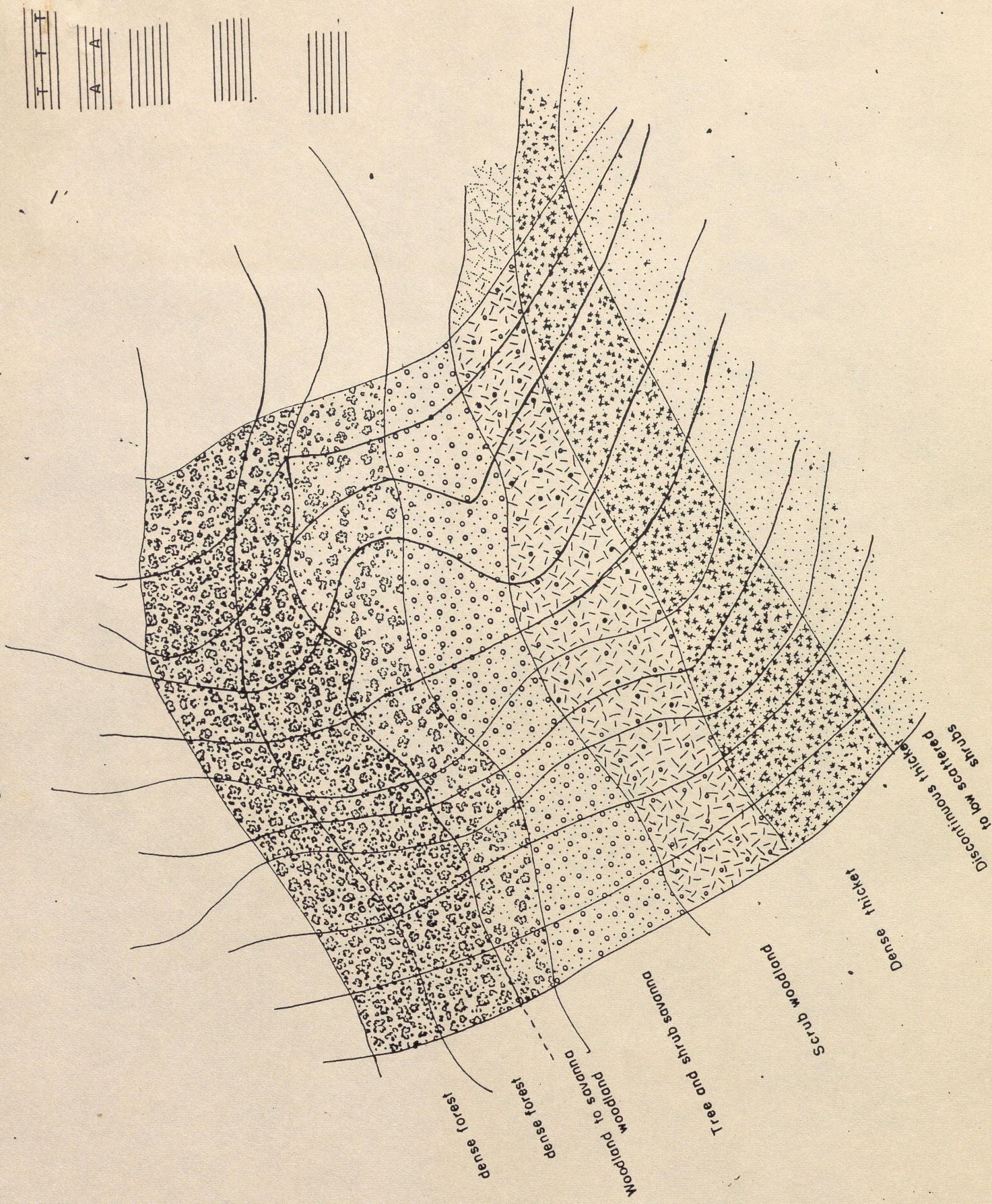
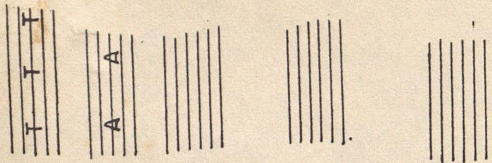
Coonor ghat

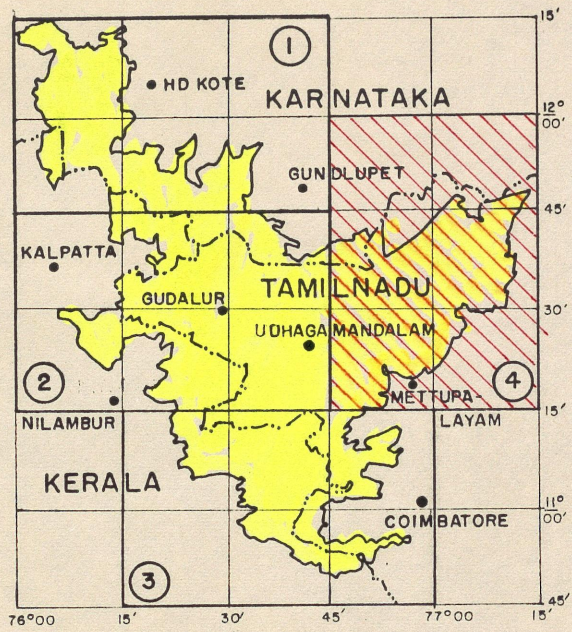
Mekrupalayan area.

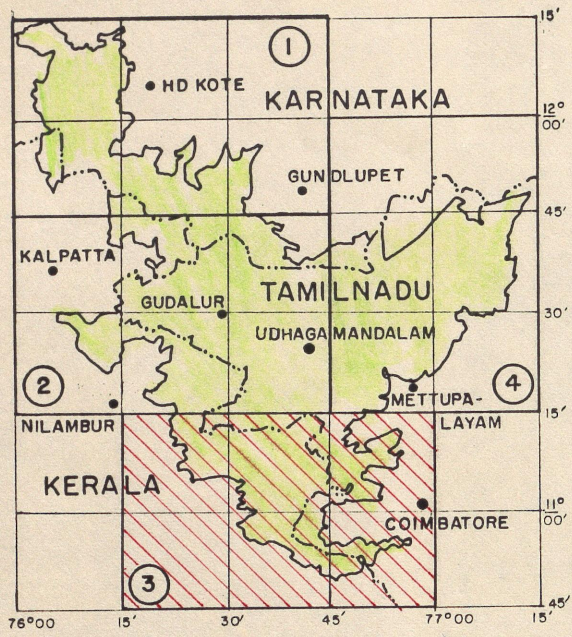
Rollin, slope

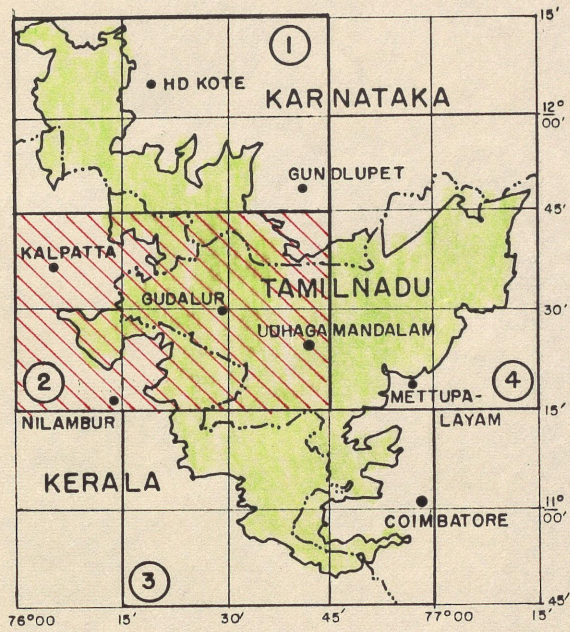
Hulsant slope.

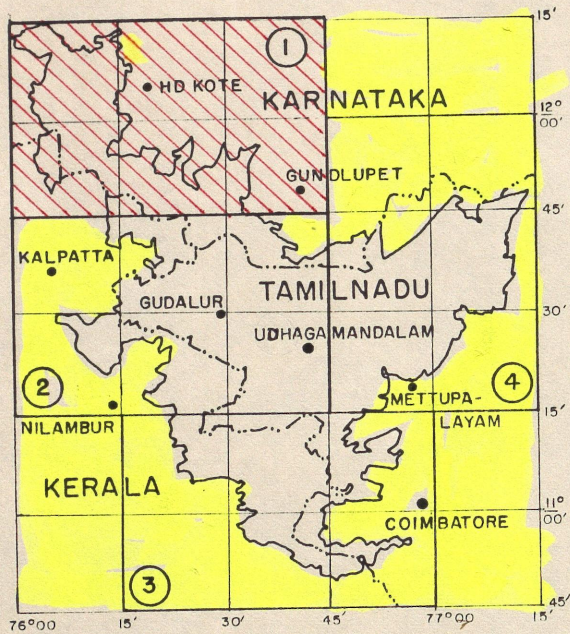










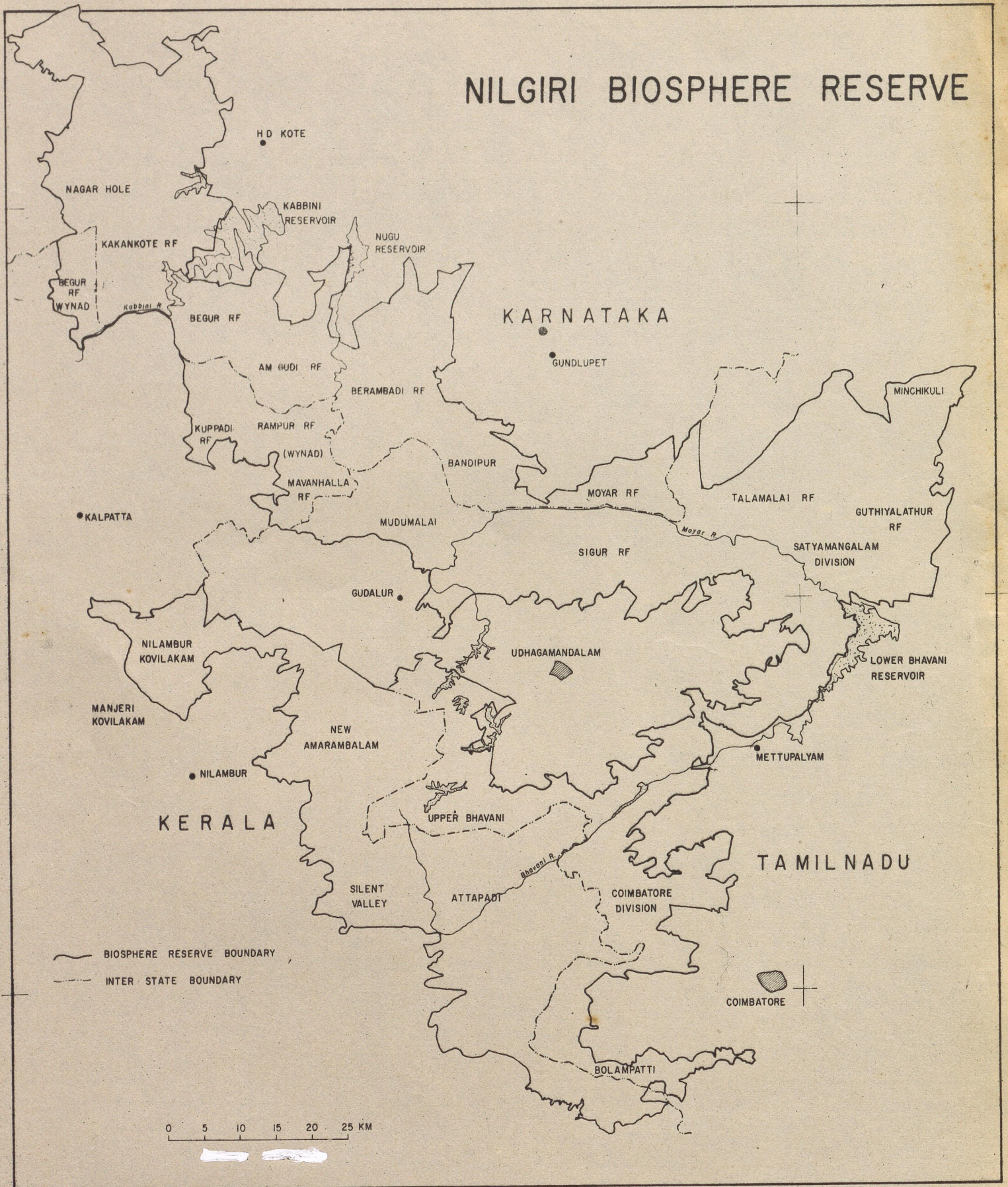


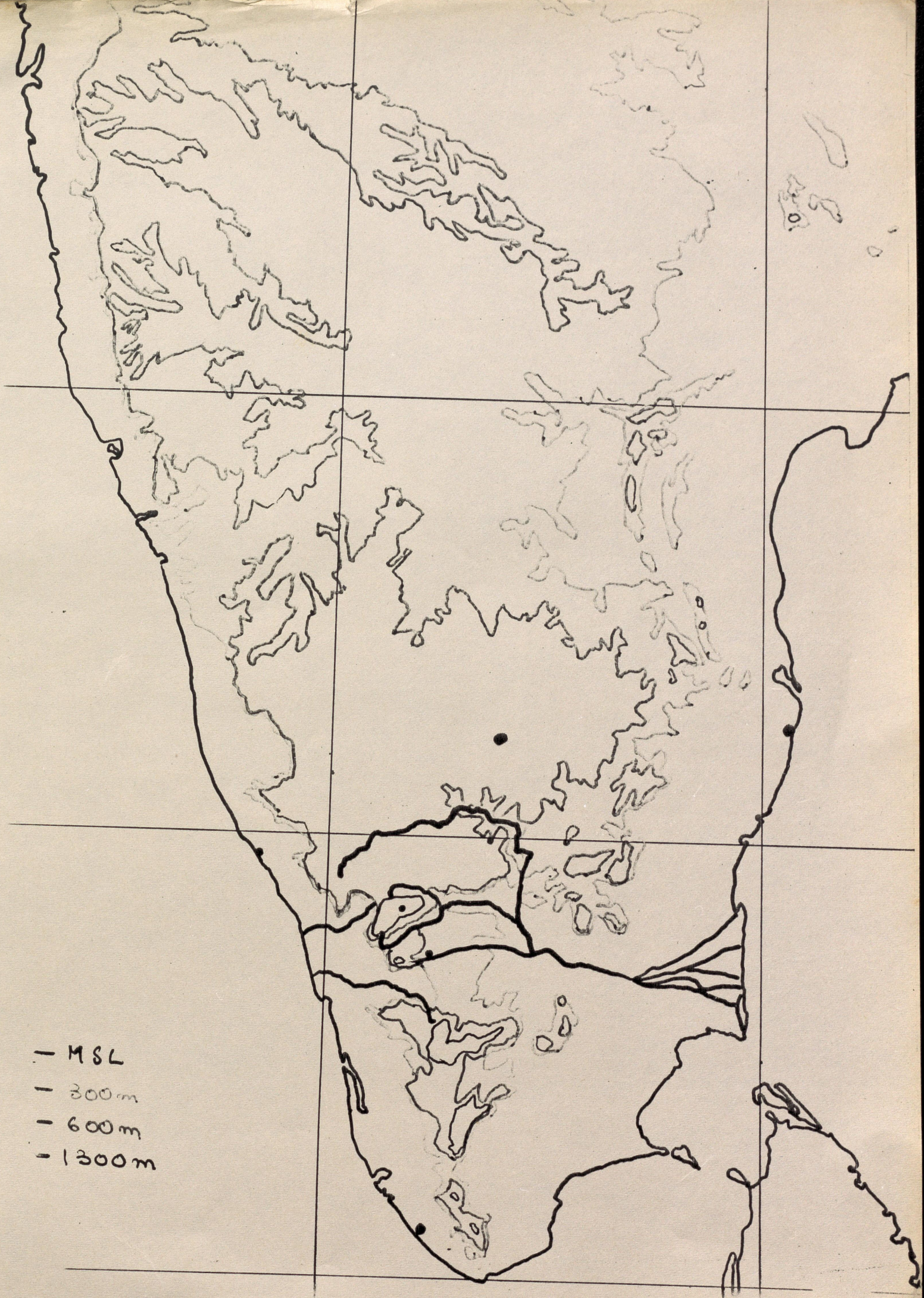
UDHAGA MANDALAM

HUMAN COMMUNITIES.



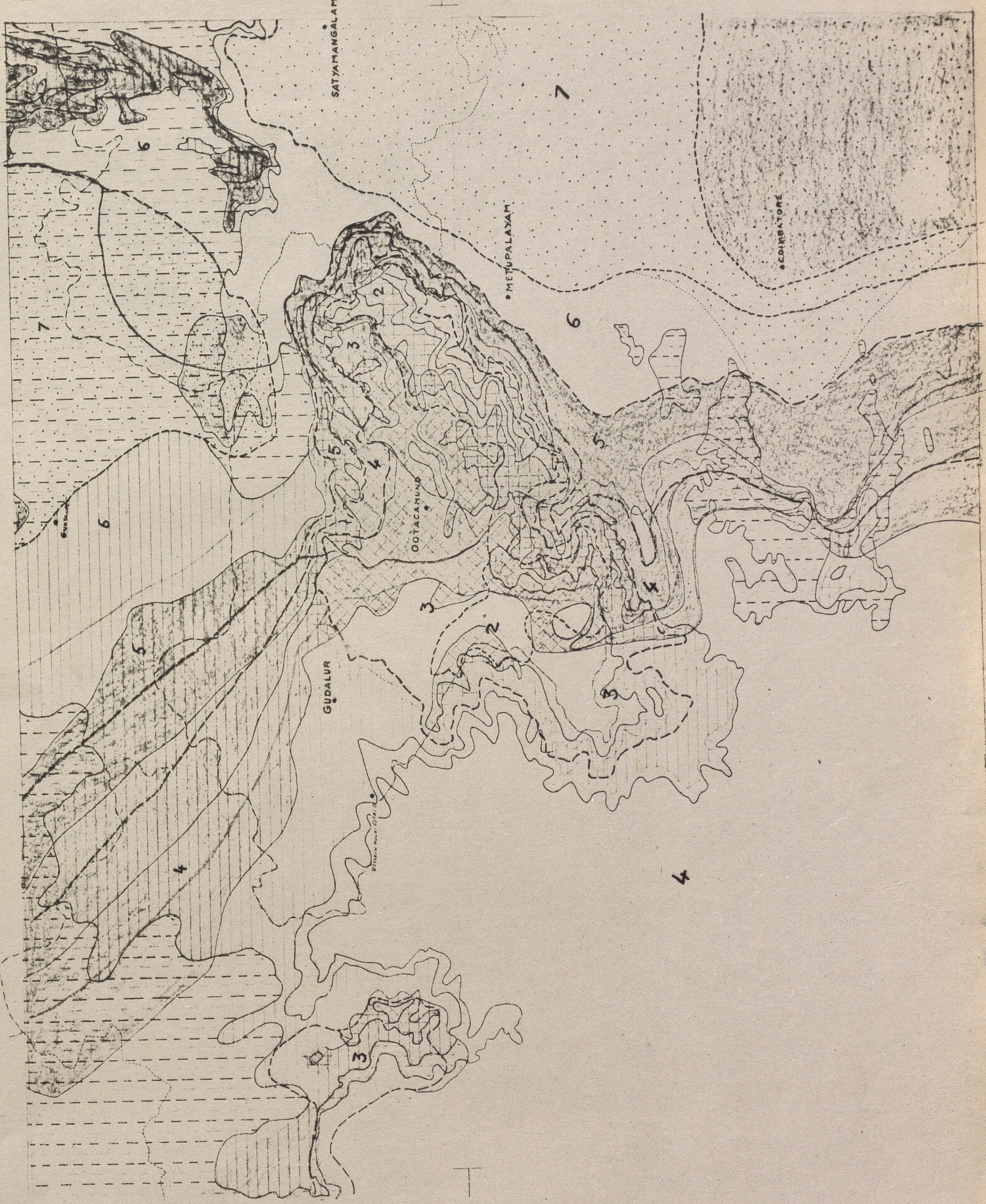
# NILGIRI BIOSPHERE RESERVE





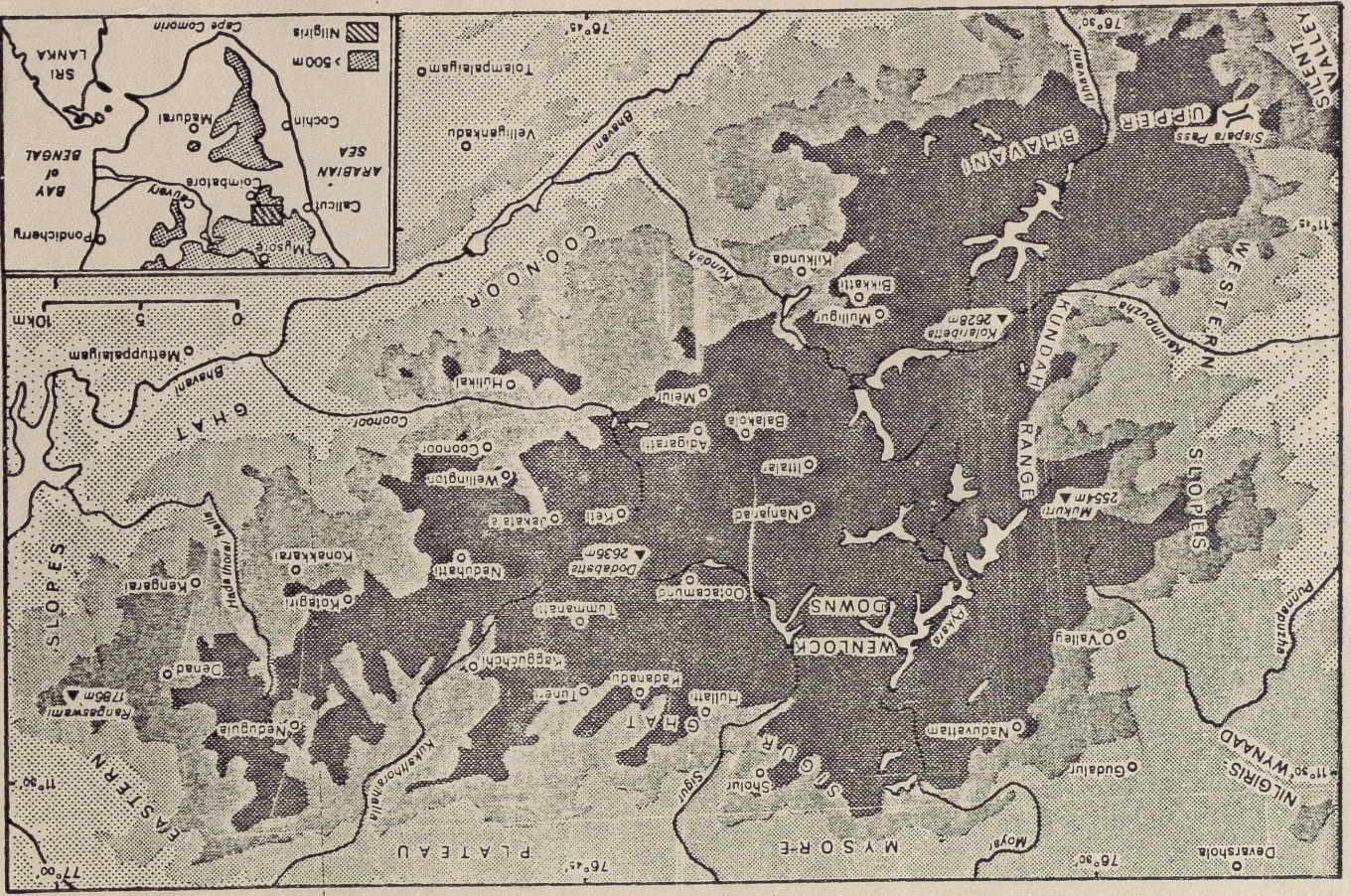
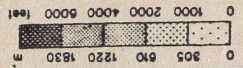
- MSL
- 300m
- 600m
- 1300m

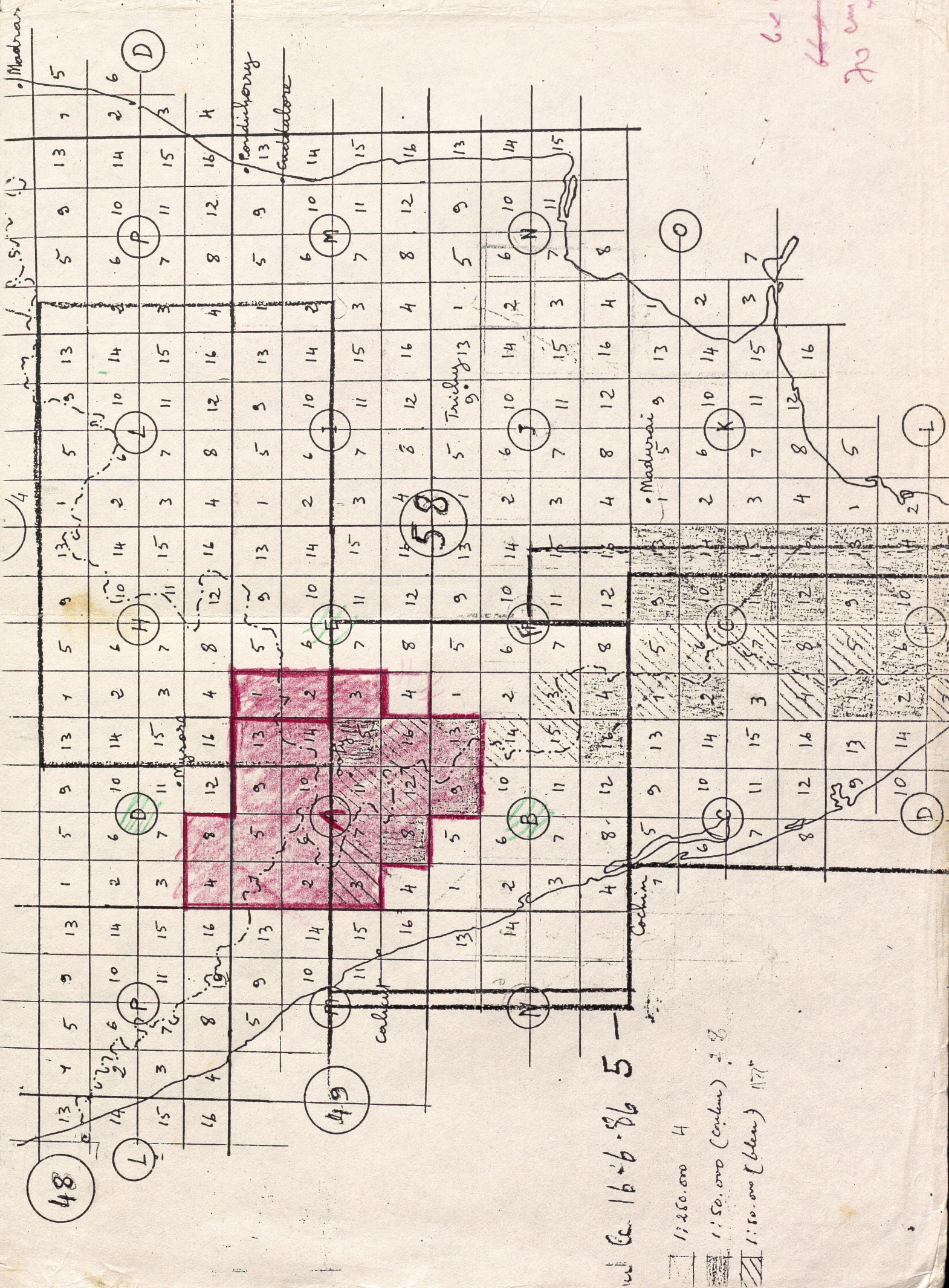




The Nilgiris: Topographical Outline.

○ Towns and villages with population over 5000 (Census 1971; spelling according to SURVEY OF INDIA. One Inch map series)

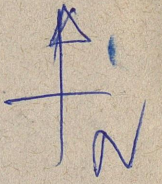




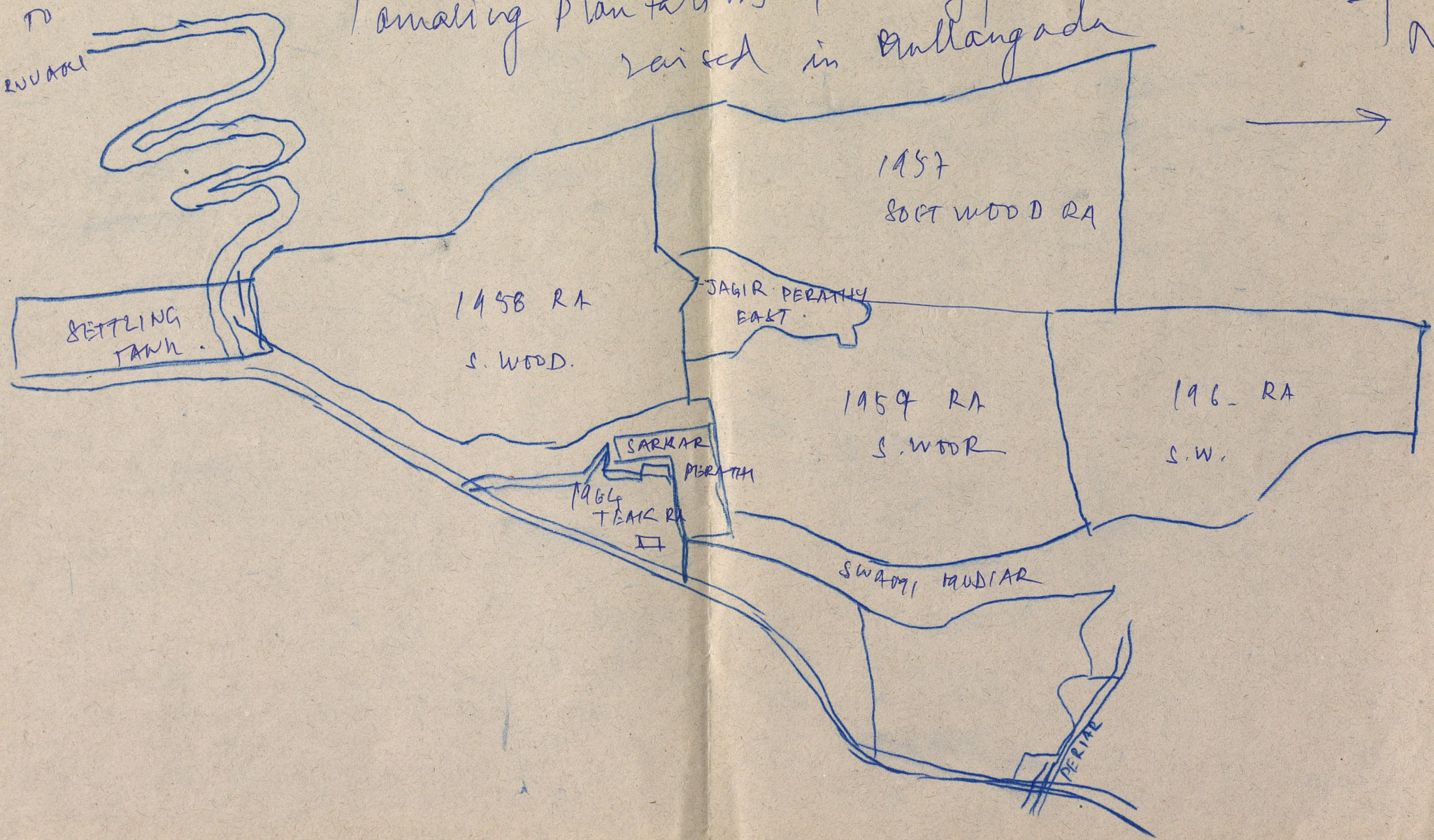
625  
~~625~~  
 70 cm x 60

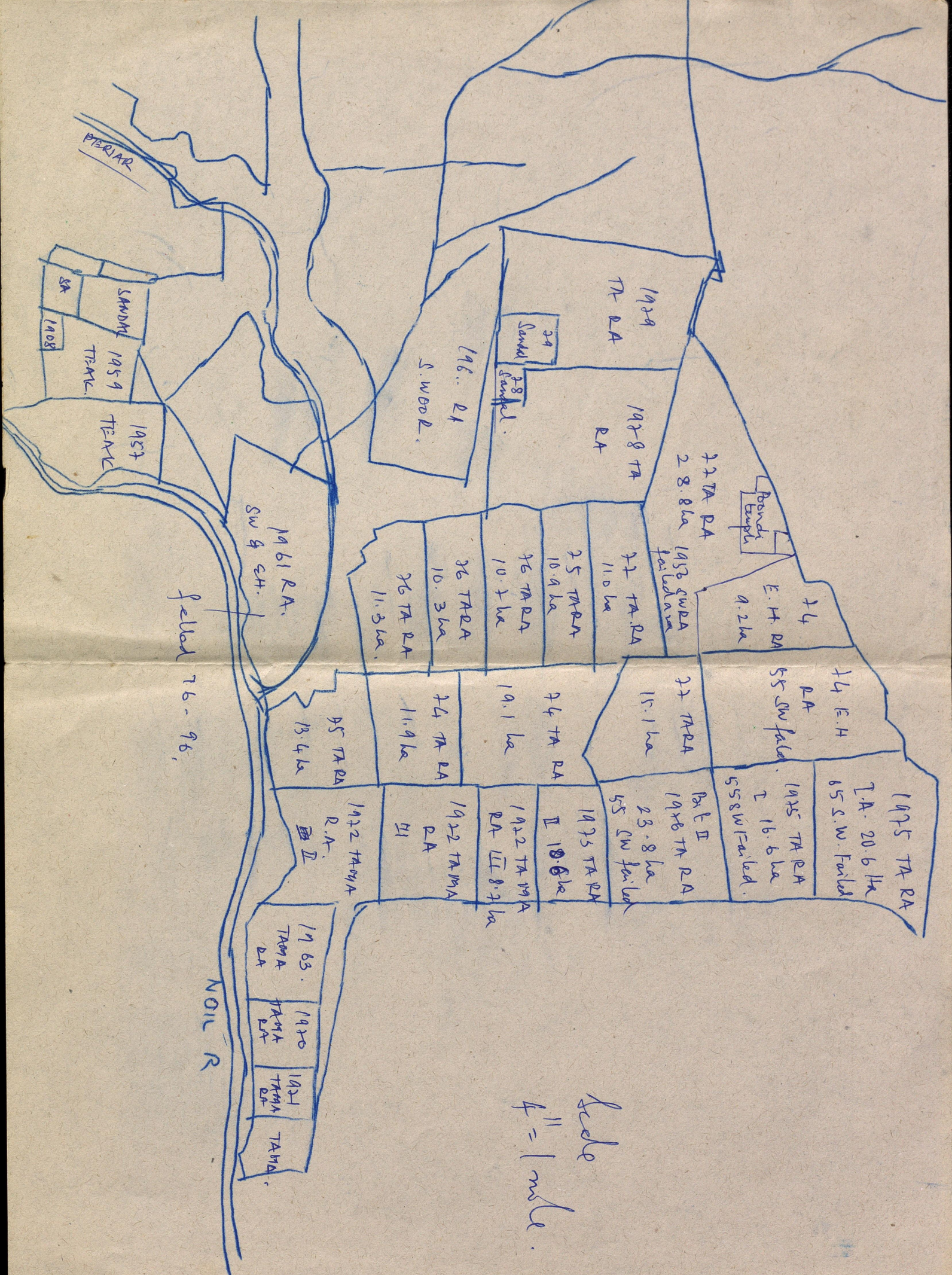
# Bolanpetty Range

## Tamaling Plantations & Eucalyptus Plantation raised in Bullangada



TO  
SIRUVARI





BERAR

SA  
SANDH  
1959  
TRAK.

1959  
TRAK

1929  
TR DA

29  
SANDH  
28  
SANDH

196. DA  
S.WOOD.

1978 TA  
RA

22 TA DA  
28.8 ha

Pond  
Templ

24  
E.H DA  
9.2 ha

1958 SW DA  
faded area

22 TA DA  
11.0 ha

25 TA RA  
10.9 ha

26 TA RA  
10.1 ha

26 TA RA  
10.3 ha

26 TA RA  
11.3 ha

1961 RA.  
SW & CH.

fede 76-98,

24 E.H

24 DA  
55 SW fede

22 TA RA  
15.1 ha

24 TA RA  
19.1 ha

24 TA RA  
11.9 ha

25 TA RA  
13.4 ha

1975 TA RA  
T.A. 20.6 ha  
65 S.W. Faded

1975 TA RA  
I 16.6 ha  
55 SW Faded

Part II  
1976 TA RA  
23.8 ha

55 SW fede

1975 TA RA  
II 18.6 ha

1972 TA RA  
RA III 8.9 ha

1972 TA RA  
RA

VI

1972 TA RA  
R.A. II

1983  
TA RA DA

1970  
TA RA RA

1971  
TA RA RA

TA RA

NOIL R

fede  
4'' = 1 mile.

~~57 D~~ SURVEY OF INDIA TOP SHEETS DATA BASE

	<u>Year</u>	<u>Scale</u>	<u>Available at CS</u>	<u>Available at SOT / SD</u>
57 D	<del>1918</del>	BW 1: 250,000	✓ (from SOT)	
	<del>1930</del>	{ 1909-1910 1924-1925	✓	
<del>X</del>	<del>1943</del>	"		
	<del>1950</del>	"		
	<del>1965</del>	"		
	<del>1981</del>	"	✓	
<del>57 D/4</del>	1911			✓ (A)
	<del>1924</del>		✓	
<del>57 D/8</del>	1927			✓ (A)
	<del>1993</del>		✓	
✓ 88 A	1922			
	1929			
	1941			
	<del>1950</del>		✓ (from IF)	
	<del>1970</del>		✓ (from IF)	
	<del>1981</del>		✓	
✓ 58 A/NW	<del>1916</del>	1905-1908	✓ (from SOT)	
58 A/1	1910	1905-1908		C
<del>X</del>	<del>1925</del>	1905-1908	✓	
	<del>1945</del>	1905-1908 BW	✓	
	<del>1977</del>		✓	

Available at CES

Available at SOL

✓ 58A/2

1910

~~1945~~

~~1976~~

1906-08 bw ✓ (from SOL)

✓

D.

✓ 58A/3

~~1910~~

~~1925~~  
Reprint 1943

~~1972~~

1907-1908 ✓ (from SOL)

1907-1908 bw ✓ (from SOL)

✓

✗ 58A/5

1910

1945

~~1974~~

✓

D.

✓ 58A/6

~~1910~~

1927

~~1945~~

~~1978~~

1906-1907 ✓ (from SOL)

1906-1907 bw ✓ (from SOL)

✓

✓ 58A/7

~~1910~~

1925

1936

1945

1957

~~1972~~

1906-1909 ✓ (from SOL)

✓

✓ 58A/8

~~1910~~

1925

1929

1945

~~1971~~

1906-1909 ✓ (from R.O. M. gudi)

✓

@ CBS

@ SOL

~~58A/9~~

1910

1945

1971 ✓

D.

✓ 58A/10

1911

1928 1908-1910 Z ✓ (from SOL)

1944 Z ✓ (from SOL)

1959 1908-1910 ✓ (from Mr Gowrishanker, Madras) C.

1976 1971-72 ✓

✓ 58A/11

1913 1908-11 ✓ (from SOL)

1924 1908-11 ✓ (from SOL)

1934 1908-11 ✓ (from SOL)

1946 1908-11  
Comm. 1939 ✓ (from SOL)

1957 ✓ (from SOL)

1973 ✓

✓ 58A/12

1912 1908-1910 ✓ (from SOL) & (from R.O. of gudi)

1925 1908-1910 ✓ (from SOL)

1933

1945 1908-1910 BW ✓ (from SOL)

1969 ✓ (from SOL)

1971 ✓

~~58A/13~~

1910 1908-1909 ✓ (from SOL)

1945 1908-1909 BW ✓ (from SOL)

1973 ✓

58 A/14

<u>Yr</u>	<u>@ case</u>	<u>@ SOL</u>
1911		✓ c
1917/45	{ 1908-1910 BW 1929-1940 } ✓ (from SOL)	
1926	✓	

58 A/15

1913	1908-1910	✓ (from SOL)
1927		✓ (from SOL)
1934		✓ (from SOL)
1945	1908-1910 BW	✓ (from SOL)
1956		✓ (from SOL)
1975		✓

58 A/16

1912	1908-10	✓ (from SOL) & (from R.O. M. gudi)
1930		✓ (from SOL)
1945	{ 1908-10 1927-28 } BW	✓ (from SOL)
1956	1953-54	✓ (from SOL)
1973		✓

58 B/9

1912		✓ (from SOL)
1932		✓ (from SOL)
1942		✓
1945	1909-1910 BW	✓ (from SOL)
1977		✓

58 B/13

1912	1909-1910	✓ (from SOL)
1930	{ 1909-1910 1927-1928 }	✓ (from SOL)
1954	{ 1909-1910 1927-28 }	✓ (from SOL)
1977		✓

~~58 B.~~

<del>1922</del>	<u>@ CGS</u>	<u>@ SOL</u>
1922		
1937	A	
1941		
1958		
1972		
<del>1981</del>	✓	

~~58 E~~

1898		
1930		
1944		
<del>1973</del>	✓	

✓ 58 E / SW

<del>1929</del>	1926-27	✓ (from SOL)
-----------------	---------	--------------

✓ 58 E / A

1927			A.
<del>1945</del>	1926-27	✓ (from SOL)	
<del>1977</del>		✓	

✓ 58 E / 2

<del>1927</del>	1926-27	✓ (from SOL)
<del>1945</del>	1926-27 SW	✓ (from SOL)
<del>1976</del>		✓

✓ 58 E / 3

<del>1928</del>	1926-27	✓ (from SOL)
<del>1945</del>	1926-27 SW	✓ (from SOL)
<del>1954</del>	1953-54	✓ (from SOL)
<del>1972</del>	latest rest	✓

21 maps

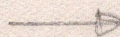
17 maps of 1:50,000

4 maps of other scales

Height classes	Woody		Herbaceous		
	Evergreen	Deciduous.	Grasses	Forbs	Lichens & Mosses.
8 > 35 m		b			
7 20-30 m					
6 10-20 m		p/i			
5 5-10 m					
4 2-5 m					
3 0.5-2 m			c	EP	
2 0.1-0.5 m					
1 < 0.1 m					
coverage c = 75% ; i = 51-75% ; p = 26-50% ; r = 6-25% ; b = 1-5% ; a = < 1%					

- Remarks: On
1. Unique characteristics
  2. Regeneration
  3. Anthropogenic pressure.

600 m  
 $\frac{1}{20}$  ha =  
 100  
 11000



Species No.

1 Aug - - - -

Ootacamund

No. of  
pieces

No. of  
copies.

			No. of pieces	No. of copies.
<	VNo. 1.	Ootacamund	8" - 1' size	21-4
	VNo. 2.	Nanjand.	"	3-11
	3	Nedivettam	"	3-8
	4.	Sholur	"	34-6
	5.	Hullatti	"	4-2
	6.	Kadenadu	"	4-5
	7.	Tuveri	"	2-6
	8.	Zhbanadu	"	1-6
	9.	Tummanathi	"	1-2
	10.	Kagguichchi	"	2-2
	11.	Kukal	"	3-3
	12.	Masinagudi	"	2-12
	13.	Kinnakbarai	"	7-7
	14.	Kilkundah	"	5-2
	15.	Melkundah	"	6-4
	16.	Bikkatti	"	4-2
	17.	Mulligur	"	5-6
	18.	Ittaller	"	2-2

LIST OF REVENUE VILLAGES &

REVENUE MAPS AVAILABLE

19. Balakula. 3-8

20 Coonoor taluk

N.No:1	Hallimoyar	2-1
2	Kallampalaigam	4-1
3.	Kobodu	4-1
4.	Azakkodu	3-1
5.	Kadinamala	4-1
6.	Nanipuram	3-1
7.	Denad	6-2
8.	Kodanad	3-3
9.	Nedungala	4-3
10.	Konakarai	3-2
11.	Kengarai	5-3
12.	Jakkenare	5-2
13.	Kotagiw	3-3
14.	Naduhatti	2-3
15.	Yedappatti	3-1
16.	Banliyan	3-2
17.	Coonoor	3-2
18.	Ubatalai	3-1
19.	Jakatala	2-1

20. Kets 2-3

21. Adigaratti 3-3

22. Halikal 1-4

Gudalur taluk

U.No:1.	Cherumalai	4-2
2	Devala	3-5
3	Gudalur	5-6
→ 4	Mudumalai	10-9 <del>4-4</del>
→ 5	Padantana	10-6
→ 6.	Srimadurai	10-3
→ 7.	Nellakotta.	10-2
→ 8	Munanad	10-6
9.	Nelligalam	2-8
10.	Cherankod	2-6
11.	Erumadu	4-2
12.	Andhithony V.	4-7

Jf. Dir. of Survey,  
Central Survey Office  
Chennai  
Mes 5.

N 4.16

# Revenue Villages of Nilgiris - 9

## Availability of Revenue Maps @

V. No.	<u>Ootacamund Taluk</u>		No. of pieces
1.	Ootacamund	8" - 1 mile	21 - 4
2.	Naijanad	'	3 - 11
3.	Nedinattam	'	3 - 8
4.	Sholur		3 - 6
5.	Hullatti		4 - 2
6.	Kadanadu		4 - 5
7.	Tuneri		2 - 6
8.	Ebbanadu		1 - 6
9.	Tummanatti		1 - 2
10.	Kaggukehi		2 - 2
11.	Kukal		3 - 3
12.	Masinagudi		2 - 12

Jt. Director of Survey

Central Survey Office

Chepauk,

Madras 600005

\* Below 4 copies, not for sale.

V. No.

Preces - Anabelile

13.	Kinna kkarai	7 - 7
14.	Kil Kunday	5 - 2
15.	Mul Kunday	6 - 4
16.	Bikkatti	4 - 2
17.	Mulligur	5 - 6
18.	Ithallar	2 - 2
19.	Balakula	3 - 8

Coonoor Taluk

1.	Aallimoyan	2 - 1
2.	Kallampalaiyam	4 - 1
3.	Kokodu	4 - 1
4.	Arakkodu	3 - 1
5.	Kodina melai	4 - 1
6.	Nani puram	3 - 1
7.	Denad	6 - 2
8.	Kodanad	3 - 3
9.	Nedungala	4 - 3
10.	Kona Karai	3 - 2

V.No

Prices - Available

11.	Kengasai	5 - 3
12.	Jakkanave	5 - 2
13.	Kotagiri	3 - 3
14.	Naduhatti	2 - 3
15.	Nedappatti	3 - 1
16.	Barliyan	3 - 2
17.	Loonoor	3 - 2
18.	Ubatalai	3 - 1
19.	Jakatala	2 - 1
20.	Keti	2 - 3
21.	A digaratti	3 - 3
22.	Halikah	1 - 4

Gudalur Taluk

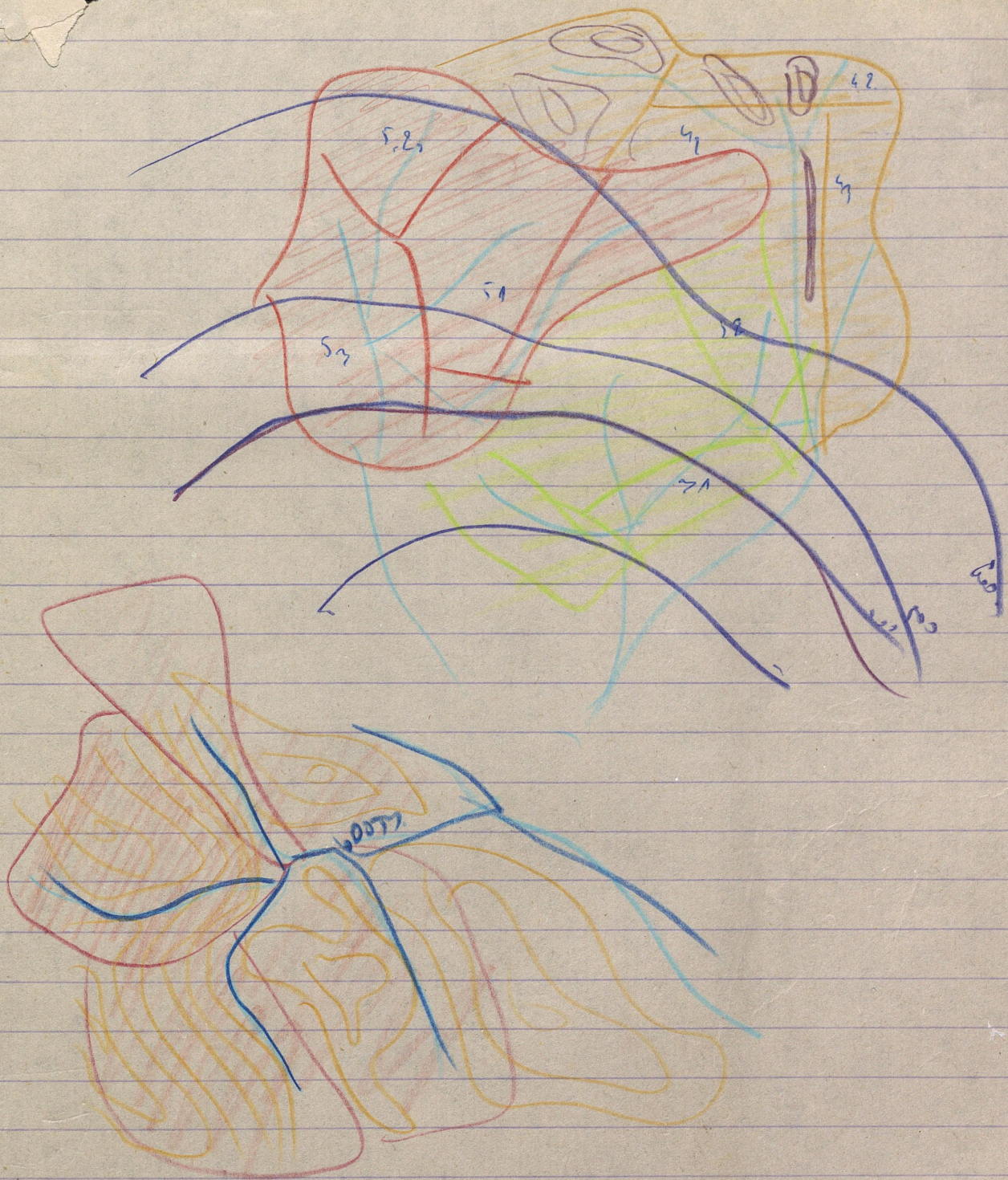
1.	Cherumulai	4 - 2
2.	Devata	3 - 5
3.	Gudalur	5 - 6

V. No.

Pages - Available

4.	Mudumalai	10 - 9
5.	Padantasa	10 - 6
6.	Srimadurai	10 - 3
7.	Nellakotta	10 - 2
8.	Munanad	10 - 6
9.	Nelliyalam	2 - 8
10.	Cherankod	2 - 6
11.	Erumadu	A - 2
12.	Oucherlony Valley	4 - 7

---



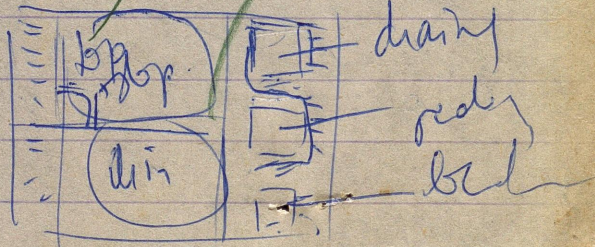
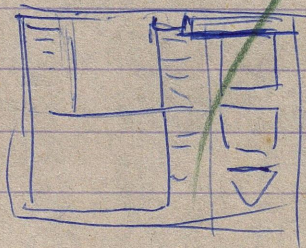
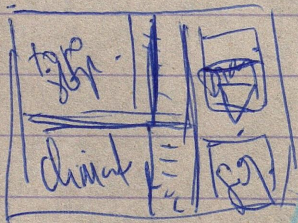
1. / topography  
Drainage / character (top) / (bottom)  
top



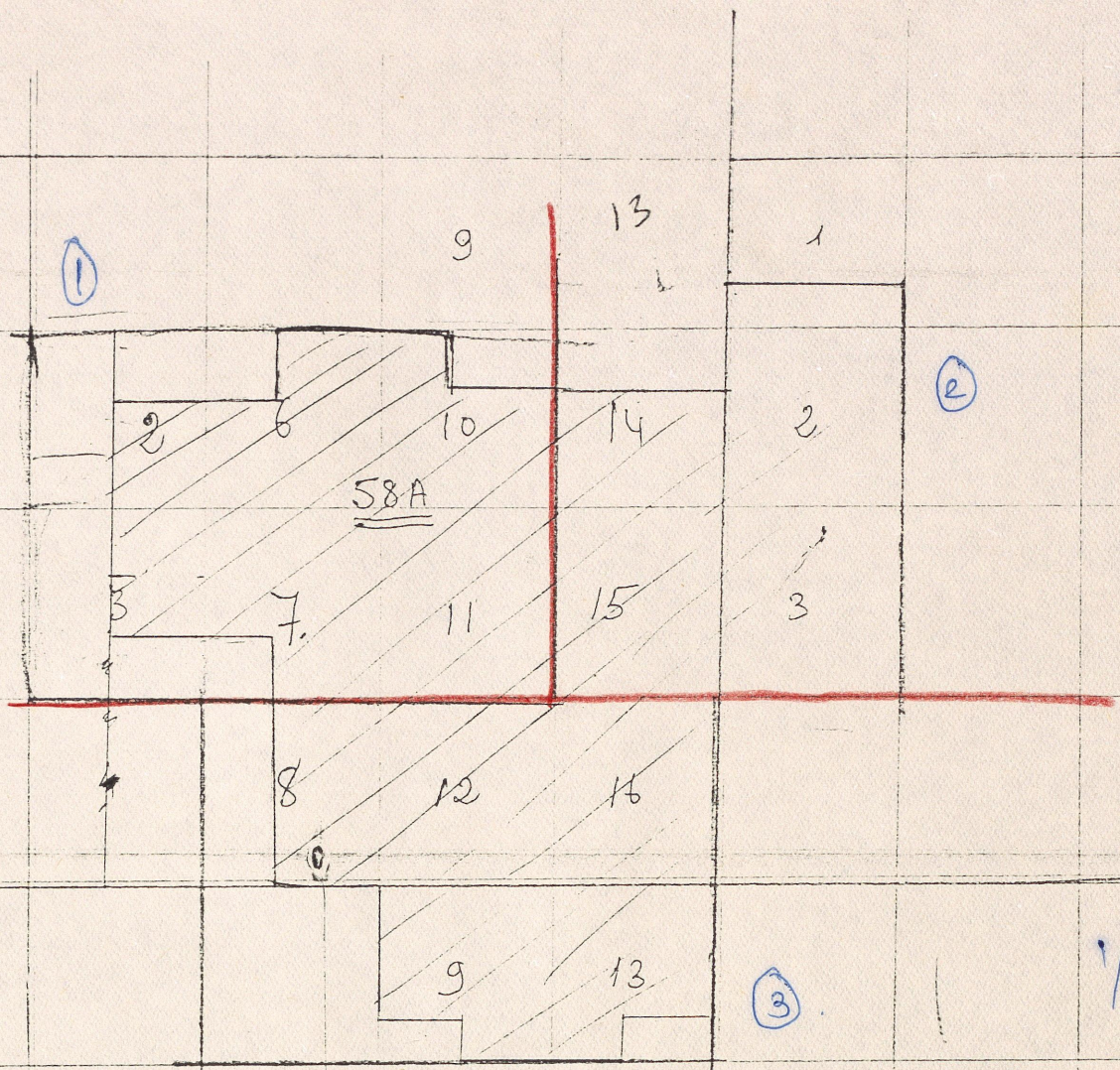
1) top-bottom

2)

(L)



14  
13



58E

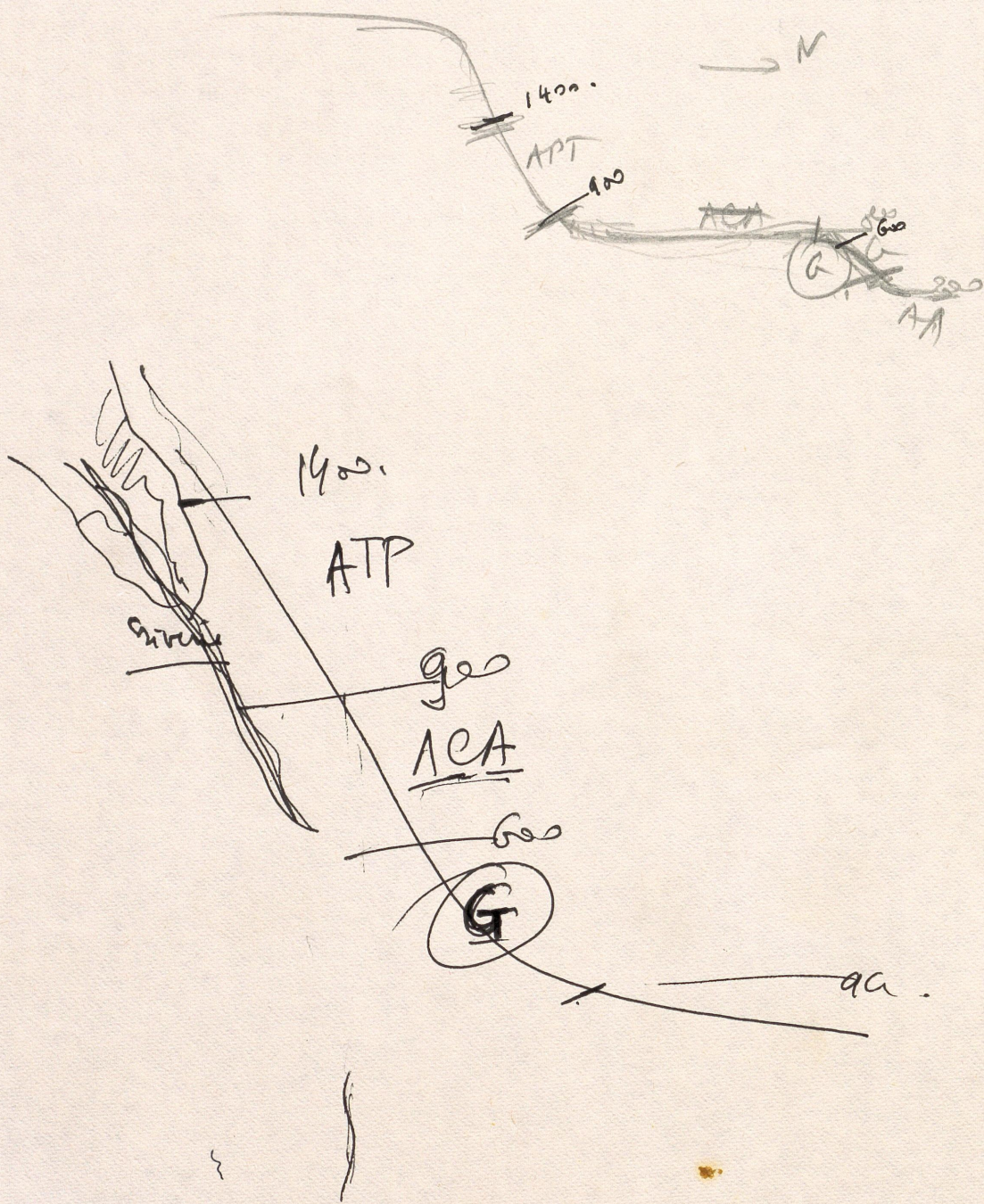
1/100,000

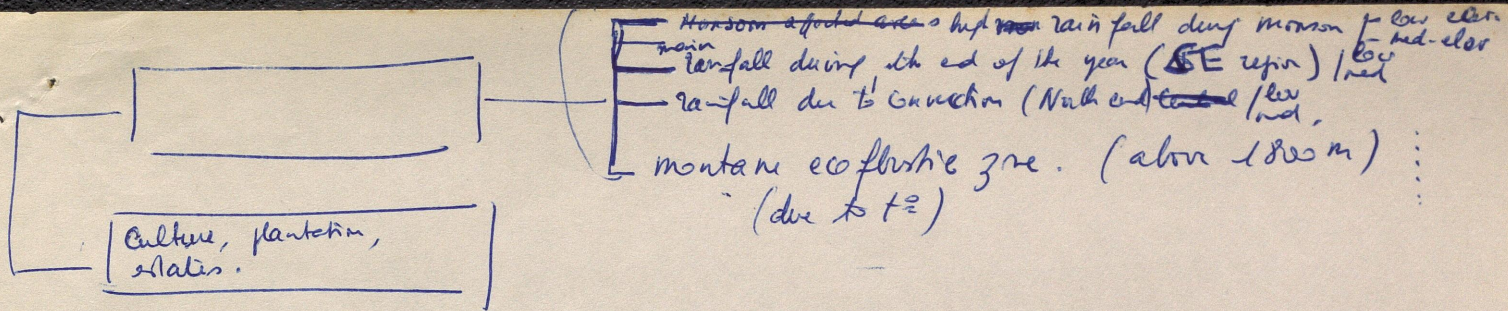
58

- 1/250,000 { A - Drainage & Climate
- B - Topography - Contours & Slope.
- C. Location & Biogeography
- 1/4,500,000

Base:

Teak disappear above 1100m





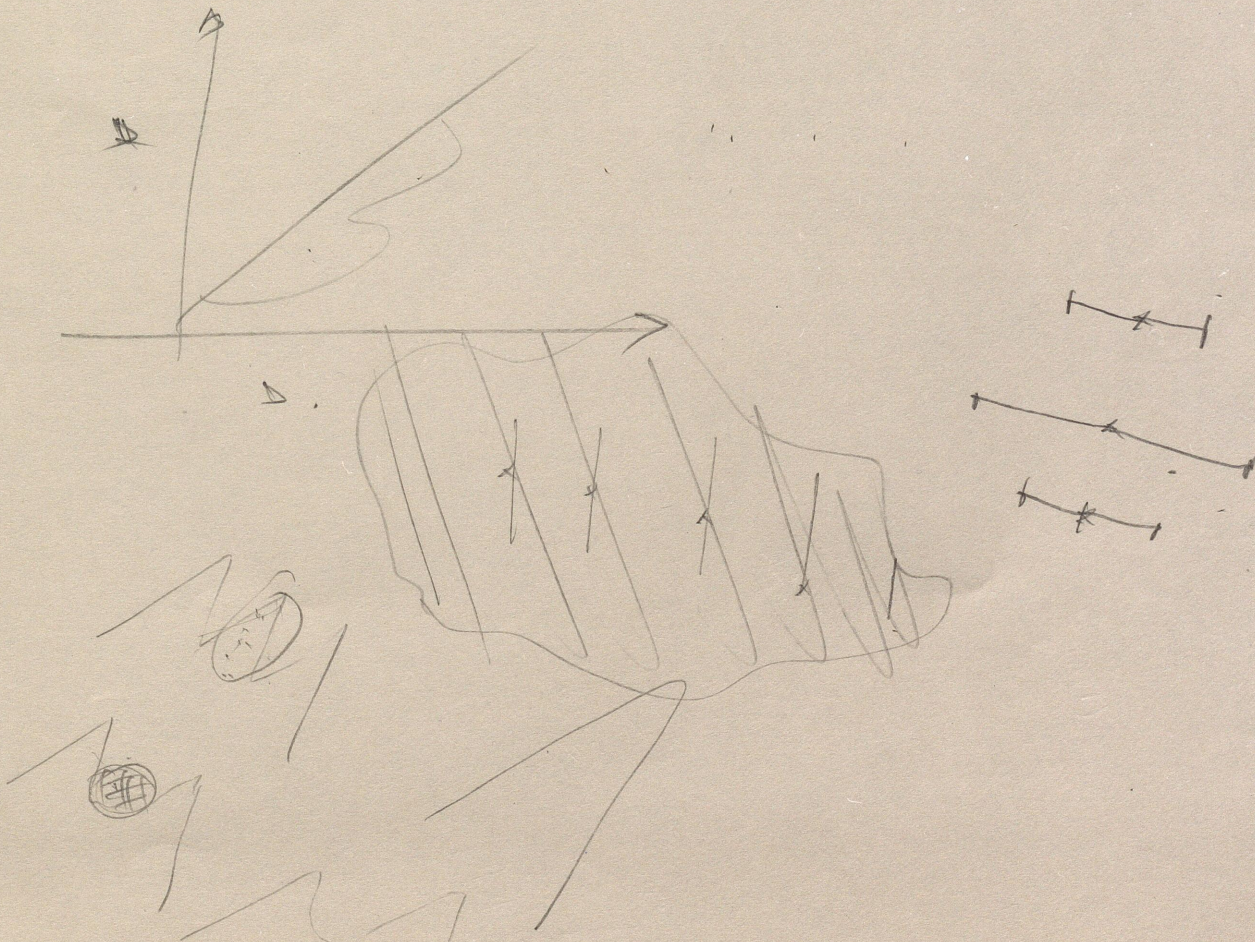
Leaves

i Natural ---

ii Cult. about  
Plant. Est. , quality.

iii Organic aspect  
Health - Ita } page } fall. incl.

iv Anthropogenic  
advised } - killer  
- drugs } U P P P



2. Tenter, grâce à une énergie générée sur place, une voie nouvelle de développement qui partirait du village même, alors que les planificateurs ignorent, en fait, les villages qui ne sont pas reliés à une ville par le cordon ombilical d'une route ou d'une ligne électrique.

3. Réaliser (en l'occurrence, dans le cadre d'une coopération franco-indienne) entre les sciences de l'homme et les innovations technologiques une symbiose sans laquelle il ne saurait y avoir de réussite.

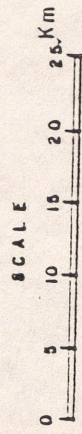
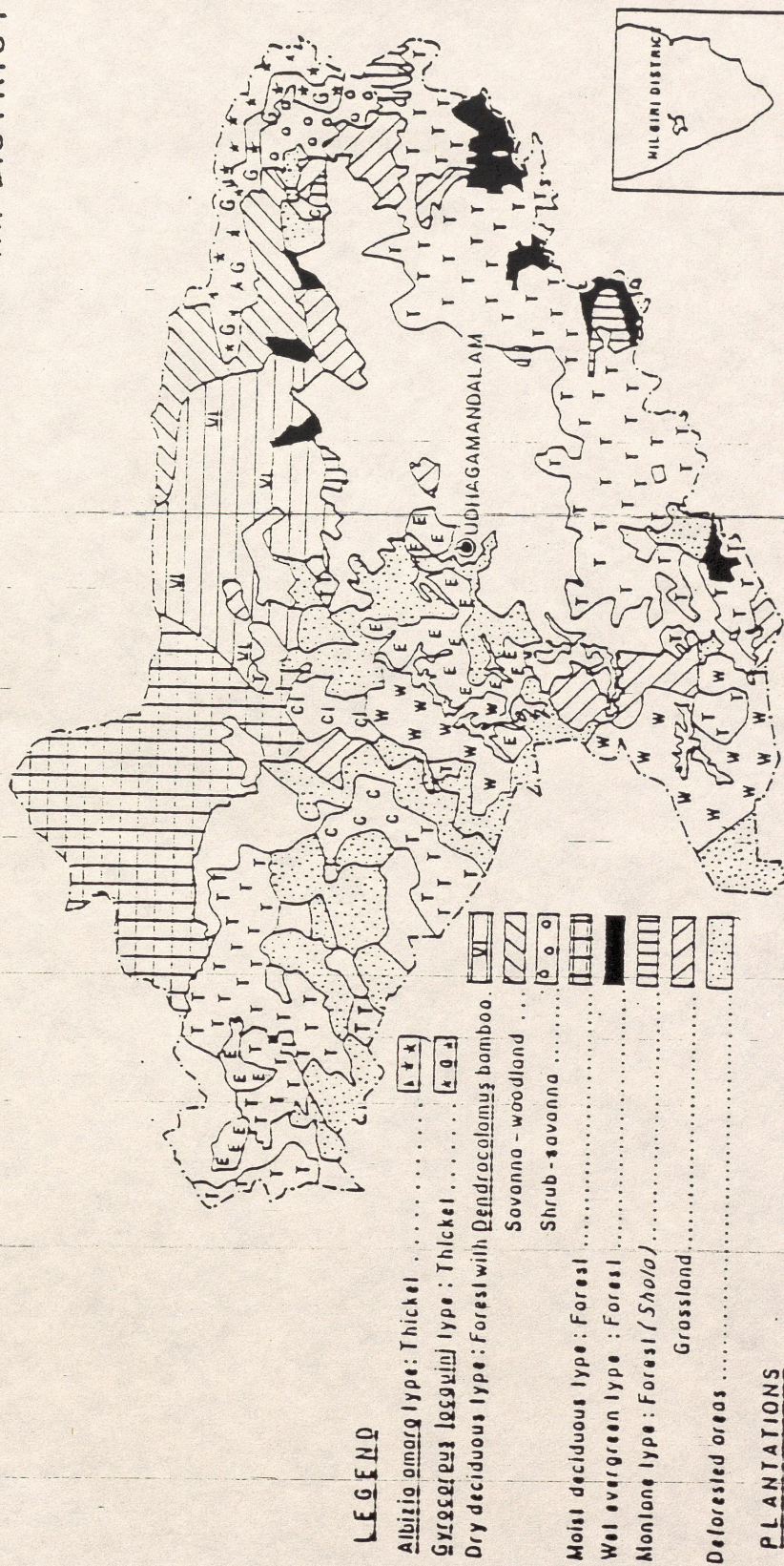
La collaboration de l'IFP à ce programme d'étude pourrait prendre à l'avenir la forme d'une affectation de chercheur ou de stagiaire IGREF, dans des conditions qui restent à définir. A l'interface technique/société/milieux, ce programme permettra à l'IFP d'enrichir le volet scientifique d'une opération qui est aussi une expérience concrète de développement à la base.

*Chercheurs concernés:*

P. Amado (DR CNRS), P. Jacques (IGREF).

# VEGETATION OF NILGIRI DISTRICT

Fig. 1.



### LEGEND

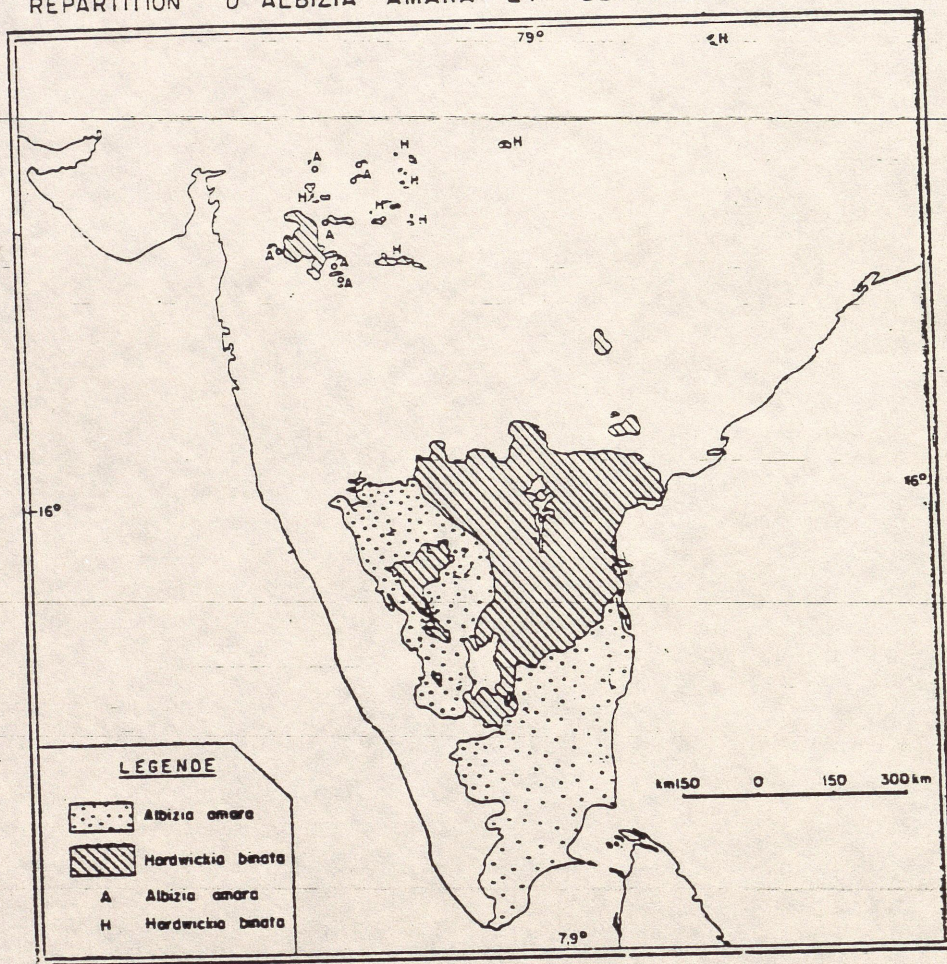
- Albizia omarg type: Thicket . . . . . [Symbol]
- Gynergetes lagavini type: Thicket . . . . . [Symbol]
- Dry deciduous type: Forest with Dendrocalamus bamboo . . . . . [Symbol]
- Savanna - woodland . . . . . [Symbol]
- Shrub-savanna . . . . . [Symbol]
- Moist deciduous type: Forest . . . . . [Symbol]
- Wet evergreen type: Forest . . . . . [Symbol]
- Montane type: Forest (Shola) . . . . . [Symbol]
- Grossland . . . . . [Symbol]
- Deforested areas . . . . . [Symbol]

### PLANTATIONS

- Coffee . . . . . C
- Tea . . . . . T
- Cinchona . . . . . CI
- Eucalyptus . . . . . E
- Wattles (Acacia) . . . . . W

CARTE N° 3

RÉPARTITION D'ALBIZIA AMARA ET DE HARDWICKIA BINATA



W. / er → Mla.  
Prof. Phocap. (+T)  
Tum spp.

All-a  
Near off.

8/11

Stamb  
off  
Tum  
Petium

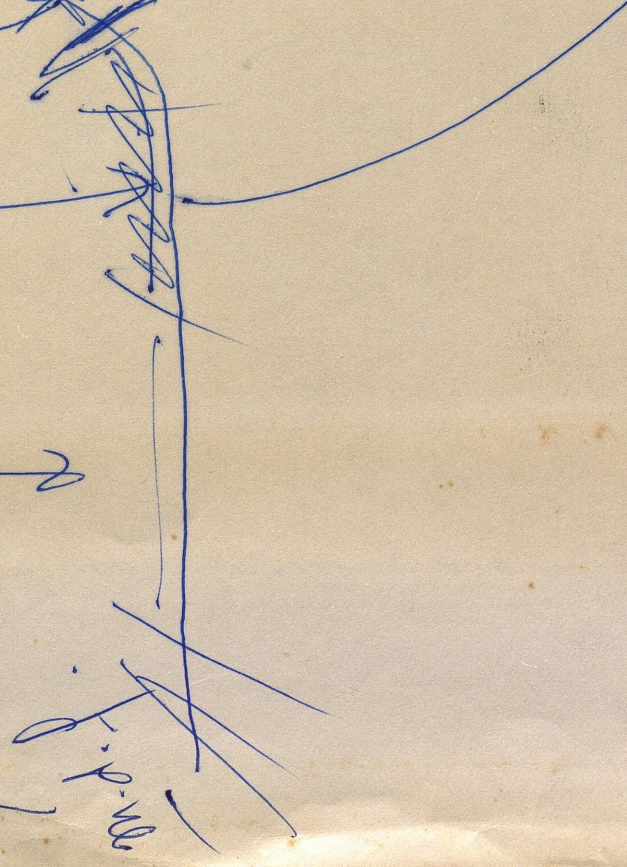
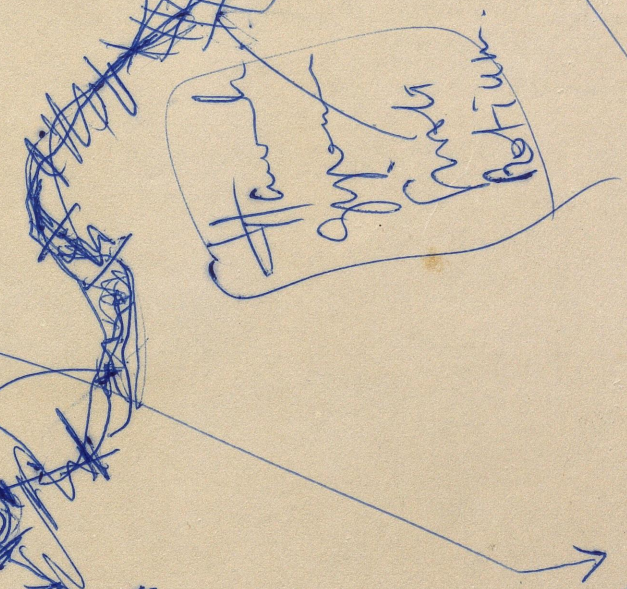
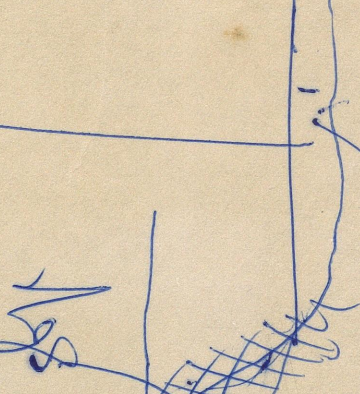
Stamb St.

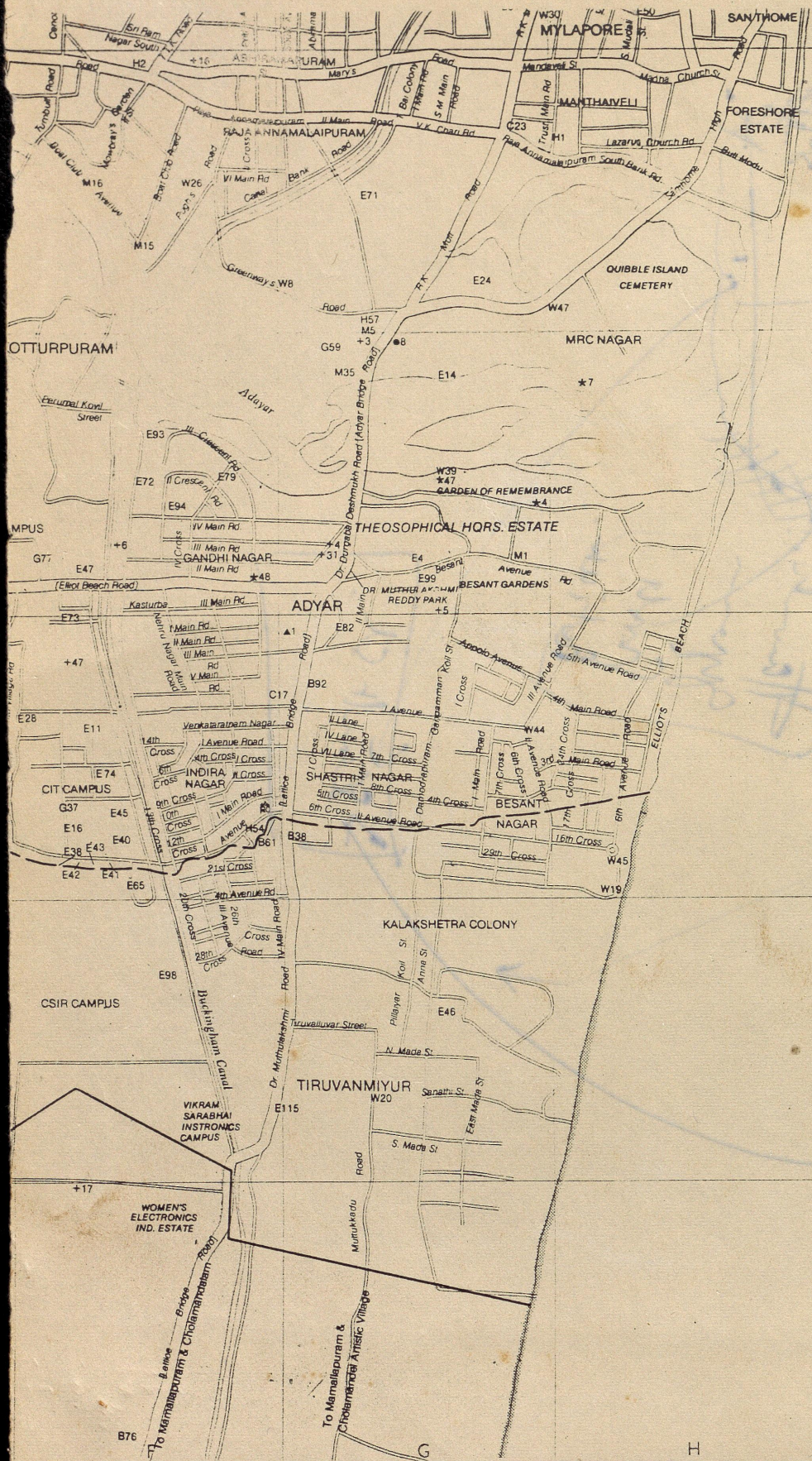
Prof. M. am.  
Chesort

A-T-T

1/1

ind. f.





The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line.

①	P					

- 1) Canopy height of the forest
  - 2) growth / Diameter of trees  $> 10$ cms in a specified area (say  $1000 \text{ m}^2$ )
  - 3) No. of species in a specified area (say  $1000 \text{ m}^2$ )  
or  
No. of species ~~in~~ among a specified number of trees.
  - 4) height of the tree. / ht. of first branching.
- 

1. How are we to determine the health of the ecosystem -  
Its future possibilities, as represented now?
2. How are we going to show the biomass of a particular locale?
3. How are we going to sample & estimate the  
shrub and herbaceous vegetation?
4. Is there any way in which we can infer the  
past utilization and management from the vegetation  
that is there in the present? eg. Can we infer

clear-felling or heavy selection felling of an area? from  
some vegetational aspects?

---

What would be the model to correlate the

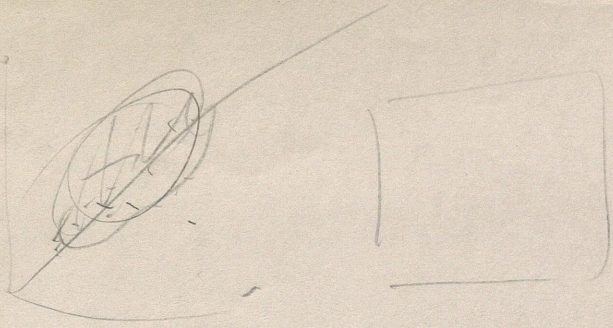
~~height of the tree~~

① → height of the tree

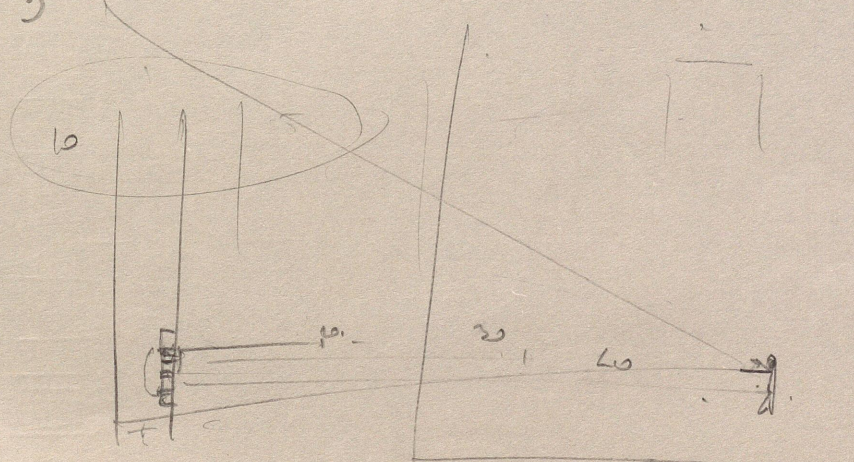
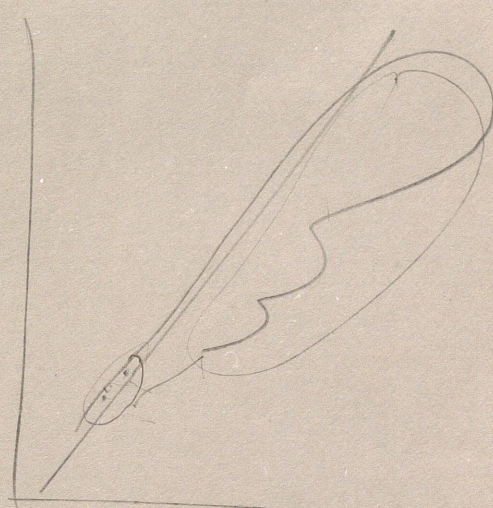
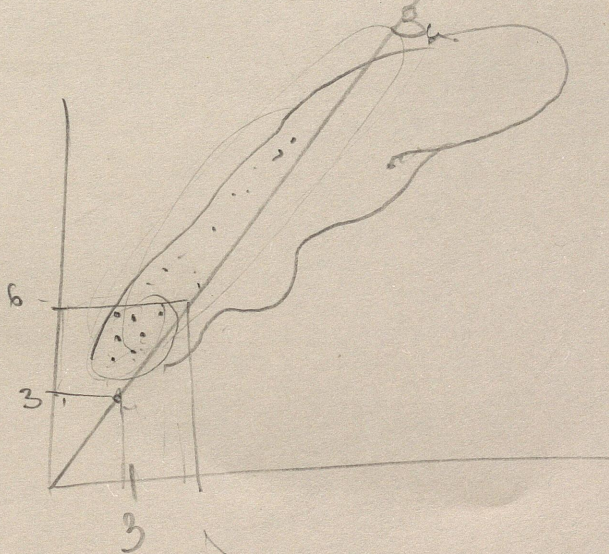
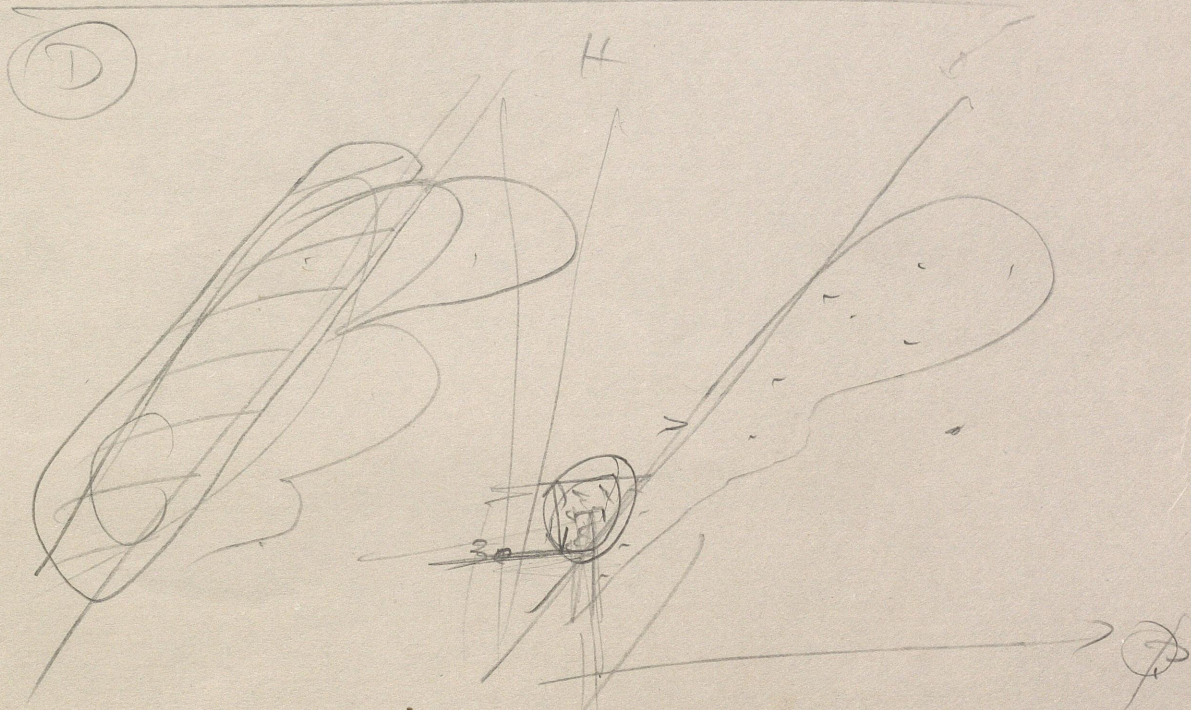
② → [ first branching/forking height  
or  
height of hole

③ → Diameter of stem at 1.3m.

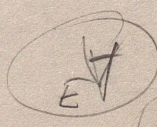
---

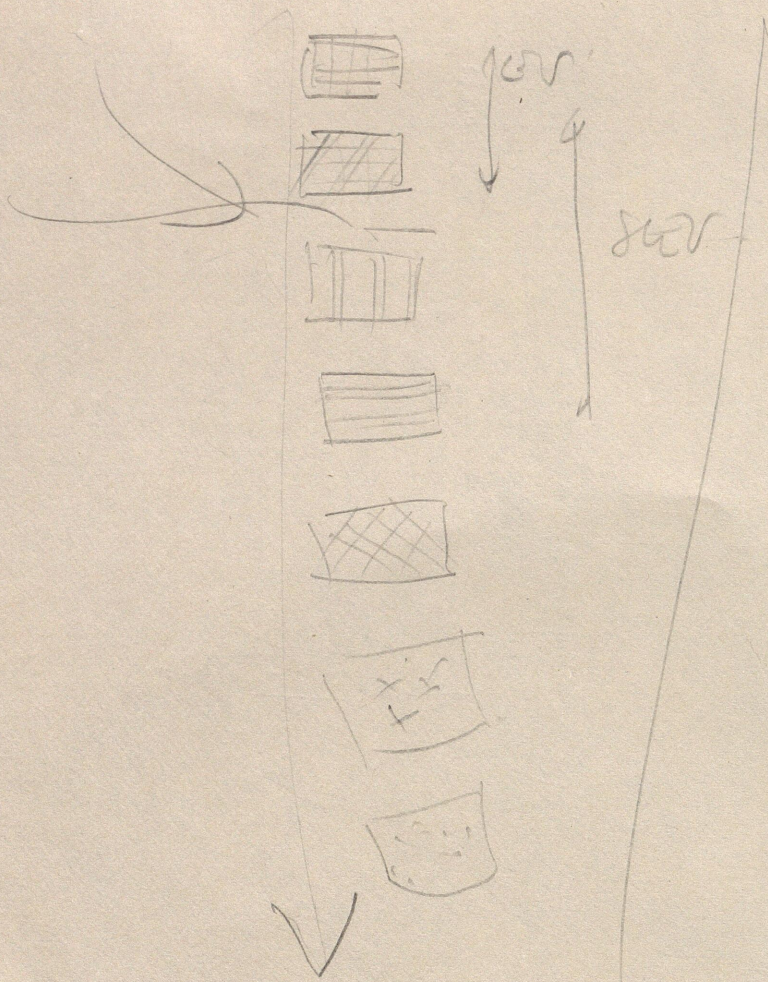


1 E



$D^2H$



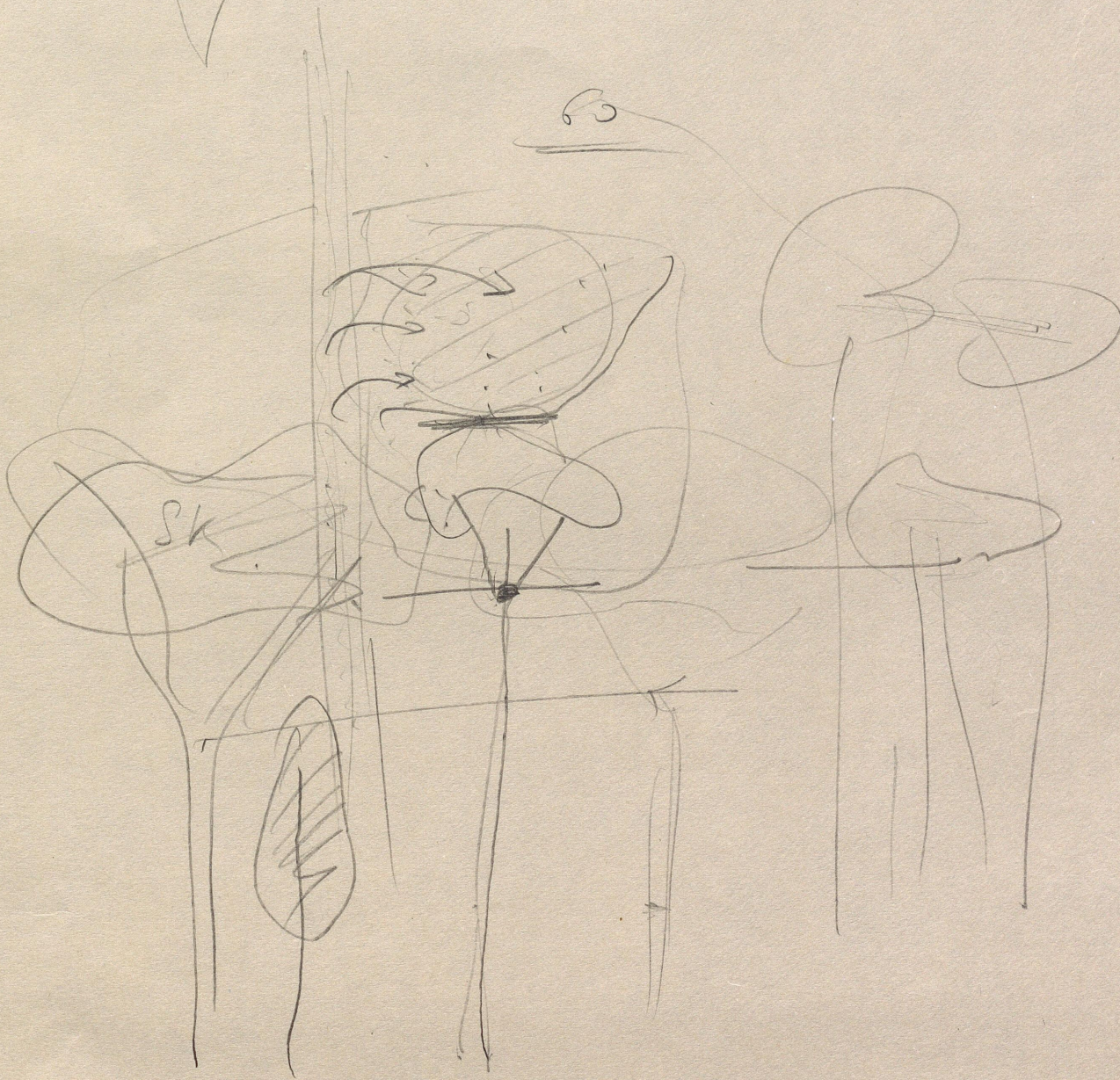
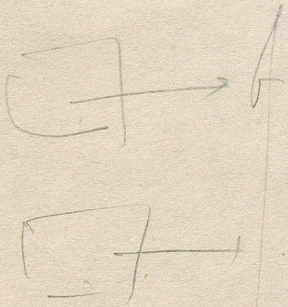
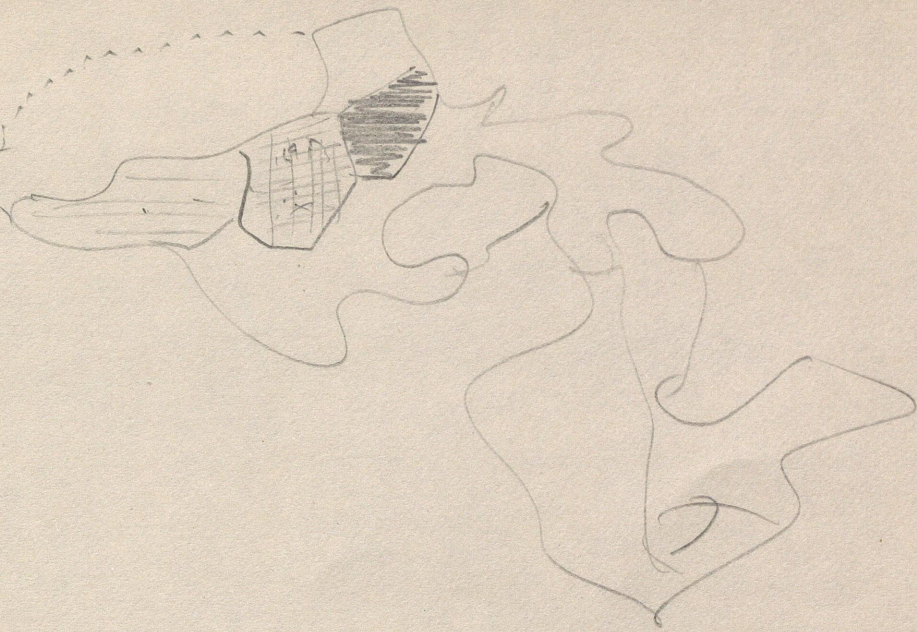


Thematic maps

Thematic  
on  
forests

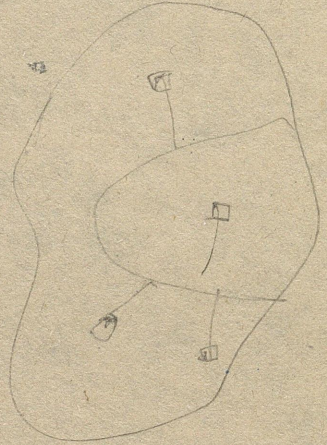
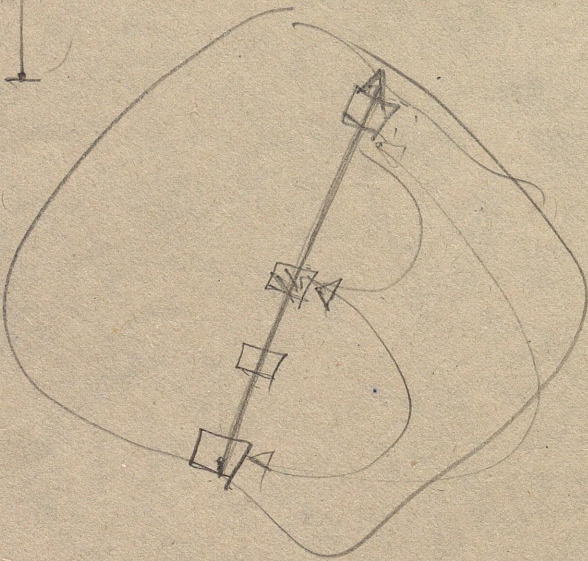
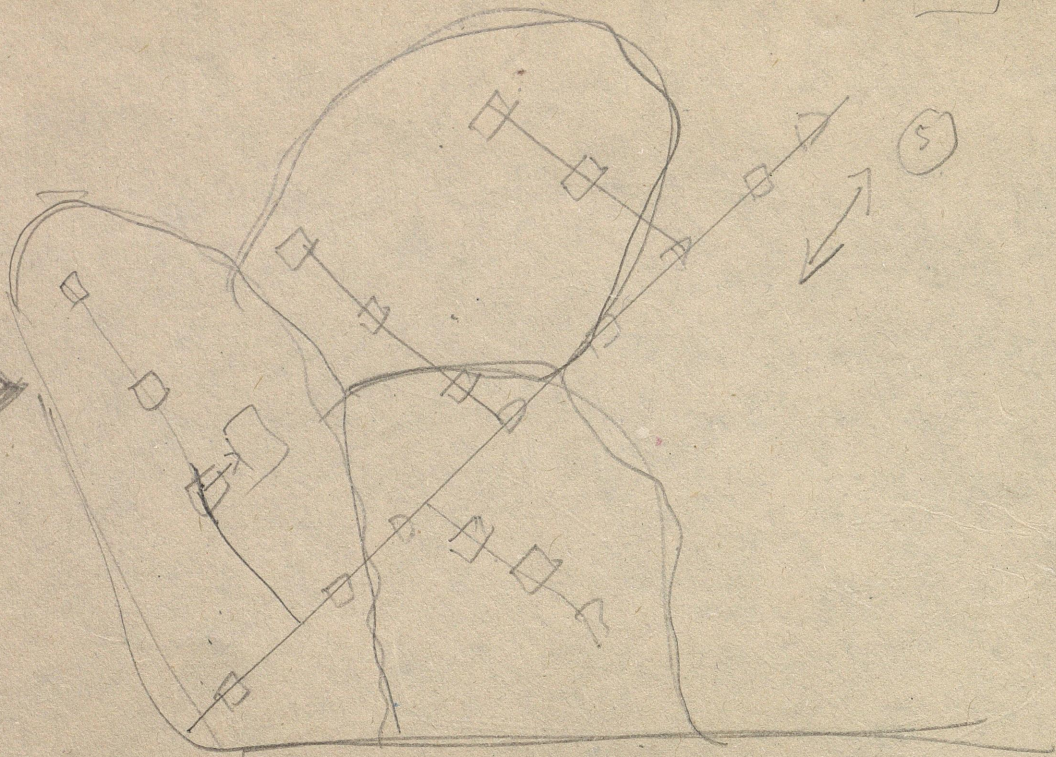
- General management
- Vegetation
- Zoological
- Population
- Project Effects
- Reconstructions

Thematic map  
on forest history



10 ✓

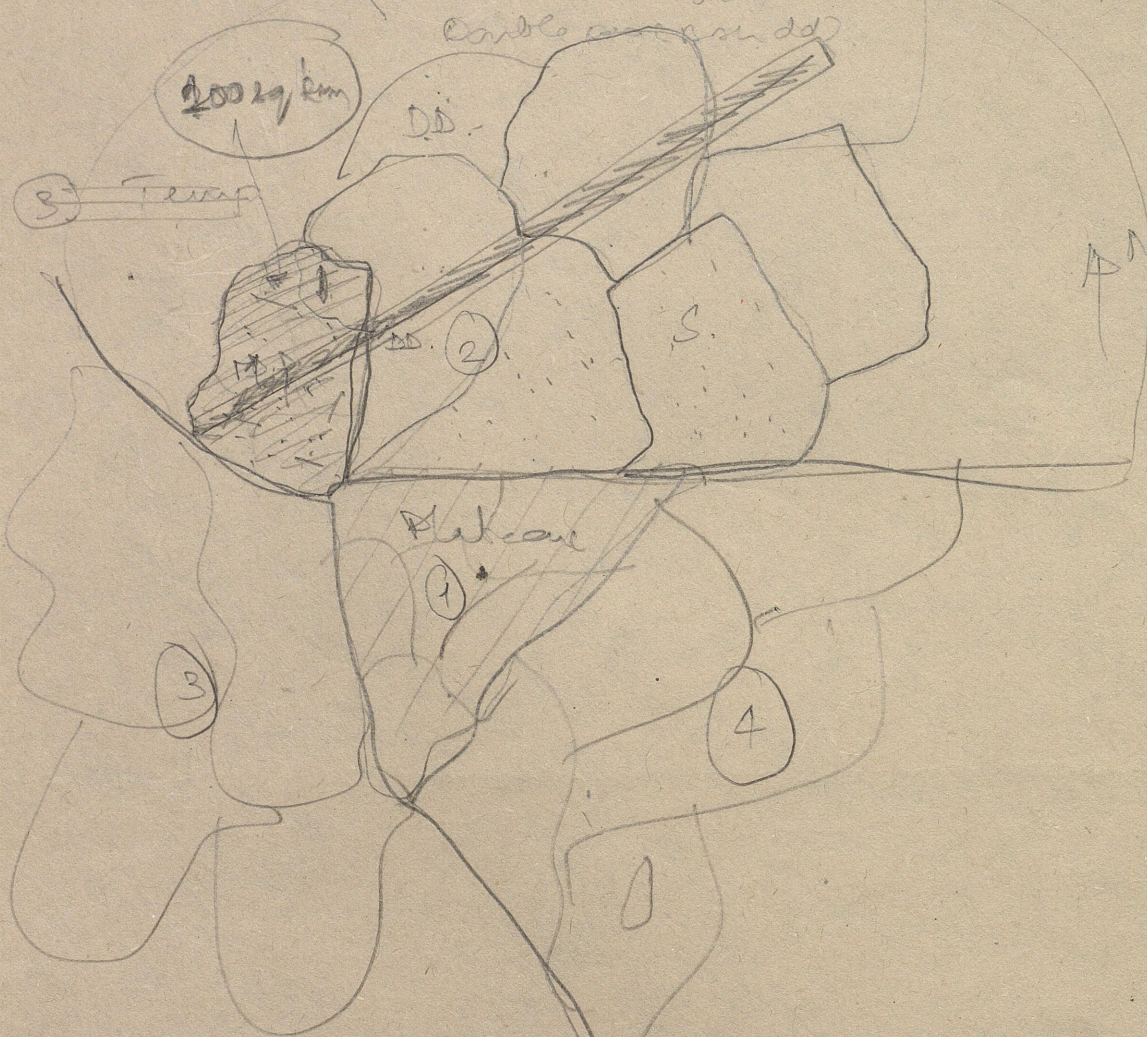
1/2 the land



Unit 4  
 ① M. tile < 1800  
 > 1800

1:250,000  
 1:100,000 ✓

Unit 2  
 ② Rainfall  
 Single peak  
 Double peak with  
 median  
 Correlation coefficient



M.S.A → 80% of sp.

- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓

+ Confidence

Structure  $\frac{D}{C}$

Sum  $\frac{D}{C}$

45 km x 2.5

40 x 2.5 = 100 km

40 x 2.5 = 100 km

Total Area : ~~4~~ 10,000 sq km

1) Moyar

- 1) Pykasa
- 2) Anarhalla
- 3) Sigur pallam
- 4) Kakkam halle
- 5) Bidar halle
- 6) Sirur River

6

2) Bhavani River

- 1) Bhavani
- 2) Struvani
- 3) Varaha pallam
- 4) Kundah.
- 5) Pollur river
- 6) Kallar river.

6

3) Kunti puza

1

4) Chaliyar puza.

1) Chitali puza.

2) Karunan Puza.

3) Panna Puza

4) Karim puza.

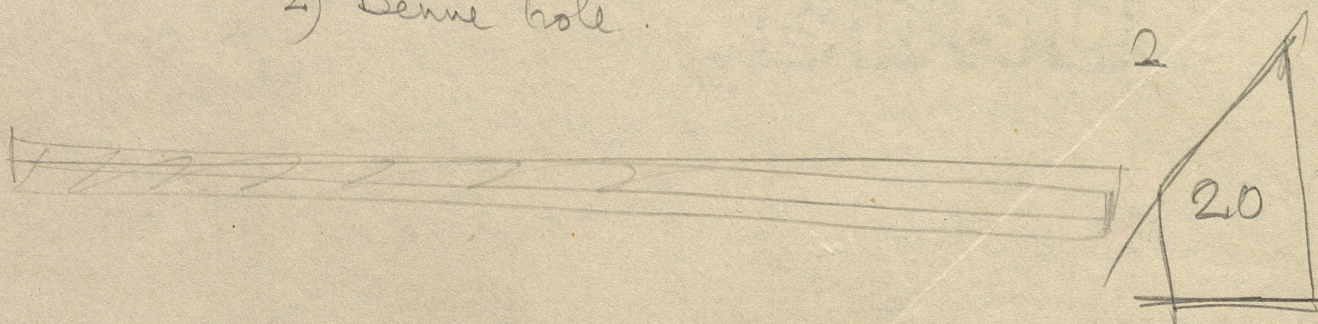
5) Panna puza.

5

5) Kabbini River

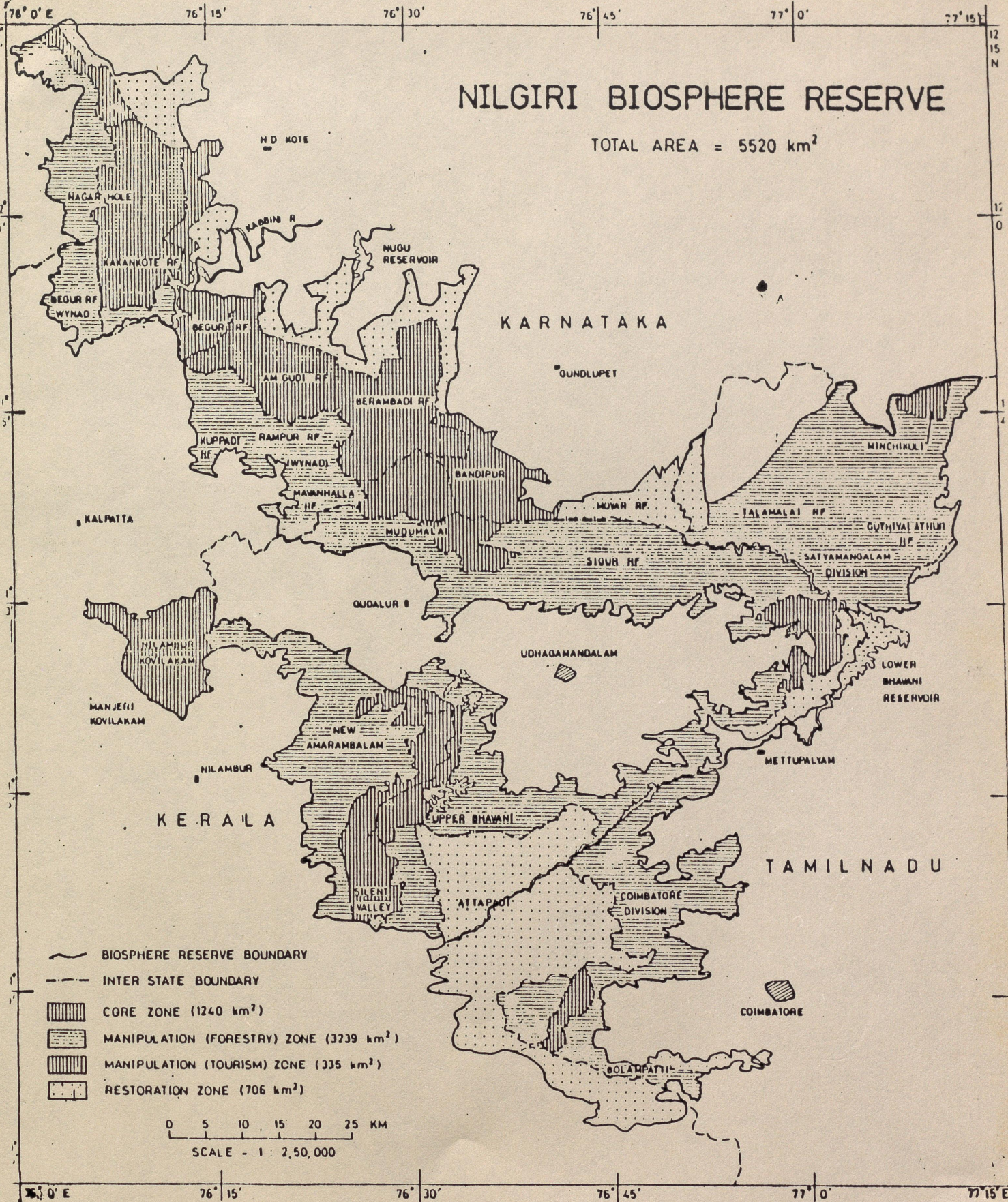
1) Nul puza

2) Benne hole.



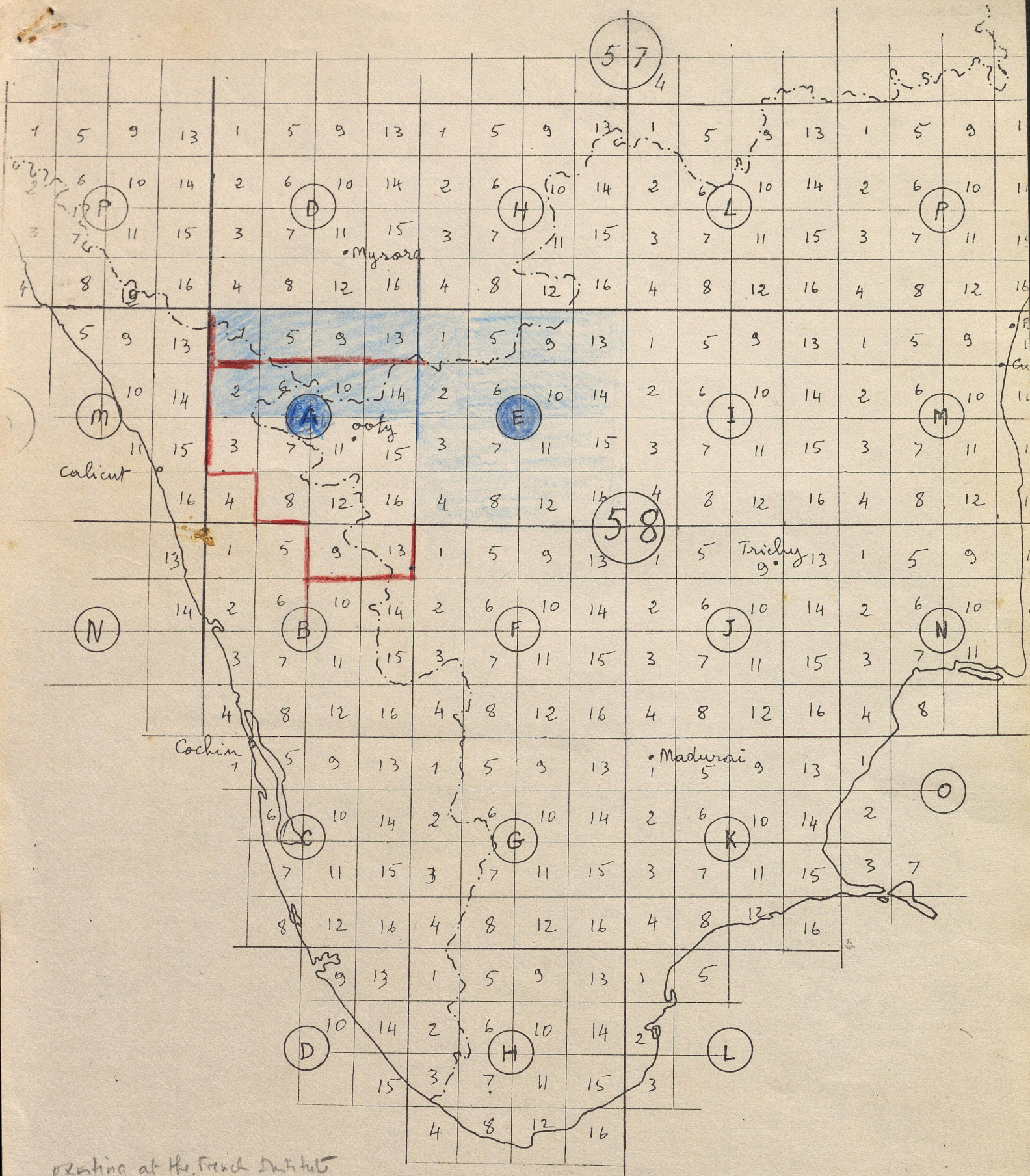
# NILGIRI BIOSPHERE RESERVE

TOTAL AREA = 5520 km<sup>2</sup>





- BIOSPHERE RESERVE BOUNDARY
- - - INTER STATE BOUNDARY
- ▨ CORE ZONE (1240 km<sup>2</sup>)
- ▤ MANIPULATION (FORESTRY) ZONE (3239 km<sup>2</sup>)
- ▥ MANIPULATION (TOURISM) ZONE (335 km<sup>2</sup>)
- ⋯ RESTORATION ZONE (706 km<sup>2</sup>)

0 5 10 15 20 25 KM  
SCALE - 1 : 2,50,000



printing at the French Institute

 1/250000

 1/50000

for Marbank

110 x 25 cm

Rival Map. 80 gms / m<sup>2</sup>  
100 gms / m<sup>2</sup>

112 cm x 112 cm