
TABLE OF CONTENTS

INTRODUCTION

0.0 SUMMARY INFORMATION

- 0.1 Forest lands : summary information
- 0.2 Village & habitation lands : summary information
- 0.3 Surveying details

1.0 ABIOTIC FACTORS

- 1.1 Topography
- 1.2 Climate
- 1.3 Soils
- 1.4 Water resources

2.0 FOREST LANDS:

- 2.1 Natural vegetation
 - 2.1.1 Vegetation types
 - 2.1.2 Height & cover estimates
 - 2.1.3 Density & biomass estimates
 - 2.1.4 Indicator species
- 2.2 Forest plantations
- 2.3 Human pressure
 - 2.3.1 Habitations inside the forest
 - 2.3.2 Human activity
 - 2.3.3 Economic value
- 2.4 Wild life

3.0 VILLAGE & HABITATION LANDS

- 3.1 Land ownership details with Endogamous group
- 3.2 Agriculture
- 3.3 Arboriculture
- 3.4 Livestock
- 3.5 Communications & access
- 3.6 Site cultural characteristics
- 3.7 Disasters & events in history

4.0 ENDOGAMOUS GROUP CHARACTERISTICS:

- 4.1 Houses, livestock & occupation
- 4.2 Endogamous group distribution & spread
- 4.3 Livestock
- 4.4 Agriculture
- 4.5 Material gathered
- 4.6 Exchange relationships
- 4.7 Tools & implements
- 4.8 Cultural seasons

5.0 SKETCH MAP OF VILLAGE

A.0 CHECK-LIST FOR ORAL HISTORY INTERVIEWS

INTRODUCTION

This schedule is designed to collect information on land use and vegetation, and the different human communities and their resource use patterns pertaining to the Nilgiri area. We have to identify the units of measurement, and this would depend upon the scale of the study, the simplicity of identifying the units, and the ease of measuring or detailing various parameters of them.

For our study, for the purpose of drafting a schedule and collecting information, we choose a unit as the village or habitation, with its revenue and common lands; and the forest lands meaning the reserved forest lands controlled directly or indirectly by the Forest Department. These two broad units of land are mutually exclusive categories that integrate with each other to form the composite landscape of the Nilgiris.

Regarding the resource use patterns and the human communities, we work in terms of endogamous groups. This is our unit to measure and detail various cultural parameters that would have a significant bearing on resource use patterns. We gather information on the control over the natural resources, the use of various materials by each endogamous group to meet its wants, as well as the information, knowledge and technology content of each group.

On this framework, a detailed schedule is drawn up on which data would be collected from an appropriate sample size depending upon the time and resources available, from a total of about 430 villages in the whole study area.

NILGIRI LANDSCAPE

- A. FOREST LANDS
- B. VILLAGE / HABITATION LANDS
- C. ENDOGAMOUS GROUPS

In the Nilgiri Area there is a tremendous diversity of land ownership and land use patterns. More than 60% of the area is under the control of the Forest Department who use them as wildlife parks and sanctuaries, forests for timber and minor forest produce extraction, commercial monoculture plantations, as well as land leased to other government agencies and corporations like Tantea which are under the management of the forest department.

FOREST LANDS

- A. WILDLIFE PARKS AND SANCTUARIES
- B. RF's FOR TIMBER AND MFP
- C. COMMERCIAL PLANTATIONS
- D. FOREST CORPORATIONS
- E. OTHER LEASED LANDS

Village and habitation land could be privately owned or owned by the government in addition to the village and habitation commons.

VILLAGE/HABITATION LANDS

PRIVATE INDIVIDUAL OWNERSHIP
PRIVATE CORPORATE OWNERSHIP
GOVERNMENT LANDS OTHER THAN THE FD
VILLAGE COMMONS

All these lands could be under various land uses such as :

agriculture with its diverse cropping patterns,
arboriculture,
areas for grazing livestock,
fuelwood collections and
areas for conservation and recreation.

In addition to the schedule information, data is also to be collected from interviews and participant observation with an aim to reconstruct the ecological history of the Nilgiri area. Oral histories relating to the environment would be rich as that would be the basis on which the human community depends for the fulfillment of its wants.

Such histories would be biased by the endogamous group and its mode of resource use. Thus in addition to helping in the reconstruction of the ecological history of the area, the interview would also reveal the changing modes of resource use of the particular human community. Further, we note that over the period of a generation, i.e., over the period of 50 - 80 years, human experiences relating to the environment would be alive , accurate and well articulated by some members of the group.

Over a longer period, experiences regarding the environment passed on from generation to generation tends to go into the realm of myth, tradition and culture. These may however be significant and have an intimate bearing on the environment. Thus our interview information should make this distinction and categorize them as experiential environmental history, and cultural environmental history.

Interviews on the changing environment would be conducted in each geographical area with competent resource persons of the older generation. These interviews would be conducted as conversations between the observer and respondents, covering the set of topics that are included in the check-list for oral history information.

0.0 SUMMARY INFORMATION

0.1 Forest lands summary information

S.No : Name of the forest:

Legal status : RF/WLS/NP

Forest division :

Range:

Range Head quarters:

Area of the Forest:

Nearest Habitation (within 10km radius):

Habitations inside the forest:

Access:

0.2 Village & habitation summary information

S.No: Name of Habitation:

Terrain: Flat/ Hilly

Name of the taluk:

No of houses:

Endogamous groups:

Economic activity: Agriculture/ Trade/ Services/ Industry/ Pastoral

Access: Path/ Road/ Rail

0.3 Surveying details:

Informants

Occupation

Endogamous group

Remarks

Other enclosures & references:

Participant observer:

Date:

Place:

1.0 Abiotic factors:

1.1 Topography:

Slope: Steep/Moderate/Flat

Elevation:

1.2 Climate:

Annual Seasons Current Months One Generation Ago

Rainy

Dry

Hot

Cold

Change in rainfall :

Change in seasonality:

Years of max rainfall:

1.3 Soils and Geology

Type of soil

Colour

Texture

Drainage

Land use

Erosion

Years of land slides if any.

1.4 Water resources:

Water source

Utility

Water distance

Means of transport

Seasonality

Availability

Years of water scarcity

Years of flooding

2.0 FOREST LANDS

2.1 Natural forests:

2.1.1 Forest Types according to the Vegetation Legend (on a scale of 1km.*1km.) from satellite imageries and field verification:

Type of Forest

Physiognomy

Terrain

Vegetation legend code

Map No

Color
=====

2.1.2 Height and cover estimates

Description of landscape elements

Tree level

Shrub level

Grass level

Herb level

Cover scales: A=100% B=60-100% C=30-60% D=0-30% E=0%
=====

2.1.3 Density and biomass estimates

S.No

Landscape element

Dist

Girth

Height

Dist.

Girth

Height
=====

2.1.4 List of indicator species of plants:

a : abundant - la : locally abundant - r : rare - ab : absent

Indicators of high humidity or moisture levels in soil

- 1) _____ Piper species
- 2) _____ Arenga (palm)
- 3) _____ Pinanga (palm)
- 4) _____ Cane (palm)
- 5) _____ Araceae (climbers/herbs/annuals)
- 6) _____ Zinziberaceae
- 7) _____ Tree ferns
- 8) _____ Mosses (epiphytic)
- 9) _____ Orchids (epiphytic)
- 10) _____ Others

Indicators of age/stability

- 1) _____ Woody lianas (>30 gbh)
- 2) _____ Buttressed trees
- 3) _____ Woody stranglers

Indicators of dryness and desertification

- 1) _____ Anogeissus
- 2) _____ Wild date
- 3) _____ Opuntia/Euphorbia
- 4) _____ Hardwickia
- 5) _____ Acacia

Indicators of flooding or high water course/level

- 1) _____ Terminalia arjuna
- 2) _____ Mangifera indica
- 3) _____ Saraca indica
- 4) _____ Bassia nerifolia
- 5) _____ Ochlandra
- 6) _____ Bambusa arundinacea

Indicators of high altitude

- 1) _____ Rhododendron
- 2) _____ Wild rose

Indicators of fire

- 1) _____ Pteridium
- 2) _____ Wild date

Indicators of overgrazing

- 1) _____ Thorny plants/cacti
- 2) _____ Argemone
- 3) _____ Calotropis
- 4) _____ Barleria (thorn)

Indicators of human intervention

- 1) _____ Strychnos
- 2) _____ Ficus
- 3) _____ Wild jack
- 4) _____ Tamarind
- 5) _____ Other trees of utility as food

Indicators of canopy opening

- 1) _____ Macaranga (evergreen forests)
- 2) _____ Strobilanthes (ev)
- 3) _____ Pschotrea (ev)
- 4) _____ Bamboo (moist forests)
- 5) _____ Tall grass (moist forests)
- 6) _____ Eupatorium (deciduous)
- 7) _____ Lantana (deciduous)
- 8) _____ Parthenium (scrub)
- 9) _____ Rubus

2.2 Forest plantations in the RF:

Total area of RF

Species

Terrain

Area

Density

Other i/c spp.

Maturation period

Productive period

Biocide/Fertilizer

Productivity

Marketable products

Market

Market distance

Utility

Year of plantation
=====

2.3 Human pressure:

2.3.1 Habitations inside the forest:

Name of the habitation

Legal status

Seasonal/perennial

Endogamous groups

No. of houses

Area cultivated

Species husbanded

Livestock
=====

2.3.2 Human activity:

Type of human activity Legal status H/M/L/A Veg change Spp harvested

Grazing

Fuel wood collection

Fire

Others (specify)

=====

2.3.3 Economic value

Minor forest produce

Species

Consumption/Market

Group involved in collection

Group involved in marketing

Quantity harvested

Market

Market distance

Period

=====

Timber trees species

Market

Market distance

Group involved in extraction

Group involved in marketing

Quantity extracted

Period

=====

2.4 Wildlife & fishes

Species

Presence/Absence

Years of last sighting

Hunting/Scavenging

Conflict

=====

3.0 VILLAGE & HABITATION LANDS

3.1 Land ownership details:

Total land

Common lands

Private lands

Details of group

Maximum land owned

Minimum land owned

No. of landless

Amount of land leased in

Amount of land leased out

Amount of land owned by outsiders

Amount of land owned outside the village
=====

3.2 Agriculture:

Species

Seed source

% of agricultural area

Sowing period

Harvesting

Productivity

Inter-cropping species

Second-cropping species

Fallowing period

Useful product

Utility

Subsistence/commercial

Market

Market distance

Biocide Fertilizer

Organic fertiliser

Type of soil

Type of terrain

Irrigated/dry

Hoe/plough cultivation

Year of introduction
=====

3.3 Arboriculture:

Species

Terrain

Density

Other i/c species

Density

Maturation period

Productivity period

Biocide/Fertilizer usage

Marketable products

Productivity

Utility

Processing level

Market

Market distance

Marketing agency
=====

3.4 Livestock:

Species

No. of animals

Seasonal/perennial : Stall fed -
 Agri fields -
 Village commons -
 Reserve Forests -

Useful product

Utility

Subsistence/commercial

Market

Market distance

Marketing

Processing level
=====

4.0 ENDOGAMOUS GROUP CHARACTERISTICS:

4.1 Houses, livestock & occupation:

Group details

No. of houses Katcha
 Pucca

Livestock Cattle
 Buffaloes
 Sheep
 Goats

Traditional occupation

Current occupation

No. of people working outside village
=====

4.2 Endogamous group distribution and spread:

Endogamous group

Other places in which group is present

Other places in which group has affinal relation
=====

4.3 Livestock including poultry, dogs & pets:

Endogamous group

Livestock Species
 Number

Owned or managed

Useful product

Utility

Subsistence/commercial

=====

4.4 Agriculture:

Endogamous group

Crops husbanded

Seed source

Useful product

Utility

Consumption/Trade
=====

4.5 Material gathered:

Endogamous group

Species

Utility

Source

Availability
=====

4.6 Exchange relationships: A:artifacts F:food R:ritualistic L:labour

Endogamous group

=====

4.7 Tools of Implements:

Endogamous group

Type of implements

Material

Locally/indus. made

Remarks
=====

4.8 Cultural seasons:

Endogamous group

Fairs & festivals

Site of event

Season
=====

4.9 Diet & food:

- - - - -
Staples food grains
- - - - -

Vegetables
- - - - -

Protiens
- - - - -

Food taboos
=====

5.0 Sketch of the village:

=====
Legend : H : Houses A : Agricultural fields S : School
 W : Water sources T : Temple/Sacred spot B : Path
 R : Road F : Forests P : Plantations.
=====

A.0 CHECK-LIST FOR ORAL HISTORY INTERVIEWS

1.0 ABIOTIC FACTORS

- 1.1 Water resources
 - 1.1.1 Source
 - 1.1.2 Utility
 - 1.1.3 Quality
 - 1.1.4 Quantity
 - 1.1.5 Seasonality
 - 1.1.6 Droughts & floods
- 1.2 Climate & rainfall
 - 1.2.1 Quantity
 - 1.2.2 Intensity
 - 1.2.3 Seasonality
 - 1.2.4 Disasters

2.0 VEGETATION & LAND USE

- 2.2 Natural vegetation
 - 2.2.1 Density & composition
 - 2.2.2 Extent
 - 2.2.3 Proliferating weeds
 - 2.2.4 Resources from natural vegetation
 - 2.2.5 Utility of material gathered
- 2.3 Husbanded vegetation
 - 2.3.1 Species husbanded
 - 2.3.2 Cropping pattern
 - 2.3.3 Productivity
 - 2.3.4 Agricultural technology
 - 2.3.5 Markets exchange & consumption
 - 2.3.6 Agricultural pests & diseases

3.0 LIVESTOCK INCL.

- POULTRY, DOGS & PETS
 - 3.1 Species
 - 3.2 Number
 - 3.3 Utility
 - 3.4 Fodder
 - 3.5 Diseases

4.0 WILDLIFE & FISH

- 4.1 Species
- 4.2 Extent
- 4.3 Number
- 4.4 Hunting
- 4.5 Scavenging
- 4.6 Conflict
- 4.7 Diseases

5.0 HUMAN COMMUNITIES & ARTIFACTS

- 5.1 Population
 - 5.1.1 Growth of different communities
 - 5.1.2 Immigration
 - 5.1.3 Migrations
 - 5.1.4 Diseases & epidemics
- 5.2 Modes of resource use
 - 5.2.1 Occupation patterns
 - 5.2.2 Items gathered & items husbanded
 - 5.2.3 Exchange relationships
 - 5.2.4 Control over resources;
 - 5.2.5 Competition/conflict over resources
 - 5.2.6 Tools, implements & technology
- 5.3 Myth & culture
 - 5.3.1 Traditions on origins of the group
 - 5.3.2 Traditions of deities of the group
 - 5.3.3 Migratory movements historically
 - 5.3.4 Food taboos of various groups
- 5.3 Settlement patterns & communications
 - 5.3.1 Markets
 - 5.3.2 Communications, transport & access
 - 5.3.3 Artefacts

Summary of Village / Habitation: / Forest Area.

Name of the Village:

S.No:

No. of Houses.:

SOT: No:

Terrain:

No. of Endogamous groups in the village

Economic activity.

Communication / Access:

Name of the Forest:

Area of the Forest:

Forest Division.:

Economic Activity:

Communication / Access:

Distance from nearest habitation:

1. Abiotic factors.

11. Topography:

Slope: Steep / Moderate / Flat

Elevation:

12. Climate:

~~Annual Seasons~~
~~Seasons~~

Current Months
~~Annual Seasons~~

One Generation ago

Rainy

Dry

Hot

Cold

~~Climate~~

Change ⁱⁿ Rainfall amount :

Change in Rainfall seasonality :

Years of maximum rainfall :

pa _____

13. Soils & Geology

Type of soil	soil use colour	texture	drainage	long use	Erosion

Years of land slides if any.

14. Water Resources.

Water Source	Water usage	Distance	Means of transport	Seasonality	Availability.

Years of water scarcity

Years of flooding.

2. Vegetation and Land Use

21. Natural Vegetation.

211. Type of forest according to the vegetation legend

$$7 + 7 + 5 + 5 + 5 + 2 + 2 + 3 + 5 + 5 + 4 + 1 + 3 + 6 + 6$$

= 66 Vegetation types

(On the scale of 1 km) from satellite imagery.

212. Sub-landscape ~~elements~~ elements and their descriptions on the scale of 100 m x 100 m. from field visits &

~~Visual~~ Visual estimates of height & cover of vegetation in each of the sub-landscape elements.

Description of sub-landscape element - req. dominant spp.	Tree Canopy		Shrub level		Grass level		Herb level	
	Height	Cover	Height	Cover	Height	Cover	Height	Cover

• pa —

213.

~~214.~~ Estimates of tree density and biomass by the point centred quadrat method.

landscape element	Dist	Girth	Ht.	Dist	Girth	Height
1.						
2.						

• — pa.

24

Scores: a: abundant
la: locally abundant
r: rare

A LIST OF INDICATOR SPECIES OF PLANTS

Indicators of high humidity or moisture levels in soil

- 1) Piper species
- 2) Arenga (palm)
- 3) Pinanga (palm)
- 4) Cane (palm)
- 5) Araceae (climbers/herbs/annuals)
- 6) Zinziberaceae
- 7) Tree ferns
- 8) Mosses (epiphytic)
- 9) Orchids (epiphytic)
- 10) Others

Indicators of age/stability

- 1) Woody lianas (>30 gbh)
- 2) Buttressed trees
- 3) Woody stranglers

^t
Indicators of dryness and desertification

- 1) Anogeissus
- 2) Wild date
- 3) Opuntia/Euphorbia
- 4) Hardwickia
- 5) Acacia

Indicators of flooding or high water course/level

- 1) Terminalia arjuna
- 2) Mangifera indica

- 3) Saraca indica
- 4) Bassia nerifolia
- 5) Ochlandra
- 6) Dendrocalamus

Indicators of high altitude

- 1) Rhododendron
- 2) Wild rose

Indicators of fire

- 1) Pteridium
- 2) Wild date

Indicators of overgrazing

- 1) Thorny plants/cacti
- 2) Argemone
- 3) Calotropis
- 4) Barleria (thorn)

Indicators of human intervention

- 1) Strychnos
- 2) Ficus
- 3) Wild jack
- 4) Tamarind
- 5) Other trees of utility as food
- 6) *hopped trees*
- 7) *Tree stumps*

Indicators of canopy opening

- 1) Macaranga (evergreen forests)
- 2) Strobilanthes (ev)
- 3) Pschotrea (ev)

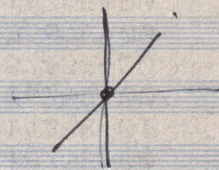
- 4) Bamboo (moist forests)
- 5) Tall grass (moist forests)
- 6) Eupatorium (deciduous)
- 7) Lantana (deciduous)
- 8) Parthenium (scrub)
- 9) Rubus

Forest

215
~~213~~

Human Pressure:

Distance from closest habitations.



Habitations inside the forest area:

Name of Habitation	No. of Horses	hibe book	
		No. of species	No.

2nd groups present

Human Activity

Type of activity	High/Medium/Low/Absent Presence/Absence	Remarks. Seasonality/group specificity
Go grazing		
Go grazing		
Fire		
Fuel wood collection		
Others: (specify)		

216

~~214~~

Economic Value.

~~Marketing~~
Marketing
Marketing
Marketing
Marketing

Timber trees:

Species

Qty Extracted

Market
Current
Value

MFPs

Groups gathering it
& marketing it

Description

Qty Extracted

Market
Current
Value

• Pa.

MFA

Gums, Resins & Waxes.

Myrobalans & Tannin.

Medicinal plants & drugs

Fibres & Flowers.

Food.

{ Bamboos
{ Canes & Rattans

Others (specify) : eg. Flavours & perfumes
eg. Oilseeds

Honey :

— pa

22. Husbanded Vegetation:

221 Arboriculture

Species :

Total Area :

Density :

Ownership : Govt / Corporate / Private.

Maturation period :

Productivity period :

Utility & Use/fruit. : eg fuelwood / Industrial raw material / food (Tea) /

Market / Distance to market :

Processing centre / Distance to processing centre :

Pesticide ~~Pesticide~~ usage :

Fertilizer usage :

Silviculture operations :

• pr.

222 Agriculture: Seed source.

Species	% of total area Area? (estimate)	Sowing period	Harvesting period	Productivity

[cont] Substance/ Commercial	Market & Market distance	Pesticide usage	Fertilizer usage	Type of soil. preferred	Type of terrain	Irrigated Dry

[cont]

Dry	Hoe cultivation	Plough cultivation	Year of Introduction

• pa.

~~Endogamous Group~~
 223 Crops/Plants Husbanded: ~~Endogamous Group~~

Endogamous group	Species	Utility c/s/o/	Propagation method	Year of introduction

• pa

& Plant products

224 Crops/Plants/Gathered: ~~Endogamous group~~

Endogamous group	Species	Utility				Source	Availability
		Food	Fibre	Structural	Others		

• pa.

225 Agricultural operations:

1. Soil treatment measures: Soil stability / Nutrient replenishment.

~~Soil treatment~~

2. Cropping methods: Crop rotation / Mixed Cropping / fallowing.

3. Pest & Disease control of crops:

4. Agricultural technology & tools used:

5. Seed / Propagation technology

• pa

23 : Vegetational changes .

~~Extension of agriculture~~

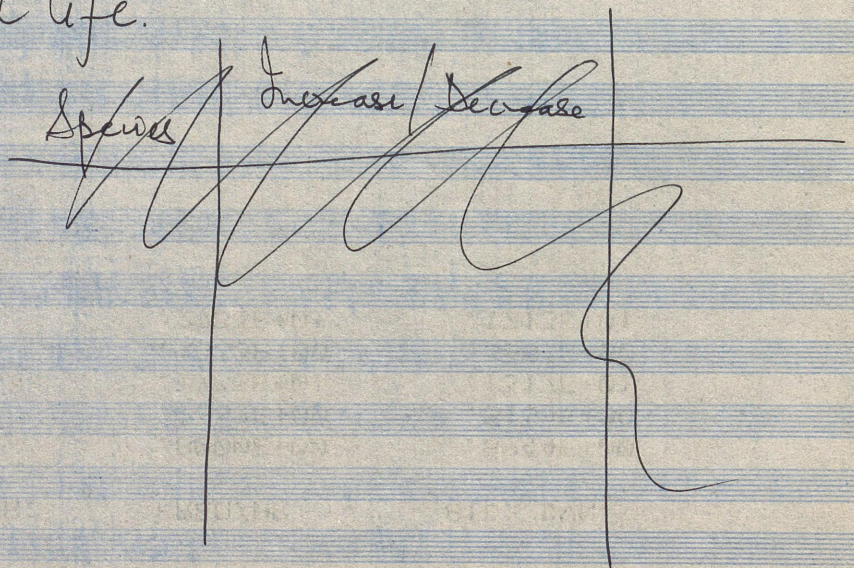
arboriculture
Changes in agriculture/over time :

1. Extent
2. Species husbanded
3. Agricultural technology (including seeds)
4. Pests & diseases.
5. Weeds

pa.

24. Changes in forest areas over time.

1. Extent
2. Composition : density
: species
3. Access to forests
4. Availability of 'services' from forests
5. Forest plantations.
6. Weeds
7. Wild life.



• pa

General Village of Habitation Characteristics

~~Name of the Village :~~

~~Implications of the Name :~~

~~Year of establishment of
No. of houses in the village~~

No. of people working outside the village.

Current occupations

Endogamous groups	No. of houses of each		Traditional occupations	Total spread territory of group
	Pucca	Katcha		

[cont]

Total spread territory of group	Spread territory of kinsmen (affinal territory)
---------------------------------	---

33. Livestock

Endogamous group.	Species	No. of animals	Stall fed	Open grazed			Utility Milk/Meat Draft animals Others.
				Paddies	Common Lands	RF	

Grazing Mode
Communal / Single

[Cont]

Subsistence	Commercial	Market / Market distance	Remarks

• pr.

34. Energy Consumption Pattern

Yr. of electrification

- A: Animal
- S: Solar
- W: Wood
- K: Kerosene
- G: Gas
- E: Electricity

Endogenous group

Heating

Lighting

Agriculture

Energy Source / Access.

Gathered / Purchased

W: Wood.

K: Kerosene

G: Gas

E: Electricity

S: Solar

A: Animal.

• etc.

35. Communications / Access

Nearest Road distance:

Frequency of public transport:

Nearest Post office:

Year of establishment of PO:

Year of ^{road} communication facility:

Nearest market facility:

Changes in communication facility over time:

• pa.

36. Year of Establishment of Village :

Changes in the No. of houses over time :

Changes in the endogenous groups over time :

Changes in the occupation pattern over time :

• ~~pr~~.

and other 'events'

37. Disasters/in the generation

Climatic disasters :

Agricultural disasters :

Livestock/Animal disasters :

Human diseases disasters :

Human migrations :

o p a .

Tools & Implements

- 1) Household utensils & storage
- 2) Agricultural implements
- 3) Trade & occupational implements
- 4) Grain storage

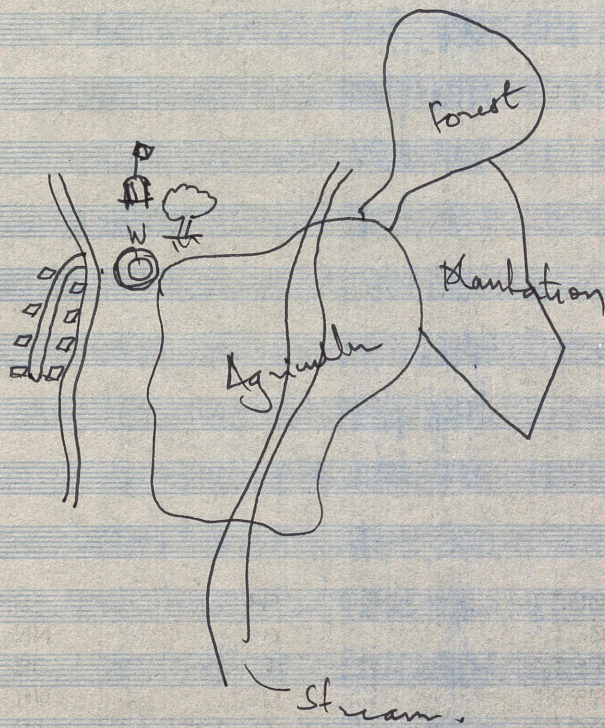
Endogenous group 3

Type of Implement	Material	Locally made	Industrially produced	Remarks

• pa

38. Sketch of the Village: with

- Houses
- Agricultural field
- Water sources
- Temple / Sacred spot
- Road / Path
- Forests
- Plantations.



6 pa.

Include in village history

4 Cultural characteristics:

41. Name of the village:

Implications of name of village:

~~1/2~~
Revered / Famous landscape features around
the village:

Sacred sites in the neighbourhood:

Archaeological sites in the neighbourhood:

Cultural seasons: fairs & festivals:

• pa.

42 Gender Bias of Activity :

~~Endogamous group.~~

Activity	Male	Female	Both
Agriculture: Ploughing Sowing Weeding Harvesting.			
Fuel collection			
fodder collection			
livestock rearing			
Others (specify)			

5. Surveying Details:

Informants	Occupation	Endogamous group	Schedule #	Remarks

Other enclosures & references : 1

2

3

Participant Observers :

4

Date

Place

Time