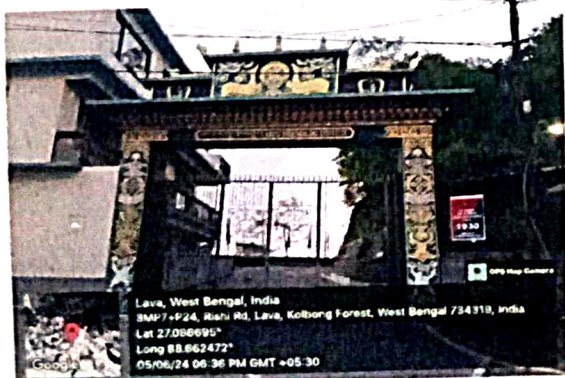


APPRAISAL OF PHYSICAL AND SOCIO ECONOMIC CHARACTERISTICS OF LAVA IN KALIMPONG DISTRICT, WEST BENGAL

Examined

Banaraj Coll. College Centre
Dept. Of Geography, Barasat



WEST BENGAL STATE UNIVERSITY



NAHATA J.N.M.S. MAHAVIDYALAYA



PROJECT WORK

COURSE- B.A. HONORS IN GEOGRAPHY

PAPER TITLE- FIELD WORK & RESEARCH METHODOLOGY

PAPER CODE	: GEOACOR11P
SEMESTER	: 5TH
REGISTRATION NO	: 1272221400535
ROLL	: 5252110 NO:12863
SESSION	: 2024-2025



S.T.D.- 03215 253267

NAHATA JOGENDRA NATH MONDAL SMRITI MAHAVIDYALAYA

P.O. Nahata, P.s.- Gopalnagar, Dist. North 24 Parganas.

PIN- 743290

ESTD- 1985



From :

**Principal/ Secretary/ Administrator/
President/ Teacher- In- Charge**

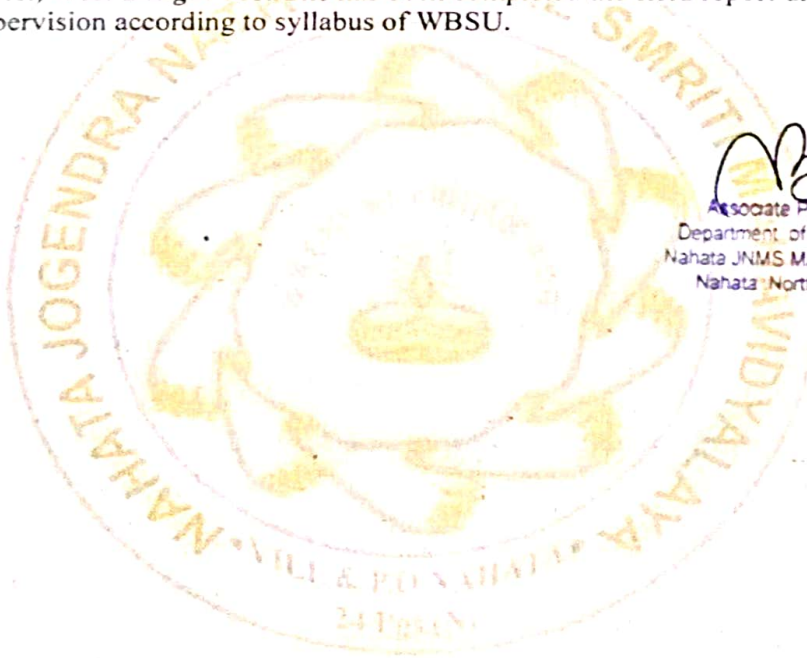
Website:- www.nahatajnmsm.com ::: Email:- info.nahatajnmsm@gmail.com

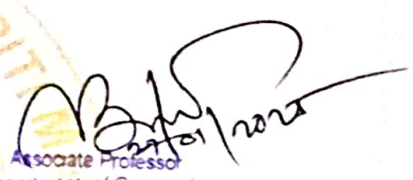
Ref. No.....

Date.....

TO WHOM IT MAY CONCERN

This is to certify that Sri/Smt/Miss....Keya Majumder.....Registration/
Roll No./1272221400535.....is a student of B.A./B.Sc.Semester-V
(H) in Geography of this institution. He /She went in the Lava in Kalimpong district for
the field work on '*Appraisal of physical and socio-economic characteristics of Lava in
Kalimpong District, West Bengal*'. He/She has been completed the field report under my
guidance and supervision according to syllabus of WBSU.




Associate Professor
Department of Geography
Nahata JNMS Mahavidyalaya
Nahata North 24 Pgs

CONTENT

ACKNOWLEDGEMENT

PREFACE

1. CHAPTER - I

- 1.1. Introduction
- 1.2. Background of the field study
- 1.3. Object
- 1.4. Methodology
- 1.5. Study area and selection process
- 1.6. Location Map
- 1.7. Route Map

2. CHAPTER - II (PHYSICAL ENVIRONMENT)

- 2.1. Geology
- 2.2. Relief
- 2.3. Soil
- 2.4. Climate (star diagram, climograph, Hythergraph)
- 2.5. Drainage
- 2.6. Natural vegetation and fauna

3. CHAPTER - III (DEMOGRAPHIC CHARACTERISTICS)

- 3.1. Sex ratio
- 3.2. Occupation
- 3.3. Income level
- 3.4. Education level
- 3.5. Caste composition
- 3.6. House type
- 3.7. Flow chart of traffic survey
- 3.8. Road and settlement
- 3.9. Source of drinking water
- 3.10. Health condition and diseases
- 3.11. Market Morphology
- 3.12. Supply of goods
- 3.13. Established of shop

4. CHAPTER - IV (TOURISM INDUSTRY)

- 4.1. Room prices
- 4.2. Most visit tourists
- 4.3. Facilities of hotel

CONCLUSION

APPENDIX

BIBLIOGRAPHY

ACKNOWLEDGMENT

For the completion of our field report, we are greatly indebted to our respected teachers, Sri Biswajit Mondal and respected madam Smt Pinki Paul. (Nahata JNM S Mahavidyalaya) and their guidance during our field survey and the preparation of the report. We are also thankful to our HOD Dr. Jhantu Sapadara for his thoughtful assistance during this report.

Lastly, express our gratitude to the local people for their kind co-operation during the data collection and survey.

Keya Majumder
Signature of the Student

PREFACE

Socio economic status consists of various social and economic components such as education level income and health.

The present study "Appraisal of physical and socio-economic characteristics of lava in kalimpong district" highlights the socio-economic status of the people in the study area.

It has been made based on a field survey of the socio-economic status of the local people. The present work tries to measure the socio-economic status of the local people, and makes some suggestions. The whole report is divided into ~~for~~ four chapters.

Chapter-I in the introductory chapter has discussed the socio-economic status, significance of the study, location of the study area, objectives, material data source, and methodology of the study.

Chapter-II represents the socio-economic status physical features that have been discussed.

Chapter III represents the socio economic status ~~that~~ of the local people.

Chapter IV represents the tourism industry and it concludes and sums up the rest of the discussion. The appendix and bibliography represents have been placed at the end of the discussion.

Keya Majumder
Signature of the student

INTRODUCTION

Socioeconomic status consists of various social and economic elements. These are the important parameters that are made by human beings. Socioeconomic status indicates the quality of life of the people at a particular area. Different socioeconomic development, as well as status, can be measured using per capita income. Rural livelihoods mainly depend on agriculture. The majority of the people are engaged in the service sector. The local people living in the valley of the mountain range. The majority of the people are engaged in the daily labor. So daily labor is the main income source of income. For this reason, their income level is low and the education level is not good. Most of the people are illiterate in the study area.

In this area, local people face different types of problems such as drinking water, lack of transport, shelter and employment problems. The local people face different types of problems such as drinking water, health problems and the livelihoods.

OBJECTIVE

The main objectives of the study area below:-

1. To find out the social condition of the local people
2. To find out the economic condition at the local people.
3. To explore the main environment in this area
4. To give some suggestion and recommendations.

Material: This study is based on primary data and partially secondary data. The primary data have been collected through the purposive sample method from Lava in Kampong district. The survey has been conducted with a structured questionnaire through the interview method.

Data source: The secondary data have been collected from gram panchayat office of Lava and various websites.

Methodology: The following research method have been conducted.

BACKGROUND OF THE STUDY

Pre field: At first various books, journal and even website search was done to gain information on the study area. After getting a general idea about the study area, a questionnaire was prepared for the collection of primary data by using both open and close ended questions.

Field: During the field the main job was to collect the data by primary survey. Quantitative and Qualitative data have been collected such as socio-economic conditions. Photographs are collected during the survey to show the relevance of topic and condition of the surveyed population.

Post field: In the post field work, the data which was collected from the survey and various sources are further analysed and interpreted. The representations of the acquired data were done using ms Excel and ms word. GIS 2.14 software was also used to make the location map. Statistical methods and Quantitative method have been used such bar diagram, Pie diagram etc.

LOCATION MAP

INDIA

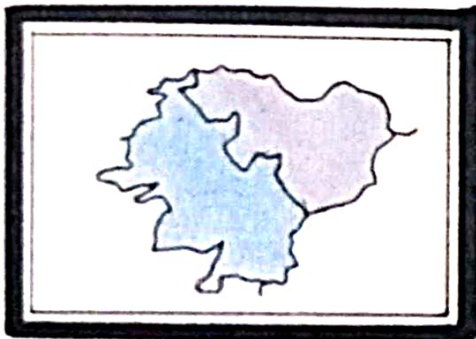


WEST BENGAL



Scale?

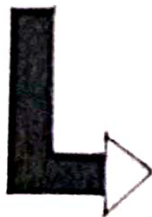
KALIMPONG-2



KALIMPONG



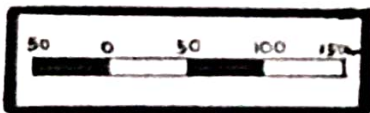
LAVA



ROUTE MAP

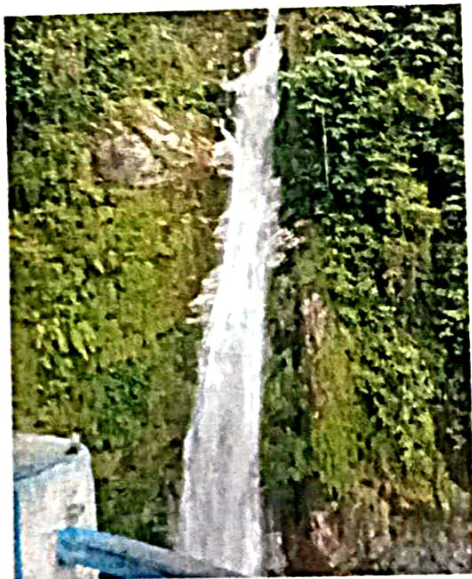


name
of the
station



INDEX

- ROAD
- +++ RAILWAY
- STATION
- WEST BENGAL
- LAVA



GEOLOGY

Geology of Lova, Kalimpong:

Lova and Kalimpong situated in the Darjeeling Himalayas of West Bengal India are region of window into the formation and evolution of the Himalayan mountain range. One of the Himalayan mountain's most spectacular and complex orogenic system on Earth.

Geological Setting:

The Himalays are the result of the collision between Indian and Eurasian tectonic plates, which began approximately 50 million years ago. Their collision led to the formation of the Himalayan mountain range including the Darjeeling Himalayas where Lova and Kalimpong are located.

Rock Types:-

The geology of Lova, Kalimpong is dominative by metamorphic and igneous rock. The metamorphic rocks include gneiss and schists and phyllites which are the results of high pressure and high temperature. Transformation of sedimentary and igneous rock.

Structural Geology:

1. The Darjeeling Sikkim Himalayan frontal Thrust which marks the boundary between the Himalayan mountain range.
2. The Lova Kalimpong shear-zone, a major ductile shear zone, accommodated significant crustal shortening during the Himalayan orogeny.

CLIMATE

Lava, Kalimpong in the Darjeeling Himalayan of west Bengal, India experience of a unique and diverse climate. The region geography, elevation latitude create a microcosm of Himalayas climate zones, ranging from subtropical temperate and alpine.

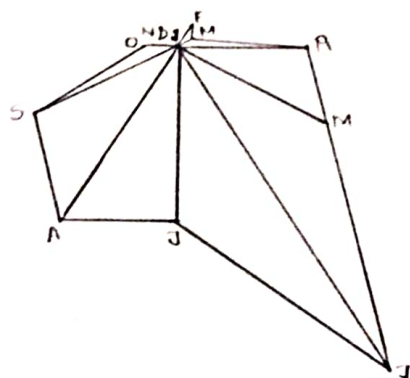
Location and Geography:

Lava Kalimpong are situated between $26^{\circ}45'$ and $27^{\circ}15'$ north latitude and $88^{\circ}30'$ and $88^{\circ}50'$ east longitude. The region's elevation varies from 1000 to 3000 meters above sea level.

CALCULATION TABLE FOR STAR DIAGRAM

MONTH	PRECIPITATION (mm)	LENGTH OF THE LINE ACCORDING TO SCALE (1cm = 5mm)
JANUARY	0.25	0.05
FEBRUARY	1.64	0.328
MARCH	1.19	0.238
APRIL	8.23	1.646
MAY	10.35	2.070
JUNE	26.96	5.392
JULY	12.74	2.548
AUGUST	14.46	2.892
SEPTEMBER	10.37	2.074
OCTOBER	4.65	0.93
NOVEMBER	0.07	0.014
DECEMBER	0.05	0.01

STAR DIAGRAM SHOWING PRECIPITATION



Scale ?

Submitted
At Govt. College Campus
In Administrative Building

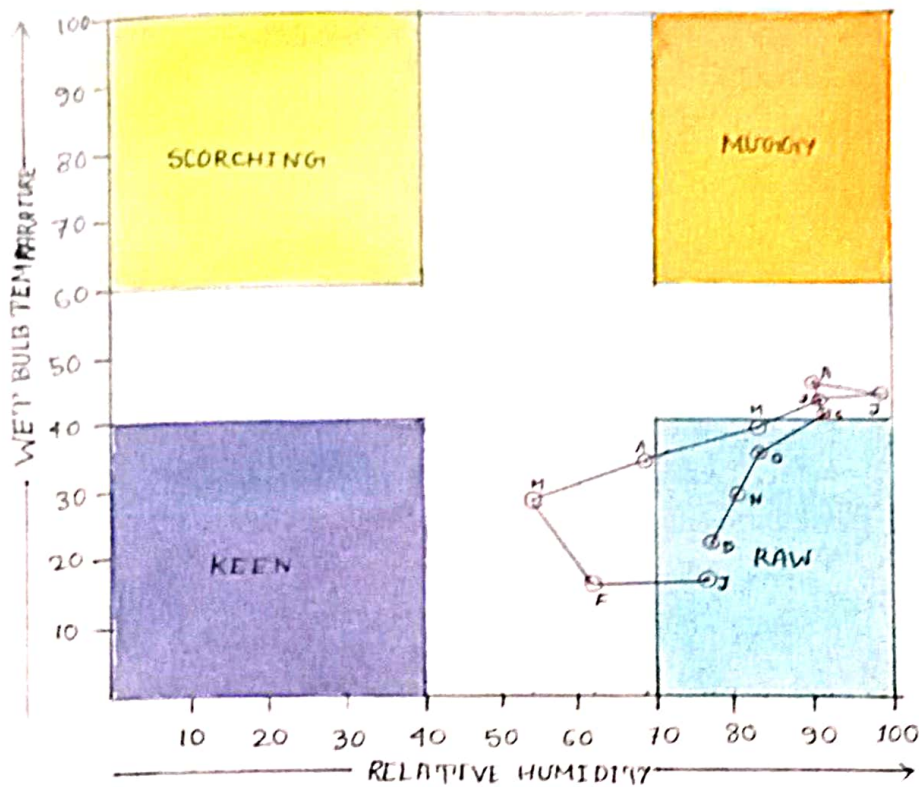
CALCULATION TABLE FOR CLIMOGRAPH

MONTH	WET BULB TEMPERATURE	SCALE (1cm = 10°)	RELATIVE HUMIDITY	SCALE 1cm = 10cm
JANUARY	8.53	0.85	76.12	7.612
FEBRUARY	8.1	0.81	72.44	7.244
MARCH	13.89	1.389	54.44	5.444
APRIL	16.76	1.676	68.56	6.856
MAY	19.49	1.949	82.5	8.25
JUNE	21.49	2.149	91.38	9.138
JULY	22.24	2.224	90.94	9.094
AUGUST	22.27	2.227	91.12	9.112
SEPTEMBER	21.13	2.113	92.06	9.206
OCTOBER	17.9	1.79	83.56	8.356
NOVEMBER	14.21	1.421	80.12	8.012
DECEMBER	11.12	1.112	77.19	7.719

CLIMOGRAPH

SHOWING

RELATIONSHIP BETWEEN WET BULB TEMPERATURE AND RELATIVE HUMIDITY

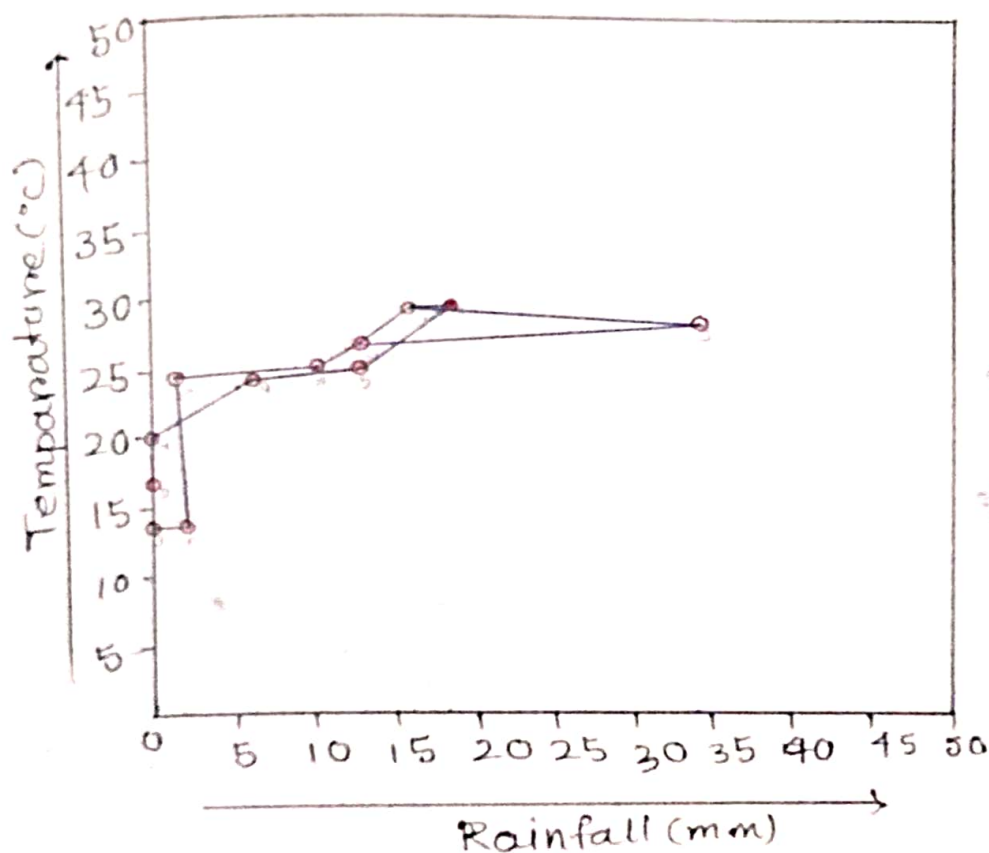


CALCULATION TABLE FOR HYTHERGGRAPH

Month	Temperature (°C)	Scale 1cm = 1°C	Rainfall (mm)	Scale 1cm = 4mm
January	10.84	2.71	0.25	0.06
February	10.77	2.6925	1.64	0.41
March	19.04	4.85	1.19	0.29
April	20.17	5.04	8.23	2.05
May	21.28	5.32	10.35	2.58
June	22.37	5.59	26.96	6.74
July	23.15	5.78	12.74	3.185
August	23.16	5.79	14.46	3.615
September	21.92	5.48	10.37	2.59
October	19.99	4.89	4.65	1.162
November	16.16	4.04	0.07	0.017
December	13.26	3.315	0.04	0.01

HYTHERGRAPH

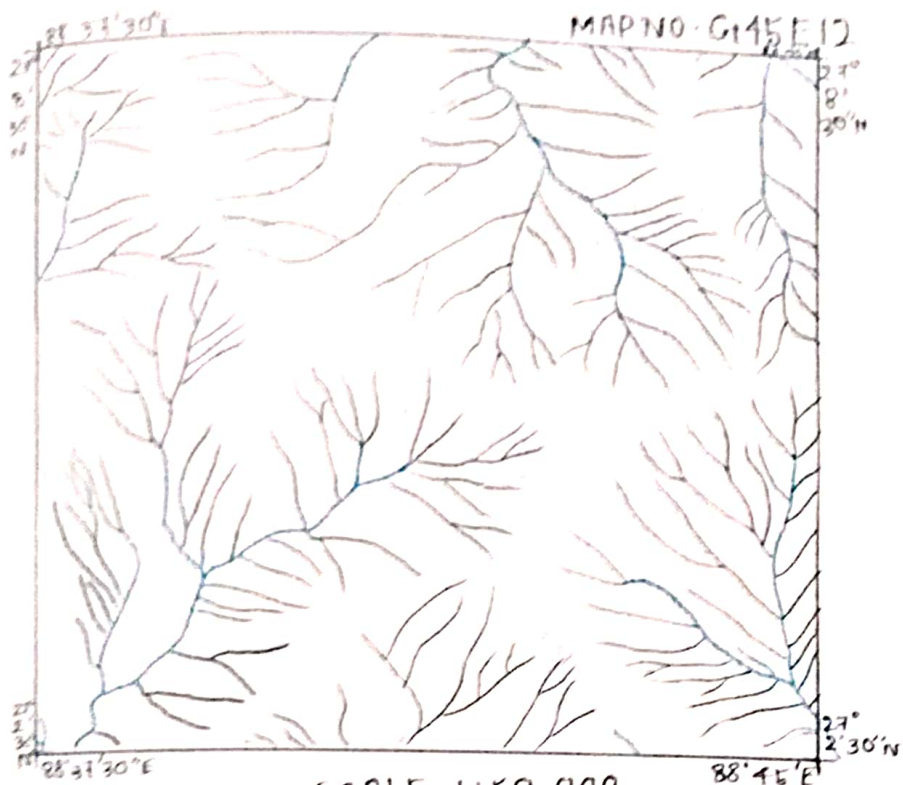
SHOWING
RELATIONSHIP BETWEEN RAINFALL AND TEMPERATURE



Examiner
Tarakot Govt. College Centre
Dudhgaon, Geographical, Baran

DRAINAGE SYSTEM

MAP NO. G145E12



VEGETATION

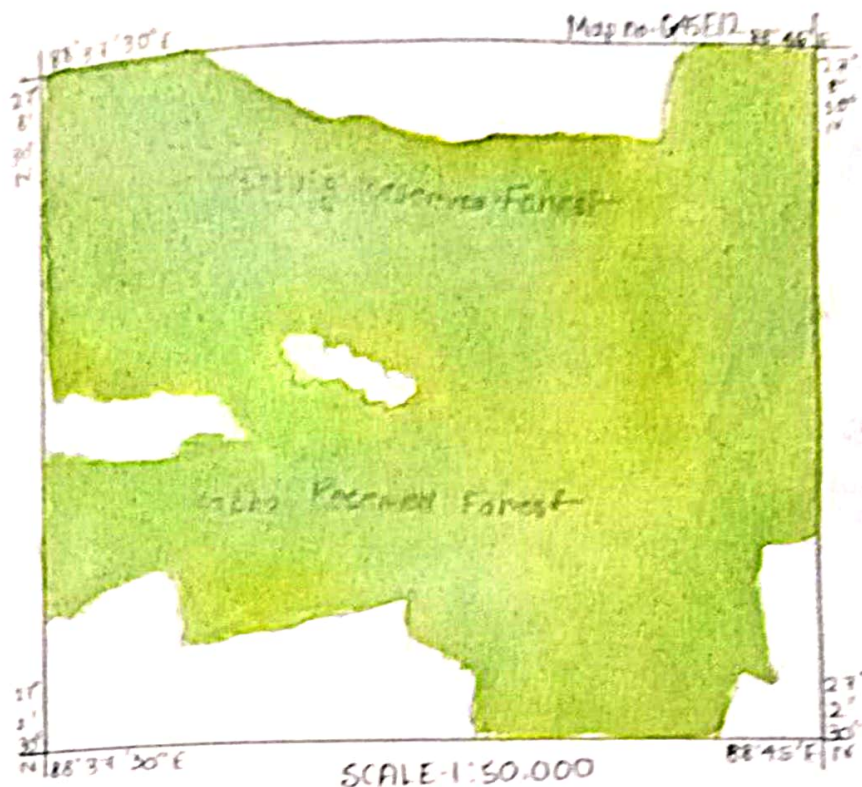
Lava, Kalimpong district is rich in flora and fauna with a temperate climate that supports agro-horticulture. The vegetation along the route to lava in west bengal India, including fir, pine and birch. The small village of lava is surrounded by a virgin alpine forest.

Four vegetation types are recognised: subtropical, mixed broadleaf forest, lower temperate evergreen forest, Upper temperate mixed broadleaf forest and, rhododendron forest, wet mixed forest. The vegetation includes Dry oak-oak forest, high level oak forest, coniferous forest, Himalayan moist temperate forest and rhododendron forest.

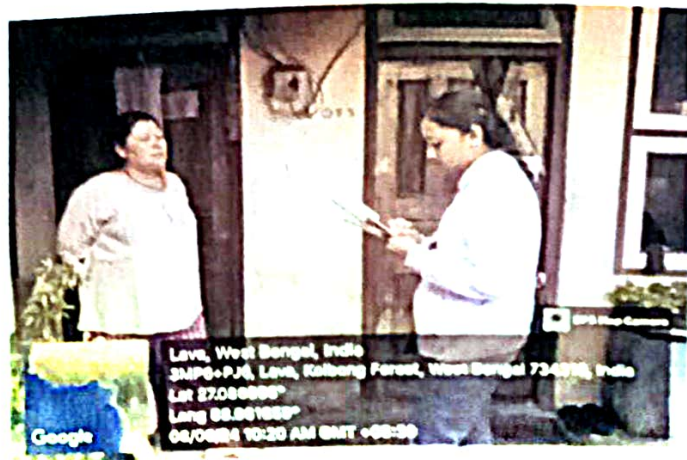
The entire area of hilly terrain with forests on hill tops and valleys.



VEGETATION MAP

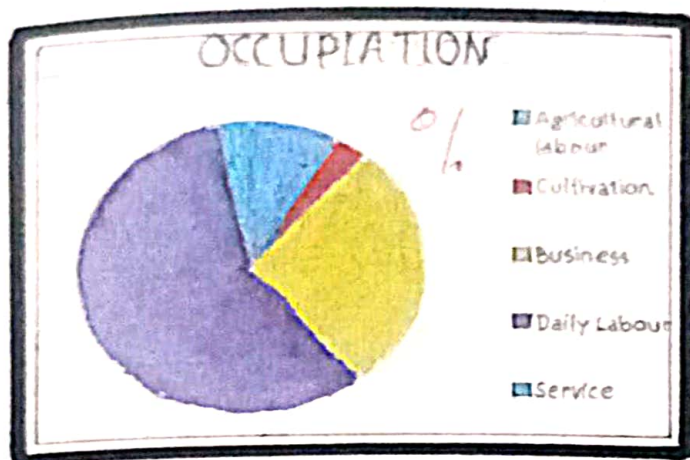
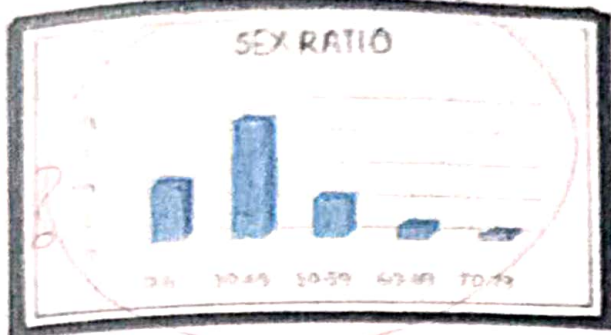


Source - Toposheet

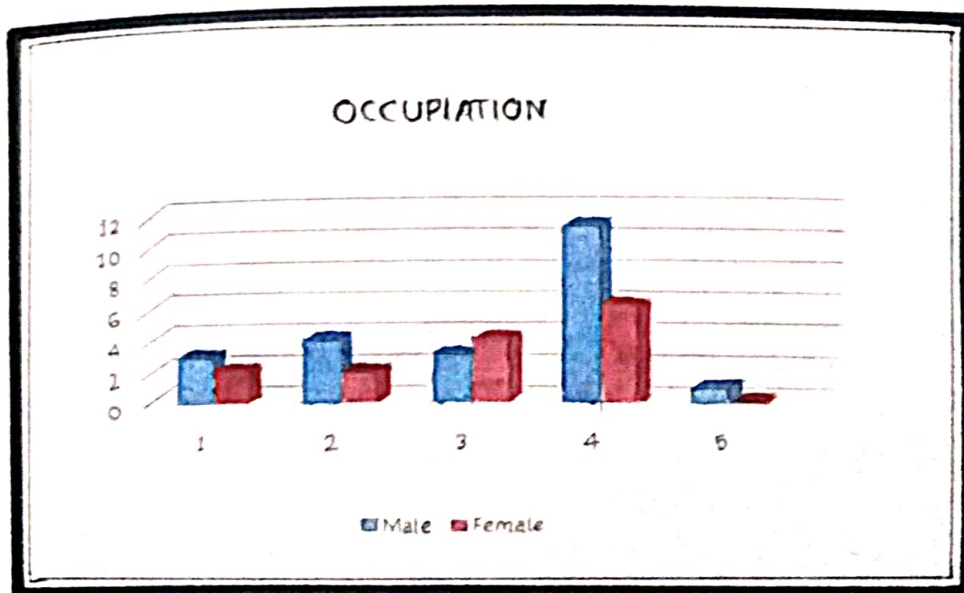


Lava, West Bengal, India
3MP6+PJ6, Lavo, Kalibang Forest, West Bengal 734006, India
Lat 27.000000°
Long 88.001000°
08/08/2019 10:20 AM GMT +05:30

Google

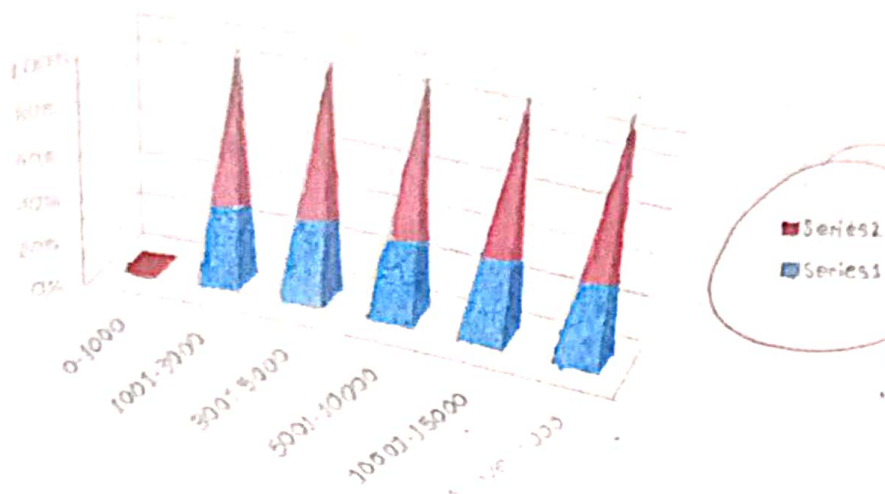


Examined
 Darasat Govt. College Cera
 Dept. Of Geography, Bar

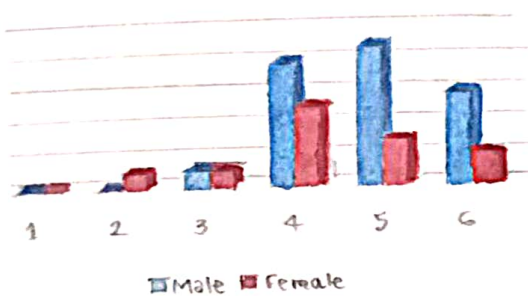


Source)

INCOME LEVEL



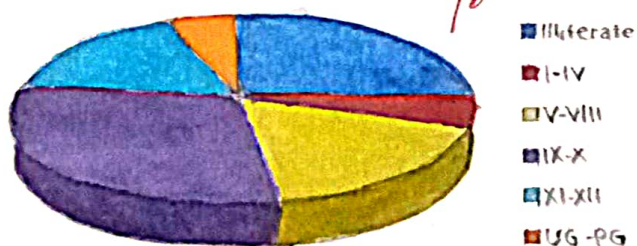
INCOME LEVEL



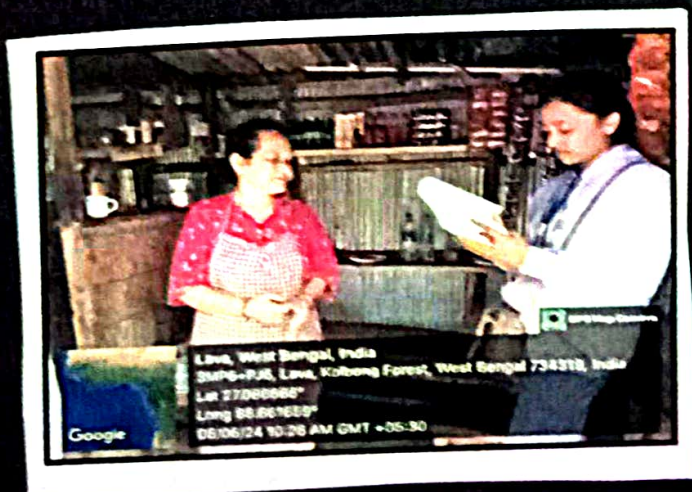
Examined

Barasat Govt. College Centre
Dept. of Geography, Barasat

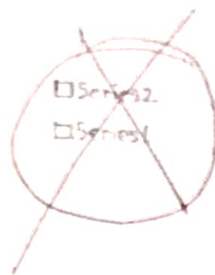
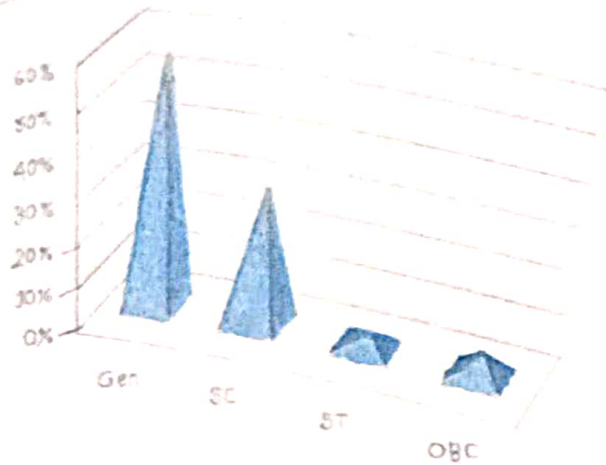
EDUCATION LEVEL



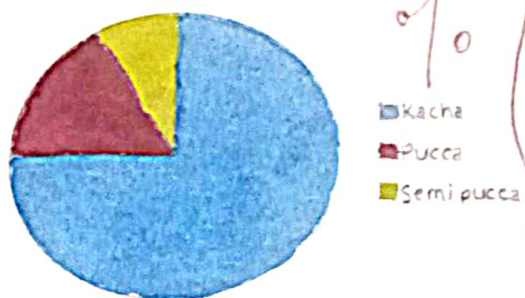
Source: Primary Survey



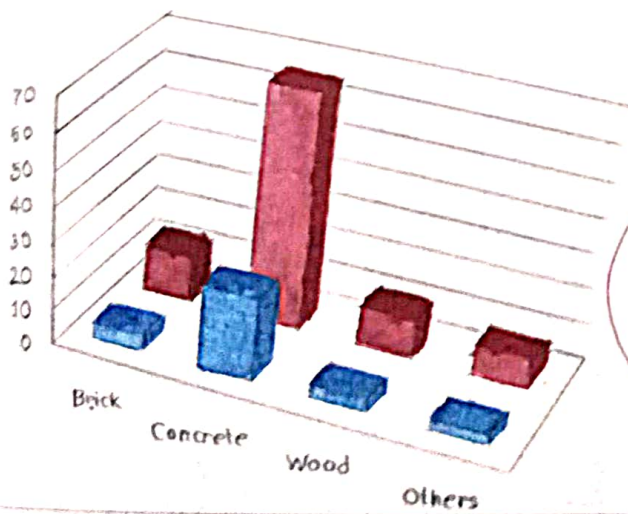
CASTE



HOUSE TYPE



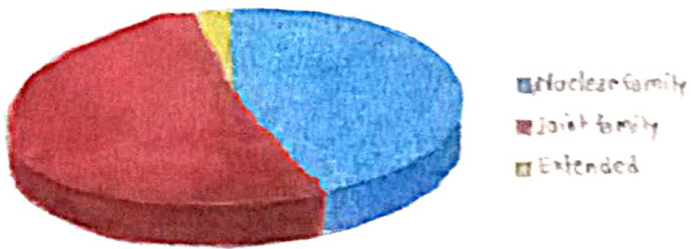
ROOF TYPE



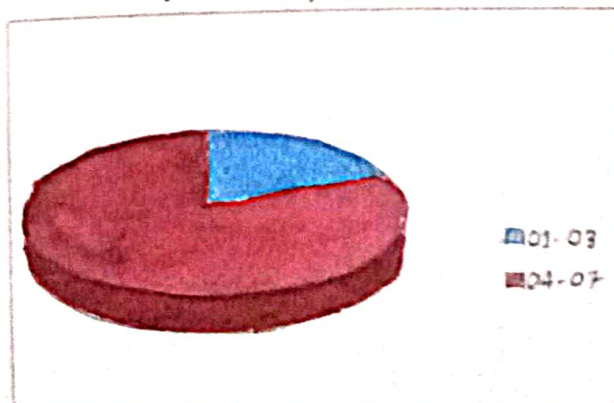
MARRITAL STATUS

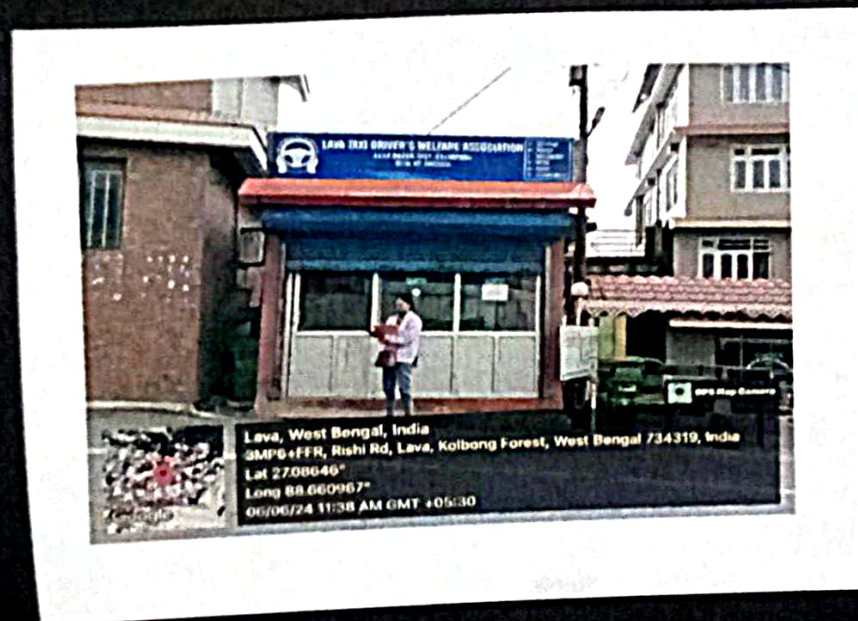
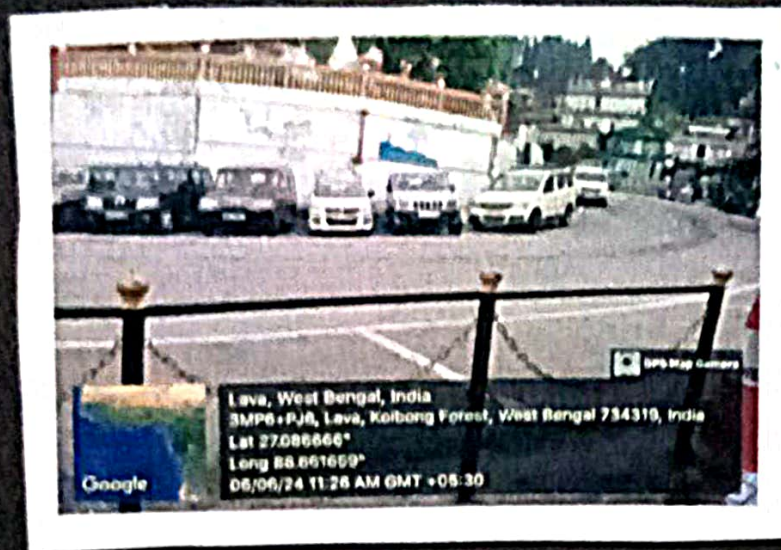


FAMILY TYPE

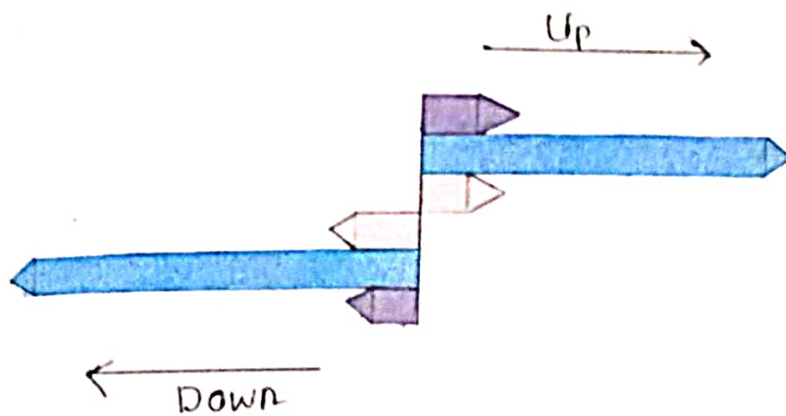


FAMILY MEMBER



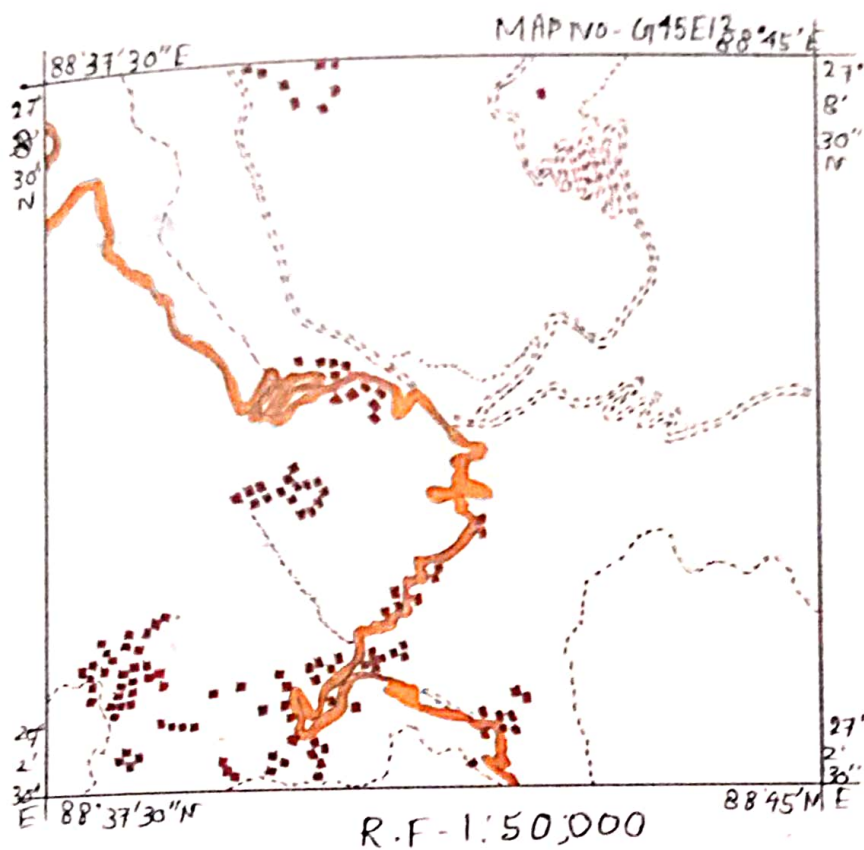


TRAFFIC FLOW DIAGRAM OF LAVA



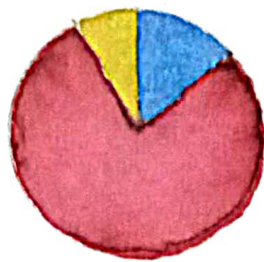
INDEX	
	TWO WHEELER
	FOUR WHEELER
	SIX WHEELER

SETTLEMENT AND COMMUNICATION SYSTEM



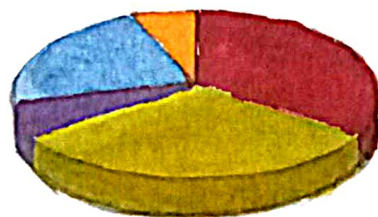
Source - Toposheet

DRINKING WATER

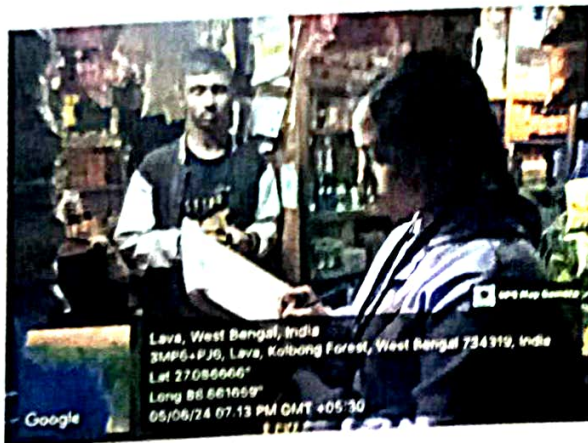


■ Pipe Line ■ Waterfall ■ River ■ Others

Disease

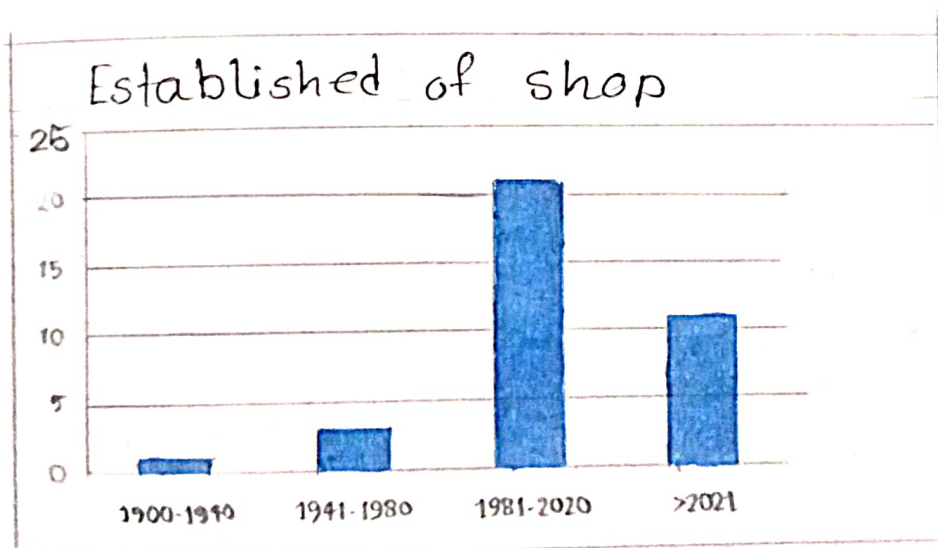
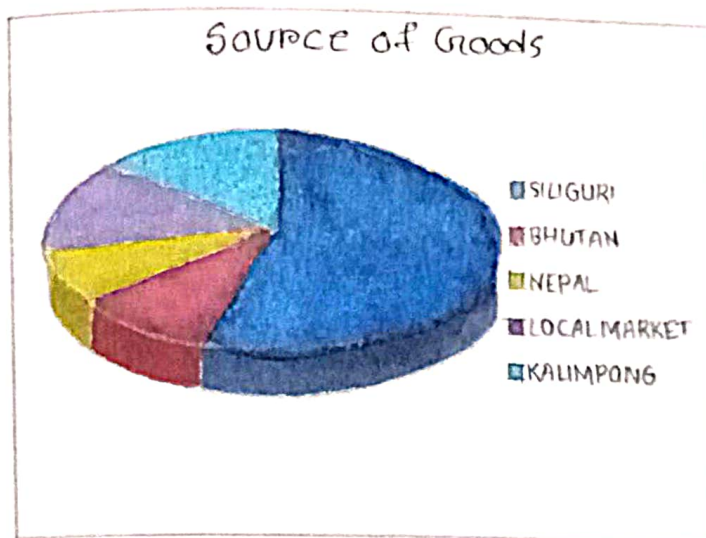


.1
■ cold/cough
■ fever
■ gastric
■ breathing problem
■ T B



Lava, West Bengal, India
3MAP6+PJ0, Lava, Kolabong Forest, West Bengal 734319, India
Lat 27°08'06.66"
Long 86°06'10.59"
05/06/24 07:13 PM GMT +05:30

Google



MARKET AREA ANALYSIS

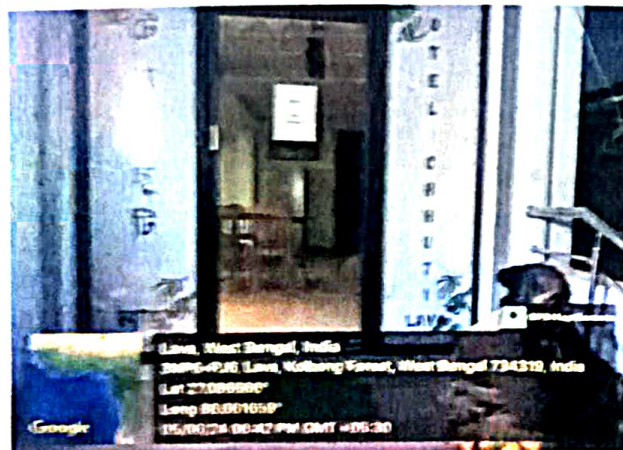
Nature of the Market:

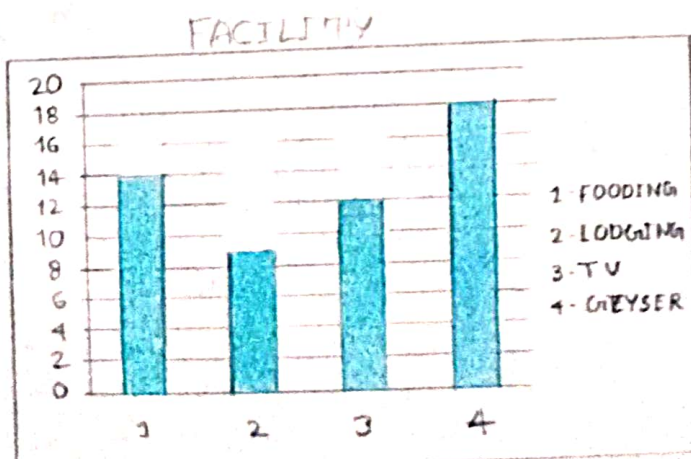
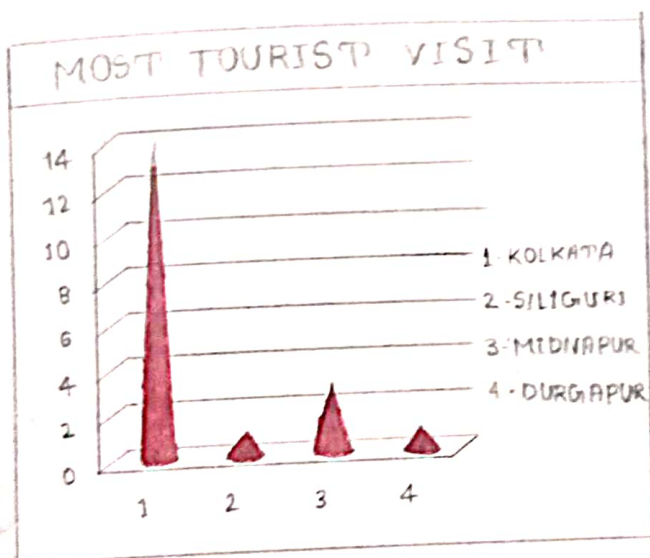
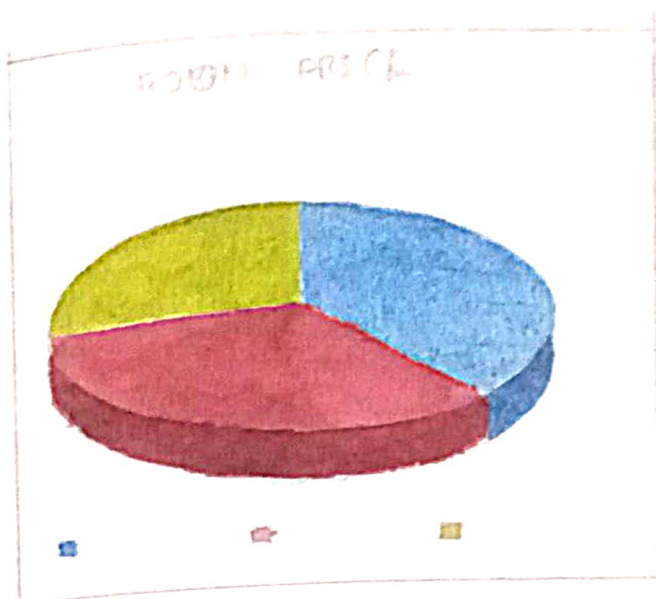
Lava is medium rural unit and it acts as rural service & centre to the surrounding areas to study the market potentialities of LAVA previously, we have surveyed 36 shops in Neora more market place of these localities there is small market near Neora more. In this market, different products are sold by the as well as outsiders. But this market is not sufficient for modern needs and essential commodities.

Profile of the shop:

1. source of goods:- shopkeepers have informed us that they bring their goods mainly from Siliguri (55.6%), Kalimpong (13.9%) Bhutan (8.3%) Nepal (8.3%). But they have some other source.

2. Established of shops:- We have been informed during market survey. Among the shops 1981-2024 years under 58.8% and 1941-1980 years under 8.3%, other shops 1900-1940 years under 2.8% established the shop.





Source - Tourist Info Center

SL No	Income	Total	Total (%)
1	0-1000	0	0
2	1001-3000	1	7.78
3	3001-5000	2	5.56
4	5001-10000	13	36.11
5	10000-20000	12	33.33
6	Above 15000	8	22.22

SL No	Education	Total	Total (%)
1	Illiterate	9	25
2	I - IV	2	5.56
3	V - VIII	6	16.67
4	IX - X	11	30.56
5	XI - XII	6	16.67
6	UG - PG	2	5.56

SL No	Marital status	Total	Total (%)
1	Married	26	72.22
2	Unmarried	8	22.22
3	Widow	2	5.56

Examined

Barak College, College Campus
Barak, 781002, Assam

Household survey questionnaire

1. Name of the respondent:

2. Age:

3. Sex:

4. Caste:

5. Religion:

6. Language:

7. Village name:

8. Panchayat name/Municipality name:

9. Block Name:

10. Migrated: yes/no

11. If yes, origin:

12. Reason for migration:

13. Demographic structure of the household:

Sl no.	Name	Sex	Age	Literacy	Marital Status	Occupation	Main/Marginal

14. Life expectancy (last 5 years):

Age group	Number of Deaths	Sex	Cause of death
0-6 yrs			
7-15 yrs			
16-59 yrs			
60 yrs and above			

15. Educational institution:

Type of educational institution	Distance	Road type	Mode of transport	Complete d up to	Drinking water	Toile t	Electricity	MD M	Classroom condition	No of teachers	Medium of study
Anganwadi											
Primary											
Upper Primary											
Secondary											
H.S.											
College											
Other											

[illegible]

17. Maternal health:

Sl No.	Age of marriage	Age at first pregnancy	Number of children	Age of second pregnancy	Institutional delivery	Other health care	Govt. assistance

18. Economic Condition:

Income	Expenditure	Savings	Land holding (Agricultural)	Land holding (Non-Agricultural)	Financial Institution (name)	Distance

19. Occupational details:

Type of crop	Production of crop	Tools required	Other infrastructure	Expenditure	Market price	Distance	Other occupational activities

20. House type:

	Wall	Floors	Stories	Number of rooms	Area	Kitchen	Toilet	Electricity	Owned/rented

21. Village-level Infrastructure:

Road (M/U)	Nearest bus stand	Frequency of vehicle/day	Nearest railway stn.	Electricity	Garbage disposal	Waste management	Distance to G.P. office	Nearest market (type)	Distance to Nearest P.S.

22. Social conditions:

Inter-household conflicts						Intra-village conflicts				
Family type (N/I)	Decision making authority	Domestic violence, if any	Child preference, if any	Attending social gathering together	Other	Inter clan marriage	Degree of social interaction	Political & developmental issues	Crime & violence	Major conflicts, if any

23. Role of local administration:

Surveyed by

Respondents signature