



To whom it may concern

Subject: Completion of Field Project by students of Geography (Hons. & Gen.) Semester V in 2021-22

The undersigned hereby certifies that the students mentioned in the table given below have completed their Field Survey Project for the University of Calcutta B.A/B.Sc. Semester-V Examination, 2021-22 in Geography (Hons. & Gen.). These students are mentioned in the modified template of Metric 1.3.2 (for DVV compliance) as GEOA (Field) with pdf link to the field survey report alongside.

SL.No	REGISTRATION NO.	COLLEGE ROLL NO.	NAME	SUBJECT
1	013-1214-0025-20	20/BAH/0010	SOUMILI DUTTA	GEOA
2	013-1211-0310-20	20/BAH/0103	RUPANJANA DUTTA	GEOA
3	013-1211-0003-20	20/BAH/0104	SOURIMA DUTTA	GEOA
4	013-1211-0042-20	20/BAH/0150	ADRIJA MISHRA	GEOA
5	013-1211-0007-20	20/BAH/0232	SOUMITA SAHA	GEOA
6	013-1212-0035-20	20/BAH/0246	ARUNIMA BISWAS	GEOA
7	013-1211-0171-20	20/BSCH/0025	ARATRIKA GHOSH	GEOA
8	013-1211-0218-20	20/BSCH/0038	TRIYA MUKHERJEE	GEOA
9	013-1211-0219-20	20/BSCH/0063	ANKITA RAJAK	GEOA
10	013-1212-0220-20	20/BSCH/0089	TRISHITA DAS	GEOA
11	013-1211-0157-20	20/BSCH/0105	MUNIYA PARVIN	GEOA
12	013-1211-0327-20	20/BSCH/0107	SNEHA CHETRY	GEOA
13	013-1212-0182-20	20/BSCH/0132	ASMITA RAY	GEOA
14	013-1211-0206-20	20/BSCH/0145	ARJOMA BOSE	GEOA
15	013-1214-0177-20	20/BSCH/0147	ZINNIA PAUL	GEOA
16	013-1212-0176-20	20/BSCH/0155	SAHELI ROY	GEOA
17	013-1211-0165-20	20/BSCH/0167	PRATYUSHA DEY	GEOA
18	013-1214-0159-20	20/BSCH/0168	AHANA GHOSH	GEOA
19	013-1211-0197-20	20/BSCH/0172	ANWESHA DUTTA	GEOA
20	013-1212-0208-20	20/BSCH/0176	ANTARIKA DHAR	GEOA
21	013-1211-0169-20	20/BSCH/0179	SOHINI MUKHERJEE	GEOA
22	013-1211-0222-20	20/BSCH/0181	MRITTIKA SEN	GEOA
23	013-1214-0174-20	20/BSCH/0182	SULAGNA GHOSH	GEOA
24	013-1211-0326-20	20/BSCH/0183	KOYEL NATH	GEOA
25	013-1214-0168-20	20/BSCH/0185	TINA DAS	GEOA
26	013-1214-0178-20	20/BSCH/0189	ANISA DUTTA	GEOA
27	013-1212-0172-20	20/BSCH/0199	MEGHA MANNA	GEOA
28	013-1211-0166-20	20/BSCH/0201	DEBOSMITA MONDAL	GEOA
29	013-1211-0201-20	20/BSCH/0225	SUZZANE SHAW	GEOA
30	013-1211-0162-20	20/BSCH/0231	SURASREE MUKHERJEE	GEOA
31	013-1211-0164-20	20/BSCH/0239	ARPITA PRAMANIK	GEOA
32	013-1211-0258-20	20/BSCH/0247	ANNWESHA ROY	GEOA
33	013-1214-0259-20	20/BSCH/0249	PROITI DAS	GEOA
34	013-1211-0342-20	20/BSCH/0256	RITU KUMARI SINGH	GEOA

Principal
Principal

Gokhale Memorial Girls' College

UNIVERSITY OF CALCUTTA
GEOGRAPHY FIELDWORK

BSc. SEMESTER V (HONOURS) EXAMINATION 2022
(UNDER CBCS, 2018 REGULATIONS)

ROLL NO. : 203013-11-0049

REGISTRATION NO. : 013-1211-0218-20

Gokhale Memorial Girls' College



18 JAN 2023

TO WHOM IT MAY CONCERN

Certified that the candidate bearing Roll no...202013-11-0049..... has actively participated in the field work conducted in and around Daringbari, Orissa during the period 23-28th May, 2022 as part fulfillment of the syllabus of Geography Hons. (CBCS) course (Semester V, Paper CC 11 Pr.) under the supervision of Smt. Kamalini Dasgupta and Dr. Md. Iqbal Sultan. This report is an outcome of the candidate's sincere effort in this regard.

May the candidate succeed in life.

Principal
Gokhale Memorial Girls' College

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ACKNOWLEDGEMENT

We are ever so grateful to our Principal, Dr. Atashi Karpha of Gokhale Memorial Girls' College and all the faculty members of the Geography Department for making the educational excursion to Saringbadi, Odisha possible and a success. We are also grateful to all the helpful, professional officials of Survey of India, NATMO, GSI and Census of India for being so kind and providing us with maps and other important data and information with full accuracy. We also extend our gratitude to 'Bear Travels' for the arrangement of our trip and making it a comfortable and hassle-free one. We are also thankful to all the workers, staff members at Hotel Duxmerie where we stayed during our fieldwork. We are also grateful to the officials at the Census Office at Saringbadi for providing us with accurate information about the place.

Lastly, we extend our warm, deepest gratitude to all the villagers who willingly participated, to Good Shepherd School, Saringbadi Primary School and Saringbadi College for cooperating with us, the officials at the State Bank of India (SBI) and Punjab National Bank (PNB) and Ma Travels for providing us with transport system to move out and about.

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CHAPTER1

CHAPTER 1: INTRODUCTION TO THE FIELD STUDY AND THE STUDY AREA

(*) DEFINITION AND PURPOSE OF FIELD STUDY:-

Geography is essentially a chronological or field science that correlates man and environment on a spatial-temporal context. Field study helps to identify man-environment relationship of smaller areas in great details. The main purpose of this field study is to fulfill a part of the syllabus of Undergraduate course in Geography Honours of the University of Calcutta. But it is really enjoyable to go for a fieldwork for some days at a distant place by a group of students and also a matter of gathering new experiences about a new place and its environment.

(*) METHODS OF FIELDWORK:-

The purpose of fieldstudy can be of several types like qualitative and quantitative, and participant and non-participant. In the qualitative record, the reporting is essentially on experience gathered through observation and conversation. It is mainly descriptive. On the contrary, quantitative survey of both physical and socio-economic systems is important for mapping and preparing cartograms.

The fieldwork can be of any duration depending on the nature of the study. Some fieldworks require several field visit. However, in this case, only one visit has been done due to shortage of time. Another important point of methodology for fieldwork is the selection of the study area. In the present study, rural environment has been taken into consideration for exploring and interacting between physical and social system.

(*) SELECTION AND SCHEDULING OF THE PRESENT FIELD STUDY:-

As per guideline in the syllabus, a part of Baringbadi, Odisha [Latitude: $19^{\circ}54'39''N$, Longitude: $84^{\circ}07'51''E$] has been selected as the study area. In Baringbadi, Kinepada village was selected for intensive study although the whole region was a matter of interest to the surveyors. The physical parameters that require large spatial extent have been studied for the whole region and its adjoining areas. Kinepada village has been studied mainly on the basis of the collection of data and information, collected through questionnaire survey. Considering all the situations, 3rd week of May (23rd - 28th May, 2022) was selected as the period of field visit. The climate condition of Baringbadi was comfortable during this time.

(*) METHODOLOGY ADOPTED IN THE PRESENT FIELDWORK:-

It has been earlier stated that present fieldwork is mainly based on observation and conversation with the local people. The methodology includes both quantitative and qualitative investigation of the problems of the concerned area. Obviously the study done for the entire Baringbadi region in general and for Kinepada village area was specific as well as intensive. For the focused area, the study has been done mostly on the basis of data generated through door-to-door questionnaire survey.

The entire fieldwork has been divided into a number of stages. In the prefield stage, necessary preparation has been done regarding collection of secondary data and information. For example, maps from Survey of India, NATMO, GSI and other study materials have also been consulted to get an idea of the study area. To study the socio-economic condition of the focused study area, questionnaire schedules on different aspects of society, economy, population and tourism have been prepared.

During the fieldwork, the entire period of stay (23rd - 28th May, 2022) was divided conveniently to do the jobs in a systematic manner. The participants or surveyors were divided into groups with respective group leaders and were entrusted with different works. However, it was done in a manner that everyone would get a chance to do all types of fieldwork in the field. Some photographs were also taken to show the specific features and activities.

Primary Survey	Sample Size
Household	140
Market Survey	50
Hotel	20
Tourist	50
Transport Worker	20
Hospital	2
Educational Institution	3
Religious Institution	2
Bank	2

In the post field stage, the materials collected during the fieldwork were classified and tabulated. On the basis of the data, different maps and cartograms have been prepared by using suitable statistical and cartographic techniques. Lastly, interpretation has been written on the basis of the maps, cartograms, and all other secondary information.

(*) LIMITATIONS OF THE STUDY :-

Field studies are always useful for identification of real situation and problems of an area. This is a very good tool not only for physical research but also very important for socio-economic studies. However, if the questions have not properly structured and understandable to the respondents by its language and content, right kind of response cannot be obtained. Some problems require several field visits to study intensively but due to the lack of adequate infrastructure and time, it is not always possible. Some areas may be very hostile, inaccessible and have socio-economic problems which make fieldwork very difficult.

I. Sults
20.12.22

(*) LOCATION OF THE SURVEYED AREA:-

Baringbadi, widely known as 'Kashmir of Odisha' is located in the Kandhamal district. It is located at $19^{\circ}54'39''N$ latitude and $84^{\circ}07'51''E$ longitude, about 246 km from Bhubaneswar. Brahmapur is the nearest railway station and serves as a link of Baringbadi with the outside. Baringbadi is 609.6 km from Kolkata via NH16 and is well connected with all major cities of India by road and rail network.

Kinepada, the surveyed village is located within Greenbadi Gram Panchayat. It is located at $20^{\circ}21'28''N$ latitude and $84^{\circ}21'48''E$ longitude at a distance of 4.5 km from Greenbadi. Its cardinal direction from Kolkata is essentially south-west.

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20.12.22

1. LOCATION MAP



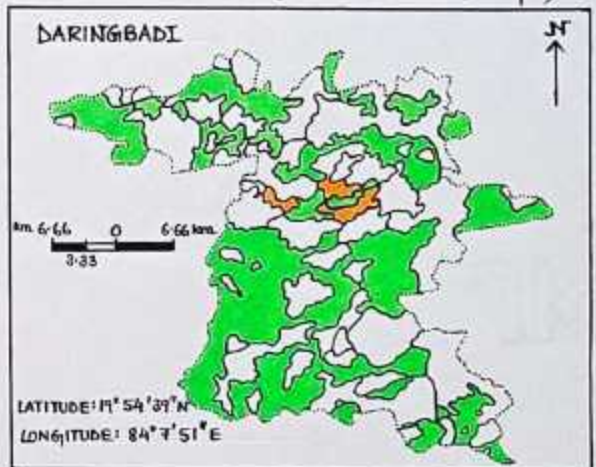
(Fig.1) SOURCE: GOOGLE (Accessed on 5-5-22, 12:05pm)



(Fig.2) SOURCE: GOOGLE (Accessed on 5-5-22, 12:11pm)



(Fig.3) SOURCE: GOOGLE (Accessed on 5-5-22, 12:15pm)



(Fig.4) SOURCE: GOOGLE (Accessed on 5-5-22, 12:19pm)



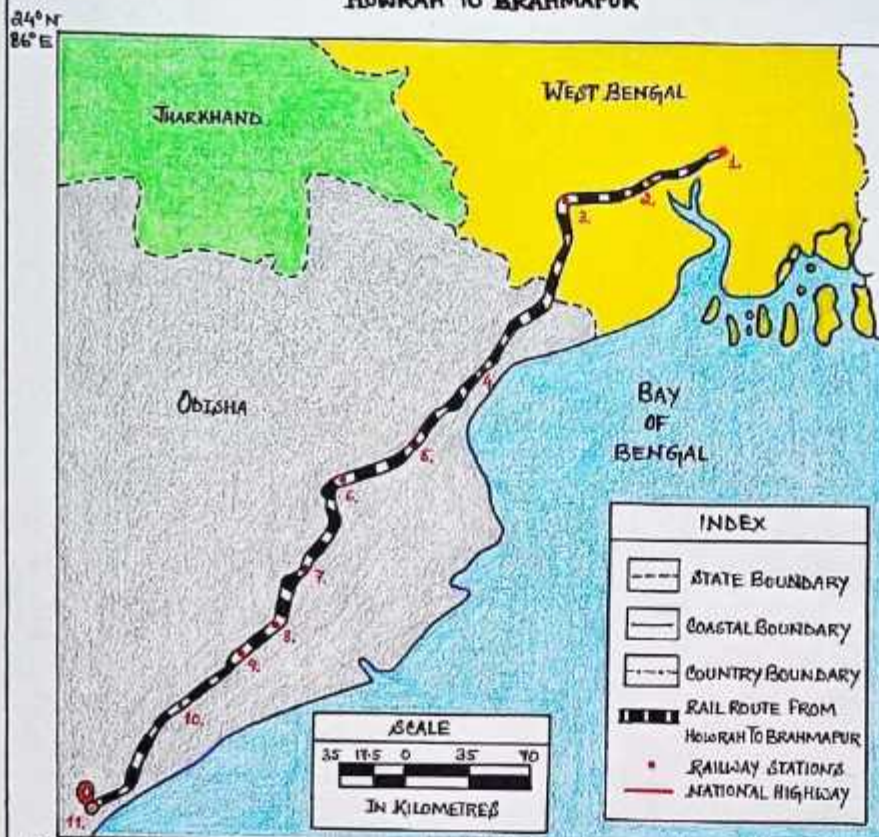
(Fig.5) SOURCE: LAND REVENUE OFFICE, BRAHMAPUR

LEGEND	
	INTERNATIONAL BOUNDARY
	STATE BOUNDARY
	DISTRICT BOUNDARY
	BLOCK BOUNDARY
	GRAM PANCHAYAT
	HIGHWAYS
	DISTRICT HEADQUARTER
	RESERVE FOREST
	GREENBADI (G.P.)
	COASTLINE

Kod 2-9-22

2. ROUTE FOLLOWED

HOWRAH TO BRAHMAPUR



(Fig 2-2) BRAHMAPUR TO DARINGBADI

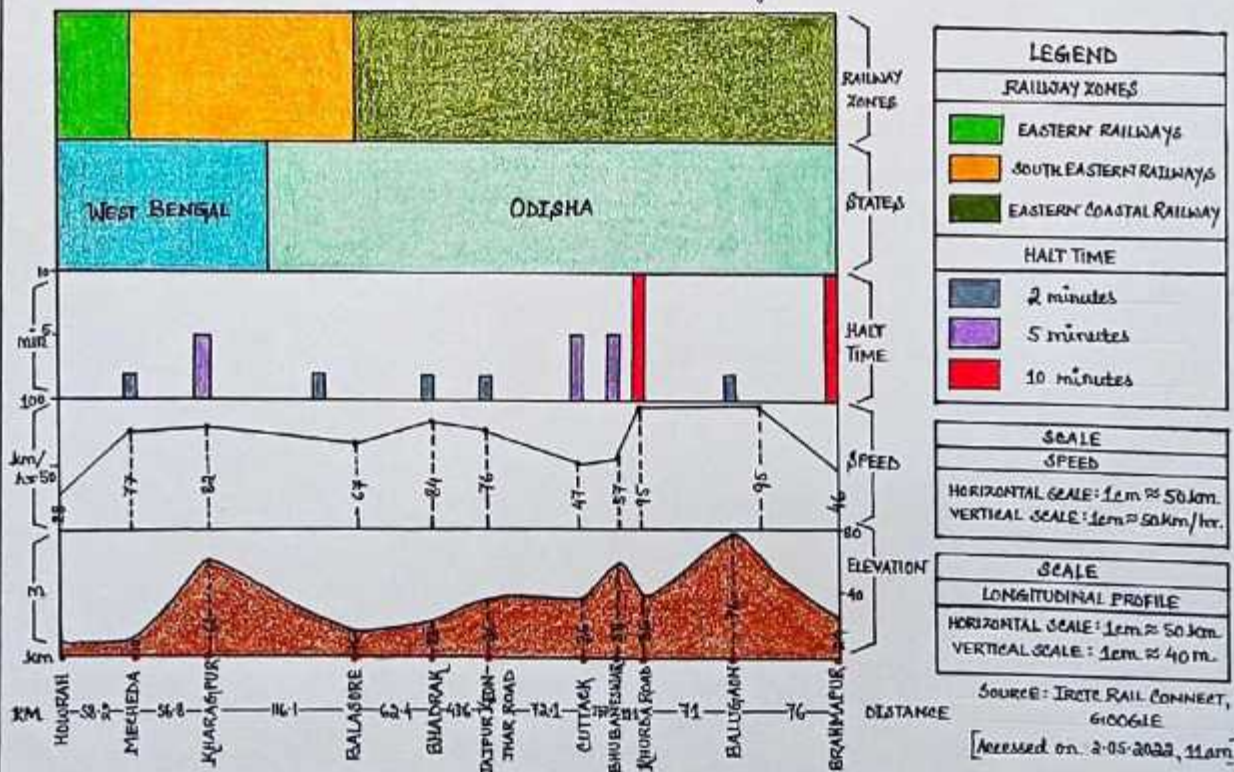


SOURCE: GOOGLE EARTH [Accessed on 2-5-22, 11am]

STATIONS	LATITUDE AND LONGITUDE
1. HOWRAH JUNCTION	22.5239°N 88.3424°E
2. MECHEDA	22.4102°N 87.8631°E
3. KHARAGPUR JUNCTION	22.3460°N 87.2320°E
4. BALASORE	21.4934°N 86.9135°E
5. BHADRAK	21.0574°N 86.4963°E
6. JATPUR KENDHAR ROAD	20.7435°N 86.1328°E
7. CUTTACK JUNCTION	20.4625°N 85.8230°E
8. BHUGANESWAR	20.2961°N 85.8245°E
9. KHURDA ROAD JUNCTION	20.1662379°N 85.6914708°E
10. BALUGAON	20.1783°N 85.1129°E
11. BRAHMAPUR	19.3150°N 84.7941°E
12. GOPALPUR	19.2647°N 84.8620°E
13. DARINGBADI	19.9037°N 84.1303°E

(Fig 2-1) SOURCE: RAILWAY MAP OF INDIA (CORRECTED UP TO 31st MARCH, 2005)

3. TRANSECT CHART SHOWING ELEVATION, SPEED, HALT TIME, STATES, RAILWAY ZONES



CHAPTER 2

CHAPTER 2: PHYSICAL BACKGROUND

(*) PHYSIOGRAPHY :-

Physiographically, the entire district of Kandhamal lies in a high altitude zone, ranging between 300m and 1100m, with an inaccessible terrain of hilly ranges and narrow valley tracts, enveloping the whole of it. Almost 66 percent of the land area of the district has vast stretches of dense forests and towering mountains.

The district of Kandhamal is located in Central Odisha between $19^{\circ}34'N$ and $20^{\circ}36'N$ latitude and $83^{\circ}34'E$ and $84^{\circ}34'E$ longitude. It is bounded by the Boudh district in the North, Rayagada district in the South, Ganjam district in the East along with Mayasmark district and Kalahandi district in the West.

The drainage of the district is primarily controlled by the Mahanadi, Bansdhara and Rushikulya basin. The Rushikulya River is one of the major rivers in the state of Odisha, which covers the entire catchment area in the districts of Kandhamal and Ganjam. The river originates at an elevation of about 1000m from the Saringbadi hills of the Eastern Ghat range. The river Bansdhara is an east-flowing river between Rushikulya and Godavari in Odisha. It originates in the Kalahandi and Rayagada (in the border of Thamal and Rampur) districts of Odisha, and runs for about 254 km where it joins the Bay of Bengal at Kalingapatnam in Andhra Pradesh.

A long and cross-profile of the River Bansdhara has been drawn (in Fig 4.5), that reveals the middle course of the river. The direction of flow of the river is from North to South. The drainage density of the river and its adjoining tributaries has been shown (in Fig 4.3). The drainage of the area shown is coarse, with the maximum drainage density being 3.89, which is at the Eastern and the Central part of the area. The minimum drainage density is 2.18 which is at the Southern part of the area shown.

The district of Kandhamal has the highest forest coverage in Odisha. The major portion of the forest is covered with Sal trees. The district mainly has a deciduous forest cover along with dense and open forests. The forests of Kandhamal can be divided into two parts — moist Sal in the Northern border, and dry Sal in the Southern border of the district. A large area of the forests in the Northern part of the district is mainly covered with bamboo. Saringbadi (lying in the southeastern part of the district) has a cover of pine forests, on account of its altitude. The vegetation of a portion of the district has been shown (in Fig 4.4). It is clear that the Northwestern portion of the area depicted has very high percentage of vegetal cover; while the Central part portrays slightly less percentage of vegetation.

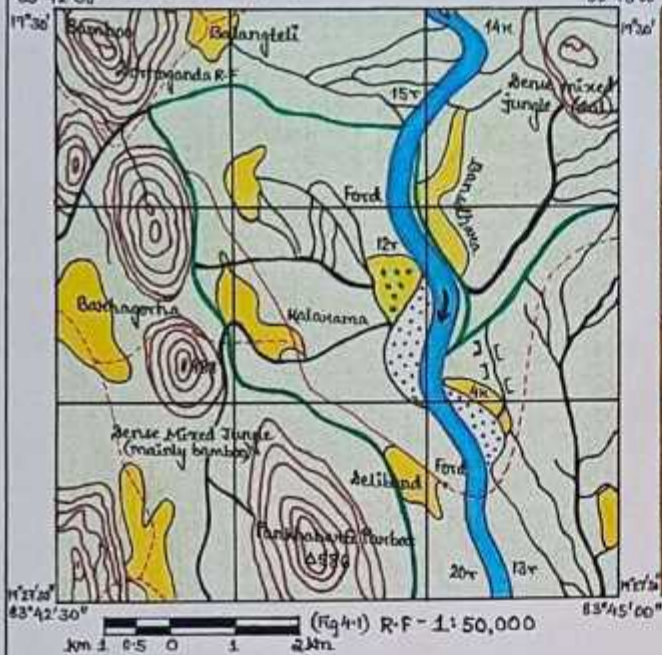
Kandhamal district is represented by a rugged, hilly and undulating terrain with dense forests, valleys and occasional plains. The district is gradually elevated towards the Southeastern border. The average elevation being 200m to 300m above the mean sea level, with a general slope towards the East.

The relative relief of a portion of the district has been shown (in Fig 4.2). The maximum value of relative relief is 420m, which lies in the Southern part of the area and the minimum value is 20m, lying in both the Northeastern and the Southeastern portions of the area depicted. The relief of the area shown is at par with the drainage density. The Central portion of the area has lower elevation on account of maximum drainage density; while the Southern part of the area has the highest elevation, which is attributed to its low drainage density.

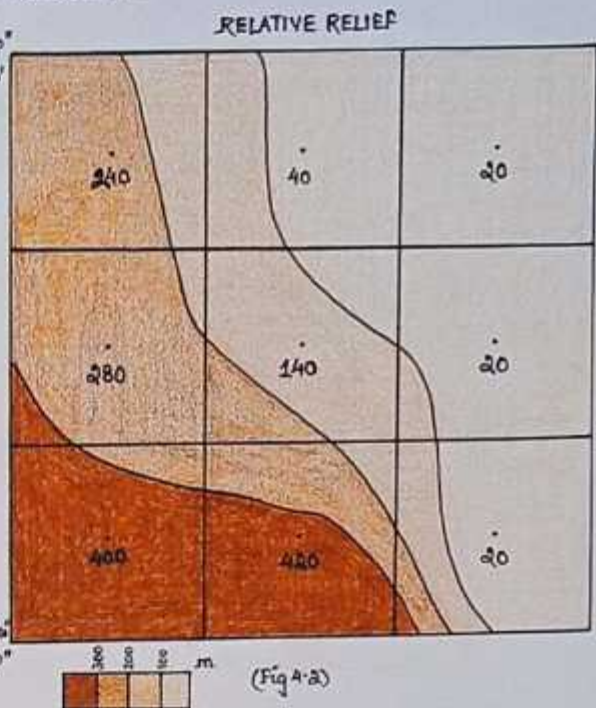
Saringbadi is a hill station located in the Southeastern part of Kandhamal, with an elevation of 912m (3002 ft) above the mean sea level. Engulfed with mostly pine forests, this hill station has a thick tropical forest cover, with dense vegetation and a wide variety of flora and fauna. The thick forests are also home to a number of rare and endangered species of plants and animals. The Rushikulya River flows swiftly through the flanking slope of the Saringbadi hills. Saringbadi's waterfall, mainly known as the Midubanda waterfall is located at a distance of 16 km from Saringbadi.

4. KANDHAMAL, ODISHA-I

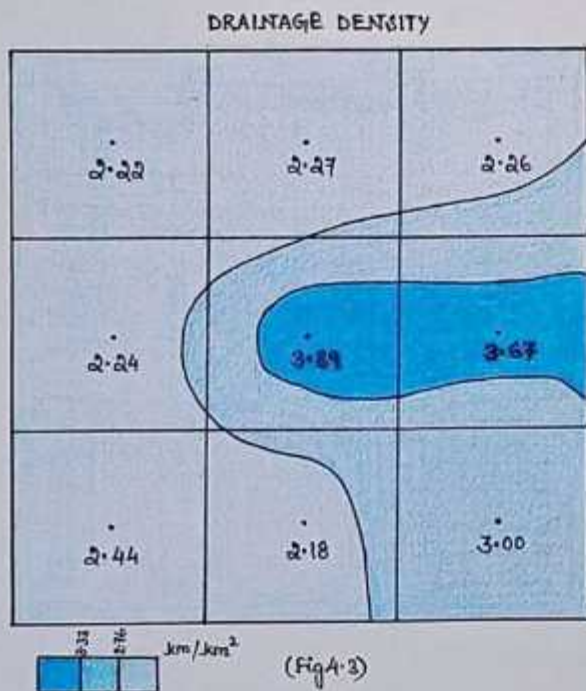
83°42'30" MAP NO: E44F11, SOI OPEN SERIES MAP, 2009 83°45'00"



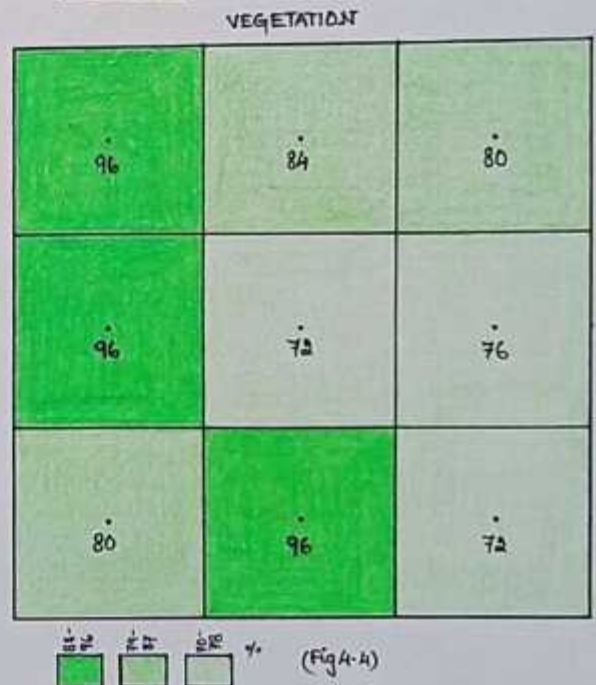
(Fig 4-1) R.F. - 1:50,000



(Fig 4-2)

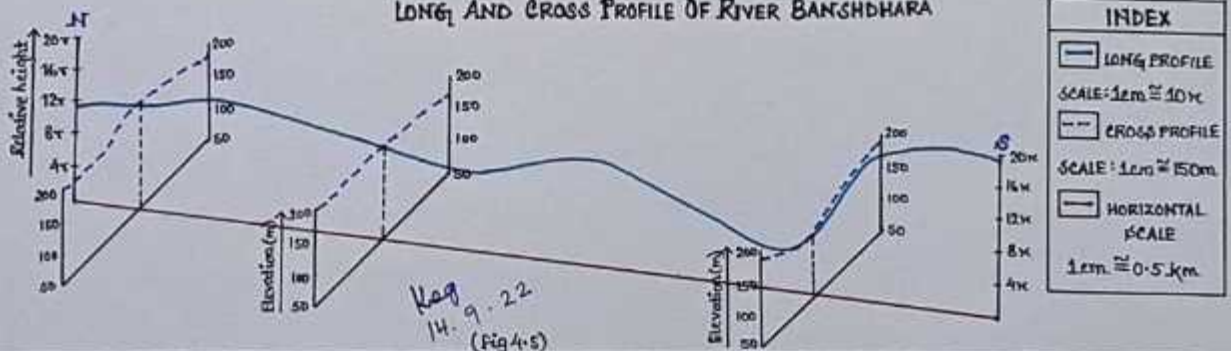


(Fig 4-3)



(Fig 4-4)

LONG AND CROSS PROFILE OF RIVER BANSHDHARA



14.9.22
(Fig 4.5)

(Fig 4.5)

(*) GEOLOGY: LITHOLOGY AND MINEROLOGY:-

Almost the entire district is underlain by the consolidated formations of Granite Gneiss, Khondalite and Charnokite.

↳ **Granite and Granite Gneiss:** These rock types in the district occupy the undulating plains, low-lying areas and also hills and hillocks at times. They are usually grey to light grey in colour.

↳ **Charnokite:** This is limited in occurrence in the district of Kandhamal. This suite of rocks comprises of pyroxene, granulite, granite, etc.

↳ **Khondalite:** Occurs in small patches, and have well-developed joints. They usually form hills and hillocks and have limited ground water development.

The Geological composition of the district has been shown (in Fig 5.2). The other geomorphic features are floodplains, pediplains, peneplains, residual hills and ranges. From the Fig 5.4, it is evident that the district of Kandhamal is endowed with large reserves of limestone, sandstone with shale, quartz, granite and silicate. The rich mineral wealth of the district owes it to its favourable geographical conditions.

(*) CLIMATE:-

Daringbadi station of the district of Kandhamal experiences sub-tropical hot and dry summer and cold, dry winter.

The month of May is one of the hottest months, where the temperature hovers around 38°C during the day (maximum temperature) and around 27°C at night (minimum temperature). The average rainfall is about 113.52 mm in the month of May with approximately 5 rainy days.

The month of August is one of the coldest months of the year with an average rainfall of about 311.76 mm with approximately 14 rainy days. The months of December and January are the coldest months of the year with the maximum temperature being 27°C and minimum temperature being 18°C .

Since Daringbadi has no meteorological stations, the climatic details of the nearest IMD station Brahmapur has been shown (in Fig 6).

(*) PROFILE OF THE SURVEYED AREA:-

The profile of the surveyed area, Dinepada, Daringbadi has been shown in Fig 7.3 to locate different points and the distance between the points of same elevation in the same horizontal plane. In the Fig 7.3, a datum line is drawn along which distances of the stations are marked and the reduced levels are plotted along the vertical axis/lines. The segmented straight lines joining the reduced levels represent the longitudinal profile on the ground surface. Here, the profile first decreases and reaches a dip and then gradually rises.

(*) LANDUSE OF THE SURVEYED AREA:-

The landuse map of Dinepada, Daringbadi provide the baseline information for the proper analysis of the purpose that the land serves — agricultural land, forested land, wasteland, etc.

The land is the most natural and essential resource on which all human activities are based. Landuse data are also needed for the analysis of the environmental process.

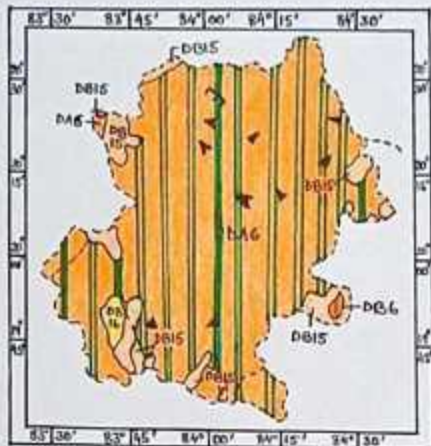
The landuse mapping is carried out for Dinepada, Daringbadi in the Kandhamal district of Odisha, shown in Fig 9. The major landuse and land cover categories identified are — agricultural land, forested land, wasteland and rocky land.

From this study, we estimated that agricultural land occupies the highest percentage of land cover, followed by rocky and forested land.

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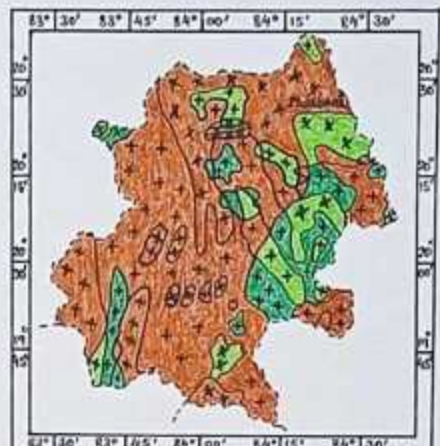
5. KANDHAMAL, ODISHA-II

GEOMORPHOLOGY



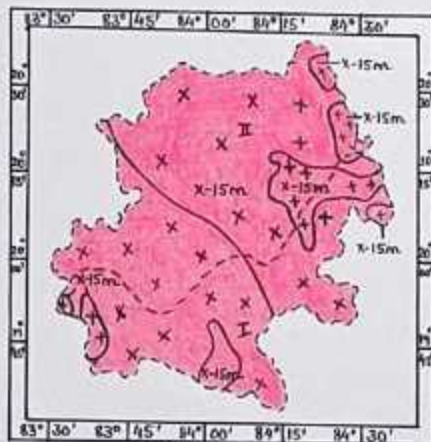
(Fig 5-1)

GEOHYDROLOGY (LITHOLOGY)



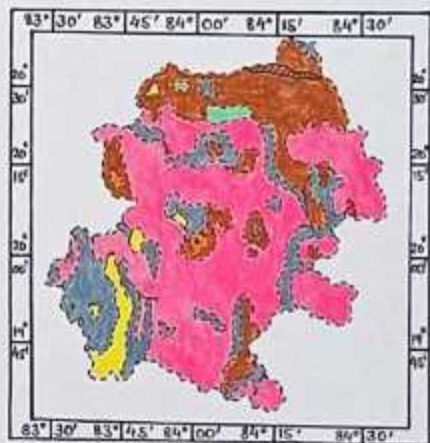
(Fig 5-2)

GEOTECHNICAL- MORPHOLOGIC



(Fig 5-3)

GEOLOGY AND MINERALS



(Fig 5-4)

SOURCE: GEOLOGICAL SURVEY OF INDIA



R.F $\rightarrow 1 : 2000,000$

INDEX

GEOMORPHOLOGY

- DB15 Ridges/Hills with DN without valleys
- DB16 Ridges/Hills with intervening broad undulating plains
- DB17 Plateau surface (Pediments/Pediplains/Peneplains)
- DB18 Deeply weathered plains / Divinerust

LITHOLOGY

- DB19 Sandstone, claystone, grit, sandstone, shale, conglomerate, limestone including intrusives
- DB20 Khondalite, Charnockite and calc silicate rocks
- DB21 Granite and Granite gneiss

GEOTECHNICAL- MORPHOLOGIC

- DB22 Peninsular, plateau and residual hills with structural hill ranges
- DB23 Basement crystalline

GEOLOGY AND MINERALS

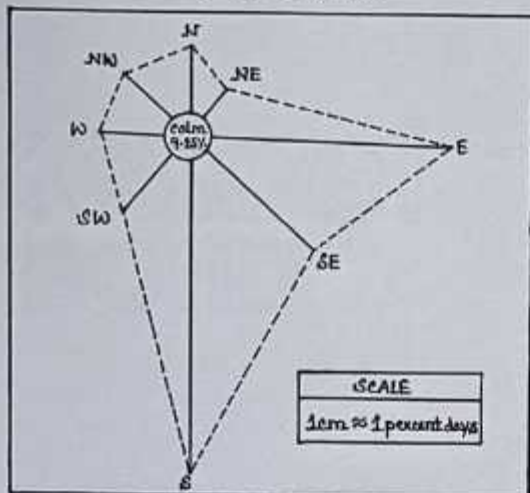
- DB24 Unclassified soil alluvium and soil deposit
- DB25 Sandstone and shale
- DB26 Quartz-garnet-sillimanite schist and gneiss with or without graphite
- DB27 Acid Charnockite (cha)
- DB28 Basic Charnockite (chb)
- DB29 Augen, gneiss, garnetiferous leucogranite

108
9.9.22

6. WEATHER PHENOMENA

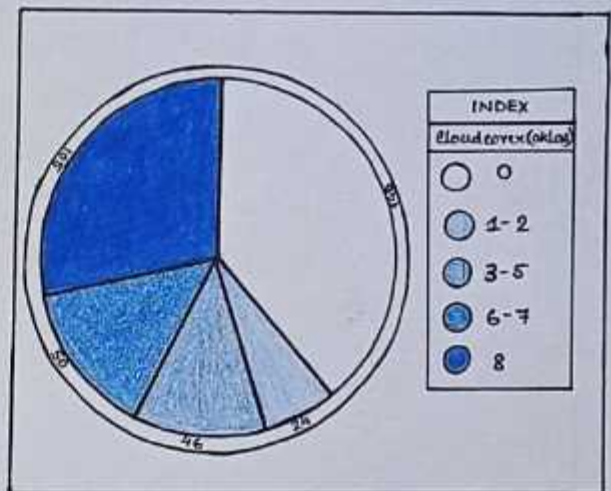
LOCATION → BRAHMAPUR, LATITUDE - 22°08'N, LONGITUDE - 88°16'E, HEIGHT ABOVE MSL - 49 mts

WIND DIRECTION



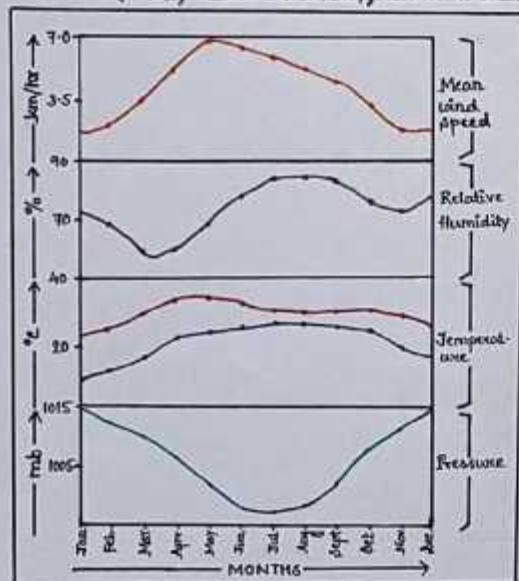
(Fig 6-1)

CLOUD COVER



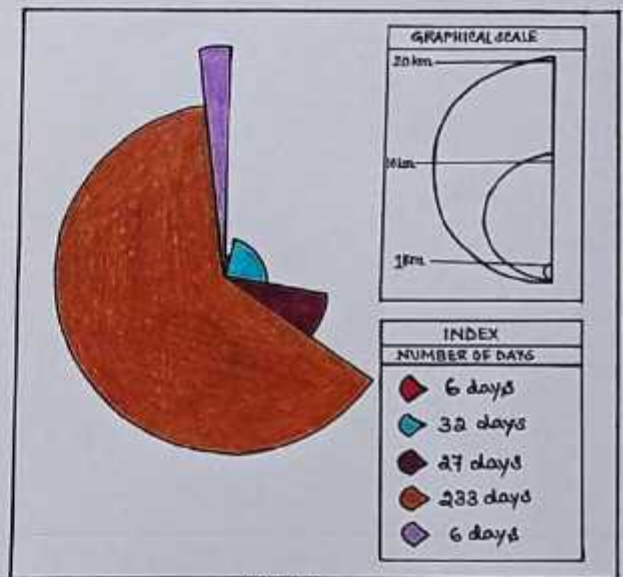
(Fig 6-2)

TRANSECT CHART SHOWING PRESSURE, TEMPERATURE, RELATIVE HUMIDITY, MEAN WIND SPEED



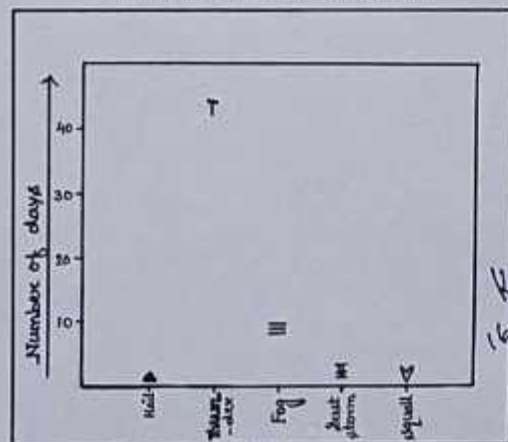
(Fig 6-3)

VISIBILITY



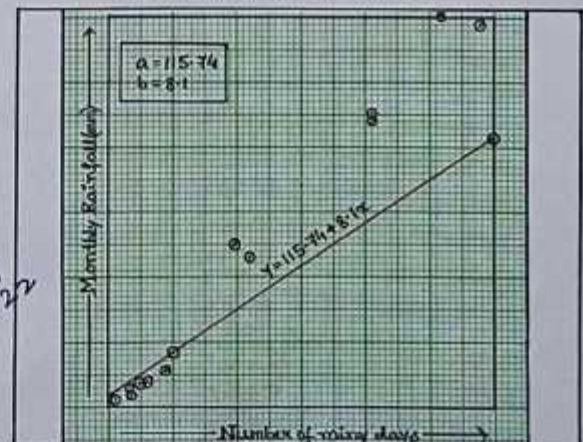
(Fig 6-4)

SPECIAL WEATHER PHENOMENA



(Fig 6-5)

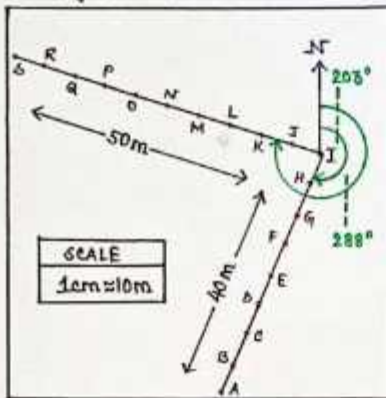
MONTHLY RAINFALL, RAINY DAYS



(Fig 6-6)

7. PROFILE LEVELING AND LANDUSE

(Fig 7-1) GROUND PLAN



(Fig 7-2) LOCATION OF SURVEYED AREA

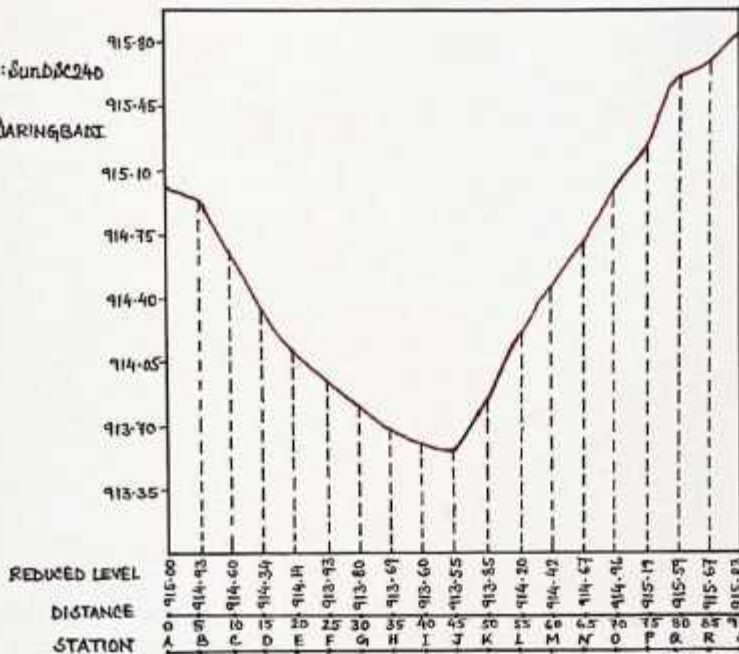


INSTRUMENT NO: Sund M240

PLACE: LINEPADA, KARINGBANGI

SURVEYED ON: 25-5-2022, 10am

SURVEYED BY: 5th SEM, GEOGRAPHY/HMS

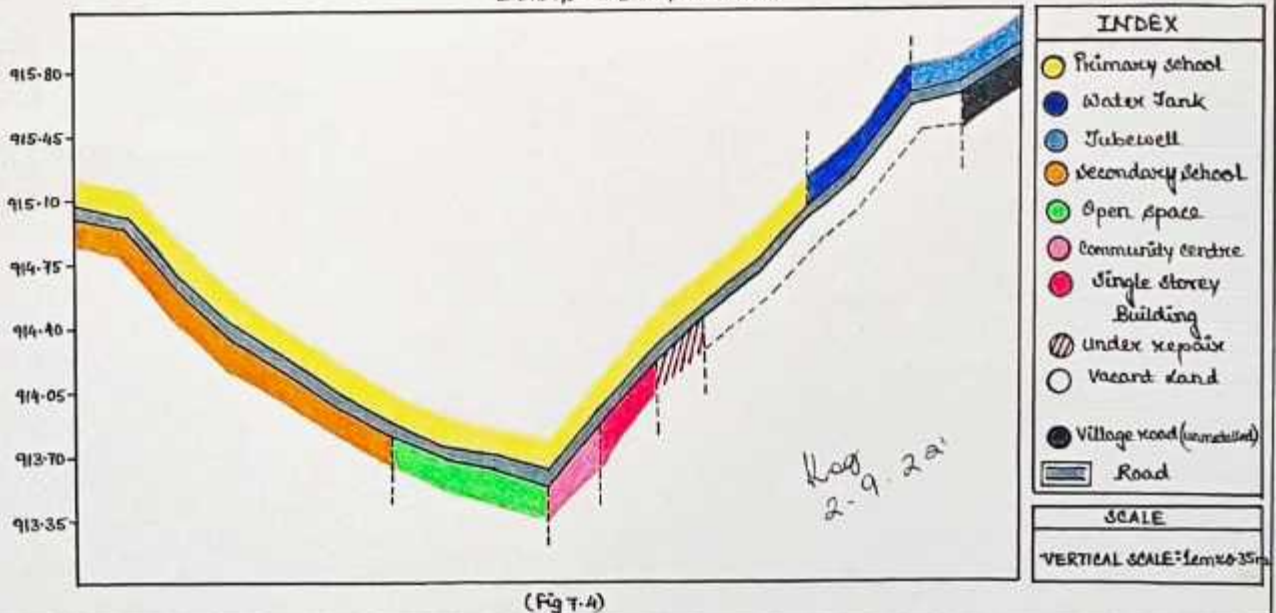


SCALE

HORIZONTAL SCALE: 1cm = 5 mts.

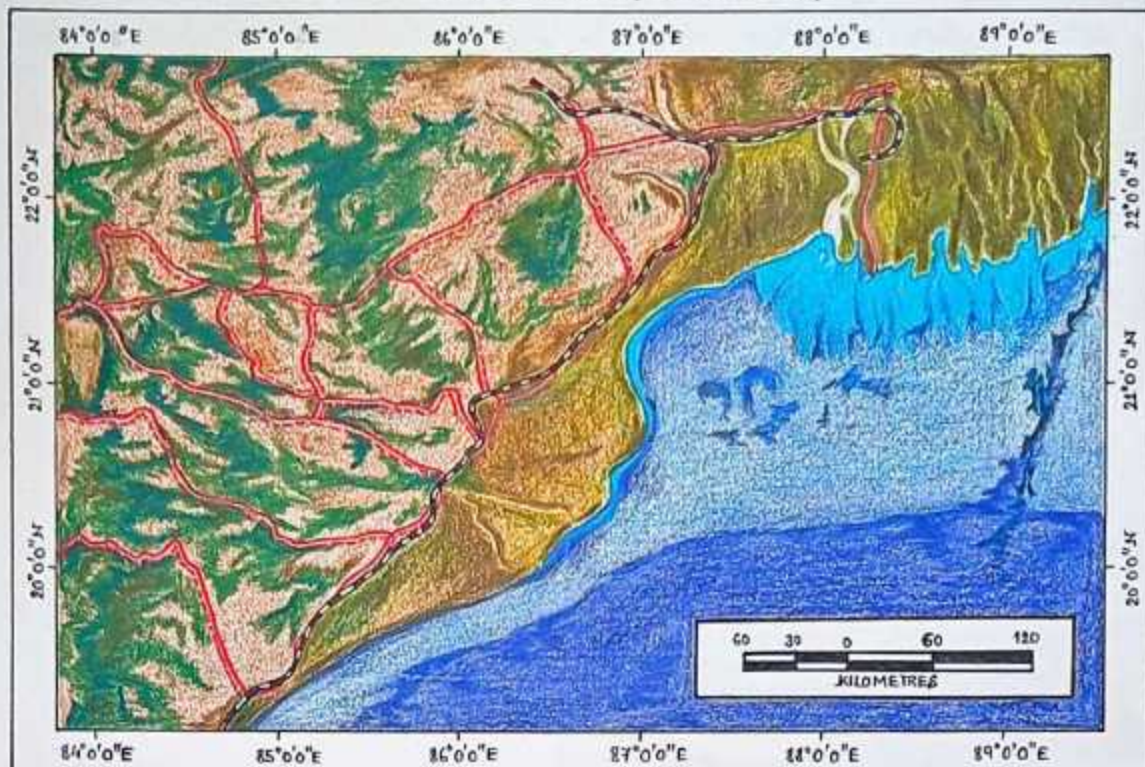
VERTICAL SCALE: 1cm = 0.35 m.

(Fig 7-3)
LANDUSE ALONG THE ROAD

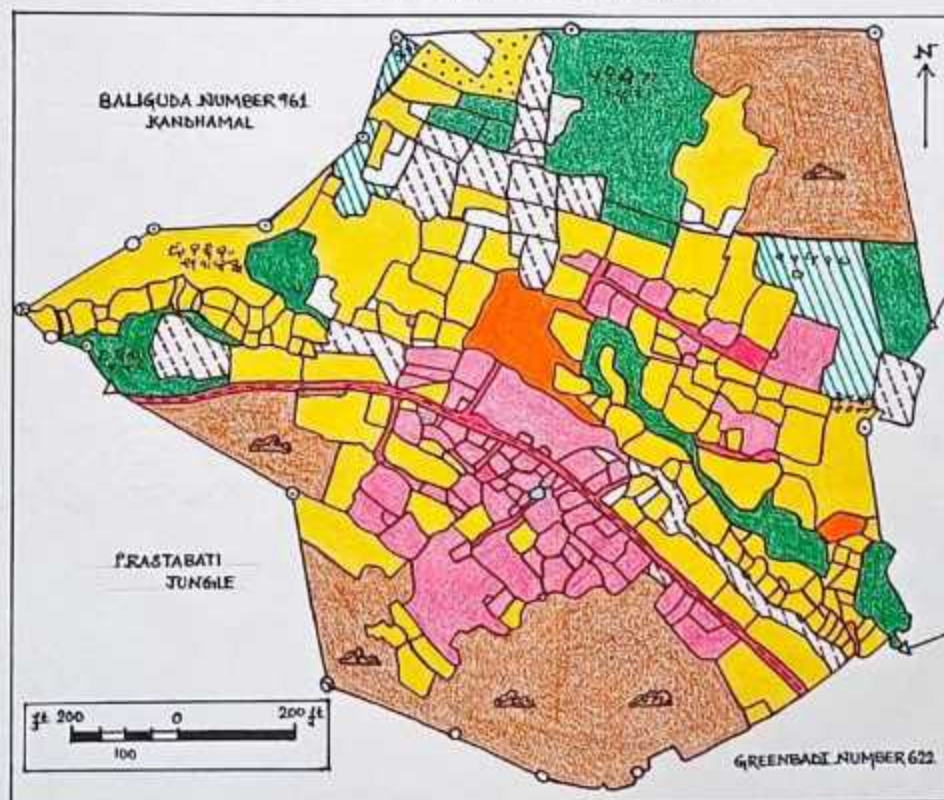


(Fig 7-4)

8. REAL COLOUR SATELLITE IMAGE



9. MOUZA LINEPADA JL 123 PS BARINGBADI



INDEX

- Agricultural land
- Forest land
- House-site
- Waterbody
- Grazing land
- Wasteland
- Road
- Developmental land
- Rocky land
- Hill
- Non-irrigated settlement
- Temple
- Rail Routes
- National Highway
- Deep Seawater
- Shallow Seawater
- Coastline
- Coastal plain

SOURCE : LAND REVENUE RECORDS, BRAHMAPUR

Ka89.22
16.9.22

Amidst the forest



A house specimen from the surveyed village



Remnants of an old house



Within the village locality



CHAPTER 3

CHAPTER 3: SOCIO-ECONOMIC BACKGROUND

(*) Household Survey:-

A household survey was conducted in Linepada village of Saringbadi, Odisha and the sample size selected was 140. Household surveys collect comprehensive and diverse socio-demographic data pertaining to conditions under which people live — their welfare, demographic characteristics and cultural factors that influence their behaviour, as well as social and economic change. Concerning the survey conducted in the study area, the parameters in focus are highlighted using various cartograms and pictorial representation. From the diagrams depicted, we observe that the area has a dominance of ST and SC communities who follow Christianity and majority speak in Odia. Linepada village depicts a male-dominated locality and most of the households follow a nuclear family pattern. Triangle graph used, show that there is a slight dominance of unmarried people followed by a near similar percent of married people too. The age-sex composition denotes that females dominate the age groups 15-30 and 31-45 because the male population of the same age groups supposedly migrate to other places for sustenance of life and work. Inspite of that, Linepada shows a negative sex ratio as male dominates over female. The education level of the Linepada population shown with cylindrical bars deduces that majority of the people have completed secondary and primary levels of education followed by graduation with a handful of population achieving post graduation degree. Annual income and expenditure reflect that the people majorly bear an annual income of less than Rs.1 Lakh and an annual expenditure of less than Rs.1 lakh, thus pertaining to minimal savings. Cattles are domesticated in general by almost every household. The region has a dominance of non-migrated family members over migrated depicting that people engage in their own family occupation. Social values of the region show that the average age for marriage of both male and female population is between 18-27 years of age.

(*) Market survey at study area:-

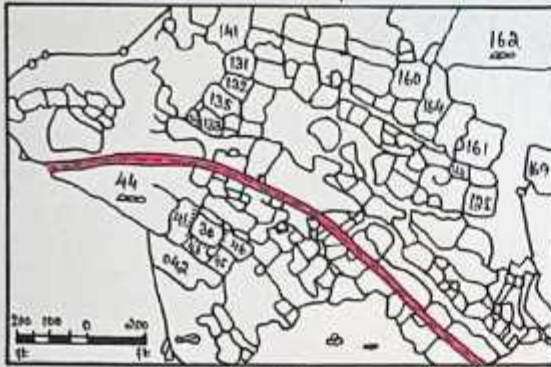
A market survey is an organised effort to gather information about the locational status, daily purchase and sell of the shops, etc to understand the market status of the area concerned. Using various diagrams to show the market parameters of the area, we find that the areal coverage of most of the shops is less than 500 sq. ft. which are singly owned by the people residing in the locality. The locational status of the shops mostly entircle business areas which will attract maximum number of customers from the peripheral regions. The shops experience daily amount of sale of below 5000 (Rs) where the demand is mostly created by the local customers. The shops usually employ 1-3 number of workers. There is a dominance of grocery and stationery shops followed by garments and other that are of necessity in their daily life.

(*) Hotel survey at study area:-

A hotel survey is conducted using a series of standardized questions aimed at evaluating the tourist experience in hotels. The idea is to evaluate several areas of the stay such as the economic status of the hotel, the availability of public facilities and amenities, social condition of the staffs employed, work aspect of establishment and several similar factors. With respect to the main area of concern, a hotel survey has been conducted and the parameters which were the matter of concern were highlighted using several diagrams and pictorial representation. A line graph has been drawn to denote that most of the hotels in that area were established after 2015. Pie diagram has been used to depict that the hotels mostly offer AC room accommodations followed by a near similar percentage of Non AC room accommodations too. Triangle graph used, show that most of the hotels have 15-25 number of rooms for accommodation and the average room charge is Rs. 1000-2000 which is shown in bar graph. The hotels of the area is owned by males who hold a significant majority over females, and most of them belong to the Hindu religion and speak Odia, followed by Hindi and others. A pareto chart has been used to show the facilities available in each hotel. The chart depicts that all the hotels have pure drinking water supply followed by fire resisting facilities, 24 hours cold and hot water supply and TV with cable connection,

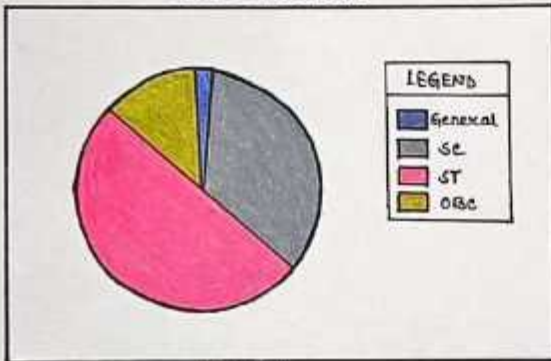
10. HOUSEHOLD SURVEY

LOCATION OF THE SURVEYED AREA



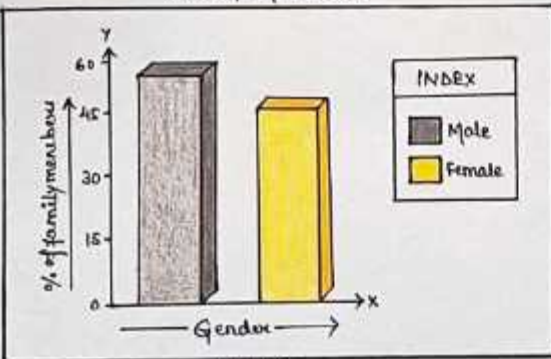
(Fig 10-1)

CASTE STRUCTURE



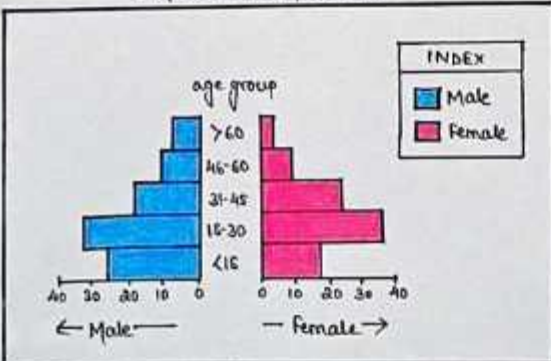
(Fig 10-3)

FAMILY MEMBERS



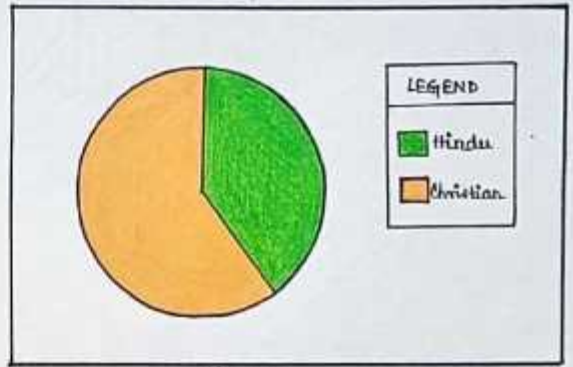
(Fig 10-5)

AGE-SEX COMPOSITION



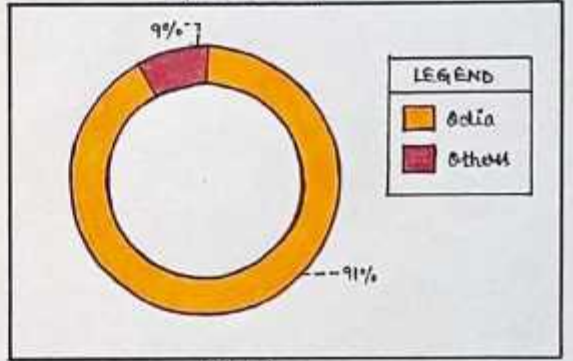
(Fig 10-4)

RELIGION



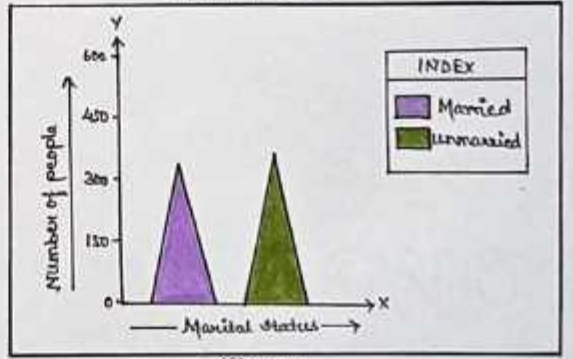
(Fig 10-2)

MOTHER TONGUE



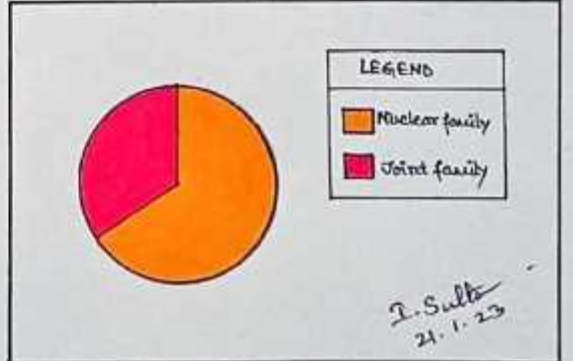
(Fig 10-4)

MARITAL STATUS



(Fig 10-6)

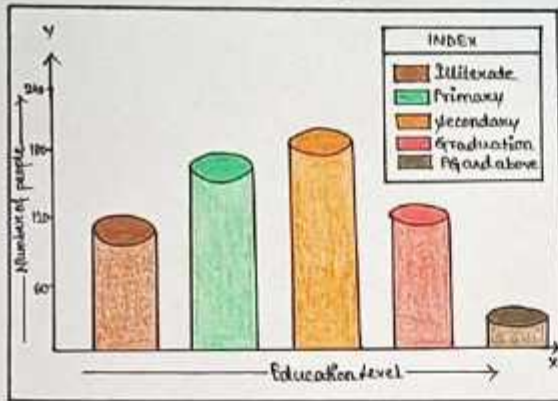
FAMILY TYPE



(Fig 10-8)

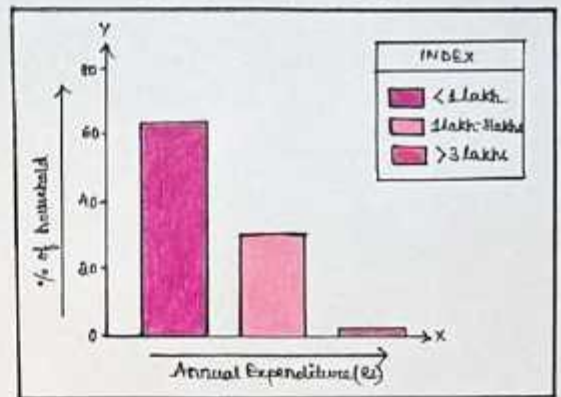
I. Sult
21.1.23

EDUCATION LEVEL



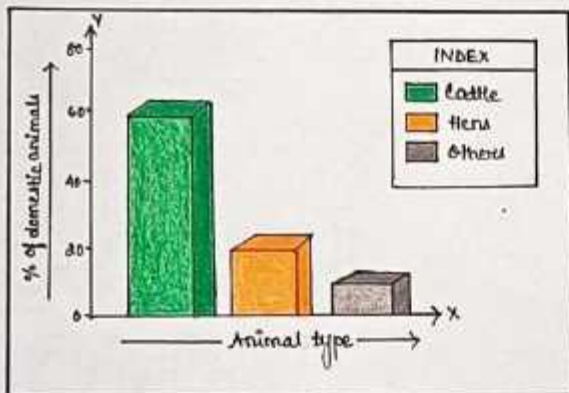
(Fig 10-9)

ANNUAL EXPENDITURE



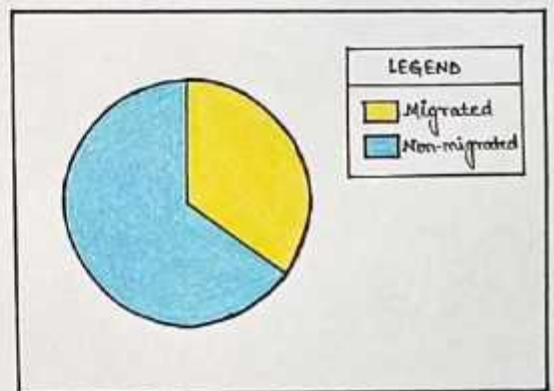
(Fig 10-10)

DOMESTIC ANIMALS



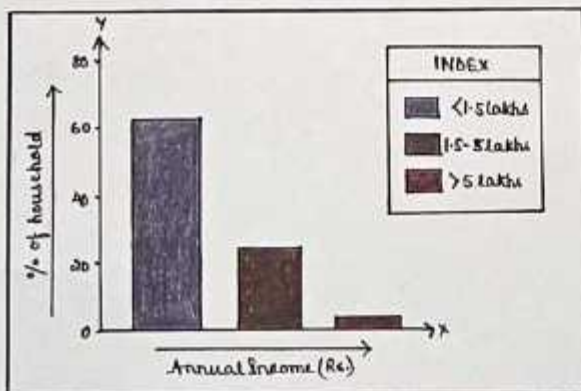
(Fig 10-11)

MIGRATED FAMILY MEMBERS



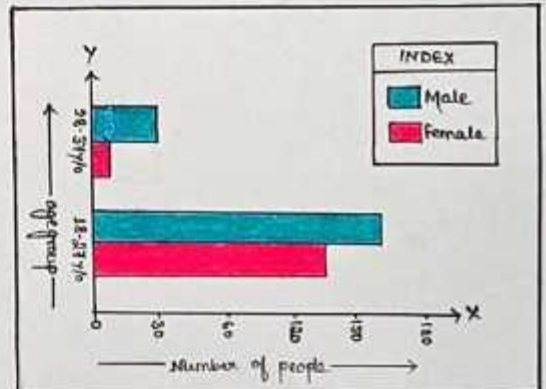
(Fig 10-12)

ANNUAL INCOME



(Fig 10-13)

AVERAGE AGE OF MARRIAGE

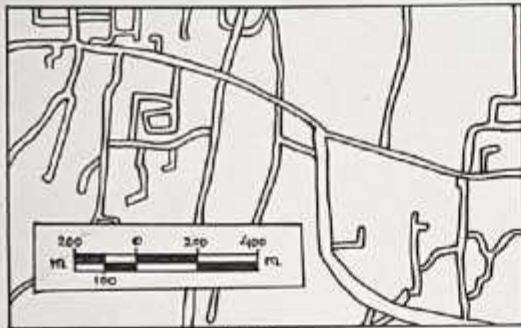


(Fig 10-14)

P. Sult
21.07.23

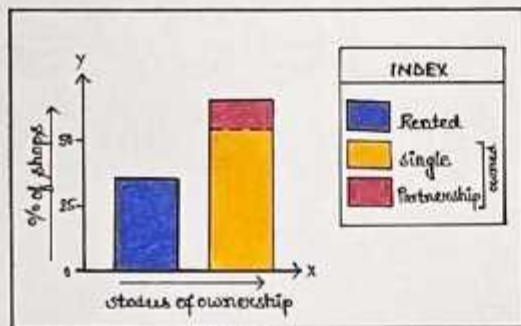
11. MARKET SURVEY AT STUDY AREA

LOCATION OF THE MARKET AREA SURVEYED



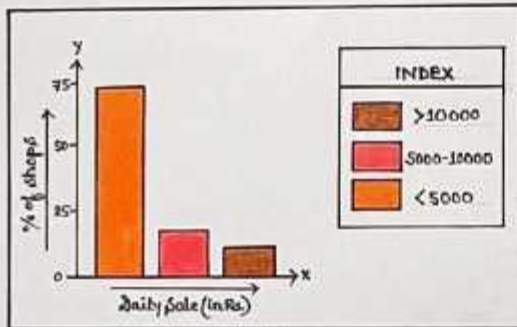
(Fig 11-1)

OWNERSHIP STATUS



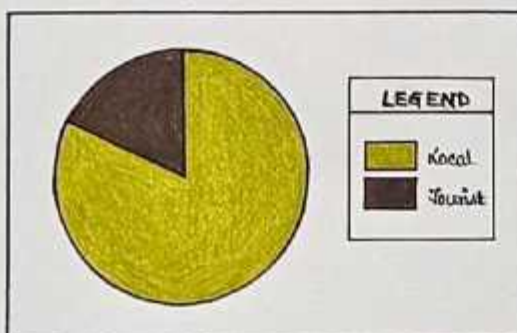
(Fig 11-3)

DAILY AMOUNT OF SALE



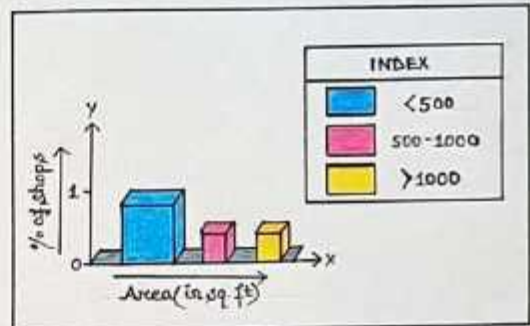
(Fig 11-5)

TYPE OF CUSTOMER



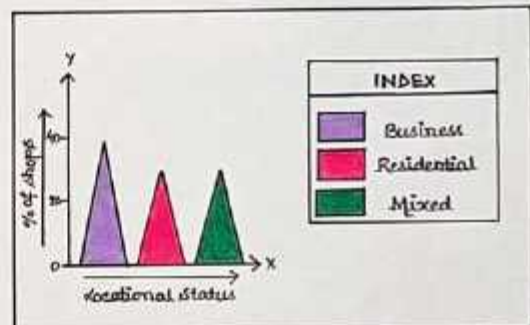
(Fig 11-7)

AREA OF THE SHOPS



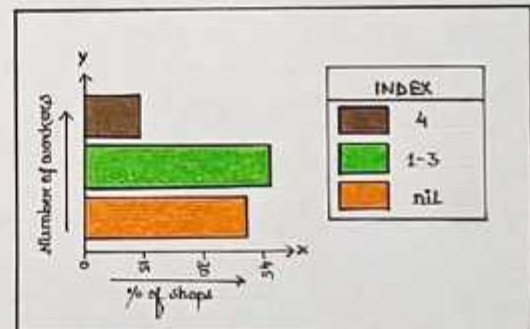
(Fig 11-2)

LOCATIONAL STATUS OF THE SHOPS



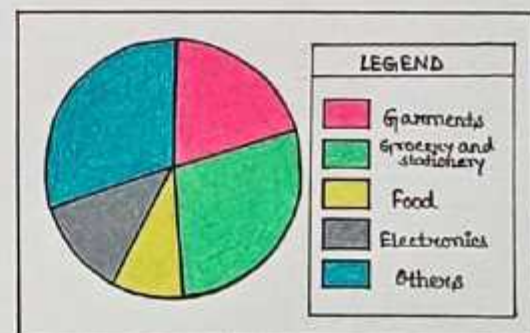
(Fig 11-4)

NUMBER OF WORKERS



(Fig 11-6)

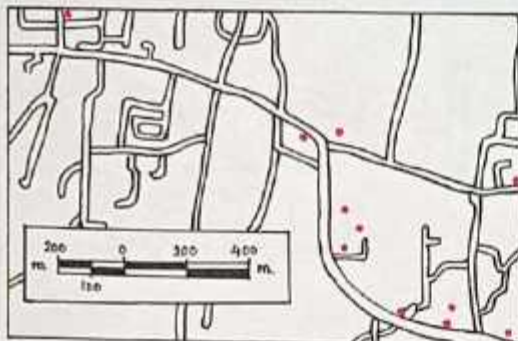
TYPE OF SHOPS



(Fig 11-8)

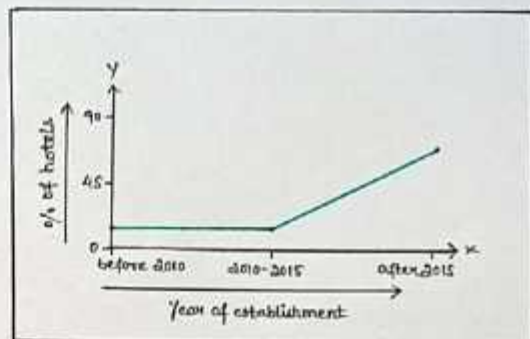
12. HOTEL SURVEY AT STUDY AREA

LOCATION OF THE SURVEYED HOTELS



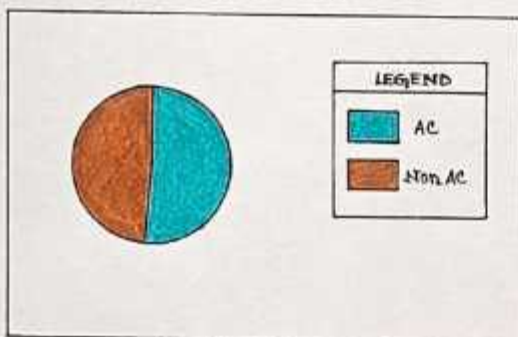
(Fig 12-1)

YEAR OF ESTABLISHMENT



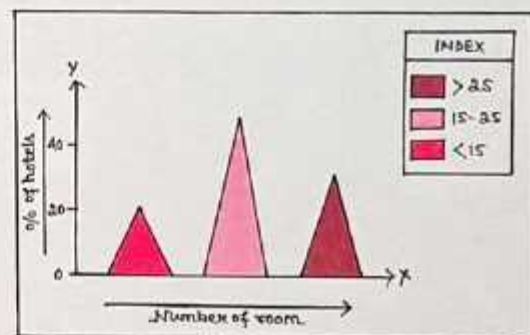
(Fig 12-2)

TYPES OF ACCOMMODATION



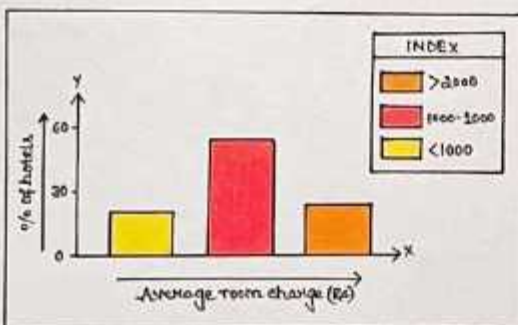
(Fig 12-3)

NUMBER OF ROOM



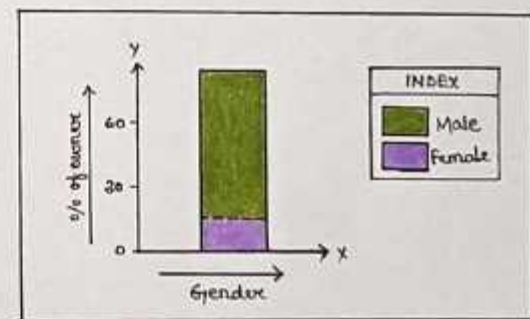
(Fig 12-4)

AVERAGE ROOM CHARGE



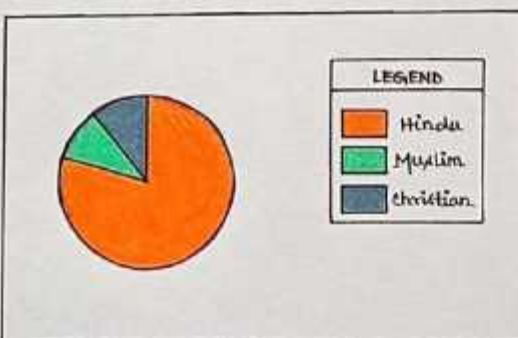
(Fig 12-5)

GENDER OF OWNER



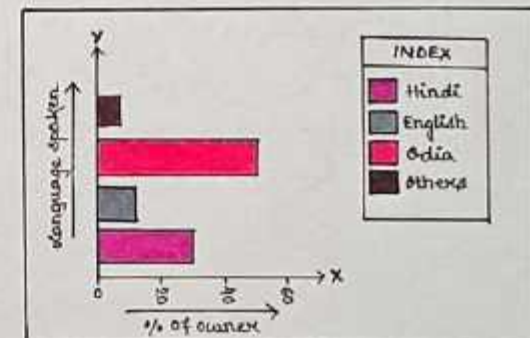
(Fig 12-6)

RELIGION OF OWNER



(Fig 12-7)

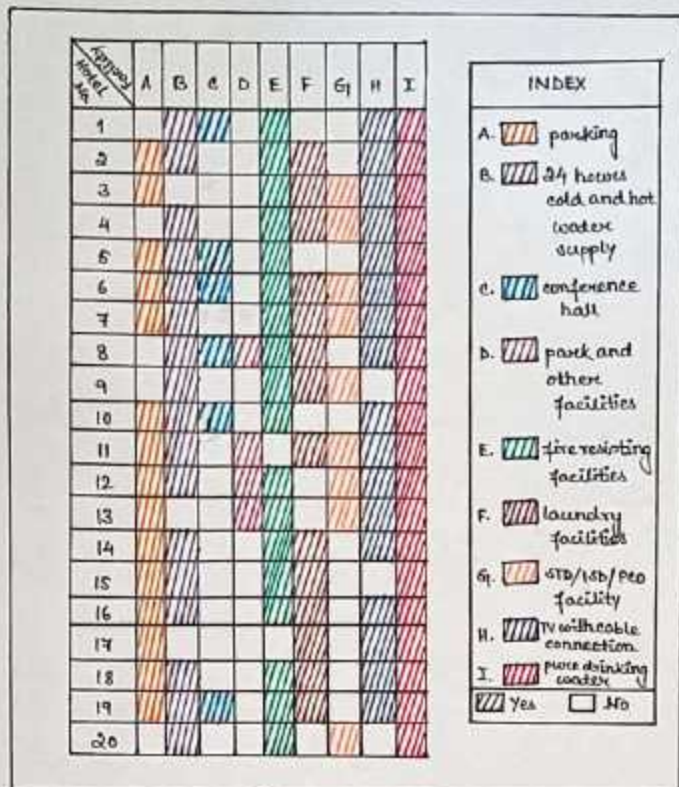
LANGUAGE SPOKEN BY OWNER



(Fig 12-8)

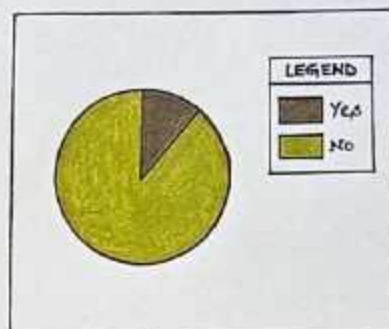
T. Sult
20.12.22

FACILITIES AVAILABLE IN HOTELS



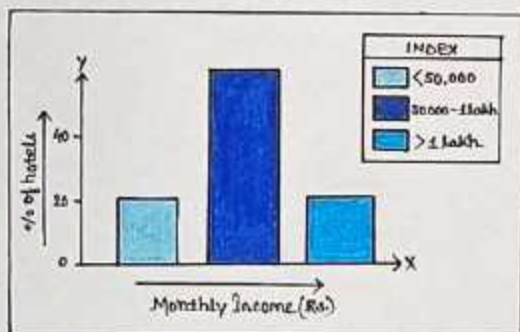
(Fig 12-9)

OWNERSHIP OF OTHER HOTELS



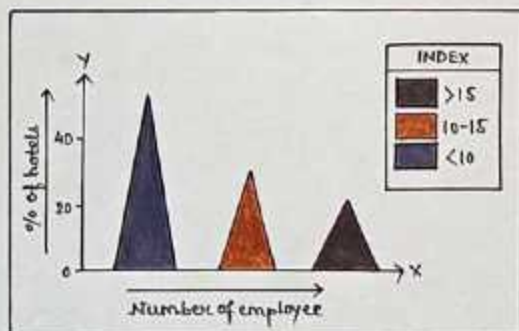
(Fig 12-10)

MONTHLY INCOME



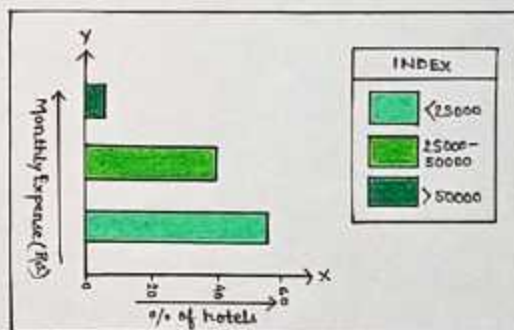
(Fig 12-11)

NUMBER OF EMPLOYEE IN HOTEL



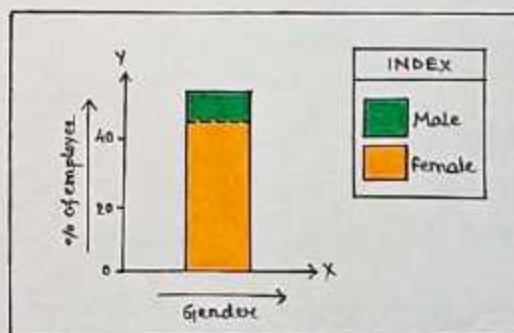
(Fig 12-13)

MONTHLY EXPENSE



(Fig 12-12)

GENDER OF EMPLOYEE



(Fig 12-14)

followed by other facilities like parking, availability of green space or park, laundry, etc. A pie diagram is used to show that the owners of the region majorly don't own any other hotels. Bar graphs showing monthly income and expense show that the hotels bear monthly income between Rs. 50,000 to 1 lakh and monthly expense of less than Rs. 25000. The hotels usually employ less than 10 employees who are mostly male.

(*) Tourist Survey :-

A tourist survey mainly allows us to obtain quality information quickly. This data comes directly from tourists or travel enthusiasts on how they see and experience a particular place and their surrounding tourist spots. It is a tool that allows the surveyor to collect information about people's opinions about the place they visited. With reference to our study area, the data collected from the tourists are represented diagrammatically. It is observed that the tourist influx in that region is significantly male dominated who belong to the Hindu religion and constitute the general caste group. There is a dominance of inter-state tourists who are significantly male to that of female tourists who usually speak in Bengali language. The tourists who visit the study area are mainly workers who belong to either service or business activities over non-workers group constituting of house-wife and students in general. On surveying the tourists, we observe that the monthly income of the concerned tourists range between Rs. 25000 and above and include a higher proportion of post graduated educational background. The tourists visit the study area by train in general followed by private cars and accommodate themselves in private hotels mostly. The flow diagram shows that the tourist flow is maximum in Gopalpur, which is a sight-seeing spot.

(*) Socio-economic status of transport workers :-

A study of the detailed information regarding the socio-economic conditions of the transport workers (in and around the study area) is done which is reflective of the prevailing economic and socio-cultural aspects of the study area. A questionnaire survey was conducted in this regard and the respective parameters are picturized in several diagrams. The transport workers belonging to the age group of 20-40 practise Christianity and are mostly married. There is an equal share of vehicle ownership and the vehicles owned are mostly commercial typed. The workers earn a monthly income of Rs. 10000-20000. They mostly cover a distance of more than 100 kms per trip by their vehicles.

(*) Road Morphology and Traffic Survey :-

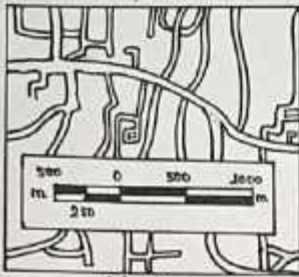
With the help of a prismatic compass, a road map connecting the main area concerned with other centres has been prepared. Here, a fourway cross road connects the area with 4 places namely Baliguda, Brahmanigaoan, Brahmapur and Greenbadi. The landuse along both the sides of the 4 roads have been arranged covering a distance of 50m along the corresponding roads. The diagram deduces that various landuse has been categorized into different groups. Among all the landuses, the presence of a PNB Bungalow, water tank and Post office demand significant mention. On account of the number of landuse types a pie diagram is drawn which shows the dominance of garment shops in the area followed by grocery shops, eateries and medical shops. Similarly, a traffic survey was conducted to perceive the up and down flow of vehicles along each road. The survey was conducted 3 times namely Morning Hours (7:20am - 8:20am), Office Hours (10:45am - 11:45am) and Evening Hours (7:10pm - 8:10pm) for better understanding the fluctuations. We can see that the flow along Brahmapur Road is mainly dominant especially during office and Evening Hours making it an important corridor, whereas the flow is slightly less towards Baliguda. There are also variations in the type of vehicles aided with a pie diagram. It is evident that the two wheelers influence the traffic flow followed by other supplementary vehicles, four wheelers and heavy vehicles.

(*) Educational status and health condition of the study area :-

Education survey is a gathered information from various educational institutions regarding the type, medium of an institution and related components available. The region has a dominance of government educational institutions where the medium of board is Odia.

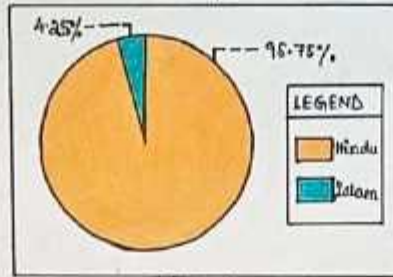
13. TOURIST SURVEY

STUDY AREA



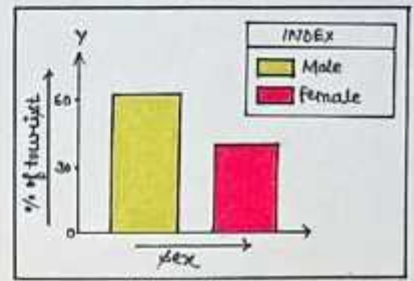
(Fig 13-1)

RELIGION



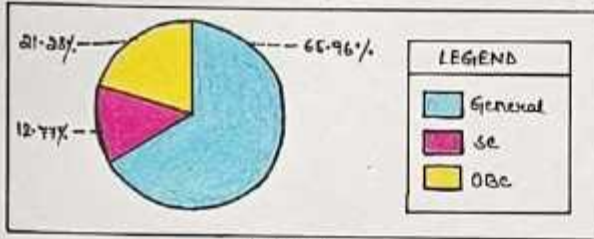
(Fig 13-2)

GENDER



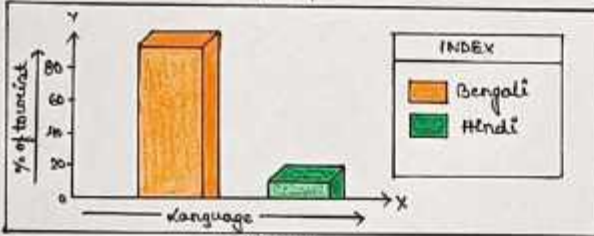
(Fig 13-3)

CASTE STRUCTURE



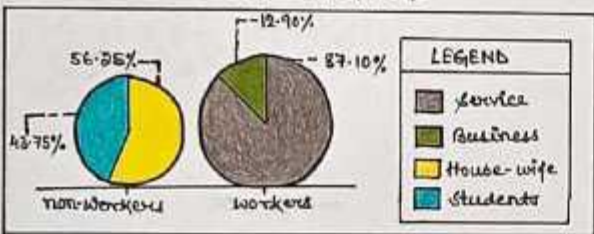
(Fig 13-4)

LANGUAGE



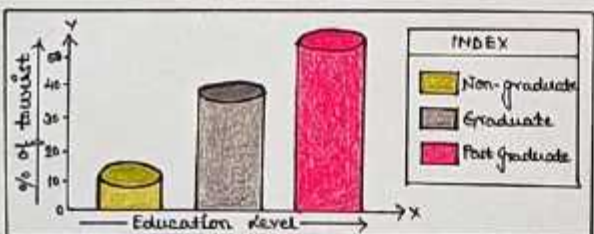
(Fig 13-6)

OCCUPATIONAL GROUPS



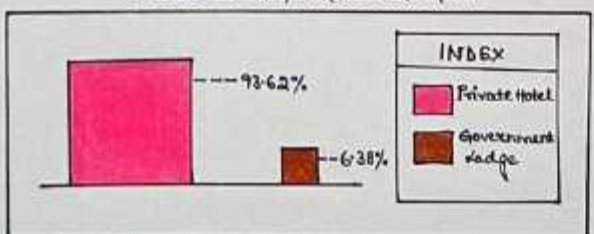
(Fig 13-8)

EDUCATION LEVEL



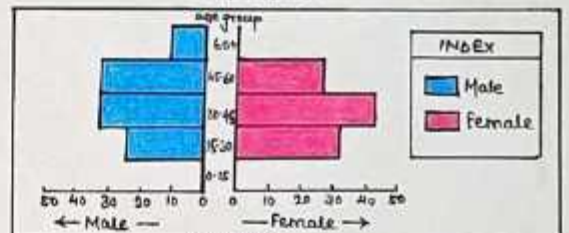
(Fig 13-10)

PLACE OF STAYING IN DARINGBADI



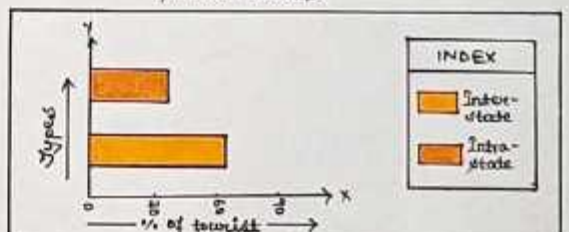
(Fig 13-12)

AGE GROUP



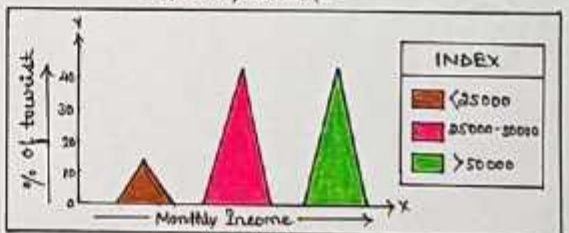
(Fig 13-5)

TYPE OF TOURIST



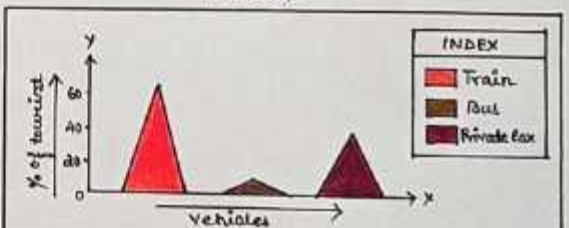
(Fig 13-7)

MONTHLY INCOME



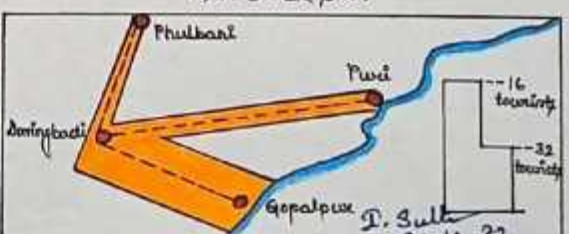
(Fig 13-9)

VEHICLES



(Fig 13-11)

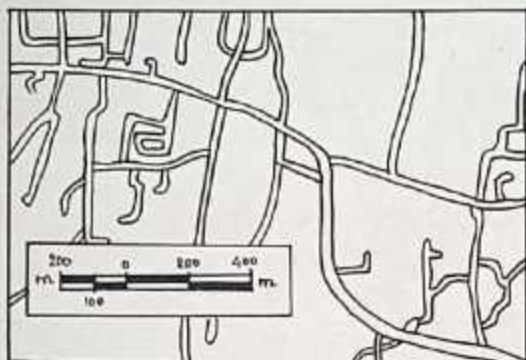
VISIT OTHER SPOT



(Fig 13-13)

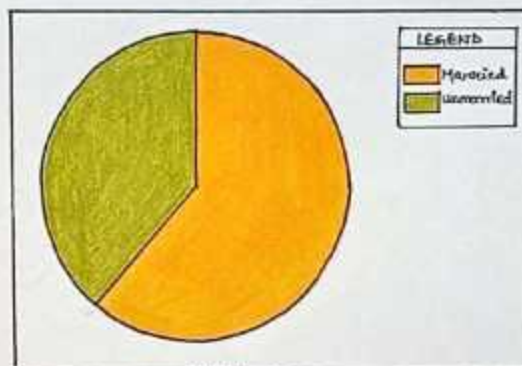
14. SOCIO-ECONOMIC STATUS OF TRANSPORT WORKERS

LOCATION OF THE SURVEYED AREA



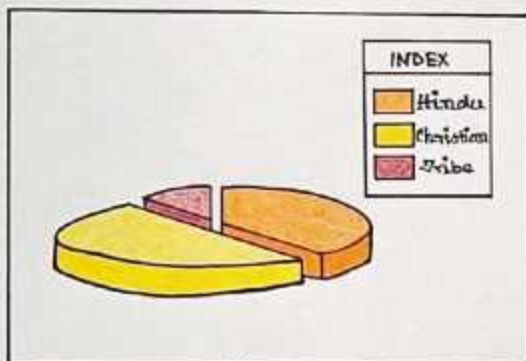
(Fig 14.1)

MARITAL STATUS

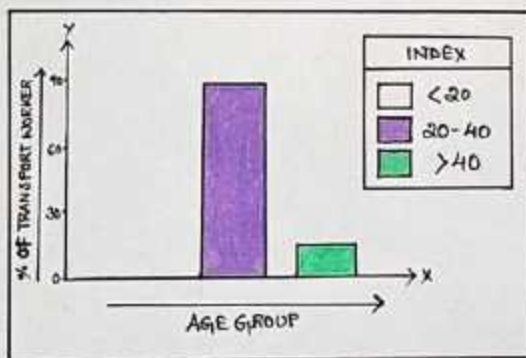


(Fig 14.2)

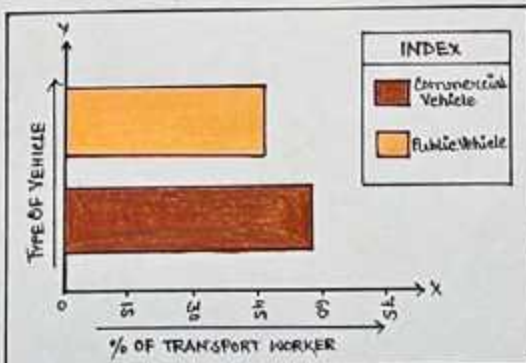
RELIGIOUS COMPOSITION



(Fig 14.3)
AGE-GROUP

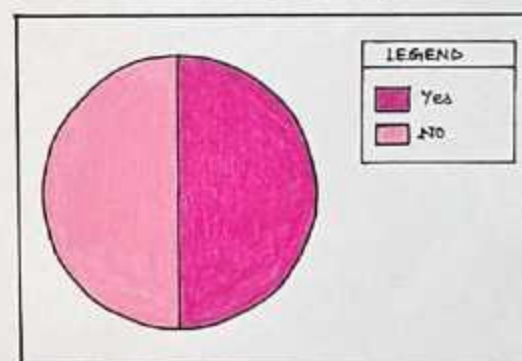


(Fig 14.5)
TYPE OF VEHICLE

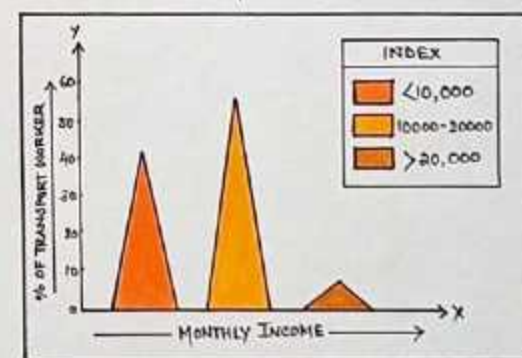


(Fig 14.4)

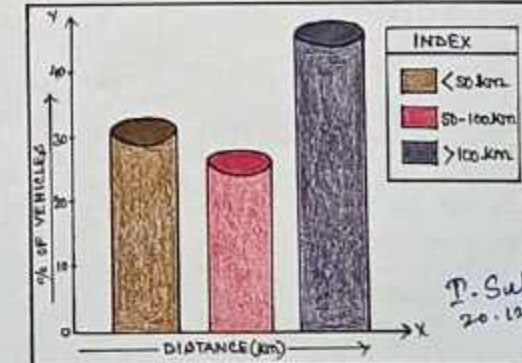
OWNERSHIP OF VEHICLES



(Fig 14.4)
MONTHLY INCOME



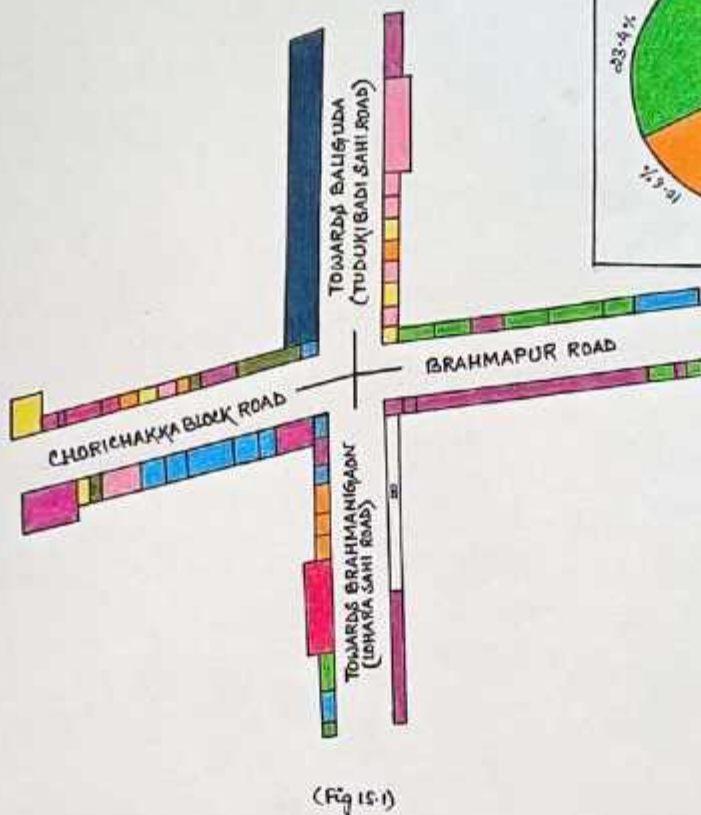
(Fig 14.6)
DISTANCE PER TRIP



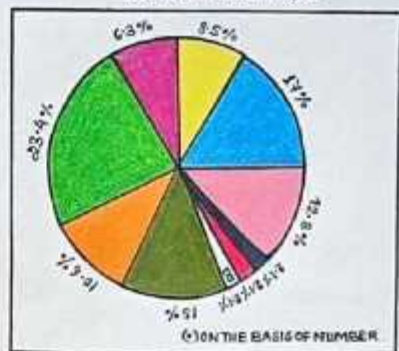
(Fig 14.8)

P. Sult
20.12.22

15. ROAD MORPHOLOGY



ROADSIDE LANDUSE



(Fig 15.2)

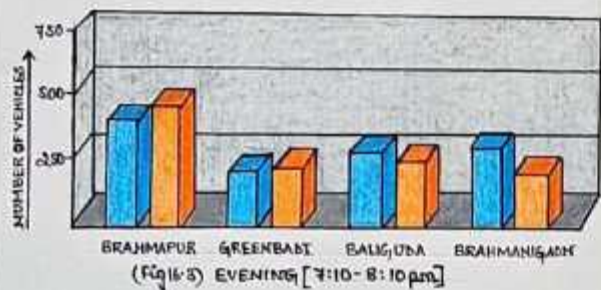
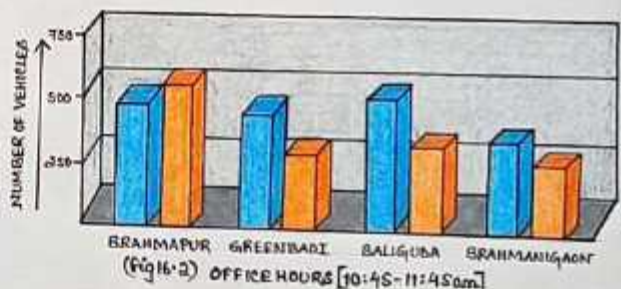
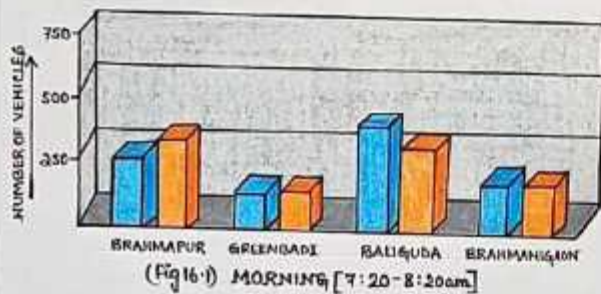
INDEX

- Warehouse
- Grocery Shop
- Healthcare Centres
- Public Bungalow
- Postoffice
- Water Tank
- Eateries
- Stationery Shop
- Garments Shop
- Others

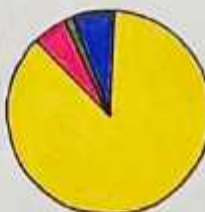
SCALE

1cm = 10m.

16. TRAFFIC SURVEY



TYPES OF VEHICLE



LEGEND

- Two wheelers
- Four wheelers
- Heavy vehicles
- Others

(Fig 16.4)

SCALE

1cm = 250 vehicles

INDEX

- UP
- DOWN

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20.12.22

Traffic Survey



Household Survey



Household Survey



Market Survey



Hotel Survey



Tourist Survey



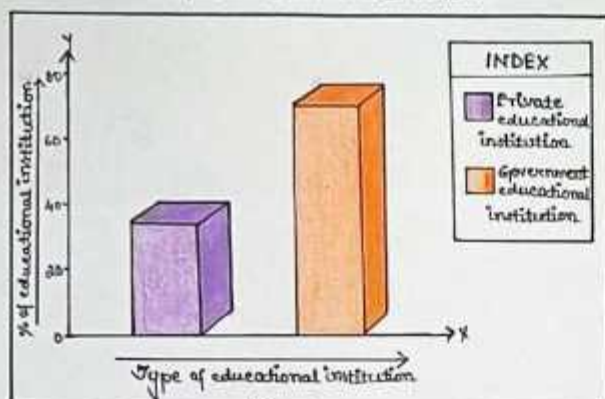
The institutions available offer facilities like library and toilet, in general with some institutions offering playground and laboratory facilities in addition. School bus and canteen are however missing in general. The students of the school/colleges mostly belong to SC/ST community. The health institutions of the study area are surveyed and following information are represented using various cartograms. It is observed that number of doctors available are mostly male and the health centres offer prime facilities like vaccination, pathology, etc. The staff composition of the primary health centre constituted an almost equal share of nurses and wardboys with a majority of office staffs; whereas the vaccination centre has more nurses.

(*) Bank and Religious Institution:-

Bank surveys are conducted to absorb ideas about the financial infrastructure and finance flows of a particular region. On surveying the banks of the study areas, we observe that the banks offer facilities like an ATM, followed by drop box and core banking solution. The ratio of male and female staff represents that the share of females are absent for the posts of a manager, assistant manager, group D staff and casual staff. However, females occupy a minimal share in case of group C staff in comparison to that of male. The customer visit in State Bank of India (SBI) is more than that of Punjab National Bank (PNB). A survey on the available religious institutions of the region show that the follower count of the Patashand Temple is more than that of the Mahamaya Temple.

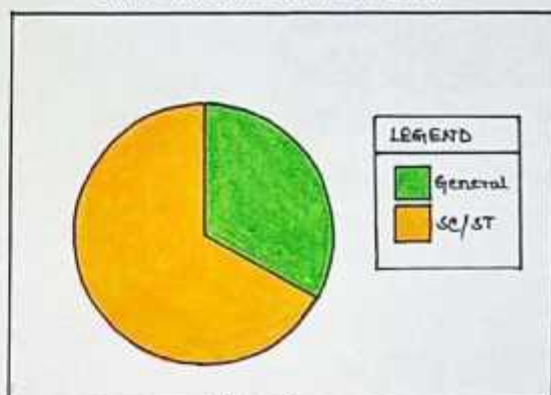
17. EDUCATIONAL STATUS AND HEALTH CONDITION OF THE STUDY AREA

TYPE OF EDUCATIONAL INSTITUTION



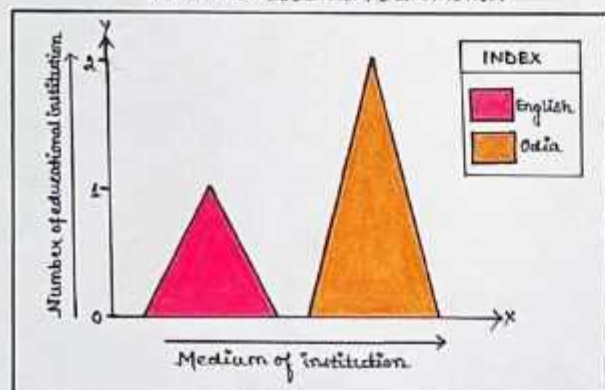
(Fig 17-1)

CASTE STRUCTURE OF THE STUDENTS



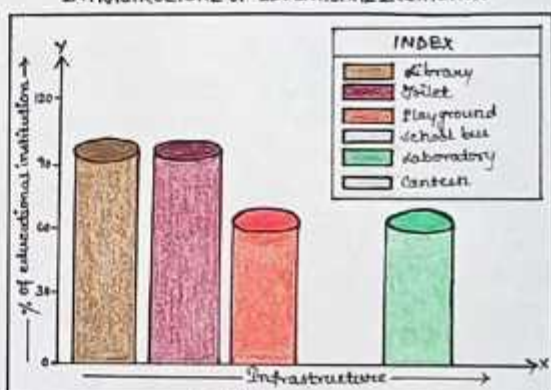
(Fig 17-2)

MEDIUM OF EDUCATIONAL INSTITUTION



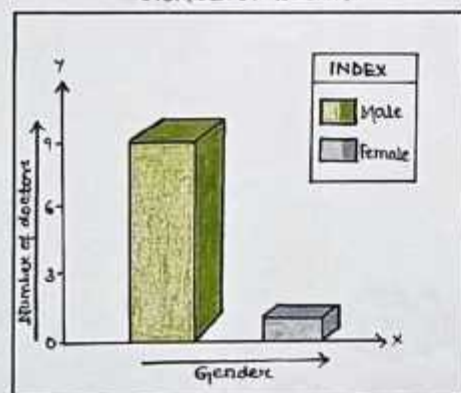
(Fig 17-3)

INFRASTRUCTURE OF EDUCATIONAL INSTITUTIONS



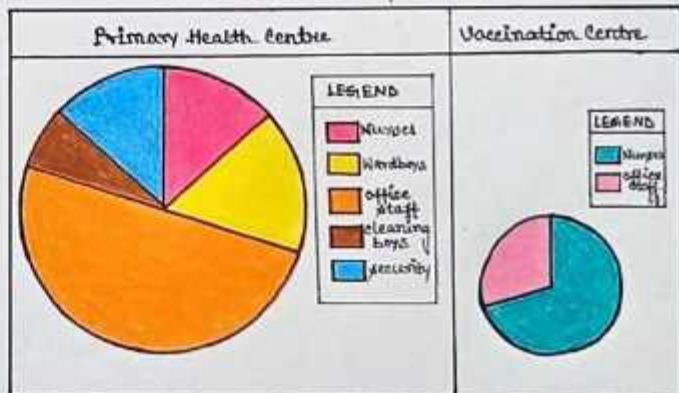
(Fig 17-4)

NUMBER OF DOCTORS



(Fig 17-5)

STAFF COMPOSITION OF GOVERNMENT HOSPITAL



(Fig 17-6)

FACILITIES AVAILABLE IN HEALTH CENTRES

Name of educational inst.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Primary Health Centre	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available
Vaccination Centre	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

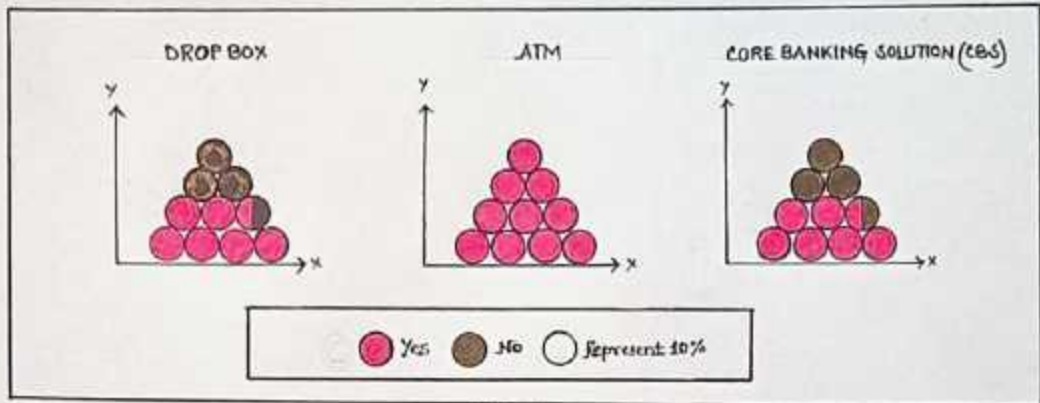
(Fig 17-7)

INDEX															
A. Available	B. Emergency	C. I.C.U.	D. Burnt cases	E. Pathology centre	F. X-ray	G. Blood Bank	H. Supply of oxygen	I. Ambulance services	J. Morgue	K. Vaccination	L. Stretcher	M. Family Planning	N. Maternity	O. CT Scan	

D. Sult
20-12-22

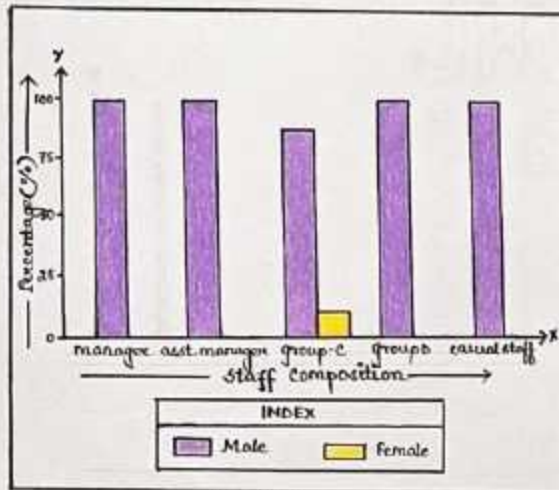
18. BANK

FACILITIES AVAILABLE IN BANK



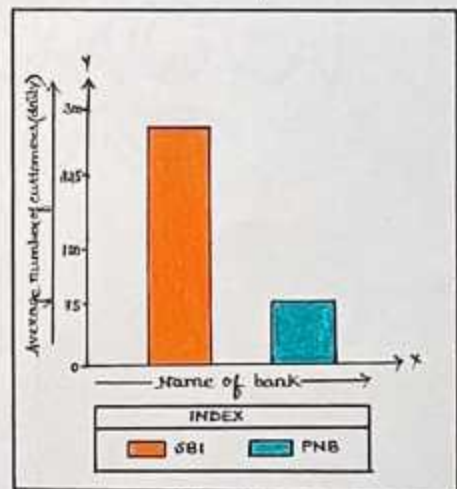
(Fig 18.1)

STAFF COMPOSITION



(Fig 18.2)

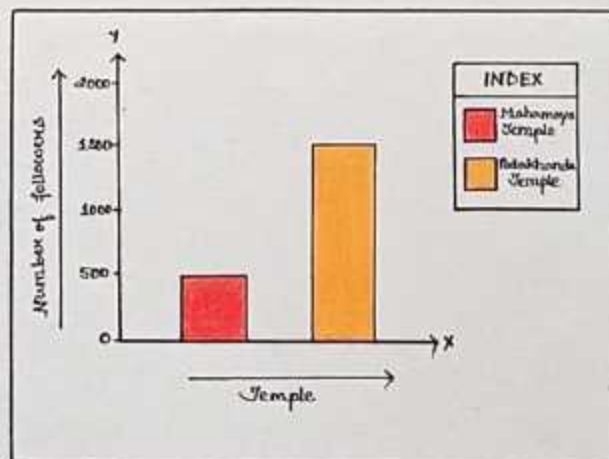
AVERAGE CUSTOMERS



(Fig 18.3)

19. RELIGIOUS INSTITUTION

FOLLOWERS OF THE TEMPLES



(Fig 19.1)

T. Sultan
05.01.23

Group picture at a sightseeing spot



Health Institution



Educational survey



Primary school



Temple survey



Sunset Point



CHAPTER 4

CHAPTER 4: CONCLUSION

Saringbadi, widely known as the 'Kashmir of Odisha' is named after 'Saring Sahab' - a British officer in charge. Situated in the heart of India's Eastern Ghats, surrounded by expansive mountains and greenery looks alluring during sunrise and sunset. The atmosphere and greenery attract visitors to enjoy views of endless hills, pine forests and valleys.

The basic objective of this study is to discover improvements in practice and procedure that will enable more effective planning and socio-economic development of the residents of the surveyed location. The conclusions drawn on the basis of field-survey offer a view of current socio-economic trend of the areas surveyed.

A vivid investigation of the Kinapada Gram area which is about 100 acres upto the sunset point, reveals that the total population of the area is 318 with about 76 households in number. The area has a fairly moderate sex ratio of 59%. Within the surveyed area there are two schools - Good Shepherd and U.P. School. Since the area consists of only 1 health centre with only 1 health worker; the provision of medical aid in the vicinity of that area is very less. The inhabitants are frequently infected by the disease 'sickle cell anemia'.

According to the surveyed report, mother and child are immunized once a month on every 4th Wednesday. On the 2nd Friday of the month, a health checkup called BHND is conducted and on occasional weekdays, vaccinations are provided to children. The area consists of an anganwadi with 16 girls and 18 boys, nurtured and taken care of by one shahayika. Awareness regarding hygiene practices, eye-motor coordination are spread among the students of anganwadi. The average size of landholdings of Kinapada area is 3 acres. The prime crops cultivated by the cultivators residing in the area are cabbage, cauliflower, potato, tomato, turmeric, paddy, etc. Total forested area of about 35% consists of vegetation like sal, piasal, mango, jackfruit, etc. The area consists of 5 Self Help Groups (SHGs) and the people engaged earn a living by making pal plates. The tourism industry blooming in Saringbadi has attracted many tourists all over India, mainly from West Bengal because of its pleasant weather. People who visit Saringbadi also visit Gopalpur which is in proximity where they can also enjoy a beach day. Some of the tourist spots that are visited frequently are - Hillview point, Madhubanda waterfalls, Coffee Plantation, Lower's point, Erre Park, etc.

The number of schools being 2 has a negative impact on the literacy rate of the surveyed area. Analysing the data, we see that since the number of young dependents (0-6) being more in the population pyramid, there is little scope for economic contribution by this age group. The area resides in a patriarchal society where the female literacy rate is found to be poor.

Considering the female contribution in the local governing body, female participation in the village meetings is low to negligible. Having only one teacher in the school, the student-teacher ratio is also very poor. Availability of only one health centre indicates poor health condition of Kinapada Gram area.

The available number of doctors is very insufficient, thus indicating a delay in the provision of aid, especially during emergency. The area lags behind in the availability of medication to combat even the most common disease. Lack of awareness regarding hygiene deteriorates the health condition of the people there. Due to lack of proper technical facilities like uninterrupted internet connectivity, the area lags behind in technological advancement as well. However,

the HDI rank of Odisha reveals poor status which symbolizes poor standard of living and low purchasing power of the people. The tourism industry, in spite of being a much flourished sector posed certain problems. The tourists visiting Saringbadi face a common problem of language barrier specially while communicating with the local vendors. There is poor transport and communication facility in Saringbadi which also stagnates the tourism sector.

The recommendations and suggestions offer more specific solutions on how improvement can take place in all the areas of human development to provide future opportunities to the budding society. Increase in the number of schools is the best alternative to improve the literacy rate of the area. Imparting proper training among the youth of the area and a surveillance of the SWOT analysis will help in the contribution for further economic development. Necessary increase in the number of teacher recruitment is a good indicator of education sector. Increase in the number of health centre and inclusion of dispensaries in each locality is a good alternative for the upgradation of health sector. A rise in the number of medical personnel will help in handling emergency situations. Government should look after the provision of proper medical aid to resolve the problem of acute diseases. Proper distribution of iron tablets would ensure better health status. The area needs improvement in the infrastructural condition of the hospitals in terms of equipments to tackle emergency situations. Awareness regarding women participation and women contribution should be spread through various yojanas, schemes or programmes to improve the involvement of women in various sectors of the society. Regulation and supervision of the working of the existing schemes and yojanas adds to the societal improvement. Government must look after the paucity of transport and communication system and take necessary steps and organize campaigns to improve the same, to construct new roads and repair the existing ones, to operationalize more government buses and other local transports, etc. Road campaigns also aim to revive the domestic tourist movement between the neighbouring states. This promotes road trips and tourism products of Odisha.

Khajuraho, inspite of the constraints, continues to attract a fang of tourists every year to savour the beauty of the hills and the adjoining areas. Development of technology will, however, help in further utilization of the existing resources, some of whose use is still unknown.

kgg
11/11/22

PROBLEMS AND PROSPECTS OF TOURISM IN DARINGBADI

(i) PROSPECT OF TOURISM:-

Daringbadi is a beautiful hill station in Odisha. This hill station lies peacefully at an elevation of 3000 ft from sea level, waiting to be explored. Daringbadi is named after Daring Sahib, a British officer who was in charge of the place. We can feel the refreshing cool breeze as we trek along the hilly trails of the vivacious landscape sprawling through the jungle. Daringbadi, known as the 'Kashmir of Odisha' provides an eclectic mix of cultural tourism, tribal tourism and nature tourism. The series of waterfalls punctuating the landscape are a must visit. Some of the popular ones are - Daringbadi waterfall, Pichudi waterfall, Badubaba waterfall and Ruhu waterfall.

Dotted with fine forests and waterfalls, the hillstations of Phulbani are popular holiday destinations of the state. Daringbadi Nature Camp and Belgian Nature Camp offer accommodation options travellers coming to this part of Odisha. Surrounded by beautiful valleys and plateaus and dotted with pepper and coffee gardens, the land of one of the most ancient tribes of India 'Kutia Kondhas', is a perfect gateway for people who are looking for some time off from the mundane city life.

(ii) CONSTRAINTS OF TOURISM DEVELOPMENT:-

Nearest railway station of Daringbadi is Brahmapur, situated almost 120 km away from this hill station. Public transport like bus is very rare in this route, so most of the tourists depend on hired motor vehicles which increases overall transport cost. Though terrorist activities of extreme leftist have been controlled to some extent but still now they are active in some parts of Kandhamal and Phulbani districts.

(iii) SUGGESTIONS:-

- Daringbadi is a potential tourist spot in respect of nature and tribal tourism. Government should involve the local people more in tourism sector. It creates opportunities of job which generates income.
- The popular spots should be maintained properly.
- There is a possibility of development of homestays for the tourists who mainly come to visit here for the attraction of tribal culture or for the research purpose.
- Medical facilities and banking service should be developed more to attract the tourists.

P. Sultana
05.01.23

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- Sultan, M.I., "Geographical Field Study: For Aught I Know"; Distributer: Techno world and AEB Pub, Kolkata, 2011 (pp. - 14-15 & 61-63)

➤ INTERNET SOURCES :-

- Google Earth
- IRETE Rail Connect
- www.google.com

➤ TOPOSHEET NUMBER :-

- E44F11, SOI OPEN SERIES MAP, 2009

APPENDIX I

1.

TRAIN NUMBER : 12863 TRAIN NAME: YPR Express [Yasvantpur Express]

Sl.No.	Stations	Zone	Distance (m)	Elevation (m)	Latitude and longitude	Arrival	Departure	Halt	Speed
1.	HWH Howrah Junction	ER	0.0	12	22.5839°N 88.3434°E	N/A	23:00		28
2.	MEA Mecheda	SER	58.2	10	22.4102°N 87.8631°E	23:54	23:56	2	77
3.	KGP Khargapur Junction	SER	115.0	61	22.3460°N 87.2320°E	00:40	00:45	5	82
4.	BLS Balasore	SER	231.1	16	21.4934°N 86.9135°E	02:10	02:12	2	67
5.	BHC Bhadrak	ECOR	293.5	23	21.0574°N 86.4963°E	03:08	03:10	2	84
6.	JTKR Jajpur Keonjhar Road	ECOR	337.1	36	20.9435°N 86.1328°E	03:41	03:43	2	76
7.	CTC Cuttack Junction	ECOR	409.2	36	20.4625°N 85.8830°E	04:40	04:45	5	47
8.	BBP Bhubaneswar	ECOR	436.9	58	20.2961°N 85.8245°E	05:20	05:25	5	57
9.	KUR Khurda Road Junction	ECOR	456.0	36	20.162379°N 85.6919708°E	05:45	05:55	10	95
10.	BLU Balugaon	ECOR	527.0	76	20.1783°N 85.1129°E	06:40	06:42	2	95
11.	BAM Brahmapur	ECOR	603.1	24	19.3150°N 84.7941°E	07:30	07:40	10	46

SOURCE : IRCTC RAIL CONNECT

20/11/22

2. WORKING TABLE FOR WEATHER PHENOMENA

PRESSURE, TEMPERATURE, RELATIVE HUMIDITY, RAINFALL, WIND SPEED

Month	Pressure (mb)	Maximum Temperature (°C)	Minimum Temperature (°C)	Relative Humidity (%)	Monthly rainfall (mm)	Number of rainy days	Mean wind speed (km/hr)
January	1015.3	25.7	11.8	74	12.8	1.0	1.4
February	1012.5	28.4	13.7	67	19.1	1.6	1.9
March	1009.4	34.1	18.4	54	17.6	1.7	2.1
April	1006.4	37.6	23.1	61	37.2	2.7	4.9
May	1002.2	37.1	24.7	72	114.6	6.6	6.9
June	998.6	34.5	26.0	80	218.7	12.2	5.9
July	998.1	32.5	28.0	84	294.5	17.5	5.6
August	999.7	30.3	28.1	84	301.6	15.7	4.5
September	1003.4	32.8	25.8	81	226.4	12.2	3.7
October	1009.2	32.2	23.3	78	126.6	5.8	2.0
November	1002.2	29.4	17.4	72	15.8	1.0	1.3
December	1015.0	25.4	13.1	74	3.9	0.3	1.3

SPECIAL WEATHER PHENOMENA

Weather Phenomena	Number of days
Hail	0.4
Thunder	44
Fog	10
Duststorm	1.3
Squall	0.2

CLOUD COVER

Cloud cover (octas)	Number of days
0	140
1-2	24
3-5	46
6-7	50
8	105

VISIBILITY

Visibility	Number of days
upto 1km	6
1-4km	92
4-10 km	27
10-20 km	233
over 20 km	6

WIND DIRECTION

Wind direction	Number of days
N	4
NE	2
E	15
SE	9
S	20
SW	5
W	4
NW	4
Calm	37

Source: Climatological Tables of Observatories in India,
Indian Meteorological Department (pp: 27-28)

Feb
20.1.23

3. MOUZA LINEPADA JL 123 PS DARINGBADI

PLOT NO.	LAND USE	PLOT NO.	LAND USE
1	Grazing land (government)	53	Agricultural land (private)
2	Private agricultural land (non-brigaded settlement)	54	Agricultural land (private)
3	Agricultural land (private)	55	House-site land (private)
4	Agricultural land (private)	56	House-site land (private)
5	Agricultural land (private)	57	House-site land (private)
6	Grazing land (government)	58	Agricultural land (private)
7	Agricultural land (private)	59	Temple (government)
8	Agricultural land (private)	60	House-site land (private)
9	Hill (government) [forest area]	61	House-site land (private)
10	Forest land (government)	62	House-site land (private)
11	Agricultural land (private)	63	House-site land (private)
12	Agricultural land (private)	64	Road (government)
13	Agricultural land (private)	65	House-site land (private)
14	Agricultural land (private)	66	House-site land (private)
15	Agricultural land (private)	67	House-site land (private)
16	Agricultural land (private)	68	House-site land (private)
17	Agricultural land (private)	69	House-site land (private)
18	Agricultural land (private)	70	waterbody (government)
19	Agricultural land (private)	71	House-site land (private)
20	Agricultural land (private)	72	House-site land (private)
21	Agricultural land (private)	73	House-site land (private)
22	Agricultural land (private)	74	House-site land (private)
23	Agricultural land (private)	75	Road (government)
24	Agricultural land (private)	76	House-site land (private)
25	Agricultural land (private)	77	Road (government)
26	Agricultural land (private)	78	House-site land (private)
27	Agricultural land (private)	79	House-site land (private)
28	Agricultural land (private)	80	House-site land (private)
29	Forest land (government)	81	House-site land (private)
30	Wasteland (government)	82	Agricultural land (private)
31	Agricultural land (private)	83	House-site land (private)
32	Agricultural land (private)	84	House-site land (private)
33	Agricultural land (private)	85	Hill (government)
34	Agricultural land (private)	86	Agricultural land (private)
35	Agricultural land (private)	87	Agricultural land (private)
36	Wasteland (government)	88	Agricultural land (private)
37	Road (government)	89	Agricultural land (private)
38	Agricultural land (private)	90	Agricultural land (private)
39	Agricultural land (private)	91	Hill (government)
40	Hill (government)	92	Agricultural land (private)
41	Agricultural land (private)	93	House-site land (private)
42	Agricultural land (private)	94	House-site land (private)
43	House-site land (private)	95	House-site land (private)
44	House-site land (private)	96	Road (government)
45	House-site land (private)	97	House-site land (private)
46	Agricultural land (private)	98	Agricultural land (private)
47	Wasteland (government)	99	House-site land (private)
48	House-site land (private)	100	House-site land (private)
49	House-site land (private)	101	House-site land (private)
50	House-site land (private)	102	House-site land (private)
51	Road (government)	103	House-site land (private)
52	Agricultural land (private)	104	House-site land (private)

PLOT NO.	LANDUSE	PLOT NO.	LANDUSE
105	House-site land (private)	158	Forest land (government)
106	House-site land (private)	159	Agricultural land (private)
107	House-site land (private)	160	Agricultural land (private)
108	House-site land (private)	161	House-site land (private)
109	House-site land (private)	162	Agricultural land (private)
110	House-site land (private)	163	House-site land (private)
111	House-site land (private)	164	House-site land (private)
112	Road (government)	165	Agricultural land (private)
113	House-site land (private)	166	Grazing land (government)
114	House-site land (private)	167	Hill (government)
115	House-site land (private)	168	Village forest (government)
116	House-site land (private)	169	Wasteland (government)
117	House-site land (private)	170	House-site land (government)
118	House-site land (private)	171	Agricultural land (private)
119	Road (government)	172	Agricultural land (private)
120	House-site land (private)	173	Agricultural land (private)
121	Road (government)	174	Agricultural land (private)
122	Road (government)	175	Agricultural land (private)
123	House-site land (private)	176	Agricultural land (private)
124	House-site land (private)	177	Agricultural land (private)
125	Agricultural land (private)	178	House-site land (private)
126	House-site land (private)	179	Agricultural land (private)
127	House-site land (private)	180	Road (government)
128	House-site land (private)	181	House-site land (private)
129	House-site land (private)	182	Agricultural land (private)
130	Agricultural land (private)	183	Agricultural land (private)
131	Agricultural land (private)	184	Agricultural land (private)
132	House-site land (private)	185	Agricultural land (private)
133	Agricultural land (private)	186	Agricultural land (private)
134	Agricultural land (private)	187	Agricultural land (private)
135	Agricultural land (private)	188	Agricultural land (private)
136	Agricultural land (private)	189	Agricultural land (private)
137	Agricultural land (private)	190	Agricultural land (private)
138	Agricultural land (private)	191	House-site land (private)
139	Agricultural land (private)	192	House-site land (private)
140	Agricultural land (private)	193	Agricultural land (private)
141	Wasteland (government)	194	Road (government)
142	Wasteland (government)	195	House-site land (private)
143	Forest land (government)	196	House-site land (private)
144	Forest land (government)	197	Forest land (government)
145	Wasteland (government)	198	Agricultural land (private)
146	Wasteland (government)	199	Developmental land (government)
147	Wasteland (government)	200	Agricultural land (private)
148	Wasteland (government)	201	Agricultural land (private)
149	Wasteland (government)	202	Agricultural land (private)
150	Wasteland (government)	203	Agricultural land (private)
151	Agricultural land (private)	204	Agricultural land (private)
152	Wasteland (government)	205	Agricultural land (private)
153	Agricultural land (private)	206	Agricultural land (private)
154	House-site land (private)	207	Agricultural land (private)
155	Road (government)	208	Agricultural land (private)
156	House-site land (private)	209	Agricultural land (private)
157	Agricultural land (private)	210	Agricultural land (private)

PLOT NO.	LAND USE	PLOT NO.	LAND USE
211	Wasteland (government)	236	Agricultural land (private)
212	Agricultural land (private)	237	Agricultural land (private)
213	Agricultural land (private)	238	Agricultural land (private)
214	Agricultural land (private)	239	Agricultural land (private)
215	Agricultural land (private)	240	Agricultural land (private)
216	Road (government)	241	Agricultural land (private)
217	Wasteland (government)	242	Agricultural land (private)
218	House-site land (private)	243	Agricultural land (private)
219	House-site land (private)	244	Agricultural land (private)
220	House-site land (private)	245	Agricultural land (private)
221	House-site land (private)	246	Agricultural land (private)
222	Hill (government)	247	Agricultural land (private)
223	Agricultural land (private)	248	Agricultural land (private)
224	Agricultural land (private)	249	Agricultural land (private)
225	Road (government)	250	Agricultural land (private)
226	Agricultural land (private)	251	Rocky land (government)
227	Agricultural land (private)	252	Agricultural land (private)
228	Wasteland (government)	253	Agricultural land (private)
229	Agricultural land (private)	254	Agricultural land (private)
230	Forest land (government)	255	Forest land (government)
231	Agricultural land (private)	256	Agricultural land (private)
232	Agricultural land (private)	257	Forest land (government)
233	Developmental land (government)	258	Agricultural land (private)
234	Agricultural land (private)	259	Agricultural land (private)
235	Agricultural land (private)	260	Forest land (government)

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4. WORKING TABLE FOR HOUSEHOLD SURVEY

RELIGION

Religion	Number of people	% of people
Hindu	55	39.29
Christian	85	60.71
Total	140	100

CASTE STRUCTURE

Caste	Number of people	% of people
General	3	2.14
SC	47	33.57
ST	72	51.43
OBC	18	12.86
Total	140	100

MOTHER TONGUE

Mother Tongue	Number of people	% of people
Odia	128	91
Others	12	9
Total	140	100

FAMILY MEMBERS

Family members	Number of people	% of people
Male	265	50.35
Female	360	49.66
Total	725	100

MARITAL STATUS

Marital status	Number of people	% of people
Married	333	47.51
Unmarried	368	52.49
Total	701	100

AGE-SEX COMPOSITION

Age group	Number of male	% of male	Number of female	% of female
<15	64	19.8	60	18.5
15-30	122	37.7	127	39.3
31-45	70	21.6	82	25.3
46-60	40	12.3	37	11.4
>60	27	8.6	21	6.5
Total	323	100	327	100

FAMILY TYPE

Family type	Number of household	% of household
Nuclear	92	65.71
Joint	48	34.28
Extended	-	-
Total	140	100

EDUCATION LEVEL

Education level	Number of people	% of people
Illiterate	107	17.83
Primary	157	26.16
Secondary	201	33.16
Graduation	108	18.00
PG & above	27	4.5
Total	600	100

ANNUAL EXPENDITURE

Annual Expenditure (Rs)	Number of household	% of household
<1 lakh	95	67.8
1-3 lakhs	41	29.2
>3 lakhs	4	2.8
Total	140	100

DOMESTIC ANIMALS

Animal type	Number of domestic animals	% of domestic animals
Cattle	76	62.2
Hen	28	22.9
Others	18	14.9
Total	122	100

MIGRATED FAMILY MEMBERS

Migration status	Number of people	% of people
Migrated	35	35.35
Non-migrated	64	64.65
Total	99	100

ANNUAL INCOME

Annual Income (Rs)	Number of household	% of household
<1.5 lakhs	91	65
1.5-5 lakhs	40	28.5
>5 lakhs	9	6.4
Total	140	100

AVERAGE AGE OF MARRIAGE

Age group	Number of people	
	Male	Female
18-27	107	133
28-37	33	7
Total	140	140

5. WORKING TABLE FOR MARKET SURVEY

AREA OF THE SHOPS

Area (in Sq. ft.)	Number of shop	% of shop
<500	36	72
500-1000	08	16
>1000	06	12
Total	50	100

OWNERSHIP STATUS

Status of ownership		Number of shop	% of shop
Rented		18	36
owned	single	28	56
	partnership	04	8
Total		50	100

LOCATIONAL STATUS OF THE SHOPS

Locational status	Number of shop	% of shop
Business	20	40
Residential	15	30
Mixed	15	30
Total	50	100

DAILY AMOUNT OF SALE

Daily sale (in Rs.)	Number of shop	% of shop
<5000	36	72
5000-10000	09	18
>10000	05	10
Total	50	100

NUMBER OF WORKERS

Number of workers	Number of shop	% of shop
nil	20	40
1-3	23	46
4	07	14
Total	50	100

TYPE OF CUSTOMER

Customer Type	Number of shop	% of shop
Local	50	81.97
Tourist	11	18.03
Total	61	100

TYPE OF SHOPS

Type of shop	Number of shop	% of shop
Garments	10	20
Grocery and stationery	14	28
Food	5	10
Electronics	6	12
Others	15	30
Total	50	100

6. WORKING TABLE FOR HOTEL SURVEY

YEAR OF ESTABLISHMENT

Year of establishment	Number of hotel	% of hotel
Before 2010	3	15
2010-2015	3	15
After 2015	14	70
Total	20	100

TYPE OF ACCOMMODATION

Accommodation	Number of hotel	% of hotel
Ac	237	50.64
Non-Ac	231	49.36
Total	468	100

NUMBER OF ROOM

Number of Rooms	Number of hotel	% of hotel
<15	4	20
15-25	10	50
>25	6	30
Total	20	100

AVERAGE ROOM CHARGE

Average Room charge (INR)	Number of hotel	% of hotel
<1000	4	20
1000-2000	11	55
>2000	5	25
Total	20	100

GENDER OF OWNER

Gender of owner	Number of owner	% of owner
Male	17	85
Female	3	15
Total	20	100

RELIGION OF OWNER

Religion	Number of owner	% of owner
Hindu	16	80
Muslim	2	10
Christian	2	10
Total	20	100

LANGUAGE SPOKEN BY OWNER

Language spoken	Number of owner	% of owner
Hindi	11	30.56
English	4	11.11
Odia	18	50.00
Others	3	8.33
Total	36	100

OWNERSHIP OF OTHER HOTELS

Other hotels	Number of owner	% of owner
Yes	2	10
No	18	90
Total	20	100

MONTHLY INCOME

Monthly Income (Rs)	Number of hotel	% of hotel
<50,000	4	60
50000-1lakh	12	60
>1lakh	4	20
Total	20	100

MONTHLY EXPENSE

Monthly expense (Rs)	Number of hotel	% of hotel
<25000	11	55
25000-50000	8	40
>50000	1	5
Total	20	100

NUMBER OF EMPLOYEE IN HOTEL

Number of employee	Number of hotel	% of hotel
<10	10	50
10-15	6	30
>15	4	20
Total	20	100

GENDER OF EMPLOYEE

Gender of employee	Number of employee	% of employee
Male	20	54.05
Female	17	45.95
Total	37	100

7. WORKING TABLE FOR TOURIST SURVEY

GENDER

Sex	Number of tourist	% of tourist
Male	28	59.58
Female	19	40.43
Total	47	100

RELIGION

Religion	Number of tourist	% of tourist
Hindu	45	95.75
Islam	2	4.26
Total	47	100

LANGUAGE

Language	Number of tourist	% of tourist
Bengali	44	93.62
Hindi	3	6.38
Total	47	100

OCCUPATIONAL GROUPS

Occupation		Number of tourist	% of tourist
Working	Service	27	87.10
	Business	4	12.90
Non-working	Housewife	9	56.25
	Students	7	43.75
Total		47	100 (each)

EDUCATION LEVEL

Education	Number of tourist	% of tourist
Non-graduate	6	12.77
Graduate	17	36.17
Post-graduate and above	24	51.06
Total	47	100

PLACE OF STAYING IN DARJILING

Place	Number of tourist	% of tourist
Private Hotel	44	93.62
Government Lodge	3	6.38
Total	47	100

AGE GROUP

Age group	Male	%	Female	%
0-15	1	3.57	-	-
15-30	6	21.43	6	31.58
30-45	9	32.14	8	42.11
45-60	9	32.14	5	26.32
60+	3	10.72	-	-
Total	28	100	19	100

CASTE STRUCTURE

Caste	Number of tourist	% of tourist
General	31	65.96
SC	6	12.77
ST	-	-
OBC	10	21.28
Total	47	100

TYPE OF TOURIST

You are from	Number of tourist	% of tourist
Inter State	30	63.83
Intra State	17	36.17
Total	47	100

MONTHLY INCOME

Income	Number of tourist	% of tourist
<25000	5	15.16
25000-50000	14	42.42
>50000	14	42.42
Total	33	100

VEHICLES

Vehicle	Number of tourist	% of tourist
Train	30	63.83
Bus	1	2.13
Private car	16	34.04
Total	47	100

VISIT OTHER SPOT

Other spot	Number of tourist	% of tourist
Gopalpur	33	80.49
Puri	7	17.07
Phulbari	1	2.44
Total	41	100

8. WORKING TABLE FOR SOCIO-ECONOMIC STATUS OF TRANSPORT WORKERS

MARITAL STATUS

Marital Status	Number of transport worker	% of transport worker
married	12	60
unmarried	08	40
Total	20	100

RELIGIOUS COMPOSITION

Religion	Number of transport worker	% of transport worker
Hindu	06	30
Christian	10	50
Tribes	04	20
Total	20	100

OWNERSHIP OF VEHICLES

Ownership of vehicle	Number of transport worker	% of transport worker
Yes	10	50
No	10	50
Total	20	100

AGE GROUP

Age group	Number of transport worker	% of transport worker
<20	-	-
20-40	18	90
>40	02	10
Total	20	100

MONTHLY INCOME

Monthly Income (in Rs)	Number of transport worker	% of transport worker
<10000	08	40
10000-20000	11	55
>20000	01	5
Total	20	100

TYPE OF VEHICLE

Type of vehicle	Number of transport worker	% of transport worker
Commercial vehicle	11	55
Public vehicle	09	45
Total	20	100

DISTANCE PER TRIP

Distance (in km)	Number of vehicle	% of vehicle
<50	06	30
50-100	05	25
>100	09	45
Total	20	100

ROAD MORPHOLOGY

Serial No.	Name of the road	Length of the road (m)	Width of the road (ft)	Characteristics of the road [eg; metalled]	Magnetic Bearing
1	Chonichakka block road to Brahmanigoon	50	28	metalled	177°
2	Chonichakka block road to Brahmapur road	50	29	metalled	82° 30'
3	Chonichakka block road to Greenbadi	50	30	metalled	255°
4	Chonichakka block road to Baliguda	50	33	metalled	1°

TRAFFIC SURVEY

Name of the road	Morning		Office hours		Evening	
	UP	DOWN	UP	DOWN	UP	DOWN
Brahmapur	268	338	472	566	424	478
Greenbadi	144	156	294	280	248	232
Baliguda	418	334	502	318	282	240
Brahmanigoon	188	192	352	270	302	212

TYPES OF VEHICLE

Name of the road	Two wheelers	Four wheelers	Heavy vehicles	Others
Brahmapur	2148	142	24	232
Greenbadi	1168	74	4	108
Baliguda	1534	234	84	342
Brahmanigoon	1100	122	44	178
Total	5950	572	156	760
Degree Value	313° 13'	17° 59'	4° 54'	23° 54'

10. WORKING TABLE FOR EDUCATIONAL AND HEALTH INSTITUTION SURVEY

TYPE OF EDUCATIONAL INSTITUTION

Type of educational institution	Number of educational institution	% of educational institution
Private	1	33
Government	2	67
Total	3	100

CASTE STRUCTURE OF THE STUDENTS

Caste structure	Number of student	% of student
General	102	33
SC/ST	208	67
Total	310	100

MEDIUM OF EDUCATIONAL INSTITUTION

Medium	Number of educational institution
English	1
Odia	2
Total	3

INFRASTRUCTURE OF EDUCATIONAL INSTITUTION

Infrastructure	Number of educational institution	% of educational institutional
Library	3	30
Toilet	3	30
Playground	2	20
school bus	0	0
Laboratory	2	20
canteen	0	0
Total	10	100

NUMBER OF DOCTORS

Gender	Number of doctors
Male	9
Female	1
Total	10

RADIUS OF STAFF COMPOSITION

Staff composition	Total	$r = \sqrt{\frac{\text{Total}}{\pi}}$	Scale [1cm = 3unit]
Primary health centre	30	3.09	1.03
Vaccination centre	7	1.49	.49

ANGLES OF STAFF COMPOSITION

Staff composition	Nurses	Ward boys	office staff	cleaning boys	security	Total
Primary health centre	48°	60°	180°	24°	48°	360°
Vaccination centre	257° 8'	—	102° 61'	—	—	360°

11. WORKING TABLE FOR BANK AND RELIGIOUS INSTITUTION SURVEY

FACILITIES AVAILABLE IN BANK

Facilities	YES	%	NO	%
Drop box	2	66.7	1	33.3
ATM	3	100	0	0
CBS	2	66.7	1	33.3

STAFF COMPOSITION

Staff Composition	Male	%	Female	%
Manager	2	100	0	0
Assistant Manager	2	100	0	0
Group C	8	88.9	1	11.1
Group D	2	100	0	0
Casual staff	10	100	0	0

AVERAGE CUSTOMERS

Name of the bank	Average number of customers(daily)
State Bank of India(SBI)	300
Punjab National Bank (PNB)	75

FOLLOWERS OF THE TEMPLES

Name of the temple	Number of followers
Mahamaya Mandir	500
Patakhandia	1500

APPENDIX II

12. CALCULATION TABLE FOR PHYSICAL BACKGROUND OF KANDHAMAL

RELATIVE RELIEF

Grid No.	Highest contour value (m)	Lowest contour value (m)	Relative relief (m)
F11	420	180	240
F12	180	140	40
F13	260	140	120
F14	480	200	280
F15	300	160	140
F16	160	140	20
F17	580	100	480
F18	580	160	420
F19	160	140	40

Classes
<100
100-200
200-300
>300

Relative relief (m)

DRAINAGE DENSITY

Grid No.	Drainage length (cm)	Drainage length (km)	Area (sq. km)	Drainage density (km/km ²)
F11	10.0	5.00	↑	2.22
F12	10.2	5.10	↑	2.24
F13	10.0	5.00	↑	2.22
F14	10.1	5.05	↑	2.24
F15	13.5	8.75	1.5 × 1.5 = 2.25	3.89
F16	16.5	8.25	↓	3.64
F17	11.0	5.50	↓	2.44
F18	9.8	4.90	↓	2.18
F19	13.5	6.35	↓	3.00

Classes
<2.76
2.76-3.33
>3.33

Drainage density (km/km²)

VEGETATION

Grid No.	With vegetal cover	Without vegetal cover	Value of vegetal cover (%)
F11	24	1	96
F12	21	4	84
F13	20	5	80
F14	24	1	96
F15	18	7	72
F16	19	6	76
F17	20	5	80
F18	24	1	96
F19	18	7	72

Classes
70-78
79-87
88-96

Vegetal cover (%)

LONG PROFILE OF RIVER BANGDHARA

Relative Height	River length (cm)	Selected scale	River length (km)
Source to 14r	0.5	↑	0.33
14r to 18r	1.0	↑	0.67
18r to 10r	3.0	↑	2.00
10r to 12r	4.0	1cm ≈ 1.5 km	2.67
12r to 13r	5.0	↓	3.33
13r to 4r	5.8	↓	3.67
13r to 20r	8.0	↓	5.33
20r to bounding latitude	10.0	↓	6.67

CROSS PROFILE OF RIVER BANGDHARA

Contour crossing (m)	River length (cm)
200	0.5
200	1.0
200	1.5

Contour crossing (m)	River length (cm)
200	0.5
200	1.5
160	1.0

Contour crossing (m)	River length (cm)
200	0.5
100	0.5
200	2.0

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13. CALCULATION TABLE FOR WEATHER PHENOMENA

CALCULATION FOR MONTHLY RAINFALL, RAINY DAYS

Month	Monthly rainfall (mm)(y)	Number of rainy days (x)	Deviation	coded 'x'	x^2	xy	Yc
January	12.8	1.0	-5.5	-11	121	-140.8	26.64
February	19.1	1.6	-4.5	-9	81	-171.9	42.84
March	17.6	1.7	-3.5	-7	49	-128.2	59.04
April	37.3	2.7	-2.5	-5	25	-186.5	75.24
May	114.6	6.6	-1.5	+3	9	-433.8	91.44
June	218.7	12.2	-0.5	-1	1	-216.7	107.64
July	294.5	17.5	0.5	1	1	294.5	123.84
August	301.6	15.7	1.5	3	9	904.6	140.04
September	226.4	12.2	2.5	5	25	1132.0	156.24
October	126.6	5.8	3.5	7	49	886.2	172.44
November	15.8	1.0	4.5	9	81	142.2	182.64
December	3.9	0.3	5.5	11	121	42.9	204.84
(N = 18)	$\Sigma Y = 1387.9$				$\Sigma x^2 = 572$	$\Sigma xy = 4677.5$	

SPECIAL WEATHER PHENOMENA

Weather Phenomena	Number of days	Scale (1cm = 10 days)
Hail	0.4	0.04
Thunder	44	4.4
Fog	10	1.0
Disturbance	1.3	0.13
Squall	0.2	0.02

CLOUD COVER

Cloud cover (octal)	Number of days	Scale (in degree)
0	140	138° 4'
1-2	24	25° 36'
3-5	46	45° 22'
6-7	50	49° 15'
8	105	103° 0'

VISIBILITY

Visibility	Number of days	Scale (in degree)
upto 1km	6	5° 56'
1-4 kms	92	90° 59'
4-10 kms	27	26° 42'
10-20 kms	233	230° 26'
over 20 kms	6	5° 56'

WIND DIRECTION

Wind direction	Number of days	Scale [1cm = 4%]
N	4	1
NE	2	0.5
E	15	3.75
SE	9	2.25
S	20	5
SW	5	1.25
W	4	1
NW	4	1
calm	37	9.25

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14. PROFILE LEVELLING AND LANDUSE

INSTRUMENT NO: SUNDSC240

SURVEYED ON: 25-05-2022, 10:00 am.

PLACE: Linapada, Mangalagiri

SURVEYED BY: 5th semester, Geo Hons.

Stations	Distance	Staff Readings			Height of the instrument (hi)	Reduced Level (RL)	Landuse		Remarks
		BS	IS	FS			Left	Right	
A	0	0.055			915.055	915.000	Primary school		BM at A 915mtr M.S.L
B	5		0.120			914.935		Secondary school	AI Road Width 3.4mtr.
C	10		0.450			914.605			
D	15		0.710			914.345			
E	20		0.910			914.145			
F	25		1.120			913.935			
G	30		1.250			913.805		Open space	FB of IA 203°
H	35		1.360			913.695			
I	40	4.270		1.450	917.875	913.605			
J	45		4.320			913.555	community centre single storey building under repair	3.1 mtr	
K	50		4.020			913.855			
L	55		3.670			914.205			
M	60		3.450			914.425			
N	65		3.200			914.675			
O	70		2.915			914.960	Water Tank	Vacant Land	
P	75		2.680			915.195			
Q	80		2.280			915.595	Tubewell	Village road (unmetalled)	FB of Id 288°
R	85		2.200			915.675			
S	90			2.040		915.835			
		Σ BS		Σ FS					
		=4.325		=3.490					
			0.835			0.835 (last RL - first RL)			

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APPENDIX III

GOKHALE MEMORIAL GIRLS' COLLEGE

DEPARTMENT OF GEOGRAPHY

EXCURSION 2022

IS. INTERVIEW SCHEDULE FOR HOUSEHOLD SURVEY

1. IDENTIFICATION:-

A.1) Name of the village/place: _____ 2) District: _____

3) Block/Tehsil: _____

4) Ward No: _____ Municipal Area: _____

B. Name of the head of the household: _____

C. Religion: _____

D. Caste/sub-caste/tribe: _____

E. Mother-tongue: _____

F. Number of members: (a) Total: _____ (b) Male: _____ (c) Female: _____

G. Family site: (a) Near source of water: _____

(b) Near line of communication: _____

(c) Isolated: _____

(d) Any other: _____

H. Family type: (a) Nuclear: _____

(b) Joint: _____

(c) Extended: _____

2.SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF THE FAMILY MEMBERS:

[illegible]

2.PROPERTY(LAND/ANIMAL/OTHER):

A.

Size & Status Of Operational Holding	Land Use (In Acres/Katha) Own house..... Agriculture..... /Horticulture..... /Orchard..... /Dairying..... Plantation..... /Others.....	Land Tenure (Within 1year) Land/Land Sold/Land Bought/Leased Out

B.SIZE OF HOLDINGS-(MENTION UNIT):

a)0- 3 _ _ _ _ _

b)3-6 _ _ _ _ _

c)>6 _ _ _ _ _

DOMESTIC ANIMALS:-

TYPES	NUMBERS	PURPOSE

INCOME LEVEL OF THE FAMILY:-

SOURCES	INCOME LEVELS (<5000/5000-10000/>10000)

FAMILY EXPENDITURES(In Rs/within a year/month):-

Categories	Expenditure in Rs
1.Food	
2.Clothing	
3.Fuel (kerosene, LPG, Diesel, petrol, electricity etc)	
4.Education	
5.Recreation	
6.Liquor,cigarettes	
7.Maintenance/repair of shelter ,machinery , car etc	
8.Medicine	
9.Rent	
10.Social function(marriage, upanayana ,etc)	
11.Festivals	
12.Loan repayment, EMI etc	
13.Others	
14.Savings	

Migration :

1.How many years have you lived in this village/place.....

2.Name and distance of place of origin_____

3.And the place where migrated

in search of (elaborate the reason)	1.resources
	2.food
	3.jobs
	4.education
	5.marriage
	6.natural calamity
	7.displacement caused by development project
	8.Any other

3. At present number of family member has migrated out temporarily:

Yes: Number:

No:

4. If yes then specify these:

Family members	Age	Sex	Place where migrated	Length of migration	Reason of migration

5. HEALTH:-

A. Illness (morbidity pattern of any family members (during last 5 years))

Name	Age	Sex	Cause /type of illness	Duration Of sickness	Whether medically treated (yes/no)	If yes source of treatment				Outcome cured /not cured /cured partly
						Health centre (PHC)	District hospital	Pvt. clinic	Any other	

B. Record of disability in household:-

Name	Sex	Age	Type of disability
			In seeing
			In speech
			In hearing
			In movement
			Mental
			Any other

c. Deaths during last one year:-

Death :- Total no.....Male.....Female.....Age.....Cause.....

D. Immunization provided:

(BCG/Triple antigen/Meningococcal/Measles/Chicken pox/Oral polio/Hepatitis B/Hib booster typhoid)

7. Households amenities:-

A. (1) House Type:.....

Wall material	
Roof material	
Floor material	
Total no. of rooms	

Electrified:-yes/no

Place of kitchen :-inside the house/in open space

- B) Source of water supply:- (a) tap water (public/private)
(b) Hand pump (public/private)
(c) Open well (public/private)
(d) Pond (public/private)
(e) Any other

In absence of private connection

a) Distance travelled and hours spend for fetching water:-

.....

b) Number and age of members engaged in getting water (1) male.....

(2) female.....

C) Main cooking device used (1) Chulha & firewood

(2) Kerosene stove

(3) Charcoal & soft coke

(4) Gas (LPG)

(5)Biogas

D)Sanitation status:-

Waste type	Covered drain	Uncovered drain	Let out in open space	Specified space/vats

E)Toilets:- (private/public/open fields)

F)Asset Ownership

a) Transport (2 wheeler/4 wheeler)

b) Electric gadgets(TV, mobile, fridge ,computer ,solar cell , v.c.r)

c)Agricultural implements

d)Others

8.Cultue & Tradition

a)Food & Dress:-

Frequency	Types of dress(male/female)	Type of food
Regular		1.
		2.
		3.
		4.
		5.
		6.

Occasional		1.
		2.
		3.
		4.
		5.
		6.

b)Main festivals throughout the year:-

Months	
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	

C)Social perception:-

Level up to which the children should be educated	Minimum age of marriage
Male	
Female	

D)Languages known(other than mother tongue)to the family member:-

Languages	Ability (specify no. of family members)		
	Can speak	Can read	Can write
Local dialect			
Hindi			
English			
Other			

11.Engagement of female:-

Nature	yes	no	Numbers of hours
Domestic chores			
Fetching			
SHG			
Households Industry			
Teaching offspring			
Escorting Offspring to school			
Part time domestic duty			

12. Other information

i)Participate in tourism activity(yes/no)

If yes:-

Member	Nature of job	Duration of job	Income (yearly/monthly)

E. Do you feel that tourism has helped in development of tourism :-(yes/no)

F.1)The benefits received from the development of tourism in this area

- a)Generating employment
- b)Including development of roads , transportation and communication network
- c) Reviving and preserving the local art and handcraft
- d)Any other benefits (specify)

2.The disadvantages

- a)Overcrowding during tourist season

- b) Increasing pollution (air/sound/water etc)
- c) Excessive garbage dumping
- d) Loss in forest cover
- e) Scarcity of water
- f) Increase in frequency of landslides
- g) Increase in security
- h) Including price rise
- i) Bad influence on the young generation (Drug abuse etc)
- j) Breakdown of the traditional lifestyle

Name of the investigators and date

.....

Geographical Field Study

Department of Geography

College Name.....

16. Questionnaire for Field Survey

PART-D, MARKET SURVEY

1. Year of establishment:
2. Type of shop/establishment (e.g. grocery):
3. Area occupied (in Sq.Ft):
4. Status of ownership: Rented/Owned (please put a tick mark), if owned then the status of proprietorship is single/partnership.
5. Location status: Business area/Administrative area/Residential area/ Industrial area/Mixed area:
6. Average volume of daily sale (in Rs.):
7. Where from the commodities come? Ans:
8. No. of workers including self with average monthly expenditure on salary.
Ans. No. : Salary in Rs.:
9. Status of storage facilities in case of perishable goods, if any: How long the shop/establishment remains open? Ans. (in hours):
10. The days of closing:
11. How many days of last one year the establishment had to be remained closed due to unusual events, (mention such events, e.g. bandhs, strike etc.):
12. Whether the customers are local? Yes/No.
13. Whether goods/services are provided in credit? Ans.: Yes/No, if yes, average time of credit in days :
14. What types of problems are being faced in those days? Ans :

GOKHALE MEMORIAL GIRL'S COLLEGE

DEPARTMENT OF GEOGRAPHY

EXCURSION 2022

17. QUESTIONNAIRES FOR HOTEL SURVEY AT A TOURIST SPOT

1	Names of the Hotel:			
2	Address:			
3	Location of the Hotel:			
	Distance from railway station			
	Distance from bus-stand			
	Distance from main market			
	Location of surrounding			
4	Year of establishment of the Hotel:			
5	Accommodation:			
	Types of room (mention attach-bath)	No. of Room:	Charge(roomwise):	
6	Have you those licence:			
	Police dept's licence:	Yes/no		
	Municipality's licence:	Yes/no		
	Health officer's licence:	Yes/no		
	Fire service agency's licence	Yes/no		
	Money changer licence	Yes/no		
	Bar licence	Yes/no		
7	Do you have those facilities:			
	Parking facility	Yes/no	(no. of cars)	
	24 hour cold & hot water supply	Yes/no		
	Conference Hall	Yes/no	(no. of people)	
	Park and other facilities for kids	Yes/no	(Type of facilities)	
	Fire resisting facility	Yes/no		
	Laundry facilities	Yes/no		
	Own Travel Agency	Yes/no		
	Any discount in off season (in %)			
	STD/ISD/PCO facility (room-wise)	Yes/no		
	TV with cable connection (room-wise);	Yes/no		
	Pure drinking water facility:	Yes/no		
	Restaurant facility	Yes/no		
8	Name of the Hotel owner:			
	Sex:	Religion:		
	Nationality:	Language spoken:		
	Occupation:			

9	If he/she has any hotel except this			
10	Expenditure of this hotel for maintenance			
	Monthly		Yearly:	
11	Income of this hotel			
	Daily		Monthly	
	Yearly			
	Peak season		(Duration of peak season)	
	Off season		(Duration of off season)	
12	Water supply (daily):			
13	Total employee of this hotel:			
	Male		Female	
	Language spoken:			
	Bengali		Hindi	
			Others	
14	You are aware about the term "Environmental-pollution"		Yes/no	
15	Do you get any help from government for the development of the hotel:		Yes/no	
16	Future planning for the development of your hotel			

GOKHALE MEMORIAL GIRLS' COLLEGE

DEPARTMENT OF GEOGRAPHY

EXCURSION 2022

18. QUESTIONNAIRE FOR TOURIST SURVEY

1. Name:
2. Sex: Male/Female
3. Age Group: 0-15 / 15-30 / 31-45 / 46-60 / above 60
4. Religion:
5. Caste: General / S.C. / S.T. / OBC
6. Language:
7. Occupation:
8. Income (monthly): (<25000 / 25000-50000 / >50000)
9. You are from: (Inter-State / Intra-State / Foreigner)
10. Tourist attraction reason: (Scenic Beauty / Health / Education / Others) [specify]
11. Your education level: (Non-Graduate / Graduate / Post Graduate and above)
12. No. of visits made: (1st Time / Two / Three / Frequent)
13. Type of vehicles you have used for coming: (Train / Bus / Private Car / Steamer / Others)
14. Place of staying here: Private Hotel / Govt. Lodge / Relative's House / Others)
15. Are you willing to visit other spot except this spot:
16. What should be done for better Tourism Development:
17. Comment on physical & social environment of this spot:

Signature of the Surveyor

GOKHALE MEMORIAL GIRLS' COLLEGE

DEPARTMENT OF GEOGRAPHY

EXCURSION 2022

19. QUESTIONNAIRE FOR THE TRANSPORT WORKERS

1. Types of vehicle :
2. Route of the vehicle :
3. Distance :
4. Licence : Y/N
5. Route permit :
6. No. of vehicles in this route :
7. Fare (per km) :
8. Carrying capacity in a trip :
9. No. of trips in a day :
10. Peak-hour (in a day) :
11. Daily income :
12. Daily expenditure (including salary of the staff and cost of fuel, etc) :
13. Percent of income during peak-hour :
14. Any peak-season : Y/N (If yes, mention the months) :
15. Name of the driver :
16. Own vehicles : Y/N
17. How long is he driving in this route :
18. Religion :
19. Caste :
20. Language :
21. Age : <20/20-40/41-60/>60
22. Marital status :
23. No. of children (if married) :

24. Family type : Nuclear/Joint/Extended

25. Occupation (except driving) :

26. Income (Monthly) :

27. House type : Own/Rented/Other

28. What type of problems do you face in this occupation :

29. What attempts are you taking to overcome this problem :

30. Few comments on this place :

Signature of the surveyor:

Name:

Roll no.:

GOKHALE MEMORIAL GIRL'S COLLEGE

DEPARTMENT OF GEOGRAPHY

EXCURSION 2022

21. QUESTIONNAIRE FOR COLLEGE/SCHOOL SURVEY

1. Name of the college/school: _____
2. Year of establishment: _____
3. Ward no. : _____
4. Private/Govt/Govt aided:
(a) Nature of school:
(b) Boy's school/girl's school/co-education school:
5. Student's detail record:

Class	General caste		S. C.		Total	
	Boys	Girls	Boys	Girls	Boys	Girls
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
Total						

6. Medium of instructions:
7. Detailed record of the staff members:

STAFF	Male	Female	Total	Educational Qualification	Remarks/Any other information
Principal					
Teaching					
Non-teaching					
Anganwadi worker					
Mid-day meal cook					
Casual worker					

8. If any anganwadi center attached to it: _____
9. Timing of the school/college: _____
10. Residential/ Non-residential: _____
11. If residential then it's detailed information: _____
12. If free medical check ups were conducted in last one year: _____
13. Amount of fees for students: _____
- (a) Class 1 to 4: _____
- (b) Class 5 to 8: _____
- (c) Class 9 to 12: _____

14. School building, equipment, facilities, furniture and other things:-

Building	Equipments	Facilities	Rooms	Incentives record of last year	Remarks
Kaccha	Black boards	Toilets- common/separate For male: _____ For female: _____ For staff: _____, flushed or not	Total rooms:	Books given to the number of students	
Pucca	Maps:	Drinking water facilities, no. of points:	For class:	Uniform given to no. of students:	
Mixed	Books:	Playground:	For teachers:	Financial aid for S.C., S.T. students:	
	Sports items:	School bus:	For Principal:	S. C. Students	
	Other:	Library:	For office:	S. T. Students	
	Electric connection:	Any other:	Any other type:		
		Computer lab:			
		Canteen:			
		Laboratory:			

15. Mid day meal information:

Cooking device	Type	No. Of days provided in a week	Total no. of students provided	Remarks
Fire work/gas	Cereal	Total no. of days provided in last year	No. of boys provided/day	
Any other	Veg items		No. of girls provided/day	
Cooking utensils' owned by school or not	Non veg items			

16. Academic calendar of the school:

Exams:	Annual Exam	Half-yearly exam	Unit test
Vacation:	Summer	Winter	Any other

Sports:	
Annual function:	

Holidays:					
-----------	--	--	--	--	--

17. (a) Distance travelled by the members for school:

Members	Comes from which Village/ward	Distance in kms	Mode of travelling Bus, cycle, walk, train, others	Remarks
Teacher				
Students				
Other people				

(b) Whether school bus is provided: yes/no

18. (a) Performance of students in board examination:

	80% and above	50-79%	Below 50%
Number of students			

(b) No. of students passed out from each class last year:

Class	Students Boys	Girls	Total
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12.			

19. A) Do the students participate in co-curricular activities: yes/no

If yes what are the types of co-curricular activities:

B) No. of physically challenged students in the _____
no _____ class _____

20. Special facilities for the physically challenged students:

21. Problems faced by the:

- a) Social problems
- b) Political
- c) Economic
- d) Other

22. Are there any plans for the development of the school in future like:-

- (a) Extension of the school building
- (b) Introducing higher classes (xi-xii) (if earlier was not present)
- (c) Establishment of laboratories for different subjects
- (d) Introducing modern facilities like smart classes, audio-visual, wifi connectivity in school campus
- (e) Others (specify)

Name of the surveyor:-

8. Patients come from : _____

9. Distance (<5 km/5-10 km/10-15 km/>15 km)

10. Availability of facilities :

(a) Number of beds: _____ (1) Free beds _____ (2) Chargeable _____

(b) Outdoor check-up _____

Outdoor Fees	Timings and Dates	Number of Patients Attended/Days

(c) Operation theatre – i : number of O.Ts _____

(d) Wards : i) emergency _____ ii) I.C.U. _____ iii) Maternity _____

iv) Children's _____ v) Burnt cases _____ vi) Others _____

(e) Pathology centre : _____

(f) X-Ray : _____

(g) CT Scan : _____

(h) Blood Bank : _____

(i) Ambulance Service : _____

(j) Pharmacy : _____

(k) Supply of Oxygen Cylinders : _____

(l) Morgues : _____

(m) Stretcher/ Wheel chair : _____ Lift : _____ Food : _____

(n) Vaccinations provided (BCG/Triple Antigen/Oral Polio/Chicken Pox/Measles/Meningococcal)

(o) Family Planning Programmes Provided : _____

11. Visiting Hours : _____

12. Facilities for the visitors :

(a) Waiting Lounge : _____

(b) Drinking Water : _____

(c) Laboratories : _____

(d) Canteen : _____

(e) Telephone Booth : _____

(f) Others : _____

13. Additional Facilities :

(a) Generators : _____ (b) Fire extinguishers : _____ (c) Others : _____

14. Method of Medical Waste Disposal :

(a) Incineration _____ (b) Chemical Disinfection _____

15. Any other information : _____

16. Whether any financial assistance is provided for pre natal or post natal care

17. If yes, in what form they are provided :

(a) Pre natal (financial aid/haematinic capsules)

(b) Post natal _____

Signature of the surveyor

GOKHALE MEMORIAL GIRLS' COLLEGE

DEPARTMENT OF GEOGRAPHY

EXCURSION - 2022

23. BANK SURVEY

- Name:
- Location:
- Bank Manager:
- Asst. Bank Manager:
- Year of Establishment:
- Major Service:
- Drop Box Facility:
- ATM facility:
- Yearly Expenditure:
- Employee Profile:

STAFF COMPOSITION

SERIAL NO.	POST	MALE	FEMALE	TOTAL	PERMANENT/ CONTRACTUAL	LOCATION	AVERAGE QUALIFICATION
1.	Manager						
2.	Assistant manager						
3.	Group C						
4.	Group D						
5.	Casual Staff						

- Bank Office:
- Number of Counter:
- Profit or loss in the last year:
- Comment:

PERMANENT MEMBERS		CASUAL MEMBER
MALE	FEMALE	

- Number of Visitors (per day):

Facility

- Special Office: yes/no
- CBS Facility: yes/no
- Building Development: yes/no
- A/C: yes/no
- Repairing: yes/no
- Basic Problem:.....

SIGNATURE OF SURVEYOR:

ROLL NUMBER:

EXCURSION- 2021-2022

24. Study on Temple/Mosque/Church/Others

NAME OF INSTITUTION : GOKHALE MEMORIAL GIRLS' COLLEGE,KOLKATA

PLACE:

DATE:

1. Name of shrine:
2. Address with phone number:
3. Head Quarters:
4. Religion:
5. Name of the Idol worshipped:
6. Number of priests working in that holy shrine: M: F: Child:
7. Total numbers of followers of that shrine:
8. Name of main festival observed:
9. Name of other festivals observed:
10. How many tourist visited this place last year: National: International:
11. Hierarchy of the priests:
12. Number of branches: 1.India: 2.Abroad:
13. What are the activities:
14. Nature of charitable works if undertaken:
15. Number of people benefitted:
16. Amount of expenditure in last three years:
17. Source of income:
18. Whether any audited statement of account is available:
19. Is there any foreign contribution/donation/aid received (yes/no)
20. Country relating undertaken by the priest/s to the foreign countries:

21. Number of tours undertaken by the priest/s to the foreign countries:

22. Purpose of those tours:

23. Were those tours personal/official/complementary in nature:

24. Short reporting on the historical background of this holy shrine:

Name of surveyor