# UNIVERSITY OF CALCUTTA

## RESEARCH METHODOLOGY AND FIELDWORK LABBOOK

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# PHYSICAL AND SOCIO ECONOMIC SPECTRUM OF SRIKONA VILLAGE IN BALASORE DISTRICT, ODISHA, INDIA





BARKHAN

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### (NAAC ACCREDITED - B+ +)

Ref. No.

Date 28/1/23

## TO WHOM IT MAY CONCERN

This is to certify that Smt. _____ HRISHITA SARKAR _____, bearing Roll No: _____ 203044 - 11 - 0031 _____, Registration No: _____ 044 -1211 -0274- 20 _____ an examinee of B.A./B.Sc. Geography (Honours) Semester V, CBCS Examination, 2022 of the University of Calcutta, has visited Srikona Village of Baleshwar Sadar district of Orissa state from 20th September to 24th September, 2022. She has successfully completed her field report within the assigned time under my supervision.

This field report partially completes the Core Course Paper 11 of the Semester system of the CBCS Pattern of Geography Honours Course.

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Principal
Principal
Muralidhar Girls' College

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# ACKNOWLEDGEMENT

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# INTRODUCTION

Field work is the process of observing and collecting data about people, cultures and natural environment. In geography field work is important as it connects the theory to real life.

The study tour has been conducted in Srikona village, Balasore, Orissa. Chadipur is an expanding tourist spot near the mouth of Budhabalanga river. Agriculture and fishing grounds are developed in this area.

Srikona village comes under chadipur taluk in Baleshwar District of Odisha. The total land area of Srikona is around 2506 hectares which consists of a total household of around 1519, the nearest village to Srikona is Baleshwar (15 Km)

- Panchayet ⟶ Srikona
- Taluk ⟶ chadipur
- District ⟶ Baleshwar
- Male population → 3523
- Female population → 3412
- Pincode ⟶ 756025

All the data are on the basis of 2011 cencus data.

# OBJECTIVES

In order to study any region very closely, the available data (primary data) should be analyzed through processing of various scientific and non scientific methods and also proper cartographical representation, so that one can get vivid picture regarding the influence of natural and cultural enviornment upon the lives and activities of people. The main objectives of our field study are stated as :

a) To project the outline of the study area

b) To show physical perspective of the area which concerns topographical features of the region. Dumpy level was conducted to study the elevation points of the study area.

c) Intensive study to understand the socio-economic condition of the Srikona village of Balasore district.

d) To highlight the problems on way to development of the village

e) After highlighting or findings of the problem during a research work, one can suggest some measures to solve the problems.

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# METHODOLOGY

The following methods has been opted for research work are :

### ◼ PRE FIELD WORK

    a) Literature review : to go through previous research work and to overview information of the study area.

    b) Questionnaire : preparation for market and household questionnaire.

    c) Map : Stream ordering, drainage density, road density and settlement density was prepared from collected topographical map

    d) Location map and route map was prepared using GIS software.

### ◼ FIELD WORK.

It is based on collecting primary data.

    a) Socio economic data collected through questionnaires

    b) Longitudanal profile by dumpy level.

    c) Soil sample collected using proper tools and techniques

    d) Latitude and longitude with GNSS receiver

    e) evidences through photography

### ◼ POST FIELD WORK

Analysis of primary data which was collected during field work.

    a) Proper representation of data using statistical and cartographic techniques.

    b) Interpreting

    c) Analysing the problem and prospect of that region.

4

# PRE FIELD

# LOCATION MAP

Fig-1

# ROUTE MAP



WEST BENGAL

SANTRAGACHI

SALIMAR

22°30'N

KHARAGPUR

22°30'N

BELDA

22°N

DANTAN

ORISSA

JALESWAR

BASTA

22°N

21°30'N

BALASORE

STUDY AREA [SRIKONA]

BAY
OF
BENGAL

Butts
3/1/23

21°30'N

87°0'E    87°30'E    88°0'E
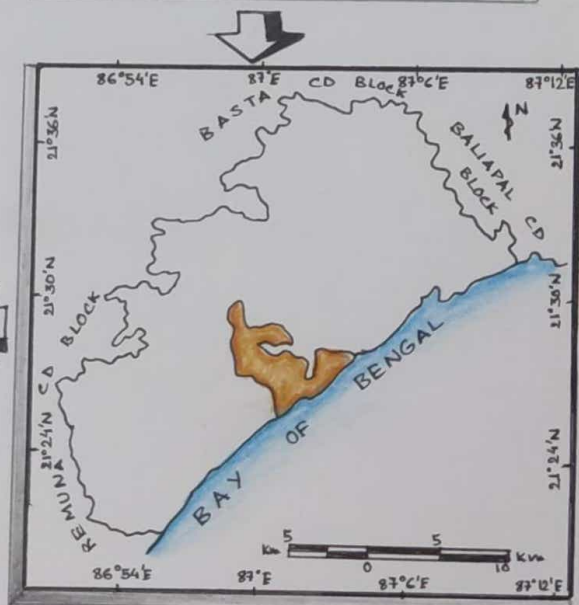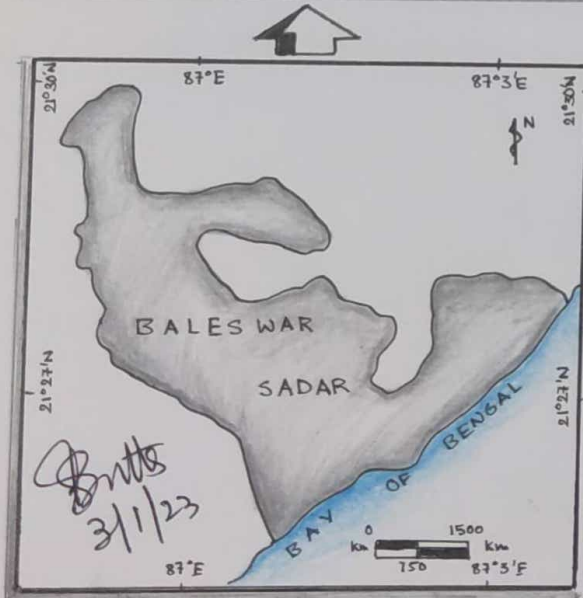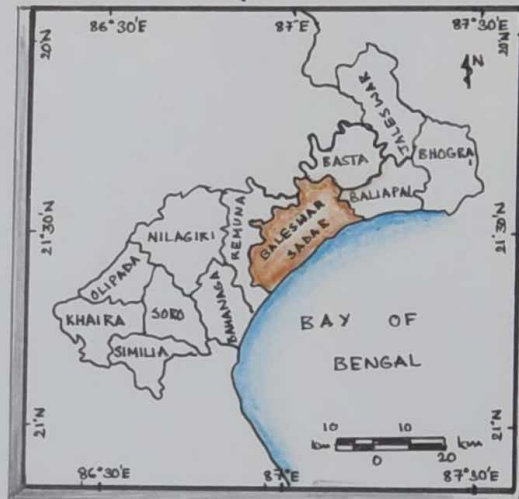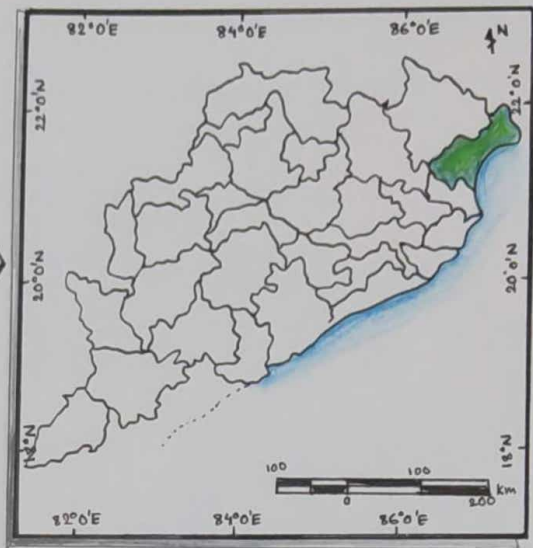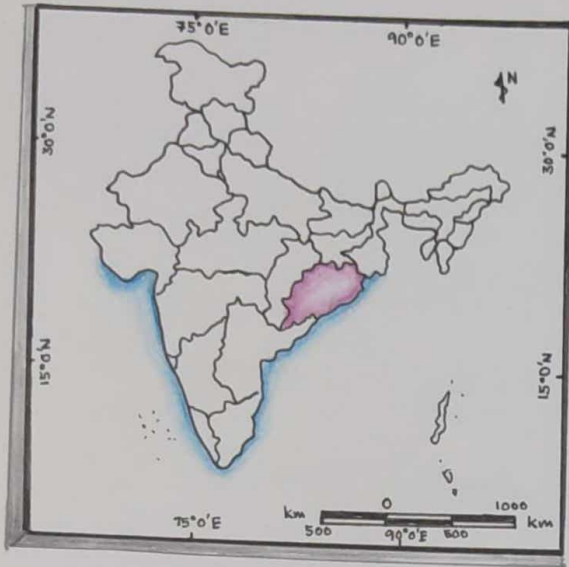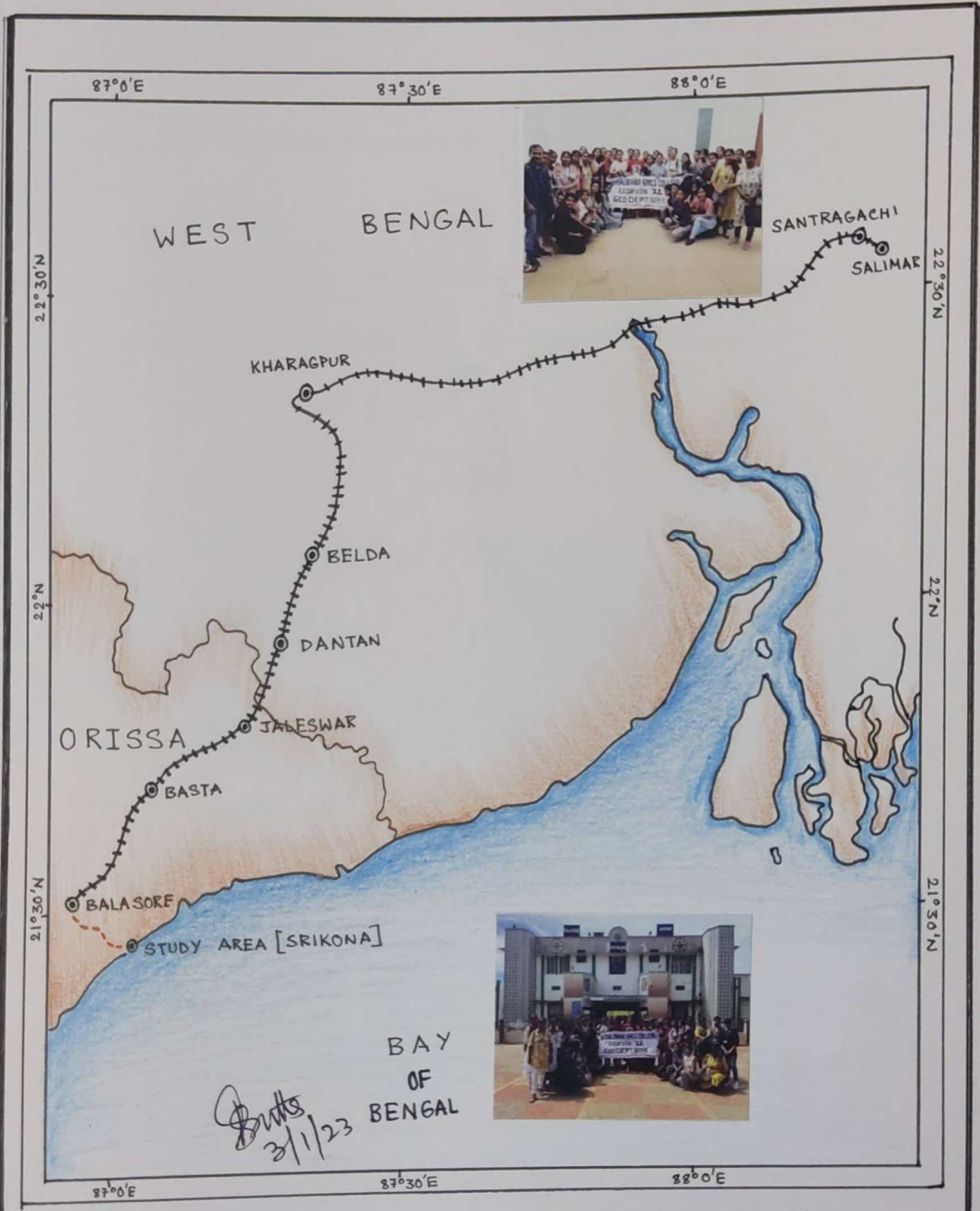
| INDEX | | |
|---|---|---|
| ✈ | SOUTH EASTERN RAILWAY | |
| - - - | ROAD | |

R.F - 1 : 80,0000

Fig-2

# STREAM ORDERING



MAP NO: F45 P3

87° 0"E
21°30' 48"N

87°2' 59"E
21°30' 48"N

21°34' 2"N
87° 0"E

21°34' 2"N
87°2' 59"E
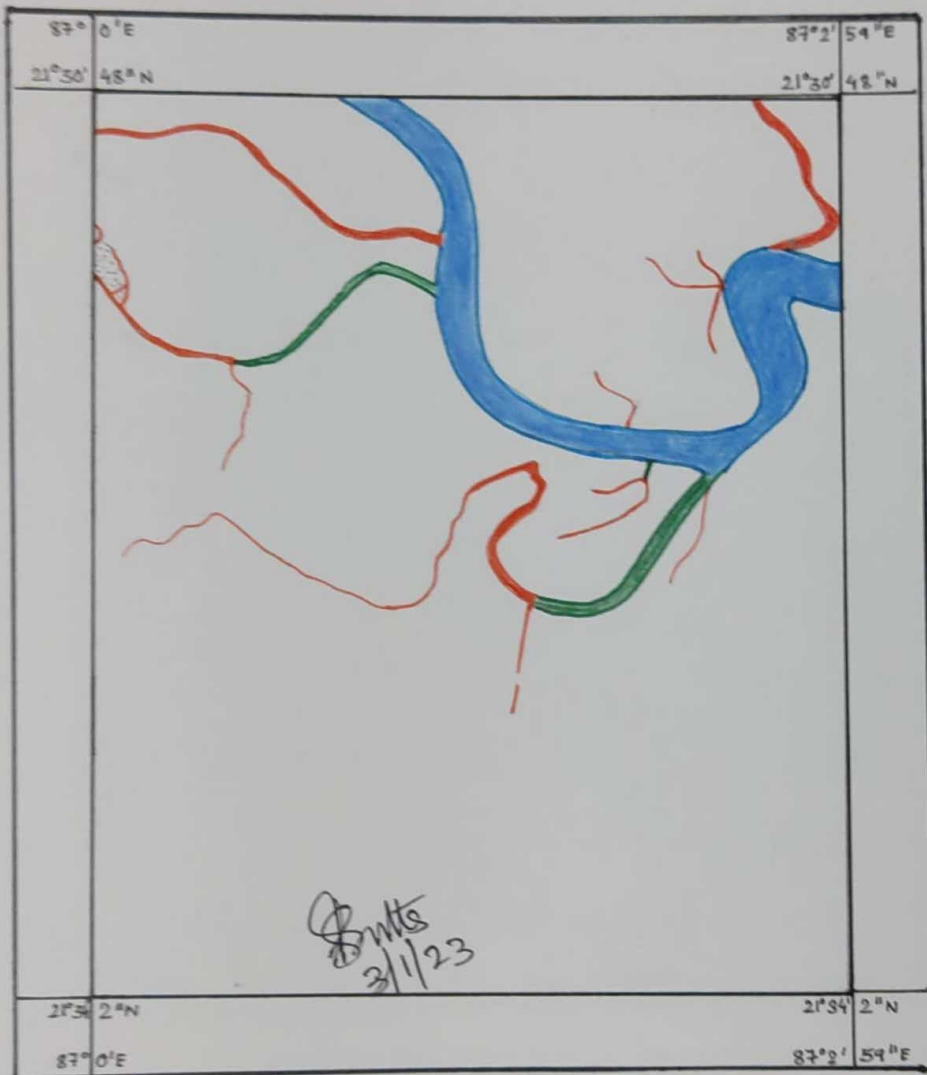
R.F : 1:50,000

| INDEX | |
|---|---|
| 〜 | 1ST STREAM |
| 〜 | 2ND STREAM |
| 〜 | 3RD STREAM |

# DRAINAGE DENSITY

MAP NO: F45P3



| | A | B | C | D | E | |
|---|---|---|---|---|---|---|
| 1 | 1 | 1.4 | 1.5 | 0 | 0 | 1 |
| 2 | 1.5 | 1.5 | 1.5 | 0.6 | 3 | 2 |
| 3 | 1.3 | 0 | 2.5 | 3.2 | 1 | 3 |
| 4 | 0.3 | 1 | 2 | 1.6 | 0 | 4 |
| 5 | 0 | 0 | 0.2 | 0 | 0 | 5 |
| 6 | 1 | 0 | 0 | 0 | 0 | 6 |
| | A | B | C | D | E | |

R.F ≥ 1 : 50,000

INDEX

2.70

1.35
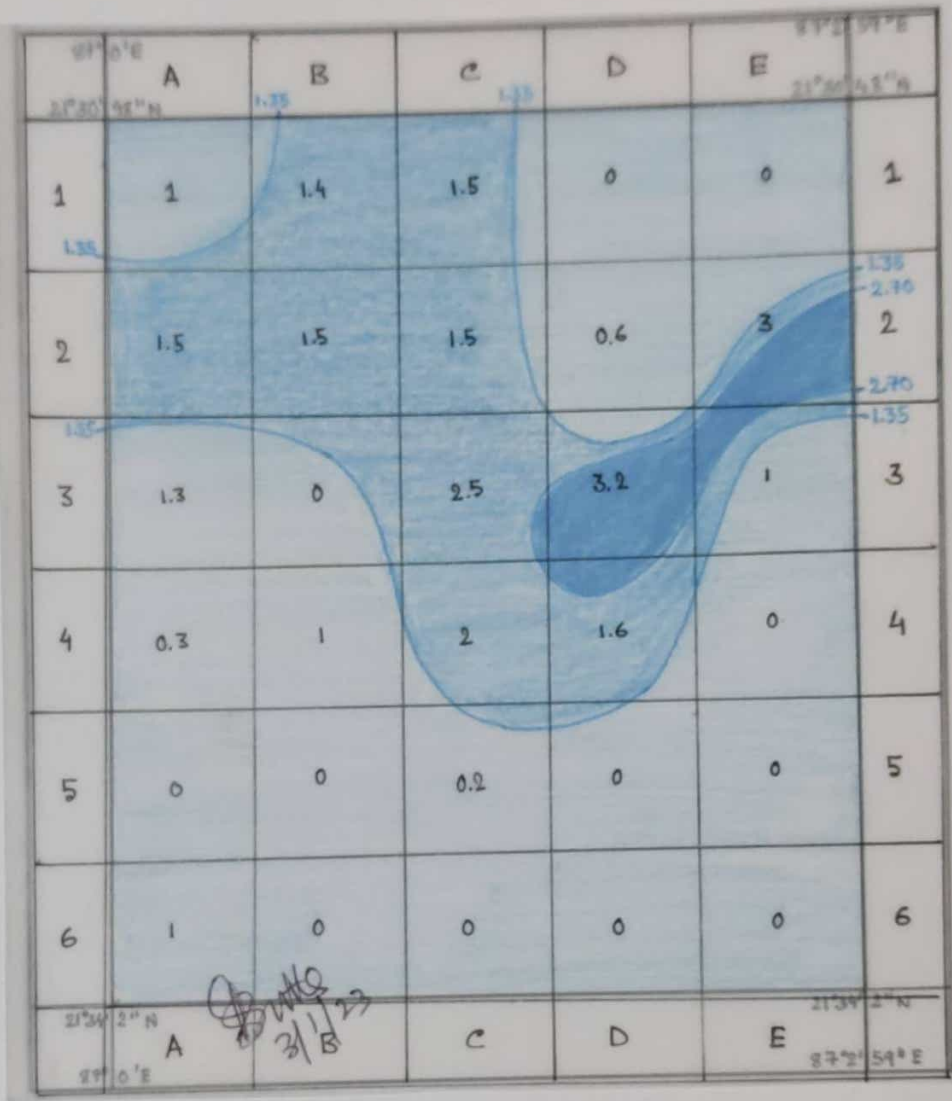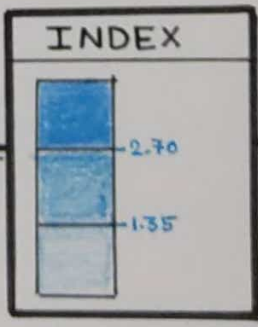
# ROAD DENSITY

MAP NO: F45 P3



| | A | B | C | D | E | |
|---|---|---|---|---|---|---|
| 1 | 3.3 | 2.5 | 1.8 | 2.3 | 2.5 | 1 |
| 2 | 3.3 | 1.8 | 0.3 | 2.3 | 0.5 | 2 |
| 3 | 3 | 2.8 | 1.8 | 0.3 | 1.8 | 3 |
| 4 | 1.5 | 1.8 | 2.3 | 2.5 | 1.3 | 4 |
| 5 | 3 | 4.8 | 5.3 | 1.8 | 0 | 5 |
| 6 | 3.5 | 3 | 2.3 | 0 | 0 | 6 |
| | A | | C | D | E | |

R.F: 1:50,000

INDEX
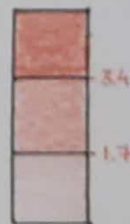
# SETTLEMENT DENSITY

MAP NO - F45 P3

|   | A | B | C | D | E |   |
|---|---|---|---|---|---|---|
| 1 | 14 | 14 | 16 | 12 | 10 | 1 |
| 2 | 16 | 12 | 10 | 17 | 9 | 2 |
| 3 | 9 | 13 | 15 | 0 | 20 | 3 |
| 4 | 20 | 10 | 18 | 17 | 17 | 4 |
| 5 | 20 | 26 | 26 | 15 | 0 | 5 |
| 6 | 12 | 19 | 17 | 0 | 0 | 6 |
|   | A | B | C | D | E |   |

Butts 3/1/23

R.F - 1:50,000

## INDEX

18.4

9.2
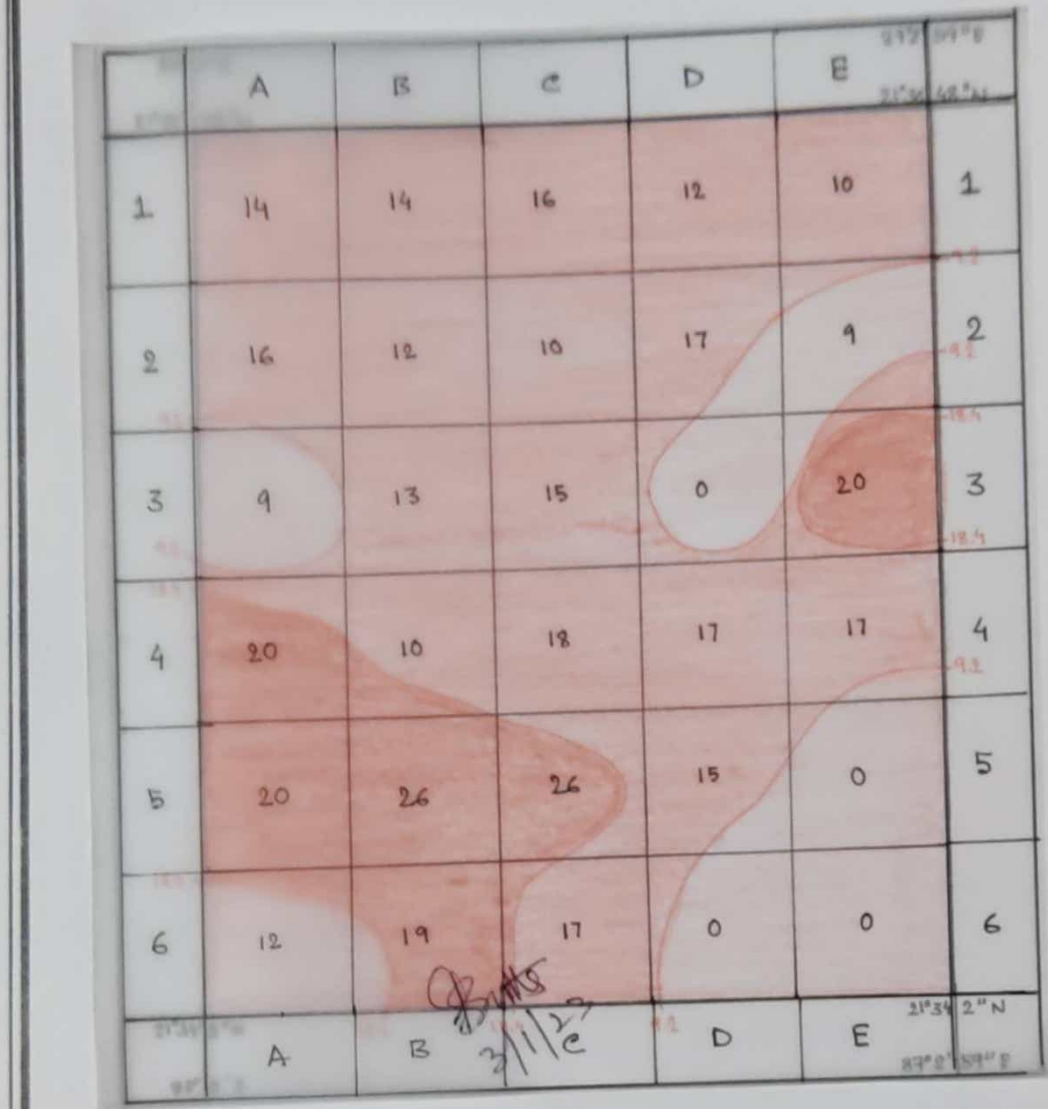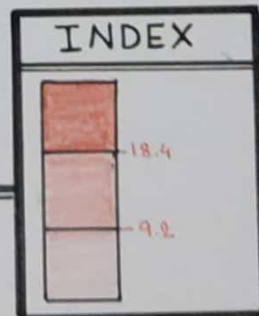
# GEOLOGY

The geological formations of the district Balasore are ranging from Pleistocene laterite to the recent alluvium with a few areas bordering Mayurbhanj district covering Archean unclassified including Singhbhum granite in Nilagiri upland.

The available data tentative stratigraphic sequence of the district are :

| | | |
|---|---|---|
| Recent | Alluvium | |
| Pleistocene | Laterite | |
| | ⌐ Dolerite dykes | |
| | Anorthosite | |
| Middle Proterozoic | Epidiorite [gabbro] | |
| | Granophyre complex | |
| | Enstatite peridotite | |
| | Unclassified gnesisses | |
| Archaean | ⌊ Singhbhum granite | |

The description of individual rocks are as follows:

ALLUVIUM : It is usually most extensively developed in the lower part of the course of a river, forming floodplains and delta.

**LATERITE:** Laterites are seen to have been developed over biotite gneiss and granites, and are also locally found.

**DOLERITE DYKES:** A dyke is an intrusion of igneous rock between an existing layer of rock.

**ANORTHOSITE:** Most models involve separating plagioclase crystals based on their density as Anorthosites are enormous geologic interest.

**EPIDIORITE:** It is composed of Plagioclase and hornblande, both minerals showing slight alongation

**GRANOPHYRE COMPLEX:** The granophyres are generally niebeckite consisting essentially of phenocrysts showing granophyric intergrowth of quartz and feldspar in a fine grained ground mass.

**ENSTATITE PERIDOTITE:** A band of enstatite peridotite, about one and a half kilometers long and 800 m wide has been noted.

**UNCLASSIFIED GNESISSES:** These are exposed in the western part of Baleshwar bordering Mayurbhanj district. Two types of gness are present in the district : (1) fine grained grey gneiss and (2) coarse grained gneiss

**SINGHBHUM GRANITE:** These rocks are mostly intrusive unclassified granite gneiss and are mostly hornblende granite type.

# TOPOGRAPHY

On the Northern side of Orissa lies the small yet significantly striking coastal city of Baleshwar. It is located in the south - eastern part of India. [21°30'N, 86°56'E]

Situated at an altitude of 19.08 meters the regions display a mixture of three different forms of topographic region

```
                    ┌──→ The Coastal Belt
TOPOGRAPHIC    ──────┼──→ The Alluvial Plain
 REGION             └──→ The North western hills.
```
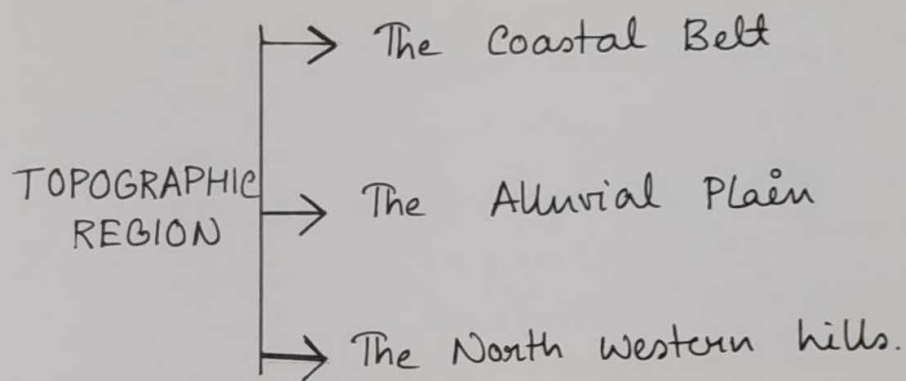
i) THE COASTAL BELT: The coastal belt stretches to about 83 km in the shape of a strip Brimming with sand dunes and coastal ridges. the belt is mostly swamped with blackish water from the rivers, making it an unsuitable place for cultivation.

ii) THE ALLUVIAL PLAIN: The subsequent adjoining geographical is in this city is the inner deltaic alluvial plain. They are extremly rich and it is a fertile region. The soil is extremly bountiful and rich for agricultural activities.

iii) THE NORTH WESTERN HILLS : The last and final kind of terrain is the diverse geographical area of Baleshwar area, the North-western hills. These hills mostly include the Nilagiri subdivision. The hilly regions of Nilagiri are full of widespread covers of tropical semi-evergreen forests consisting mostly of gravelly soil, which affects its productivity. With an altitude of approximately 546m above sea level, the hills are the home to some scheduled tribes.

# DRAINAGE

Chadipur is a beach in Balasore District, Odisha, India. The beach is located on the shore of Bay of Bengal and is approximately 16 km from the Balasore Railway station. The beach is unique in a way that the water reduces up to 5km during ebb tide. Due to its unique circumstances the beach supports bio-diversity.

The drainage density near the shore is low to very low whereas higher density is found in the North-east due to presence of small number of tributaries in the river.

Fishing market and community is observed at the confluence of the Budhabalanga river. After meeting with number of tributaries throughout its course (153.35km) it drains off in Bay of Bengal. Its major tributaries are Sone, the Gangadhar and the catra. It's total catchment area is 4 840 sq kilometers (1,870 sq mi).

# SOIL

The soil of the district Balasore is mostly alluvium, laterite, saline, clay, clayloam and sandy loam. The soil of central region is very fertile for growing crops. Soils of Nilagiri sub-division are mostly gravelly and lateritic soil, which is less fertile. Major soils types of Balasore District.

| SOIL TYPE | BLOCKS | IMPORTANT CHARACTERISTICS |
|---|---|---|
| SALINE SOIL | Bhograi blocks, portions of Baliapal, Balasore, Remuna, Bahanaga and Soro blocks along coast line. | Soils are sandy loam or clayey, neutral to strongly alkaline. Low in N and $P_2O_5$ and high in $K_2O$. |
| ALLUVIAL SOIL | Simulia, Soro, Remuna, Basta, Balasore, Bhograi, Baliapal and Jaleswar blocks. | Mostly acidic and nutral. Salt content is within 1 ds/m. |
| LATERITE SOIL | Jaleswar, Basta, Remuna, Nilagiri, Oupada and Khaira blocks | Mostly acidic and neutral. Organic carbon status is medium. |
| SANDY SOIL | Balasore, Remuna, Oupada, Bahanaga, Soro, Simulia and Khaira blocks | High porosity with low water holding capacity |

These soils are generally fertile with low status of Nitrogen and available phosphoric acid at certain places. They usually contain sufficient quantity of potash.

Block wise major classes with their geographical spread is mentioned below.

| BLOCKS | SOIL TYPE | | LAND SLOPE | | | |
|---|---|---|---|---|---|---|
| | MAJOR SOIL CLASSES | AREA [ha] | 0-3% [ha] | 3-8% [ha] | 8-25% [ha] | >25% [ha] |
| BALASORE SADAR | Mixed Grey Soil [Inceptisols] | 31726.75 | 25562.77 | 93.94 | | |
| | Unal Tered soils with coarse parent materials [entisols] | 2086.61 | 1482.30 | 125.08 | 1.07 | |
| | Unclassified soil [Like mud flats] | 13023.56 | 11919.22 | 133.43 | 2.31 | |

SOIL TESTING RESULT

A soil sample was collected from chadipur Beach Road. Chadipur, Odisha, India [latitude 21.451801° and logitude 87.038053°] on 23-09-2022 at 5:41 pm.
Using proper methods and methodology a soil test was performed in the college campas on 30-11-22 [time: 12:00-1:00 pm, maximum temp: 30°C, minimum temp: 19°C]. The results showed that the pH value of the soil is 8.5 [basic in nature] and the salinity of the soil is zero (0).

# NATURAL VEGETATION

The district Balasore of Orissa mainly has two types of Natural Vegetation are found. They are misscelleneous forest and the mangroves.

The forest occuring in this district has North Indian Tropical moist decidious forest as per Champion and Seth classification. The major species in this area are Sal, Neem, Keya tree and its presence is overwhelming. It is found all over the track on a variety of terrain and soil.

In almost all the forest areas in the district, it was found that the FPC's [Forest Protection Committe] were extremly effective.

Mangroves are recognized as critical coastal habitat requiring protection and special attention. Mangrove forest are among the productive ecosystems of the world.

In Orissa, mangroves are distributed in four coastal districts covering an area of 207 sq.km while in Balasore district only 4 sq.km mangrove cover are reported.

Balasore district is one of the six coastal districts [3806 sq. km] of orissa located in the North Eastern part of the state. It spreads over an area of 3806 sq. km and is situated between 87°22'E to 87°28'E longitude and 21°32'N to 21°36'N latitude.

Due to high moisture and salinity content, halophytic species like Myriostachya, wightiana, Suaeda martina, Suaeda nudiflora, Suaeda morocia, Sesuvium portulacastrum and Anthocernmun indicum grow predomenantly in this region of Balasore District.

The regular monitoring and proper management decisions should be persud for sustainabilty of the mangrove resources in Balasore and in particular blocks of Balasore and Orissa in general.

# TOURISM

Chadipur has its own unique tourism factor. It has a beach like no other beach which recedes upto 5 km offering visitors the opportunity to walk on the sea bed. This unique phenomenon supports a unique biodiversity. It is a home of many endangered horse shoe crabs, starfish and so on which attracts tourists

The confluence of the Buddhbalanga river is a scenic spot and popular amongst locals picnic spot.

The Panchalingeswara temple located 41 km from Chadipur is a revered temple of the region which attracts tourism.

Sunarpur Chowkand Bay is famous for shopping It also serves fresh crabs and prawns that is offered by local restaurants. This local sea food also acts as a pulling factor for tourism

The chadipur Beach Festival or Golden Beach festival is a four day festival which attract tourists, though most of the local people participate in it. It includes variety of cultural programs including regional dance type and various sports.

# POST
# FIELD

# DUMPY LEVEL
## LONGITUDANAL PROFILE, SRIKONA VILLAGE

PLACE: SRIKONA VILLAGE                    DATE: 21-09-2022
INSTRUMENT NO: 1                          TIME: 3:00-4:00PM

| RL IN METRE | 17.470 | 17.700 | 17.190 | 16.700 | 16.400 | 16.465 | 16.635 |
| LENGTH IN METRE | 0 | 5 | 10 | 15 | 20 | 25 | 30 |
| POINT | A₀ | A₁ | A₂ | A₃ | A₄ | A₅ | A₆ |

DATUM LINE 16.800

RL IN METRE (vertical axis): 17.800, 17.500, 17.200, 16.900, 16.600, 16.300

| SCALE |
| VERTICAL SCALE : 1cm ≈ 0.300m |
| HORIZONTAL SCALE: 1cm ≈ 5m |

Source: Field survey, 2022

21

Fig-7

MARKET MORPHOLOGY

EASTING: 0803997
NORTHING: 2372134

EASTING: 0804053
NORTHING: 2372139

INDEX
TYPES OF SHOP
GIFT SHOP
GROCERY
TEA SHOP
HOTEL
RESIDENCE

SCALE : 1cm = 10 METERS

Fig-8

TYPES OF SHOP



GRAPHICAL SCALE

INDEX
GIFT SHOP
GROCERY
TEA SHOP

Fig-9

PROFIT AND SAVINGS OF EACH SHOP



% OF PROFIT AND SAVINGS

NAME OF SHOP

INDEX
SAVINGS
PROFIT

GRAPHICAL SCALE

VERTICAL SCALE
1 cm = 10%

Fig-10

DUMPY LEVEL


STAFF READING


PRISMATIC COMPASS


GPS READING


MARKET MORPHOLOGY


MARKET SURVEY

AGE SEX PYRAMID, SRIKONA VILLAGE
[POPULATION COMPOSITION]
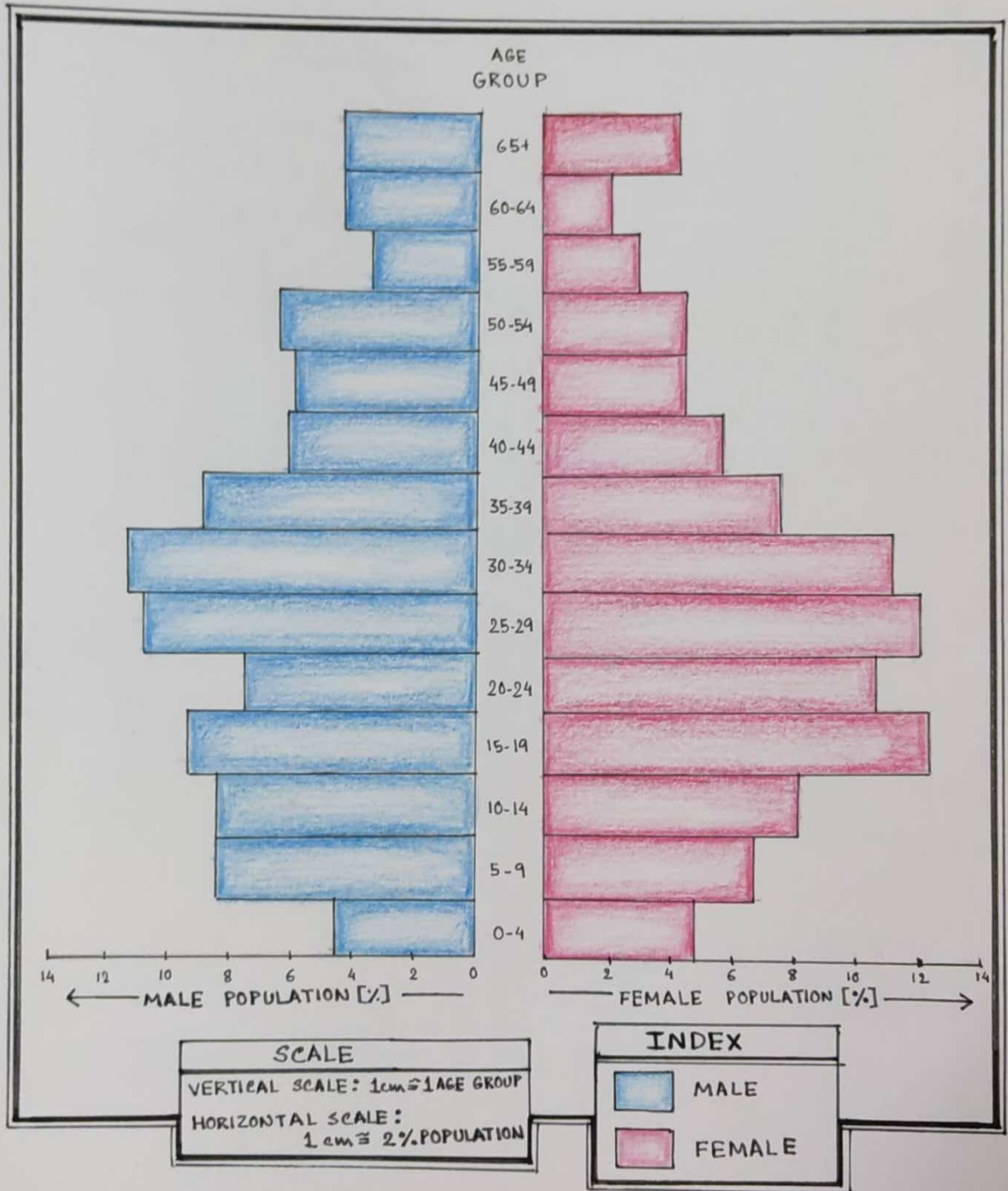
# TYPES OF CASTE, SRIKONA VILLAGE



INDEX
- GENERAL
- SC
- ST
- OBC

GRAPHICAL SCALE

HORIZONTAL SCALE : 1cm=10% POPULATION
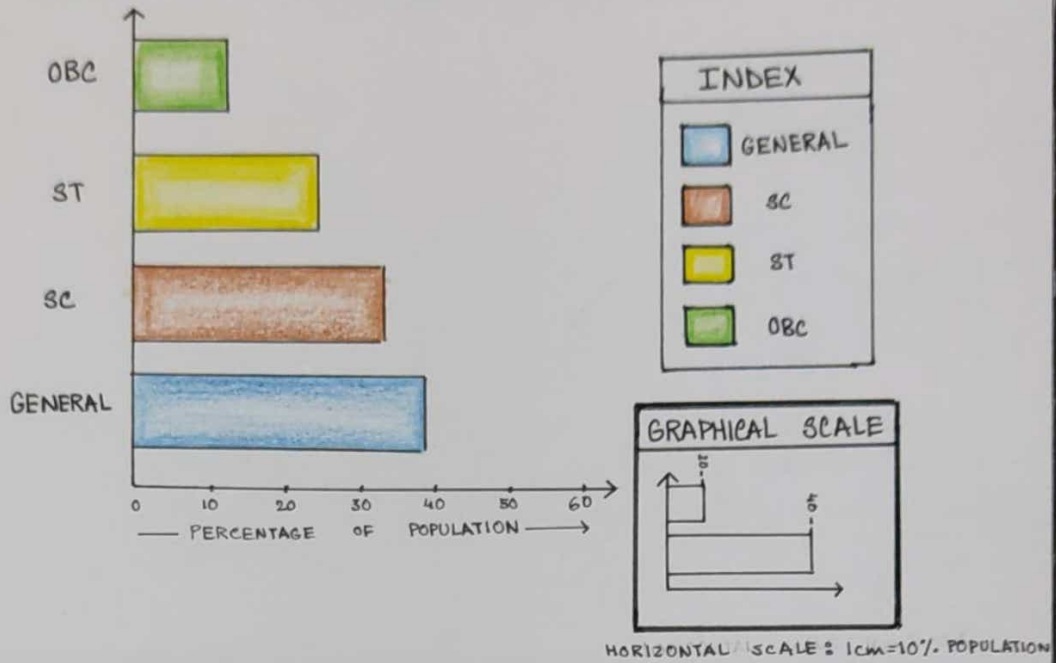
Fig 12

# RELIGION COMPOSITION, SRIKONA VILLAGE
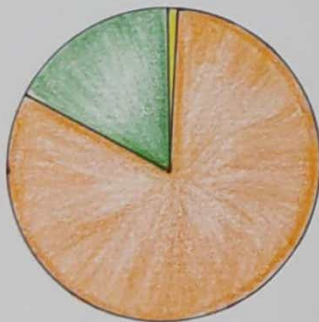


GRAPHICAL SCALE
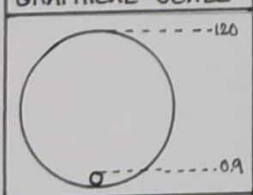
INDEX
- HINDU
- MUSLIM
- CHRISTIAN/OTHER

Fig-13

# MARITAL STATUS, SRIKONA VILLAGE



INDEX
- MARRIED MALE
- UNMARRIED MALE
- MARRIED FEMALE
- UNMARRIED FEMALE
- WIDOW

GRAPHICAL SCALE

VERTICAL SCALE :
1cm =20% POPULATION

Fig-14

Source : Field Survey, 2022

25
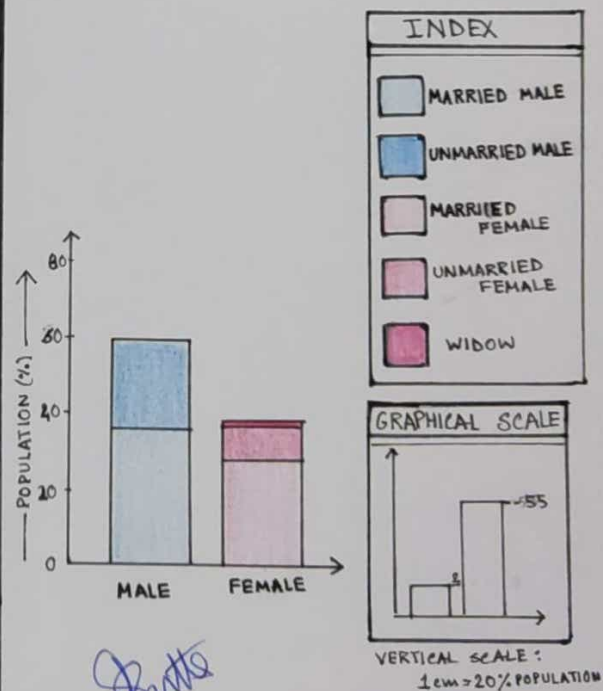
LITERACY RATE, SRIKONA VILLAGE
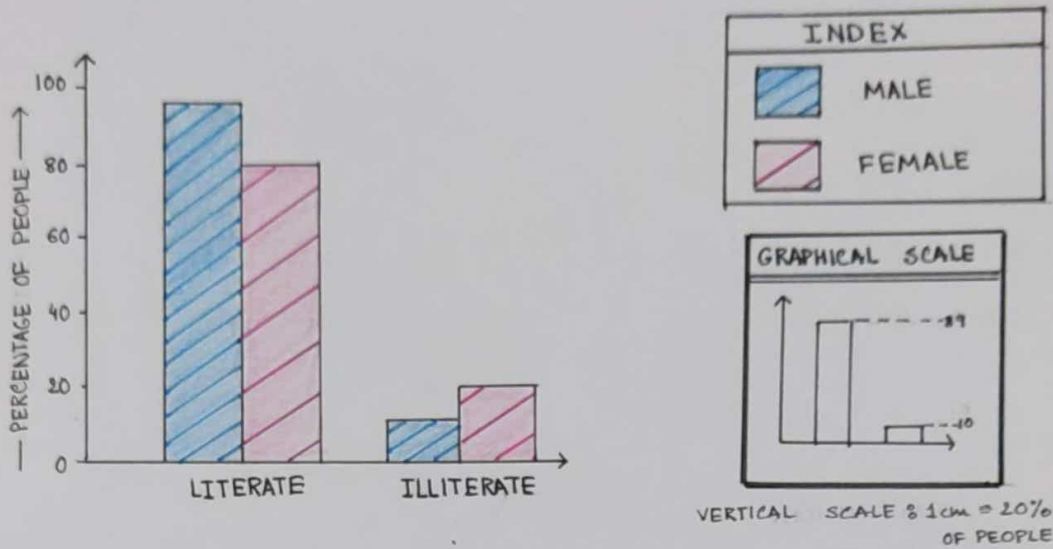
Fig-15



EDUCATIONAL QUALIFICATION, SRIKONA VILLAGE
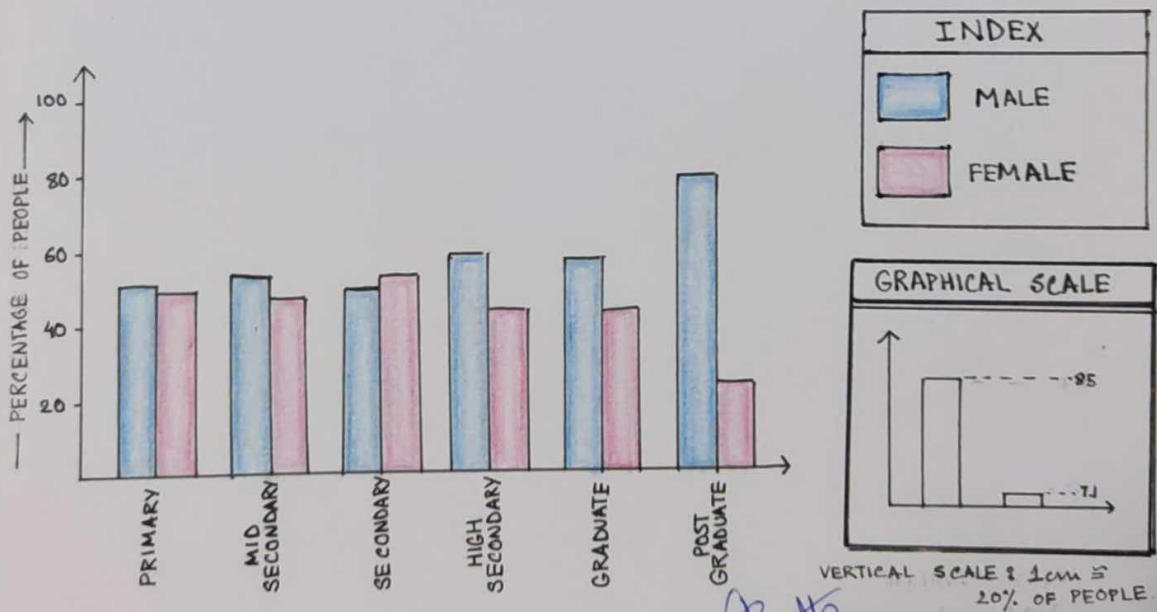
Fig-16

# OCCUPATION STRUCTURE, SRIKONA VILLAGE
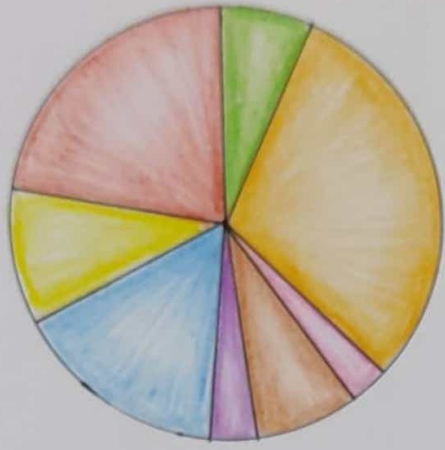


**INDEX**

| | |
|---|---|
| ● AGRICULTURE | ● PRIVATE SECTOR |
| ● BUSINESS | ● FISHING |
| ● TOURISM | ● HOME MAKER |
| ● GOV. SECTOR | ● OTHERS |

**GRAPHICAL SCALE**

35
5
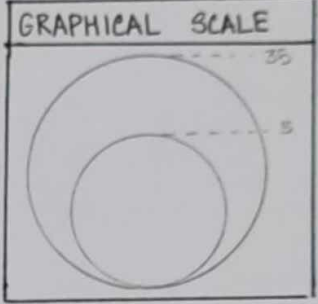
Fig-17

# NATURE OF INCOME, SRIKONA VILLAGE
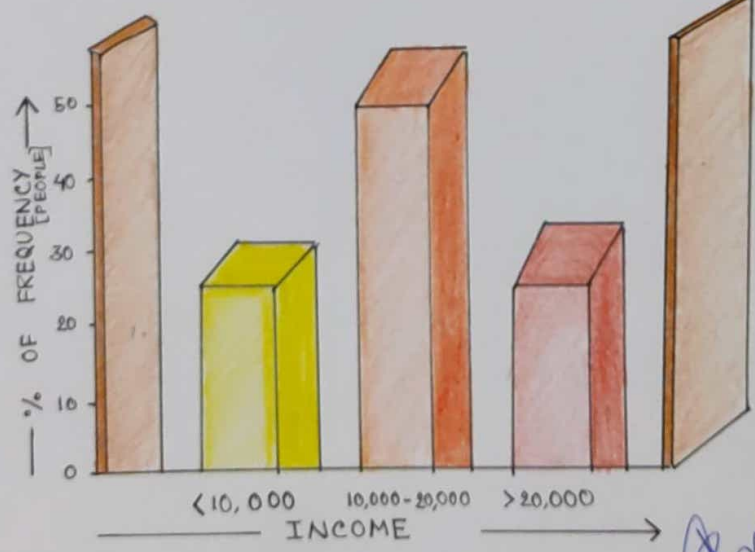


**INDEX**

| | |
|---|---|
| ■ | < 10,000 |
| ■ | 10,000-20,000 |
| ■ | > 20,000 |

**GRAPHICAL SCALE**

55
20
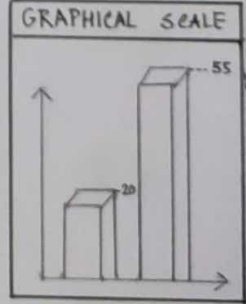
VERTICAL SCALE
1cm : 10% PEOPLE

Fig-18

**NATURE OF WALL**
SRIKONA VILLAGE

GRAPHICAL SCALE

INDEX
MUD BRICK
BURNT BRICK
CONCRETE
OTHERS

VERTICAL SCALE:
1cm = 10% FREQUENCY
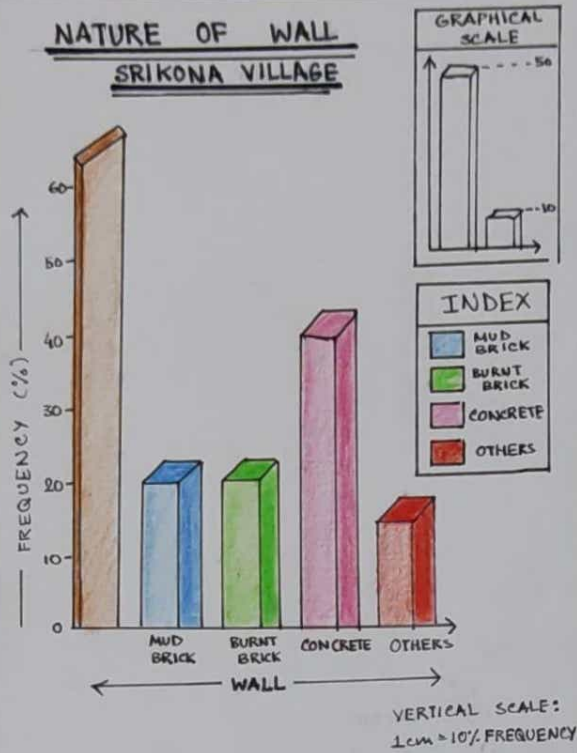
Fig-19

**NATURE OF FLOOR**
SRIKONA VILLAGE

GRAPHICAL SCALE

INDEX
BRICK
MUD
CEMENT
OTHERS

VERTICAL SCALE
1cm = 10% FREQUENCY
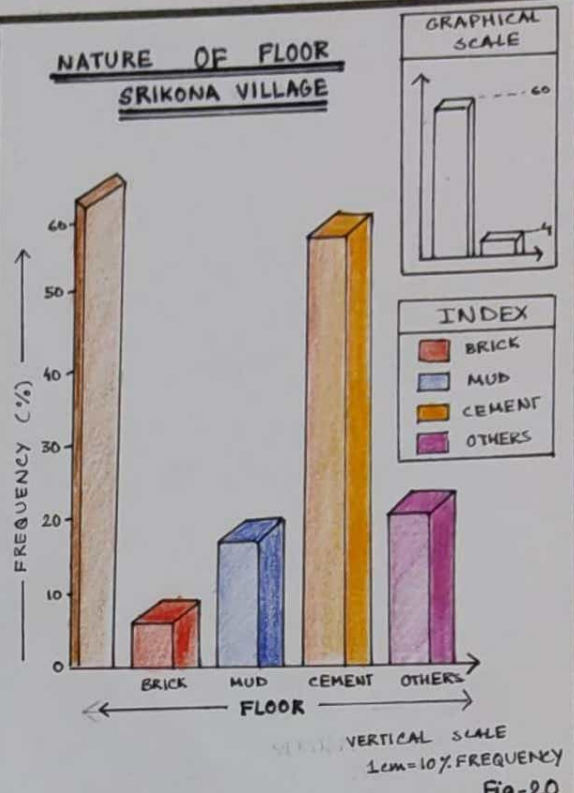
Fig-20

**NATURE OF ROOF**
SRIKONA VILLAGE

GRAPHICAL SCALE

INDEX
TIN
TILE
HAY
OTHERS

VERTICAL SCALE
1cm = 10% FREQUENCY
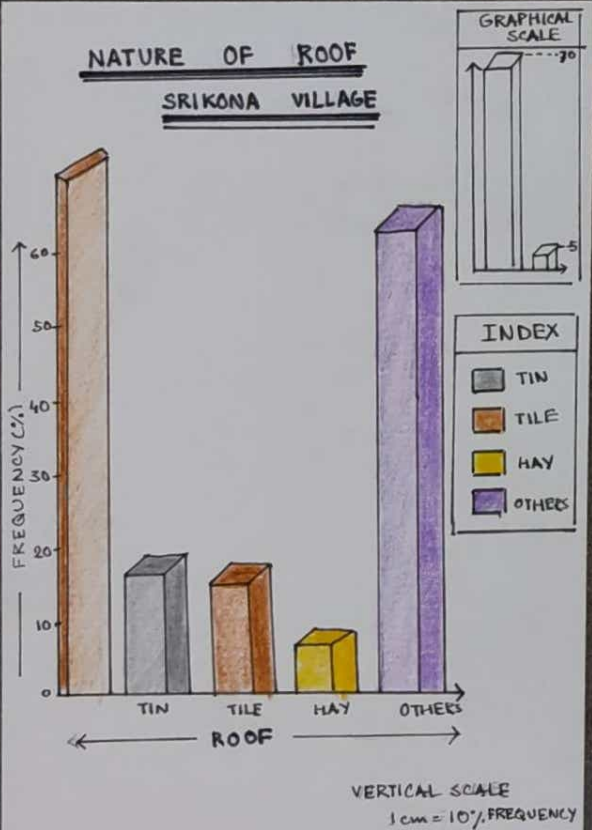
Fig-21

**NATURE OF HOUSE**
SRIKONA VILLAGE

GRAPHICAL SCALE

INDEX
OWN HOUSE
RENTED HOUSE

Fig-22

Source: Field Survey, 22

28
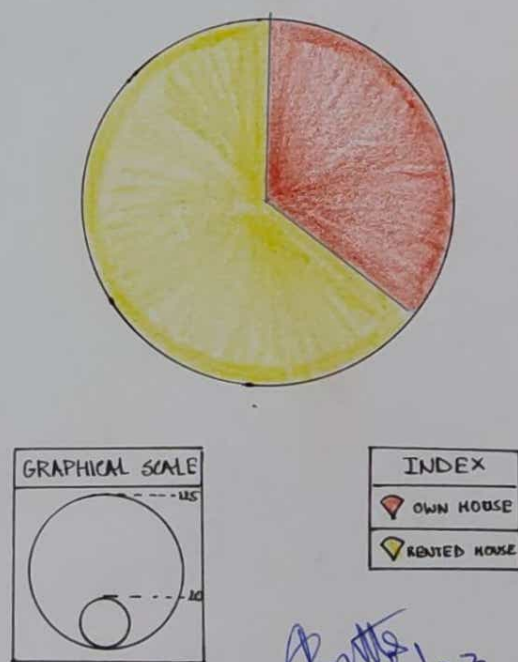
# FLOW DIAGRAM [SRIKONA VILLAGE]

TIME: 4:30-5:30 PM

N

UP

DOWN

C

B

A

## SCALE
### No OF VEHICLES

400

200

0
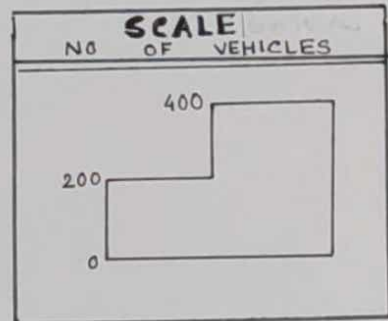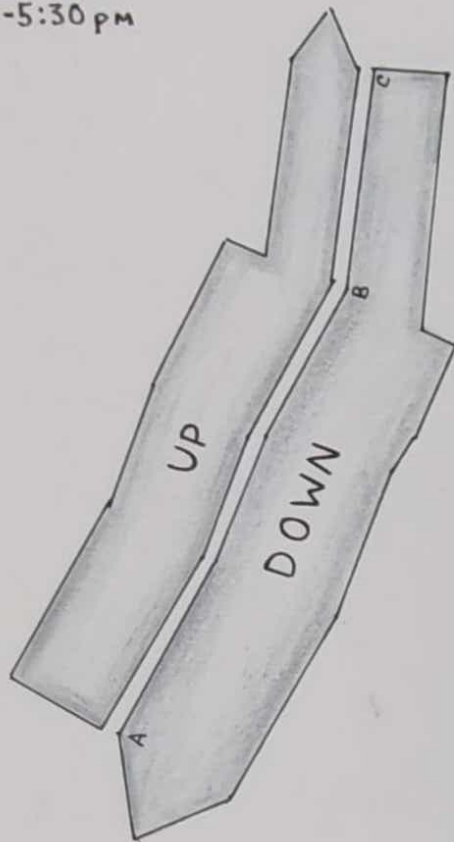
Fig-23

# LOCOMOTIVE FLOW [SRIKONA VILLAGE]



— NO OF VEHICLES (%) →

100
80
60
40
20
0

BICYCLE    BIKE    AUTO    OTHERS

← DIFFERENT TYPES OF VEHICLES →

### INDEX
UP    DOWN

### GRAPHICAL SCALE

~400

~40

SCALE: 1cm ≙ 20%
VEHICLES
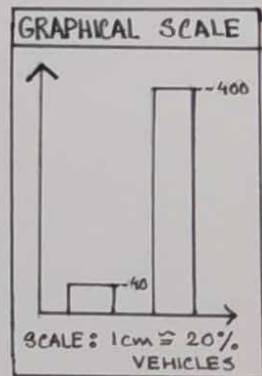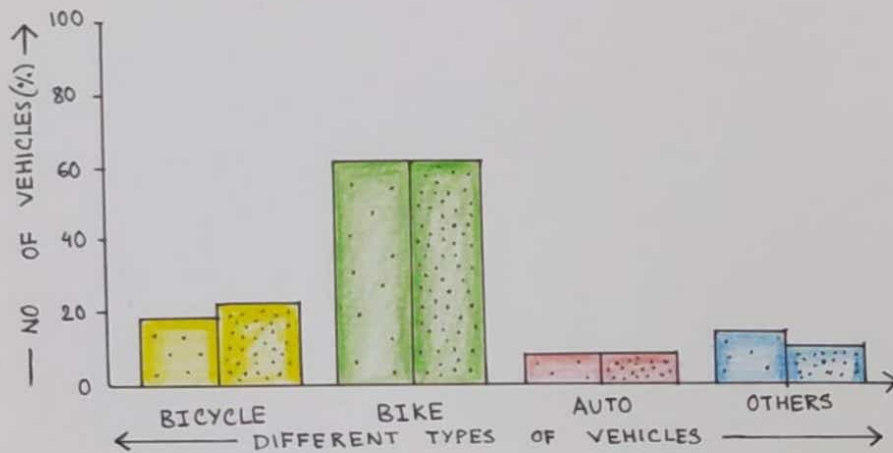
Fig-24

# SOIL

Two samples of soil were collected from hotel and from the beach of chadipur. Both the samples were tested using proper methods and methodology on 30-11-22 in the college campus. [maximum temperature 30°C and minimum]. The results are as follows.

| SAMPLE COLLECTED FROM | DATE | TIME | LATITUDE AND LONGITUDE | PH VALUE | SALINITY |
|---|---|---|---|---|---|
| Chadipur Beach | 23-09-22 | 5:19 PM | lat: 21.450656° long: 87.039195° | 6 | 0 |
| Hotel | 23-09-22 | 5:41 pm | lat: 21.451801° long: 87.038053° | 8.5 | 0 |



Chandipur, Odisha, India
F22Q+Q7H, Chandipur Beach Rd, Chandipur, Odisha 756025, India
Lat 21.451801°
Long 87.038053°
23/09/22 05:41 PM GMT +05:30

COLLECTION OF HOTEL SOIL



Balasore, Odisha, India
F22Q+PGF, Balasore, Odisha 756025, India
Lat 21.451049°
Long 87.039279°
23/09/22 05:02 PM GMT +05:30
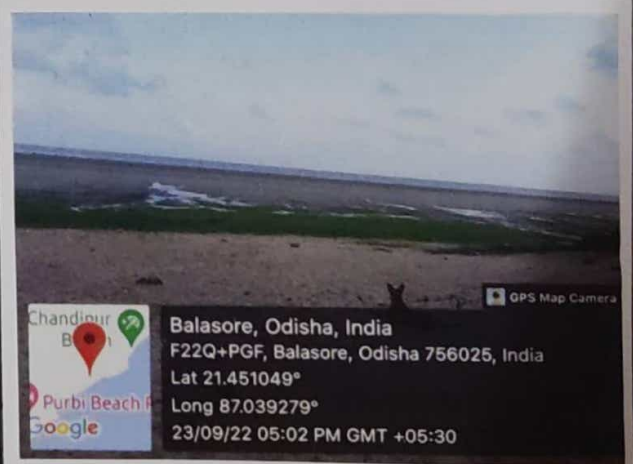
BEACH SOIL

HOUSEHOLD SURVEY



Balasore, Odisha, India
F24Q+37R, Balasore, Odisha 756025,
India
Lat 21.455378°
Long 87.038272°
21/09/22 11:01 AM GMT +05:30

HOUSEHOLD SURVEY



Balasore, Odisha, India
F23Q+CJW, Balasore, Odisha 756025, India
Lat 21.453411°
Long 87.037974°
21/09/22 10:33 AM GMT +05:30

HOUSEHOLD SURVEY
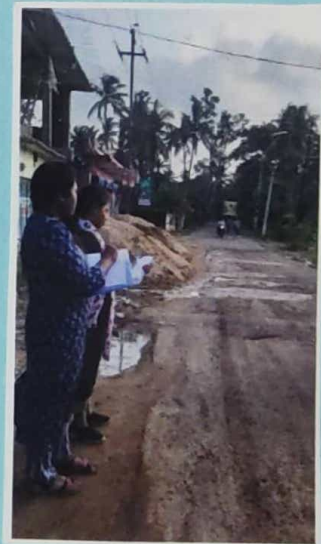


TRANSPORT SURVEY

HIGH INCOME, HOUSE

Chandipur, Odisha, India
F24R+C9M, Chandipur, Odisha 756025, India
Lat 21.455387°
Long 87.040409°
21/09/22 10:32 AM GMT +05:30



LOW INCOME , HOUSE



HIGH INCOME, KITCHEN

Balasore, Odisha, India
Sea Breeze, Major Simha Marg, Chandipur, Dist, F23R+VF5, Odisha 756025, India
Lat 21.454292°
Long 87.041658°
21/09/22 10:54 AM GMT +05:30
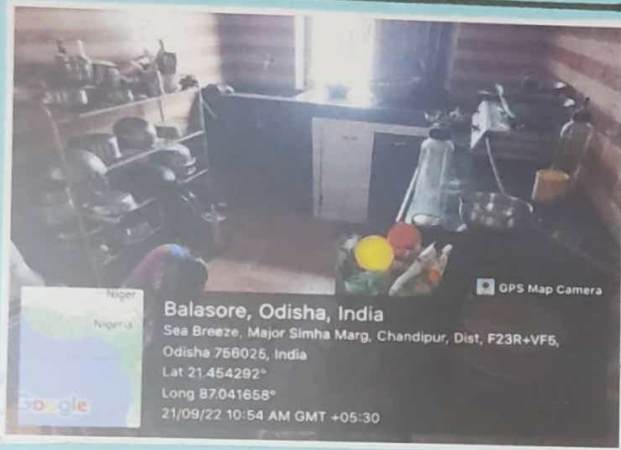


LOW INCOME, KITCHEN



HIGH INCOME, WASHROOM



LOW INCOME, WASHROOM

SHEET EROSION


RILL EROSION


SALT DEPOSITION


PATTERNS BY CRAB


null, Odisha, India
Odisha, India
Lat 21.457583°
Long 87.049537°
22/09/22 05:20 PM GMT +05:30
GPS Map Camera
Google
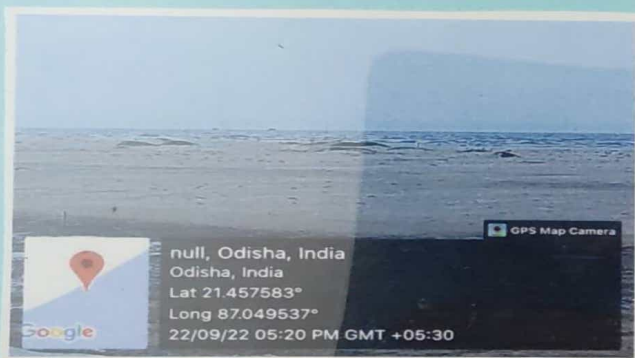
SAND DUNES[NATURAL]


ALGAL DEPOSITS

## INTERPRETATION [DUMPY LEVEL]

A longitudanal profile has been drawn on the basis of the data of seven points which has been collected from Srikona village, Chadipur, Orissa.

The data was collected by instrument no 1 on 21-09-2022 between 3:00 pm to 4:00 pm. BM or Bench mark at point $A_0$ is 17.470 m.

Highest elevation is seen in point $A_1$ (17.770 m) whereas lowest elevation is observed in point $A_4$ (16.470 m). Each reading has been taken at a gap of 30 meters.

Finally it can be concluded that the slope is uneven in nature.

## INTERPRETATION [MARKET MORPHOLOGY AND SURVEY]

A market morphology has been prepared on the basis of the collected data from Srikona village, Balasore District, Orissa. The area has dominence of hotel region and also consists some residential area. The northing and easting values of the starting point are 050 3997m and for Easting and 2372134m for northing. The northing and Easting values of the end point are 2372139m and 0504053m respectively. 4 gift shop, 3 grocery shop and 2 tea shop are observed here.

A pie diagram has been constructed on the types of shop which were noted during market survey. 44.44% of the market area are occupied by gift shop, 33.33% of the market area are occupied by grocery shop and the rest 22.22% of the market area are occupied by tea shop.

A bar diagram has been constructed on the basis of the profit and savings of each type of shop. Profit is maximum for the gift shop, 48.56% followed by grocery shop 30.86% and then tea shop 20.58%. Only in case of gift shop it is observed that savings is more than the profit they earn. Hence it can be assumed that they have some other source of earning or their market is of high value.

# INTERPRETATION,[AGE SEX PYRAMID ,POPULATION COMPOSITION

An age-sex pyramid reflects long-term trends in the birth and death rates and even short-term changes resulting from baby "booms" and "busts", wars, and epidemies.

Comparing male and female population of (Srikona) Chadipur it is observed that male population is more than female population. There is huge variation of dependent and independent population in the Srikona village, that is independent population is more than dependent population.

In case of male. highest male population is seen in the age group (30-34) that is 11.4% and lowest is seen in the age group (55-59) that is 3.6%. In case of female highest population is seen in the age group (15-19) that is 12.7% and lowest in the age group (60-64) that is 2.2%. The lower age groups (0-4, 5-9 and 10-14) have very less population that might be due to any policy or any disease.

## INTERPRETATION [CASTE, RELIGION AND MARITAL STATUS]

A bar graph, a circle and a compound bar graph is done to show the types of caste, religion composition and marital status respectively of Srikona village, Balasore district.

From the bar diagram showing different types of caste it can be interpreted that 39.29% of the people belong to general caste. 34.29% of the population belong to SC category and 15% and 11.42% of the population belong to ST and OBC respectively.

From the pie diagram showing various religion composition it can be concluded that Hindus are dominent in this region covering a population of 82.14%. 17.14% of the people are Muslim whereas rest 0.72% either are christian or others.

From the compound bar graph it can be observed that percentage of unmarried male (25.72%) is more than unmarried female (7.14%). 36.43% of the male population is married whereas only 7.14% of the female population is married, widowhood is only observed in case of female that is 2.14%

In case of pie diagram colour is assinged as orange for hendu, green for muslim and yellow for others or christian, according to their specified colour.

# INTERPRETATION [LITERACY AND EDUCATION]

Two bar diagrams has been prepared on the basis of literacy rate and educational qualification of Srikona village, Balasore District, Orissa.

In the initial bar graph it has been observed that out of the total population of Srikona Village, the male population occupies the maximum literacy rate. 88.89% of the male population are literate whereas 80.56% of the female population are illiterate. Only 11.11% of the male population are illiterate whereas 19.44% of the female population are illiterate.

In case of educational qualification, women population decreases as the education level increases. Only in case of secondary education the percentage of female rises over the male population. According to census classification the educational system is broken into six parts - Primary, secondary, mid-secondary, Higher secondary, Graduate and post graduate.

# INTERPRETATION [OCCUPATION AND INCOME]

A pie diagram and a bar diagram is drawn to show the occupation structure and nature of income of Srikona village, Balasore district, Orissa respectively.

In the occupational structure of Srikona village it is observed that highest number of population are engaged in Buisness sector (30%) followed by fishing (16.42%) followed by the homemakers (10%) and minimum amount of people are involved in tourism sector (2.85%). Suprisingly only 7.85% of the population are engaged in government sector.

The bar diagram is showing the economic structure that is the income distribution of Srikona village. It can be interpreted that maximum population (50%) of the population have income between 10,000 – 20,000 Rs. 25% of the population have income below 10,000 and the rest 25% of the population have income above 20,000 per month.

Comparing the occupational structure and nature of income of Srikona village it can be concluded that the region has low to moderate level of development.

## INTERPRETATION [WALL, FLOOR, ROOF AND NATURE OF HOUSE]

A number of bar diagrams has been constructed for showing the nature of wall, floor, roof and (own or rented house) in the Srikona village of Chadipur. Only pie diagram is constructed for nature of house.

Comparing the types of wall in Srikona village it is observed that, 48.57% of the wall are made up of concrete, 20% of the wall are made up of Burnt Brick, followed by 20% of the wall are made of mud brick and others 11.42%.

Again, comparing the nature of floor of the Srikona village it is seen that 57.14% floor are made up of cement, 17.14% is made up of mud followed by 5.71% made up of bricks and others 20%.

Again, comparing the nature of roof of the Srikona village it can be said that 15.7% of the roof are made up of Asbestor/tin, 15% are made up of tiles, followed by 6.43% made up of hay and others consisting 62.86%

Comparing, the nature of house of the Srikona village it is interpreted that 82.14% of the people live in their own house whereas 17.85% of the people live in rented house.

Seeing all the factors it can be concluded that the socio-economic condition is moderate in nature.

# INTERPRETATION [FLOW DIAGRAM AND LOCOMOTIVE FLOW]

A locomotive flow diagram has been drawn on the basis of vehicals fow in upward and downward direction. From three distintive points A, B and C the nature of flow (up and down) has been recorded between the time 4:30 - 5:30 pm.
The number of vehicals flowing towards the upward direction is more than the number of vehicals flowing towards the downward direction. Taking the scale 1cm = 200 no of vehicals the flow diagram has been done.

A bar diagram showing the nature of locomotive fow ( Bicycle, Bike, Auto and others) to up and down direction. The maximum number of vehicals which is seen in the area is bike followed by bicycle. Comparing the number of type of vehicals flowing towards the upward direction, bike covers the maximum space (60.82%) followed by bicycle (18.26%) again comparing the number of type of vehicals flowing towards the downward direction maximum space is again bike covers the maximum space (60.96%) then bicycle (21.14%) followed by other vehicals that is 9.72 %.

# PROBLEMS AND PROSPECTS

Number of problems and prospects has been observed in the surveyed mouza.

The problems of the area are noted as follows:

a) Proper clearence of waste is not observed in this area. Local people seem to dump waste in ponds, rivers and open grounds which leads to pollution.

b) People need to travel to the main city for any medical checkup as only one medical shop is observed in the area. Hence, medical facility is of great concern.

c) Roads are not properly maintained which leads to water logging during rainy season.

d) People frequently suffer from diseases due to lack of proper sanitization.

e) Pollution is highly seen in the beach areas due to very low swash effect. which reflects the amount of pollution caused by the local people in the /near the beach side (areas).

While doing the survey we faced that few local people did not want to communicate well. Inspite of so many problems there are number of prospects

which are noted below.

a) Previously, the local people of Srikona village had to travel to Balasore for any medical purpose. as only one medical shop is observed in the village. During survey we have observed that many new shops are under construction. Hence it can be assumed that more medical shops will be seen in the mouza in the upcoming years.

b) In the beach side crowd is observed for water sports. Hence, it can be estimated that adventure tourism will enhance in future.

c) New shops are under construction in the market area, hence development of market will be observed in future.

d) Most sea beach hotels are under the government where proper maintanence is observed. So more resort and hotel development will be seen which indicate a development in tourism industry.

# SURVEY OUTCOME

## HAZARD

- CYCLONE
- POLLUTION AT BEACH
- FLOOD
- BEACH EROSION
- SALINITY PROBLEM
- DISEASE

## WANT

- PROPER MEDICAL FACILITY
- PROPER ROAD
- PROPER POWER SUPPLY
- GARBAGE DISPOSAL
- GOODS AT AFFORDABLE PRICE
- DEVELOPED MARKET
- ENCOURAGEMENT OF FEMALE EDUCATION

## FACILITIES AVAILABLE

- GOOD TRANSPORT
- HOTEL DEVELOPMENT
- ADMINISTRATION
- OWN HOUSE OF PEOPLE MAXIMUM
- EDUCATION
- BUISNESS HOLDER
- TOURIST SPOT

44
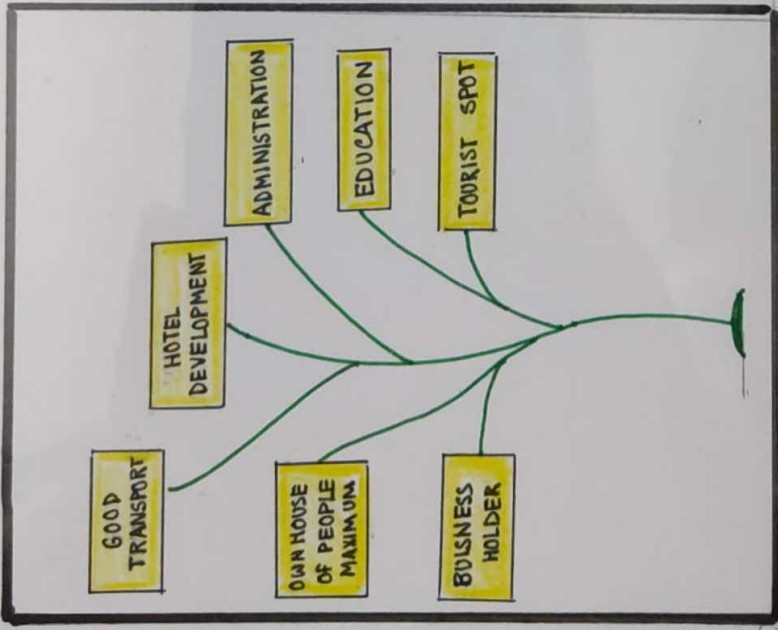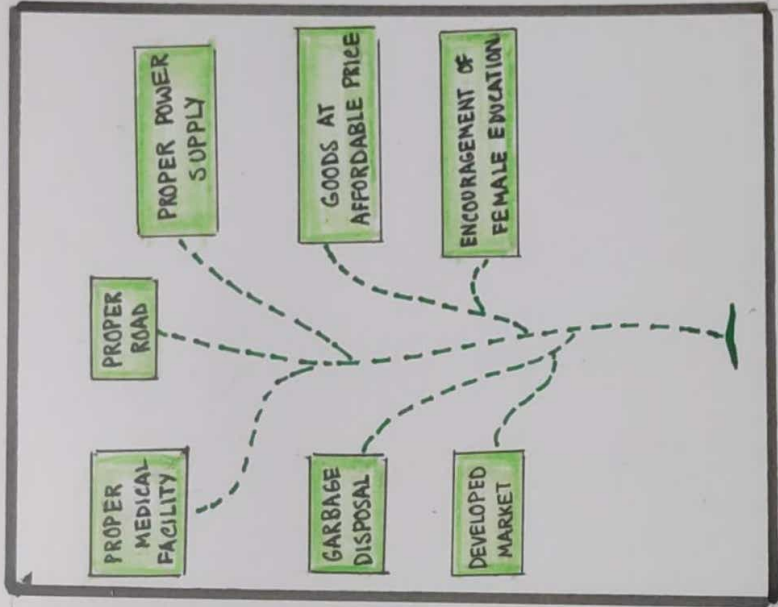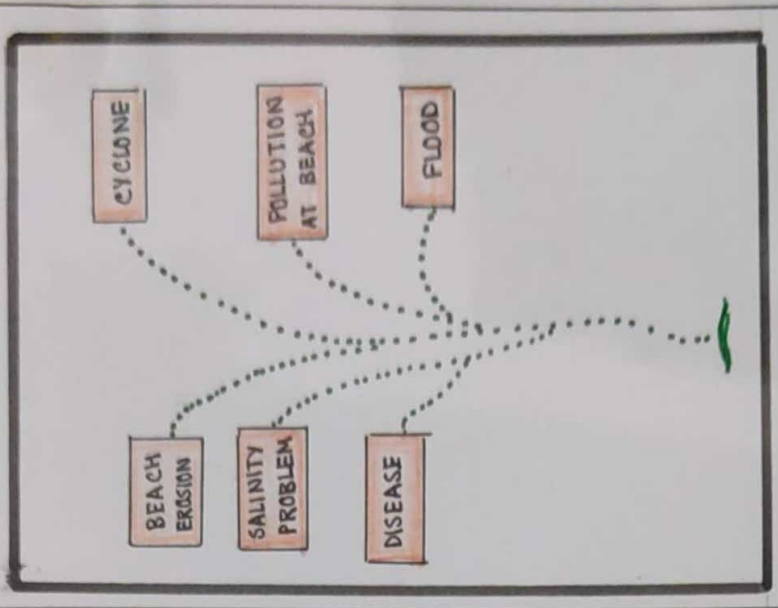
# PROBLEMS
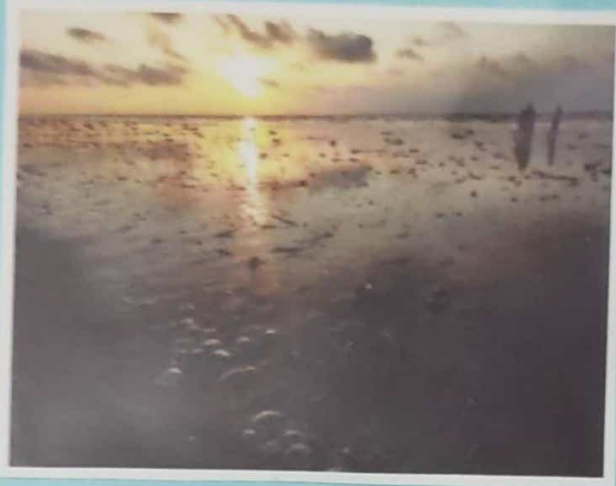


POLLUTION



WATER WASTAGE



WATER LOGGING
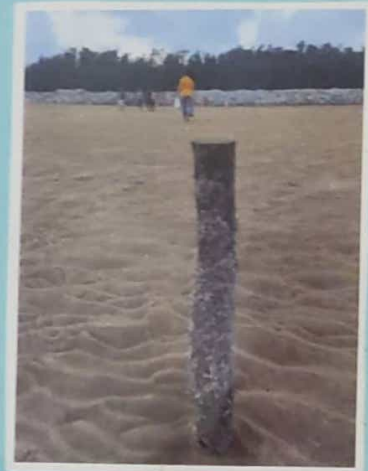


FUNGUS DEPOSITION DUE TO
SEA LEVEL RISE AND FALL



SPUME OR BEACH FOAM

# PROSPECTS


FOREST OFFICE [TOURISM]


KITCHEN/HOME GARDENING


TOURISM ENHANCEMENT


SEA BEACH PROTECTION

# APPENDIX

# CALCULATION FOR STREAM ORDERING

| STREAM ORDERING | NUMBER OF STREAMS | BIFURCATION RATIO |
|:---:|:---:|:---:|
| 1 | 14 | — |
| 2 | 4 | 3.5 |
| 3 | 1 | 4 |

REFER, Fig:3. Pg-7

# CALCULATION FOR DRAINAGE DENSITY

| GRID No | RIVER LENGTH | | DRAINAGE DENSITY |
| --- | --- | --- | --- |
| | ACCORDING TO ROTAMETER | ACCORDING TO MAP SCALE [km] | |
| $A_1$ | 2 | 1 | 1 |
| $A_2$ | 3 | 1.5 | 1.5 |
| $A_3$ | 2.5 | 1.3 | 1.3 |
| $A_4$ | 0.5 | 0.3 | 0.3 |
| $A_5$ | 0 | 0 | 0 |
| $A_6$ | 2 | 1 | 1 |
| $B_1$ | 2.8 | 1.4 | 1.4 |
| $B_2$ | 3 | 1.5 | 1.5 |
| $B_3$ | 0 | 0 | 0 |
| $B_4$ | 2 | 1 | 1 |
| $B_5$ | 0 | 0 | 0 |
| $B_6$ | 0 | 0 | 0 |
| $C_1$ | 3 | 1.5 | 1.5 |
| $C_2$ | 3 | 1.5 | 1.5 |
| $C_3$ | 5 | 2.5 | 2.5 |
| $C_4$ | 4 | 2 | 2 |
| $C_5$ | 0.3 | 0.2 | 0.2 |
| $C_6$ | 0 | 0 | 0 |
| $D_1$ | 0 | 0 | 0 |
| $D_2$ | 1.2 | 0.6 | 0.6 |
| $D_3$ | 6.3 | 3.2 | 3.2 |
| $D_4$ | 3.2 | 1.6 | 1.6 |
| $D_5$ | 0 | 0 | 0 |
| $D_6$ | 0 | 0 | 0 |
| $E_1$ | 0 | 0 | 0 |
| $E_2$ | 6 | 3 | 3 |
| $E_3$ | 2 | 1 | 1 |
| $E_4$ | 0 | 0 | 0 |
| $E_5$ | 0 | 0 | 0 |
| $E_6$ | 0 | 0 | 0 |

REFER: Fig:4, Pg-8

# CALCULATION FOR ROAD DENSITY

| GRID NO. | ROAD LENGTH | | ROAD DENSITY |
| --- | --- | --- | --- |
| | ACCORDING TO ROTAMETER | ACCORDING TO MAP SCALE [km] | |
| A₁ | 6.5 | 3.3 | 3.3 |
| A₂ | 6.5 | 3.3 | 3.3 |
| A₃ | 6 | 3 | 3 |
| A₄ | 3 | 1.5 | 1.5 |
| A₅ | 6 | 3 | 3 |
| A₆ | 7 | 3.5 | 3.5 |
| B₁ | 4.5 | 2.3 | 2.3 |
| B₂ | 3.5 | 1.8 | 1.8 |
| B₃ | 5.5 | 2.8 | 2.8 |
| B₄ | 3.5 | 1.8 | 1.8 |
| B₅ | 9.5 | 4.8 | 4.8 |
| B₆ | 6 | 3 | 3 |
| C₁ | 3.5 | 1.8 | 1.8 |
| C₂ | 0.5 | 0.3 | 0.3 |
| C₃ | 3.5 | 1.8 | 1.8 |
| C₄ | 4.5 | 2.3 | 2.3 |
| C₅ | 10.5 | 5.3 | 5.3 |
| C₆ | 4.5 | 23 | 2.3 |
| D₁ | 4.5 | 2.3 | 2.3 |
| D₂ | 4.5 | 2.3 | 2.3 |
| D₃ | 0.5 | 0.3 | 0.3 |
| D₄ | 5 | 2.5 | 2.5 |
| D₅ | 3.5 | 1.8 | 2.8 |
| D₆ | 0 | 0 | 0 |
| E₁ | 5 | 2.5 | 2.5 |
| E₂ | 1 | 0.5 | 0.5 |
| E₃ | 3.5 | 1.8 | 1.8 |
| E₄ | 2.5 | 1.3 | 1.3 |
| E₅ | 0 | 0 | 0 |
| E₆ | 0 | 0 | 0 |

REFER- Fig:5. Pg-9

# CALCULATION FOR SETTLEMENT DENSITY

| GRID NO | AREA sq. km | NUMBER OF SETTLEMENT | SETTLEMENT DENSITY |
|---------|-------------|----------------------|--------------------|
| $A_1$ | | 14 | 14 |
| $A_2$ | | 16 | 16 |
| $A_3$ | | 9 | 9 |
| $A_4$ | | 20 | 20 |
| $A_5$ | | 20 | 20 |
| $A_6$ | | 12 | 12 |
| $B_1$ | | 14 | 14 |
| $B_2$ | | 12 | 12 |
| $B_3$ | | 13 | 13 |
| $B_4$ | | 10 | 10 |
| $B_5$ | | 26 | 26 |
| $B_6$ | 1 | 19 | 19 |
| $C_1$ | | 16 | 16 |
| $C_2$ | | 10 | 10 |
| $C_3$ | | 15 | 15 |
| $C_4$ | | 18 | 18 |
| $C_5$ | | 26 | 26 |
| $C_6$ | | 17 | 17 |
| $D_1$ | | 12 | 12 |
| $D_2$ | | 17 | 17 |
| $D_3$ | | 0 | 0 |
| $D_4$ | | 17 | 17 |
| $D_5$ | | 15 | 15 |
| $D_6$ | | 0 | 0 |
| $E_1$ | | 10 | 10 |
| $E_2$ | | 9 | 9 |
| $E_3$ | | 20 | 20 |
| $E_4$ | | 17 | 17 |
| $E_5$ | | 0 | 0 |
| $E_6$ | | 0 | 0 |

REFER: Fig:6, Pg:10

# DUMPY LEVEL CALCULATION

PLACE : SRIKONA VILLAGE

DATE AND TIME: 21-09-2022, 3-4 PM

INSTRUMENT NO: 1

| LINE | LENGTH [m] | LENGTH TO SCALE [1cm≅5m] | POINT | LENGTH FROM START POINT [m] | LENGTH FROM STARTING POINT TO SCALE | STAFF READING BS | IS | FS | CL [m] | RL [m] | REMARKS |
|------|-----------|--------------------------|-------|-----------------------------|-------------------------------------|------|----|----|--------|--------|---------|
| A₀ – A₆ | 30 | 6 | A₀ | 0 | 0 | 1.715 | | | | 17.470 | BM at A point is 17.470 m |
| | | | A₁ | 5 | 1 | | 1.415 | | | 17.770 | |
| | | | A₂ | 10 | 2 | | 1.995 | | | 17.190 | |
| | | | A₃ | 15 | 3 | | 2.485 | | 19.185 | 16.700 | |
| | | | A₄ | 20 | 4 | | 2.715 | | | 16.470 | |
| | | | A₅ | 25 | 5 | | 2.720 | | | 16.465 | |
| | | | A₆ | 30 | 6 | | | 2.550 | | 16.635 | |

ARITHMATIC CHECK:

$$\Sigma BS \sim \Sigma FS = \text{Last RL} \sim \text{First RL}$$
$$1.715 \sim 2.550 = 16.635 \sim 17.470$$
$$0.835 = 0.835 \quad [checked]$$

REFER: Fig:7, Pg:21

Source: Field survey. Srikona village, 22

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## CALCULATION FOR TYPES OF SHOP

| TYPES OF SHOP | TALLY MARK | FREQUENCY | PERCENTAGE |
|---|---|---|---|
| GIFT SHOP | IIII | 4 | 44.44 |
| GROCERY SHOP | III | 3 | 33.33 |
| TEA SHOP | II | 2 | 22.22 |

REFER : Fig 9, Pg - 22

## CALCULATION FOR SAVINGS AND PROFIT

| TYPES OF SHOP | SAVINGS | PROFIT | PERCENTAGE | |
|---|---|---|---|---|
| | | | SAVINGS | PROFIT |
| GIFT SHOP | 185000 | 708000 | 56.58 | 48.56 |
| GROCERY SHOP | 81000 | 450000 | 24.77 | 30.86 |
| TEA SHOP | 61000 | 300000 | 18.65 | 20.58 |

REFER : Fig 10, Pg - 22

# CALCULATION FOR AGE SEX PYRAMID, POPULATION COMPOSITION

| AGE GROUP | TALLY MARK | | FREQUENCY | | PERCENTAGE | |
|---|---|---|---|---|---|---|
| | MALE | FEMALE | MALE | FEMALE | MALE | FEMALE |
| 0-4 | ᵗᴴᴸ ᵗᴴᴸ IIII | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ II | 14 | 17 | 4.2 | 5.3 |
| 5-9 | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ II | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ III | 27 | 23 | 8.1 | 7.1 |
| 10-14 | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ II | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ I | 27 | 26 | 8.1 | 8.0 |
| 15-19 | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ I | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ I | 31 | 41 | 9.3 | 12.7 |
| 20-24 | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ | 25 | 35 | 7.5 | 10.8 |
| 25-29 | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ I | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ | 36 | 40 | 10.8 | 12.4 |
| 30-34 | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ III | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ II | 38 | 37 | 11.4 | 11.4 |
| 35-39 | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ | 30 | 25 | 9.0 | 7.7 |
| 40-44 | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ I | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ IIII | 21 | 19 | 6.3 | 5.9 |
| 45-49 | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ | 20 | 15 | 6.0 | 4.6 |
| 50-54 | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ II | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ | 22 | 15 | 6.6 | 4.6 |
| 55-59 | ᵗᴴᴸ ᵗᴴᴸ II | ᵗᴴᴸ ᵗᴴᴸ | 12 | 10 | 3.6 | 3.1 |
| 60-64 | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ | ᵗᴴᴸ II | 15 | 7 | 4.5 | 2.2 |
| 65+ | ᵗᴴᴸ ᵗᴴᴸ ᵗᴴᴸ | ᵗᴴᴸ ᵗᴴᴸ IIII | 15 | 14 | 4.5 | 4.3 |
| TOTAL | | | 333 | 324 | | |

REFER: Fig 11, Pg -24

## CALCULATION FOR CASTE

| DIFFERENT TYPES OF CASTE | TALLY MARK | FREQUENCY | PERCENTAGE |
|---|---|---|---|
| GENERAL | IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII | 55 | 39.29 |
| SC | IIII IIII IIII IIII IIII IIII IIII IIII IIII III | 48 | 34.29 |
| ST | IIII IIII IIII IIII I | 21 | 15 |
| OBC | IIII IIII IIII I | 16 | 11.42 |

REFER, FIG:12, Pg:25

## CALCULATION FOR RELIGION

| DIFFERENT TYPES OF RELIGION | TALLY MARK | FREQUENCY | PERCENTAGE |
|---|---|---|---|
| HINDU | IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII | 115 | 82.14 |
| MUSLIM | IIII IIII IIII IIII IIII | 24 | 17.14 |
| OTHERS | I | 1 | 0.72 |

REFER, FIG:13, Pg:25

## CALCULATION FOR MARITAL STATUS

| MARITAL STATUS | TALLY MARK | | FREQUENCY | | PERCENTAGE | |
|---|---|---|---|---|---|---|
| | MALE | FEMALE | MALE | FEMALE | MALE | FEMALE |
| MARRIED | IIII IIII IIII IIII IIII IIII IIII IIII IIII IIII I | IIII IIII IIII IIII IIII IIII IIII IIII | 51 | 40 | 36.43 | 28.57 |
| UNMARRIED | IIII IIII IIII IIII IIII IIII IIII I | IIII IIII | 36 | 10 | 25.72 | 7.14 |
| WIDOW | – | III | – | 0 | – | 2.14 |

REFER: Fig 14, Pg-25

Source: Field survey, Srikona village. 22    54

## CALCULATION FOR LITERACY

| LITERACY | TALLY MARK | | FREQUENCY | | PERCENTAGE | |
|---|---|---|---|---|---|---|
| | MALE | FEMALE | MALE | FEMALE | MALE | FEMALE |
| LITERATE | (tally marks) | (tally marks) | 296 | 261 | 88.89 | 80.56 |
| ILLITERATE | (tally marks) | (tally marks) | 37 | 63 | 11.11 | 19.44 |

REFER: Fig:15, Pg:26

## CALCULATION FOR EDUCATION

| EDUCATIONAL QUALIFICATION | TALLY MARK | | FREQUENCY | | PERCENTAGE | |
|---|---|---|---|---|---|---|
| | MALE | FEMALE | MALE | FEMALE | MALE | FEMALE |
| PRIMARY | (tally marks) | (tally marks) | 97 | 95 | 50.52 | 49.48 |
| MID-PRIMARY | (tally marks) | (tally marks) | 38 | 33 | 53.52 | 46.48 |
| SECONDARY | (tally marks) | (tally marks) | 68 | 72 | 48.57 | 51.43 |
| HIGH SECONDARY | (tally marks) | (tally marks) | 46 | 32 | 58.97 | 41.03 |
| GRADUATE | (tally marks) | (tally marks) | 32 | 25 | 56.14 | 43.86 |
| POST GRADUATE | (tally marks) | (tally marks) | 15 | 4 | 78.15 | 21.05 |

REFER: Fig-16, Pg-26

Source: Field survey, Srikona village. 22

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# CALCULATION FOR OCCUPATION

| TYPES OF OCCUPATION | TALLY MARK | FREQUENCY | PERCENTAGE |
|---|---|---|---|
| AGRICULTURE | ₦₦ ₦₦ | 10 | 7.14 |
| BUISNESS | ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ II | 42 | 30 |
| TOURISM | IIII | 4 | 2.85 |
| GOVERNMENT SECTOR | ₦₦ ₦₦ I | 11 | 7.85 |
| PRIVATE SECTOR | ₦₦ | 5 | 3.57 |
| FISHING | ₦₦ ₦₦ ₦₦ ₦₦ III | 23 | 16.42 |
| HOME MAKER | ₦₦ ₦₦ IIII | 14 | 10 |
| OTHER | ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ I | 31 | 22.14 |

REFER: Fig 17, Pg 27

# CALCULATION FOR INCOME

| INCOME | TALLY MARK | FREQUENCY | PERCENTAGE |
|---|---|---|---|
| < 10,000 | ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ | 35 | 25 |
| 10,000-20,000 | ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ | 70 | 50 |
| > 20,000 | ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ ₦₦ | 35 | 25 |

REFER, Fig 18, Pg -25

## CALCULATION FOR WALL (NATURE)

| TYPES OF WALL | TALLY MARK | FREQUENCY | PERCENTAGE |
|---|---|---|---|
| MUD BRICK | THI THI THI THI THI III | 28 | 20 |
| BRUNT BRICK | THI THI THI THI THI III | 28 | 20 |
| CONCRETE | THI THI THI THI THI THI THI THI THI THI THI THI THI III | 68 | 48.57 |
| OTHERS | THI THI THI I | 16 | 11.42 |

REFER, Fig:19, Pg:28

## CALCULATION FOR FLOOR (NATURE)

| TYPES OF FLOOR | TALLY MARK | FREQUENCY | PERCENTAGE |
|---|---|---|---|
| BRICK | THI III | 8 | 5.71 |
| MUD | THI THI THI THI IIII | 24 | 17.14 |
| CEMENT | THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI | 80 | 57.14 |
| OTHERS | THI THI THI THI THI III | 28 | 20 |

REFER, Fig: 20, Pg:28

## CALCULATION FOR ROOF (NATURE)

| TYPES OF ROOF | TALLY MARK | FREQUENCY | PERCENTAGE |
|---|---|---|---|
| ASBESTOR/TIN | THI THI THI THI II | 22 | 15.7 |
| TILES | THI THI THI THI I | 21 | 15 |
| HAY | THI IIII | 9 | 6.43 |
| OTHERS | THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI III | 88 | 62.86 |

REFER, Fig:21, Pg:28

## CALCULATION FOR NATURE OF WALL

| NATURE OF HOUSE | TALLY MARK | FREQUENCY | PERCENTAGE |
|---|---|---|---|
| OWN HOUSE | THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI THI | 115 | 82.14 |
| RENTED HOUSE | THI THI THI THI THI | 25 | 17.85 |

REFER, Fig:22, Pg:29

Source: Field survey, srikona village, 2022

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# CALCULATION FOR FLOW DIAGRAM

|  | ROAD | TALLY MARK | FREQUENCY [NO OF VEHICALS] | PERCENTAGE [NO OF VEHICALS] |
|---|---|---|---|---|
| UP | AB | (tally marks) | 289 | 1.4 |
| UP | BC | (tally marks) | 183 | 0.9 |
| DOWN | AB | (tally marks) | 334 | 1.7 |
| DOWN | BC | (tally marks) | 198 | 1.0 |

REFER: Fig 23, Pg -29

# CALCULATION FOR LOCOMOTIVE FLOW

| NAME OF VEHICALS | TALLY MARK | | FREQUENCY | | PERCENTAGE | |
|---|---|---|---|---|---|---|
|  | UP | DOWN | UP | DOWN | UP | DOWN |
| BICYCLE | (tally marks) | (tally marks) | 103 | 135 | 18.26 | 21.14 |
| BIKE | (tally marks) | (tally marks) | 343 | 395 | 60.82 | 60.96 |
| AUTO | (tally marks) | (tally marks) | 44 | 53 | 7.80 | 8.18 |
| OTHERS | (tally marks) | (tally marks) | 74 | 63 | 13.12 | 9.72 |

REFER : Fig :24, Pg -29

Source : Field survey, Srikona village. 22

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# MARKET SURVEY

1. Name :
2. Age :
3. Ward No/ Village Name :
4. Language :
5. Religion :
6. Caste :
   General ☐ SC ☐ ST ☐ OBC ☐ Others ☐
7. Name Of The Market :
8. Name Of The Shop :
9. Year Of Establishment :
10. Name Of The Shop Owner :
11. Age Of The Shop Owner :
12. Owner :
    Single ☐ Partnership ☐
13. Nature :
    Self Owned Shop ☐ Rented Shop ☐ Others ☐
14. A) Opening Time ☐ B) Closing Time ☐
15. Close Day Of The Shop :
16. a ) Migrated / commuter :
    b ) If migrated [from, where :          ]
17. Number Of Family Members :
18. Age Of The Family Head :

| GENDER | MALE | FEMALE |
|--------|------|--------|
| NUMBER |      |        |

19. Age Of The Family Members:

| AGE GROUP / GENDER | <12 | 12 – 18 | 18-60 | >60 |
|--------------------|-----|---------|-------|-----|
| MALE   |  |  |  |  |
| FEMALE |  |  |  |  |

20. Minimum Qualification Of The Shop Owner :
    No Education ☐ Primary ☐ Secondary ☐ Higher Secondary ☐ Graduate ☐
21. A ) Income Of The Shop Owner :
    Daily ☐        Monthly ☐        Yearly ☐
    Amount:        Amount:          Amount:

    B ) Profit Approximation (Annualy) :

    C ) Savings (Annualy) :

22. Maintenance Charges:

23. About Worker Working In The Shop :

| TYPES OF WORK | NO OF WORKERS | WAGES |
|---|---|---|
| | | |

24. Types Of Products Sold:

25. Are You A Businessman Or Producer Of Product :

26. If Producer Then :

| RAW METERIAL USED | TERRACOTTA | HANDLOOM | COUCH SHELL | OTHERS |
|---|---|---|---|---|
| Types | | | | |
| Price | | | | |
| Source | | | | |
| Distance From House | | | | |

27. If Buinessman , Then

a ) From Whom Products Are Collected :

Producer ☐       Middleman ☐

b) Cost Of Products:

28. Transport Cost :

| TRUCK | VAN | MATADOR | OTHERS |
|---|---|---|---|
| | | | |

29. Types Of Customer :

Local People ☐ Tourist ☐ Both ☐

30. Daily Average No Of Customers :

31. Selling Nature :

Online ☐ Offline ☐ Both ☐

32. A) i. Do You Have Any Other Shop: YES/NO

ii. In This Market : YES/NO

B) i. If Is , Local/National/International

ii. Type Of Good Sold :

33 .I. Any Other Mode Of Earning : YES/NO

    Ii. If Is _____

34. Average Daily No Of Customers :_____

35. Maximum Selling Is Observed In:
    Morning ☐    Afternoon ☐    Evening ☐    Night ☐

36. Which Is The Peak Seasons For Sell:_____

37. If They Are Benefited By Government For Work Purpose: YES/NO

38. Any Connection with any NGO : YES/NO

39. i. Any Situation when you had To Issue a Loan : YES/NO
    ii. If Yes, _____

40. Help was generated From:
    Government ☐    Private ☐    NGO ☐    Others ☐

41. i. Do You Get Any Help From BDO Office : YES/NO
    ii. If Yes, Is It Sufficient : YES/NO

42. Do You Face Any Of The Following Problems :
    a)  In Availability Of Raw Materials ☐
    b)  High Price Of Raw Material ☐
    c)  High Labour Cost ☐
    d)  Lesser Sell In Off Season ☐
    e)  Owner– Labour Conflicts ☐
    f)  Others ☐

43. Do You Have Trade Licence : YES/NO

**SURVEYOR'S SINGNATURE**

_____

# HOUSEHOLD SURVEY

Village :                                                    Ward No :

Police Station:                                          District :

State :                                                       Question No:

I'd No :

## GROUP - A

1. Name Of The Interviewee :
2. Date Of Birth:
3. Age:
4. Gender :
   Male☐ Female☐ Others☐
5. Religion:
6. Caste Or Creed:
7. Education Qualification:
   Primary☐ Mid-Primary☐ Secondary☐ High Secondary☐ Graduate☐ Post- Graduate
8. Marital Status :
   Married☐ Unmarried☐ Divorce☐ Separated☐
9. Occupation:
10. Monthly Income:
11. Relation with head Of The Family :

## GROUP -B

1. Name Of Head Of The Family:
2. Date Of Birth:
3. Age:
4. Gender :
   Male☐ Female☐ Others☐
5. Religion:
6. Education Qualification:
   Primary ☐ Mid-Primary☐ Secondary☐ High Secondary☐ Graduate☐ Post- Graduate ☐
7. Marital Status :
   Married ☐ Unmarried☐ Divorce☐ Separated☐
8. Occupation:
9. Monthly Income:
10. For How Long Have You Been Living Here :

| SL. NO | NAME OF MEMBERS | FAMILY MEMBERS | DATE OF BIRTH | A G E | S E X | EDUCATION QUALIFICATION | MARITAL STATUS | | | | | W O R K | MONTHLY INCOME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | M | U | W | D | S | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| | MALE | FEMALE | OTHERS | TOTAL |
|---|---|---|---|---|
| CHILDREN (‹18years) | | | | |
| ADULT (›18years) | | | | |
| TOTAL | | | | |

## GROUP -C

1. Types Of House :
   Mud House ☐  Concrete House ☐
2. Ownership Of The House:
   Single Ownership ☐  Rented ☐
3. Number Of Rooms In The House:
   1 ☐  2-3 ☐  4-5 ☐  More ☐
4. What Materialise the walls Made ?
   Mud Bricks ☐ Brunt Brick ☐ Concrete ☐ Others ☐
5. What Is The Roof Made Of?
   Stainless Steel ☐ Tiles ☐  Hay ☐  Others Material ☐
6. What Meterial Is The Floor Made Of?
   Mud ☐ Brick ☐ Concrete ☐ Others Meterial ☐
7. Is The House Tax Paid ? YES/NO
8. Source Of Cooking And Drinking Water:
   Tubewell ☐ Well ☐  Periodic Tap ☐ Others ☐
9. What Is The Main Fuel Use For Cooking?
   Timber ☐ Kerosine ☐ Gas(LPG) ☐  Others ☐
10. Do You Practice Home Gardening?YES/NO
11. Do You Have Own Washroom? YES/ NO
12. Did You Get Any Government Assistance For Making Of Your Washroom? YES/ NO
13. What Do You Have For Recreational Purposes?
    Radio ☐ Telivision ☐ Mobile ☐ All of the Above And Others ☐
14. What Vehicle(S) Do You Have?
    Cycle ☐ Scooty ☐ Car ☐ Motor Cycle ☐ Others ☐

15. Do You Have Electricity Connection At Your Home? YES/NO
16. Is Solar Energy Used? YES/ NO
17. If Electricity Is Absent, Then What Other Means Do You use ?
Charging Light ☐ Inverter ☐ Candles ☐ Others ☐

## GROUP -D

1. How are Roads Over Here ?
Mud Road ☐ Cemented Road/ Concrete Road ☐ Others
2. Does This Place Have Proper Drainage Facilities? YES/NO
3. What Kind Of Drainage System Is In Here?
Mud Drain ☐ Concrete Drain ☐ Others ☐
4. Is Garbage Cleaned Regularly? YES/NO
5. After What Intervals, Is The Garbage Cleaned?
After 4days ☐ After 7days ☐
6. Do You Take Or Read Newspaper? YES/NO
7. Do You Have Any Government Employees At Home ? YES/NO
8. If Any, Then How Many ?
1 ☐ 2 ☐ 3 ☐ None ☐
9. What Kind Of Service Do You Do?
Government ☐ Private ☐ Others ☐
10. Do You Have Any Bank In Your Locality? YES/NO
11. If Yes, Then What Is/Are The Name ?
a)State Bank Of India ☐
b)United Bank Of India ☐
c)Government Bank ☐
d)Others ☐

## GROUP -E

1. Does This Locality People Suffer From Any Common Disease? YES/NO
2. Does This Locality Have Any Hospital Or Health Center? YES/NO
3. What Type Is The Medical Care Facility Of Locality?
a)Mobile Medical Care Center ☐
b)Ayurvedic Treatment ☐
c)Hospital ☐
d)Nursing Homes ☐
e)Homoeopathy ☐
e)Others ☐
4. Did The Locality Suffer From Any Disease In The Last Sex Months? YES/NO
5. Does This Locality People Suffer From Any Serious Disease? YES/NO
6. Total Amount Of Money Spent For Treatment:

| Direct Spending | Indirect Spending |
|---|---|
| Doctor's Fees | Spending For Food |
| Pathological Test | Transportation Cost |
| Nursing Home Fees. | Others |
| Others | |

7. Source Of Money Spent For Treatment:
   a)Own ☐
   b)Loan From Bank ☐
   c)Health Insurance ☐
   d)Loan Taken From Somebody (Not From Bank) ☐
   e)Others ☐

8.

| SL NO. | NAME OF THE MEMBERS | AGE | TYPES | TIME PERIOD OF DISEASE | TREATMENTS DONE OR NOT | RESULTS |
|--------|---------------------|-----|-------|------------------------|------------------------|---------|
|        |                     |     |       |                        |                        |         |
|        |                     |     |       |                        |                        |         |
|        |                     |     |       |                        |                        |         |
|        |                     |     |       |                        |                        |         |
|        |                     |     |       |                        |                        |         |
|        |                     |     |       |                        |                        |         |

## GROUP - F

1. Do You Have Own Any Land ? YES/NO
2. Area Of The Land :
3. For What Purpose Is The Land Used ?
4. Cultivation ☐ Animal Husbandry ☐ Fellow Land ☐ Home ☐
5. What Type Of Crops Or Grains Are Cultivated:
6. Nature Of The Agricultural Land:
7. Single Cropping ☐ Multiple Cropping ☐ Double Cropping ☐
8. 6. By What Means Is The Cultivation Done ?
   Animal ☐ Machinery ☐
9. 7. On What Water Sources Is The Agriculture Dependent?
   Rain Water ☐ Irrigation ☐ Both ☐
10. If The Agriculture Is Depended On Irrigation Then What Is The Source Of Water?
    River ☐ Pond ☐ Tubewell ☐ Canal ☐ Well ☐ Shallow ☐ Others ☐
11. Fertilizer Used In The Land Or Not ? YES/ NO
12. If Used, Then What Type Of Fertilizer It Is?
    Organic Fertilizer ☐ Chemical Fertilizers ☐ Both ☐
13. Are Pesticides Used In The Land? YES/NO
14. Was Any Agricultural Loan Taken ? YES/NO
15. If Yes, Then Is The Source Of Agricultural Loan?
    Post-Office ☐ Agricultural Committee ☐ Bank ☐ Others ☐
16. For What Purpose, Is The Agricultural Produce Used?
    For Fulfilling Personal Needs ☐ For Business ☐
17. If There Any Domestic Animals? YES/NO

## GROUP -G

1. What Is Your Main Occupation:
2. Are You Engaged With Tourism Industry Along With Your Main Occupation? YES/NO
3. If Yes, How ?
4. What Is The Reason For You Being In This Industry?
   a)Love For This Industry ☐
   b)To Maintain The Hereditary Profession ☐
   c)To Increase Income ☐
   d)Other Reason ☐
5. How Many Members Of Your Family Are Related To This Industry?
   Male ☐          Female ☐
6. Does Any Outsider Help You With This Industry Other Than The Main Earning Member (S)? YES/NO
7. If Yes, How Many Outsiders?
   Male ☐          Female ☐
8. How Much You Monthly Income From This Industry:
9. Did You Receive Any Government Help For This Industry? YES/NO
10. If Yes , Then How Much Was The Amount:
11. Do You Give Your House For Rent For The Tourist To Stay?  YES/NO
12. If Yes, Then What Is The Amount Of Rent:
13. What Kind Of Service Do You Provide To The Tourist?
    a)Only Food Service ☐
    b) Only Transportation Services ☐
    c)Both ☐
    d) Others ☐
14. At What Time Of The Year Does Maximum Tourists Visit This Place:
15. What Are The Places For Sight -Seeing Here:
16. Does Any Fair/Festival Take Place In A Years At A Certain Time By Considering Tourism As The Main Subject? YES/NO
17. How Is The Transportation System Of This Area:
18. Did The Pandemic, COVID Affected The Tourism Industry? YES/NO
19. If Yes, Then Explain It:
20. How Was The Situation Before COVID Of The Tourism Industry?

## GROUP - H

1. Are You Engaged With Fisheries ? Yes/No

2. If Yes, Is It Your Main Occupation? Yes/No

3. Reason Behind Doing Your Fisheries?

4. How Many Members Are Associated With Fisheries?

   Male ☐          Female ☐

5. Other Than The Main Earning Member , Does Any Outsider Help You With This Business ? YES/NO

6. If Yes, How Many Outsiders:

   Male ☐          Female ☐

7. How Much Is The Monthly Income From Industry :.

8. Did You Receive Any Government Help For This Industry? YES/NO

1. If Yes, Then What Is The Amount:
2. Are You Engaged With Any Other Business/Profession Other Than Fisheries? YES/NO
3. What Type Of Business Do You Have In Fisheries:

## GROUP –I

1. When Women In Your House Were Present, Did They Receive Proper Treatment? Yes/No
2. Did They Receive Any Nutritional Food During Their Pregnancy? Yes/No
3. Where Were The Babies Born ?
   a)Government Hospital ☐
   b)Private Hospital ☐
   c)Home ☐
4. What Kind Of Food Is Given To Babies ?
   a)Junk/Street Food ☐
   b)Home Made Food ☐
5. Were The Babies Properly Vaccinated? Yes/No
6. Total Number Of Babies In Your House:

| SL. NO | NAME OF THE BABY | DATE OF BIRTH | A G E | GENDER | ALIVE OR DEAD | DATE OF DEATH | CAUSE OF DEATH | PLACE OF DEATH |
|--------|------------------|---------------|-------|--------|---------------|---------------|----------------|----------------|
|        |                  |               |       |        |               |               |                |                |
|        |                  |               |       |        |               |               |                |                |
|        |                  |               |       |        |               |               |                |                |

## GROUP -J

1. What Is The Amount Of Your Monthly Savings:
2. Where Do You Store Your Wealth:
   a) Bank ☐
   b) Post- Office ☐
   c) Any Committee ☐
   d) Others ☐
3. Do You Receive Mordern Facility From The Bank? Yes/No
4. Opinion Of The Interviewee About The Village:
5. Opinion Of The Interviewee About The Village And His/Her Family:

_____
SIGNATURE OF INTERVIEWEE

_____
SIGNATURE OF SURVEYOR

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