

*REPORT ON*  
*"Flood Effectuated Dicial"*  
**A Case Study On Disaster Management**

THIS REPORT IS SUBMITTED FOR THE PRACTICAL FULFILMENT OF B.A 6<sup>th</sup>  
SEMESTER GEOGRAPHY HONORS EXAMINATION (CBCS), DIBRUGARH UNIVERSITY



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***CERTIFICATE***

This is to certify that the project report entitled "Flood Effectuated Dicial: A case study on disaster management" by Risharani Dihingia, submitted to Dibrugarh University for the partial fulfillment of B.A. 6<sup>th</sup> Semester Geography Honors, has been completed under my supervision and guidance.

Signature

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## PREFACE

This report is prepared as a part of B.A. 6 Semester Geography Honors curriculum and in order to gain knowledge about how to conduct a survey. We were required to prepare a report on disaster and a project report entitled "Dicial: A case study on disaster management" is been made. The basic objective behind doing this project report is to get knowledge about disaster and understand its management strategies.

Doing this project report helped us in understanding flood and how it impacts the life of human and flora and fauna of the studied area. Through this report, we understand about different aspect of a research or surveys and how they are undertaken and also understand the importance of research and field work in the subject geography. We also understand the importance of team work while undertaking this project report.

## CONTENTS

	Page no
• Certificate	a
• Acknowledgement	b
• Preface	c
• Chapter 1:	1 - 4
1.1 Introduction	
1.2 Statement of the problem	
1.3 Objectives	
1.4 Methodology	
1.5 Significance of the study	
1.6 Review of the literature	
• Chapter 2:GEOGRAPHICAL BACKGROUND	5 - 6
2.1 Location	
2.2 Relief and soil	
2.3 Climate	
2.4 Flora and fauna	
• Chapter 3:HISTORICAL BACKGROUND	7
3.1 History of Dicial village	

• Chapter 4:POPULATION CHARACTERISTICS	8 - 10
1 Population and it's determinants	
2 Age-sex composition	
3 Literacy	
4 Occupation	
5 Culture	
6 Transport and communication	
• Chapter 5:FOOD: NATURE, FREQUENCY AND INTENSITY	11
1 Nature and frequency	
2 Intensity	
• Chapter 6:IMPACT OF FLOOD	12 - 13
1 Impact on human population	
2 Impact on flora and fauna	
• Chapter 7:DISASTER MANAGEMENT STRATEGIES	14
7.1 Government approach	
7.2Community approach	

• Chapter 8	15 - 16
Summary	
• Conclusion	17
• Photographs	18 - 19
• Questionnaire	20

## CHAPTER 1

### Introduction

Disaster is a serious problem occurring over a short or long period of time which causes widespread human, material, economic or environmental loss which exceeds the ability of the affected community or society to cope using its resources. Disaster is broadly divided into 'natural disaster' and 'human induced disaster'. Natural disasters are those disasters caused due to natural reasons. This includes flood, earthquakes, cyclones etc. Whereas, human induced disasters are those disasters caused due to the activities of human which is beyond the limit of nature. This includes industrial accidents, oil spills, etc. In this report a natural disaster "flood" is studied in Dical village (Sivasagar).

Disaster management can be as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergency, in particular, preparedness, response and recovery. It refers to taking the necessary measures to reduce the negative impact caused due to disasters. Disasters are something which cannot be prevented, but proper management will help in minimizing the loss to life or property.

This project report has been made to understand about flood and also to know and learn how to conduct research and surveys. This survey is conducted by asking questions to the people of the studied area relating to flood, their management, impacts on human life and flora and fauna of the region.

Floods are among those disasters which frequently take place. Some of the major reasons for flood include heavy rainfall, snowmelts, tsunamis or cyclones. This disaster causes loss of life, property, flora and fauna and also mental disturbance. Most of the documented disasters of past 10 years include flood as one of the leading disasters. Floods are among those disasters whose intensity and frequency are increasing day by day. Above all mentioned factors that cause flood, climate change is influencing and contributing in the factors which accelerate the disaster.

## CHAPTER-2

### GEOGRAPHICAL BACKGROUND

#### Location

Location of the study area can be explained in two ways absolute location and relative location. Absolute location refers to the place's exact location on the earth which is often given in terms of latitude and longitude. Whereas, relative location describes the position of the place by using another, familiar feature as a reference point.

Dicial is a village situated in the Dikhowmukh under the Sivasagar district. Dikhowmukh is a part of Sivasagar district. Dicial village falls under the jurisdiction of the Sivasagar district. The absolute location of one point of Dicial is  $26^{\circ}97'$  N latitude and  $94^{\circ}50'$  E longitude.

#### Relief and Soil

Dicial is mostly a plain area. Being a river dam, the soil type is alluvial. The total area is 135 ha approximately.

#### Climate

Climate refers to the long-term pattern of weather in a particular area. Climate plays an important role in determining the basic needs like the type of food, clothing and shelter, occupations, etc. In general, climate is one of the major factors for determining the pattern and footprints formed by human in that particular region.

The climate of Dicial is tropical. The annual temperature ranges from a minimum of  $14^{\circ}\text{C}$  and to a maximum of  $34^{\circ}\text{C}$ . The rainfall ranges from 2300mm to 3000mm.

## CHAPTER-3

### HISTORICAL BACKGROUND

#### History of Dicial village

Dicial is a Village in Gaurisagar Tehsil in Sivasagar District of Assam State, It is located 19 KM towards west from District head quarters Sivasagar. 335 km from State capital Dispur

Borahibari ( 14 KM ) , Panbecha ( 15 KM ) , Hafaluting ( 15 KM ) , Sivasagar ( 15 KM ) are the nearby Villages to Dikhowmukh. Dikhowmukh is bounded by Kaliapani Tehsil towards South , Sivasagar Tehsil towards East , Jorhat Tehsil towards South , UjaniMajuli Tehsil towards west .

Sibsagar , North Lakhimpur , Jorhat , Mariani are the near by Cities to Dikhowmukh.

## **CHAPTER-4**

### **POPULATION CHARACTERISTICS**

#### **4.1 Population and its determinants**

The total population of Dicial ranges from approximately 600-800 people. The population of Dicial includes all the age group people. Just like any other regions, the demography of this area is also affected by fertility, mortality and mobility, Birth is less in this area. The major reason is the lack of medical facilities. There is no Primary Health Care service which could be easily assessable. The nearest PHC is also far and due to poor transport and communication, availing medical assistance on time is a big concern. Even death in Dicial is more. The reason can be death due to various diseases like diarrhea, cholera, malaria, etc. Beside this factors, lack of medical facilities plays as a major factor for high death. Mobility is also a determinant affecting the demographic structure of Dicial. There are pull and push factors. The main pull factor is marriage. Whereas, push factors are many like no proper education, lack of employment opportunity, annual displacement due to flood and also marriage. More than the pull factor, push factor is more prevalent in this area.

#### **4.2 Age-sex composition**

Age-sex composition refers to the proportion of population in each age group. An uneven age and sex composition was seen in Dicial. Here the males outnumber the females. One of the main reasons could be lack of medical assistance at the time of giving birth. More population of young and middle age group was seen. Whereas, the least population was from the old aged group

## CHAPTER-5

### FLOOD

#### 5.1 Nature and frequency

Flood has been a regular disaster in Dicial since long period. The main reason is because of high monsoon rains and the existence of the Dikhow river. The floods are mainly seen in between the months of May to October every year. The major cause of flood is due to heavy rainfall. The flood in Dicial is very frequent and strong that it causes erosion. Flood makes them so that people lose even a little space to put their death bodies.

#### 5.2 Intensity

Intensity of flood is the damage caused by it. It can be characterized by the dept of inundation, volume of inundation, velocity of flow and rate of rise of water. When the depth of water is more, than more will be the volume, velocity and its damaging capacity.

The flood in Dicial is very catastrophic as the flash flood washes away everything. People there live in Chang Ghar made of wood and bamboos. During that time of year when flood occurs, the water level rises rapidly and reaches up to 3 to 4 feet, forcing them to leave their house. In this situation, the people need to move to nearby relief camps with their animals.

In the past, the flood intensity was less and advantageous as they silted the area with sediments and made the land fertile for cultivation, etc. But in the recent years the frequency and intensity increased rapidly making it disastrous by damaging the biodiversity. of the area. Every year the intensity has been increasing. Monsoon starts from April and it floods the village till October last. Those 6-7 months become impossible for the villagers for survival there as the settlements are collapsed.

## CHAPTER-6

### IMPACT OF FLOOD

#### 1 impact on human population

Flood always have a negative impact on the life of people affected by it. Every year the village suffers from high intensity flood from the Dikhow river which cause huge damage to their life. This annual natural disaster destroys their house and left them flooded. In this case, they move to some rehabilitation centers where they stay until the flood water retreats and make Dicial again habitable. Once coming back, they again build their house. Building of house every year is a huge economic burden they face.

Water and sanitation are also affected due to flood. People of Dicial has no easy access for safe drinking water and at time of flood, this situation become more worse.

As people there don't consume safe drinking water, they are always exposed to various types of diseases that are caused due to the consumption of contaminated water. This situation gets worst due to flood because all possible sources of water get dirty. Moreover, there is no easy access to health care center where they can take the injured people.

Mostly people are associated with primary activities like fishing, cattle rearing, etc. these all get badly affect due to flood affecting their source of income. Storage of food is also a task for the people residing there. They usually save food for the flood season, but due to improper management, the food items get destroyed which eventually causes food shortage.

Education is also harmed during this period. Students are unable to attend their classes as flood submerges their schools also. This continuous process of getting insufficient education constantly keep them backward.

During floods, women, children and elderly people have to face immense problems, Most important is the deterioration of their mental health due to prolonged stay in the flood. People of this age group are more exposed to

## **CHAPTER-7**

### **DISASTER MANAGEMENT STRATEGIES**

#### **7.1 Government approach**

Disaster management is a systematic process of effectively preparing for and responding to disasters. It means a coordination and integrated process of planning, organizing, coordinating and implementing measures which are necessary to reduce the impact of a disaster.

Government based disaster management approaches implies the measures taken by the government authorities to rescue and reduce the problems of the residents by financially supporting them by providing food and medical facilities in the time of need. Dical being a part of Dikhowmukh, most of the government provided facilities are not functional. After the people are rescued from the flood areas and shifted to the rescue camps, they have been provided with Rasons. As transport facility is poor in the region, government's facilities like medical could not reach to them on time.

#### **7.2 Community based approach**

Community based disaster management approaches focuses on creating progressive planning and measures taken into account by the particular community of the disaster: affected area to rescue them, manages the losses and reduce the scale of destruction. It is an approach to building the capacity of communities to assess their vulnerability to both human induced and natural hazards. They built 'Chang Ghar'(house on stits); arrange boats for moving people, goods and animals to a safer place; moves to rescue centers, etc. They work on the resources available to them and try to cope up the situation.

## **CHAPTER-8**

### **Summary**

The summary of the report is a shorter version of the report it gives an overview of the entire report in short. This project report entitled "Flood Effectuated Dicial: A case study on disaster management" is a report that contain about the village Dicial, which a part of Sivasagar District. This report tries to explain a natural disaster flood in this area and the overall background of Dicial

Chapter one of the report contains the introduction of the report. An introduction is very important as it gives the reader a base knowledge about what is the report all about Other than introduction, this chapter includes statement of the problem, objectives of the study, methodology used for the study, significance of the study and review of the literature.

Chapter two is about the geographical background of Dicial. It includes the location, relief and soil, climate, vegetation and flora and fauna. This chapter explain the location and overall physical geography of Dicial.

Chapter three explains the Peopling background of the area. It is very important to the history of any region to understand their present days pattern and future perspective. This chapter includes the peopling process of Dicial.

Chapter four includes the population characteristics of the region like its demography, age-sex composition, literacy, culture and transport and communication aspect. This will give an overview about the socio-economic and socio-cultural condition of the people residing in the area.

Chapter five contains about the flood: its nature, frequency and intensity. It explains about the intensity of flood, about its frequency and how its increasing and creating havoc.

Chapter six deals with the impact of flood upon human population and the flora and fauna. It explains various difficulties faced by the people of Dicial during that period of the year it explains the positive and negative and few of th fauna of the region.