

## KHARAGPUR COLLEGE

#### DEPARTMENT OF GEOGRAPHY

#### KHARAGPUR COLLEGE

KHARAGPUR, PASCHIM MEDINIPUR, WEST BENGAL 721301, INDIA PHONE: 03222 225920, EMAIL: <a href="mailto:kharagpurcollege@gmail.com">kharagpurcollege@gmail.com</a>

#### To whom it may concern

To whom it may concern This is to certify that Mr./Miss/Mrs. Poulami De
10 whom it may concern This is to certify that Mr./Miss/ Mrs
Roll 1126121 No 200078 Reg No. 1210879 of
2020-2021 is a student of B.Sc., Semester- VI in Department of Geography,
Kharagpur College, Kharagpur. In the Project work entitled "An Assessment of Socio Economic and
Climatic Hazard Related Vulnerability in Bali-II GP, Indian Sundarban". He/she had actively
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Rimpa Mula Department of Geography Kharagpur College Mukul Maity Department of Geography Kharagpur College Dinabandhu Patra Department of Geography Kharagpur College

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## AN ASSESSMENT OF SOCIO ECONOMIC AND CLIMATIC HAZARD RELATED VULNERABILITY IN BALI-II GP, INDIAN SUNDARBAN

#### **CHAPTER-I**

#### Introduction:

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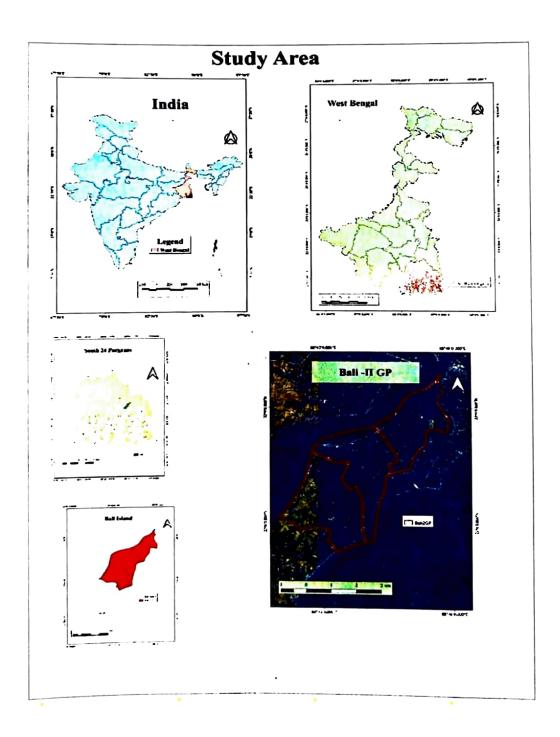
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Of the more than 100 deltas and islands that together comprise Bali delta region covers some 2000 hectares of area. Bali is a lesser-known island, more prone to neglect. The island has a population count of 17,000 inhabitants. Even after 75 years of independence, Bali has not witnessed much development. Bali island has been victimized by diverse etiquettes of climate-induced hazards and consequently enormous human population displaces, increasing stress of economic demands, enhance

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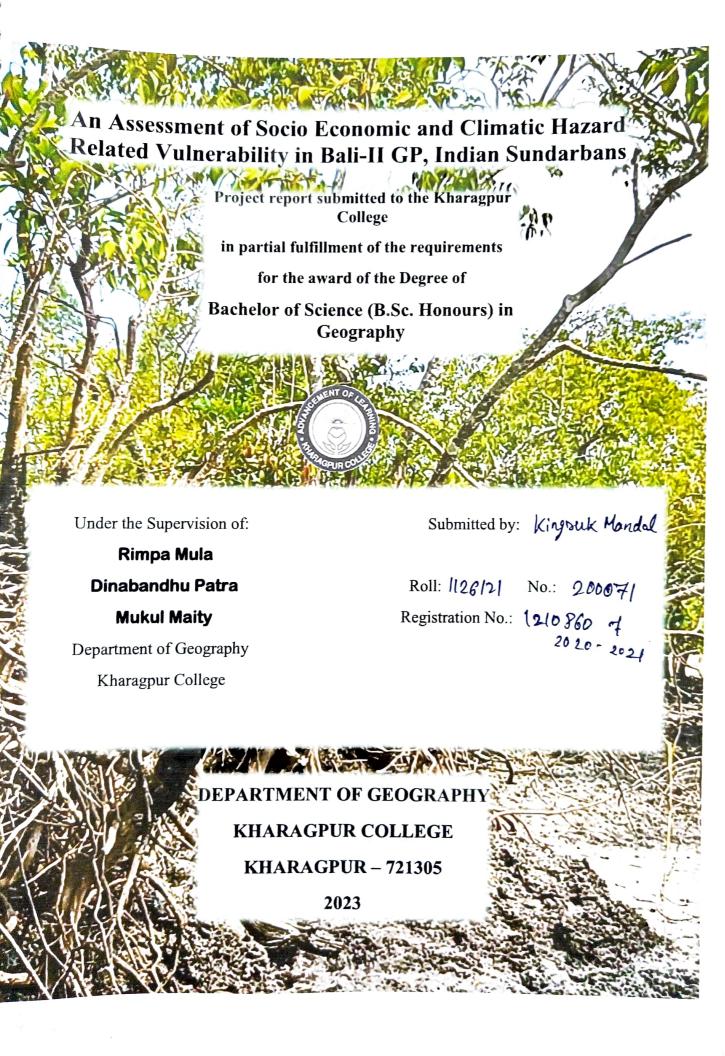
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## Conclusion:

This study area is vulnerable from all direction due to multi-hazards of nature. Coastal areas are always sensitive where Sundarban mangrove area at risk for soil erosion, flood, mangrove loss, resource and life loss, land salinity and so on. In other hand, livelihood problem faced most of the inhabitants. In Bali-II GP people mainly lost the paddy crop and productive land change into highly salted. Many People loss their best agricultural land due to cyclonic storm and se surge, more than half people informed that they feel environment problem compare to early days, though they try to protect in adverse condition and most of the young male take part for community development especially for most common disaster like Cyclone, Flood. Villagers informed about natural problem like decay of river bank, heavy rain fall, over flow. After a flood water logged more than five days even in simple flood. In our study area nearly half of the people informed that they have migrated due to flood any time in their life but among them most of the time within the island. Not only they force fully migrated but also, they lost their occupation. During physical geomorphological analysis we marked out two erosion spots where river bank eroded due Datta river's huge water pressure in cyclone time. Along the river bank mangrove's all characters are clearly visible. Due to shortage of time, we were not able to more in-depth study of physical measurements but several geospatial analyses give little clear picture. It is found that agricultural land is used those land was existed as salty land after Aila cyclone of 2008. It is not clear why these lands are now used as agricultural purpose for a long day through further study. When most of people informed that mangrove lost that is true but analysis of satellite picture showing that those places are mangrove lost few years ago before Aila, these are regreening by small mangrove sapling in natural way. In our study area daily and monthly income is very low for most of the families; though, by globalization effect life style of every people has changed so people spend money so many other purposes rather than food and shelter. Health is major concern for the island's people. There are few small doctor's chambers, and PHC, CHC but no big hospitals are located there. So, for medical emergency they use water Ambulance. Most of the family collect their drinking water from tube well and tested TDS level good in condition. As some major problem people faced here like transport, medical, environmental hazard so Government need to implementation of many programmes for development of these area with proper monitoring and evaluation.



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Kharagpur College

Mukul Maity
Department of Geography
Kharagpur College

Dinabandhu Patra
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#### **CHAPTER-I**

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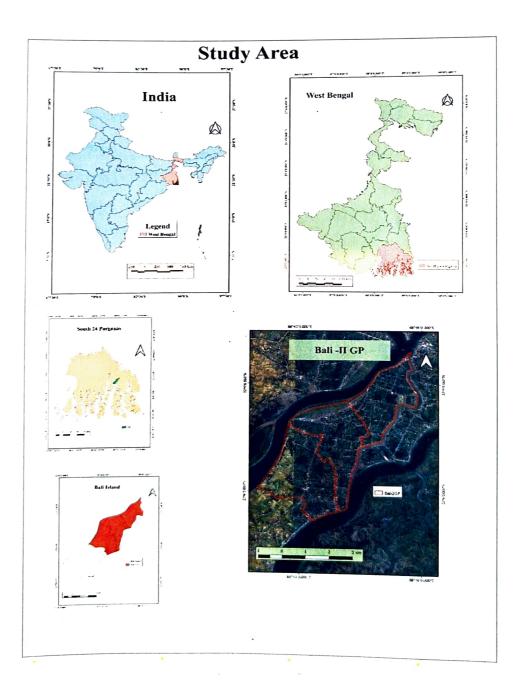
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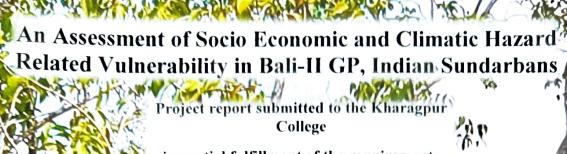
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in partial fulfillment of the requirements

for the award of the Degree of

Bachelor of Science (B.Sc. Honours) in

Geography

Under the Supervision of:

Rimpa Mula

Dinabandhu Patra

**Mukul Maity** 

Department of Geography

Kharagpur College

Submitted by: SAGAR PAL

Roll: 1126121 No.: 2000 86

Registration No.: 1210906

DEPARTMENT OF GEOGRAPHY

KHARAGPUR COLLEGE

KHARAGPUR – 721305

2023

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Not Present in Post field work

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Department of Geography
Kharagpur College

Mukul Maity
Department of Geography
Kharagpur College

Dinabandhu Patra
Department of Geography
Kharagpur College

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CHAPTER-I

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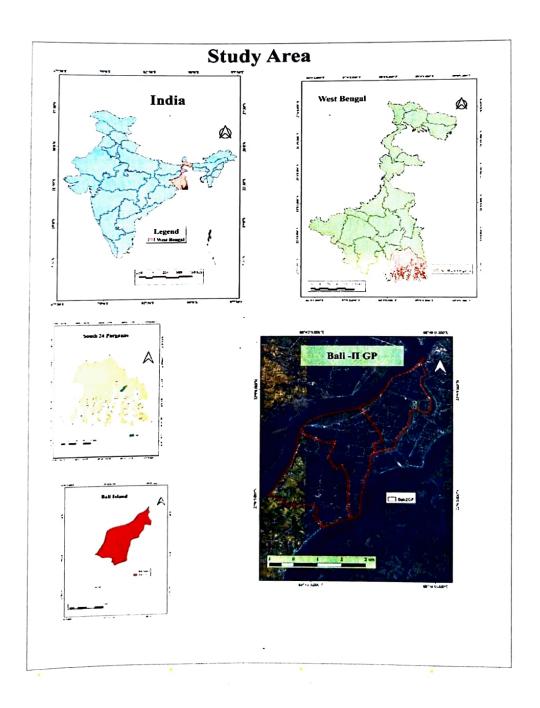
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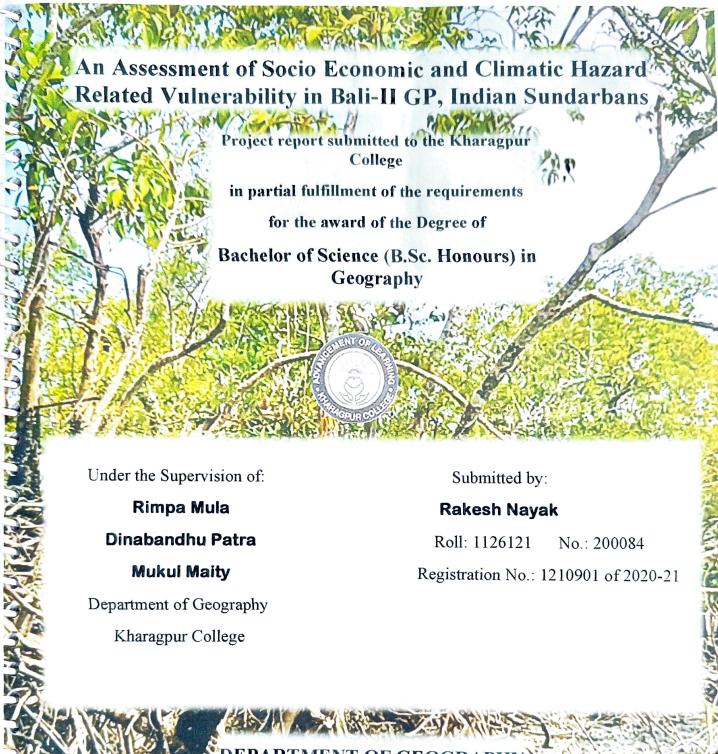
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CHAPTER-I

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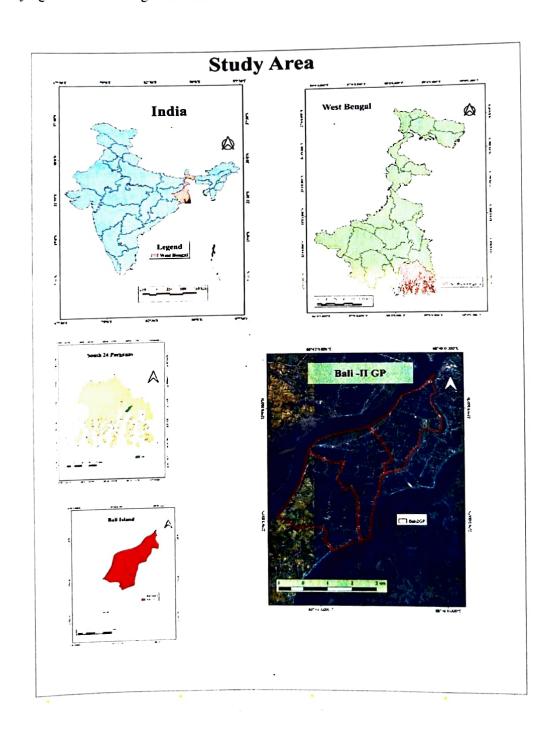
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The study area, Bali-II is a village in Gosaba Block in South 24 Pargana district of West Bengal. Bali II is surrounded by Sandeshkhali II block towards north, Basanti block towards west, Hingalgang block towards north and Canning block towards west. Three Mouzas namely Bali, Bijoynagar and Birajnagar of Bali II village have been selected for survey.



### **Conclusion:**

This study area is vulnerable from all direction due to multi-hazards of nature. Coastal areas are always sensitive where Sundarban mangrove area at risk for soil erosion, flood, mangrove loss, resource and life loss, land salinity and so on. In other hand, livelihood problem faced most of the inhabitants. In Bali-II GP people mainly lost the paddy crop and productive land change into highly salted. Many People loss their best agricultural land due to cyclonic storm and se surge, more than half people informed that they feel environment problem compare to early days, though they try to protect in adverse condition and most of the young male take part for community development especially for most common disaster like Cyclone, Flood. Villagers informed about natural problem like decay of river bank, heavy rain fall, over flow. After a flood water logged more than five days even in simple flood. In our study area nearly half of the people informed that they have migrated due to flood any time in their life but among them most of the time within the island. Not only they force fully migrated but also, they lost their occupation. During physical geomorphological analysis we marked out two erosion spots where river bank eroded due Datta river's huge water pressure in cyclone time. Along the river bank mangrove's all characters are clearly visible. Due to shortage of time, we were not able to more in-depth study of physical measurements but several geospatial analyses give little clear picture. It is found that agricultural land is used those land was existed as salty land after Aila cyclone of 2008. It is not clear why these lands are now used as agricultural purpose for a long day through further study. When most of people informed that mangrove lost that is true but analysis of satellite picture showing that those places are mangrove lost few years ago before Aila, these are regreening by small mangrove sapling in natural way. In our study area daily and monthly income is very low for most of the families; though, by globalization effect life style of every people has changed so people spend money so many other purposes rather than food and shelter. Health is major concern for the island's people. There are few small doctor's chambers, and PHC, CHC but no big hospitals are located there. So, for medical emergency they use water Ambulance. Most of the family collect their drinking water from tube well and tested TDS level good in condition. As some major problem people faced here like transport, medical, environmental hazard so Government need to implementation of many programmes for development of these area with proper monitoring and evaluation.