

Rehabilitation; A practical issue in the Sundarban deltaic area with special references to Ghoramara Island, South 24 Parganas, West Bengal, India

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Abstract

The Sundarban deltaic area is built up with the bunch of islands which is situated in the active deltaic region at the confluence of Ganga-Brahmaputra River. As a result, these islands are surrounded by brackish water bodies. Therefore erosional and depositional processes are going on at a same time. But some islands are eroding excessively. For this reason these islands have turned into endangered islands and the fact is that population of this islands becomes endangered in respect of their own settlements. For example Ghoramara and its surrounding islands are slowly abolishing or abolished by the erosional processes by the tidal surge and oceanic hazards. It is found that the islands of Lohachara, Suparibhanga, and Agunmari are at urge of abolishment and people of this area have needed rehabilitation from their own place to others and it will also suitable for Ghoramara island. At present Ghoramara island is maintaining its existence somehow or other. This Present paper deals with the problem of rehabilitation of people and proposes to some in situ and ex situ rehabilitation measures for long term or short basis.

Keywords: Rehabilitation, Sundarban deltaic, Ghoramara Island, South 24 Parganas, West Bengal

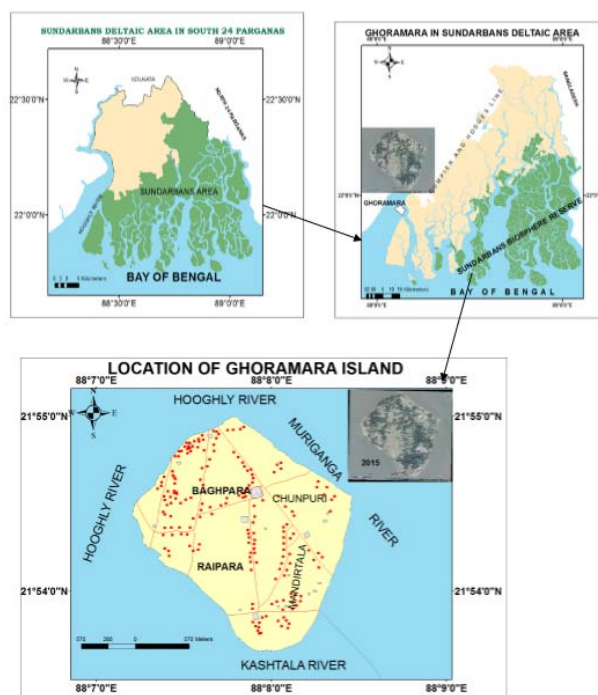
Introduction

The word 'Rehabilitation' comes from the Latin prefix re-, meaning "again" and habitare, meaning "make fit." So the rehabilitation means the population make fit their own or other places because for their safely aliveness and to protect from the physical, social also cultural hazard. The Sundarbans, a bunch of islands in south eastern part of the West Bengal, India, situated with isolated by the tidal water bodies from the mainland. This area is also unstable due to the effect of erosion and deposition processes for its active deltaic location. Erosion and deposition are the continuous processes in this area that is effected on the island. As a result, a few islands have been eroded excessively and created possibilities of abolishment of their own existence. Ghoramara is such as an island, which is shrinking rapidly and showing possibilities of abolishment about its own existence. So Population, who are settled in the island, needs rehabilitation at any suitable place or their own habitat. Moreover, the surrounding islands of the Ghoramara are also rapidly abolishing by erosion. So now Ghoramara has become an endangered island. It has been a burning issue of the Sundarbans deltaic area.

Location

Ghoramara, the name has come from "horse" bengali meaning "ghora" which was killed by the Royal Bengal Tiger during dense forest area in the British period, an island in the Sundarbans deltaic area, Situated at the western part of the active deltaic area in Sagar block, South 24Parganas. This island is isolated from the mainland by the saline water bodies. Ones upon a time it was the part of the Sagar Island. This is surrounded by the Muriganga River and kakkdwp block in the eastern part, north eastern side. The Hooghly River is flowing around the western and southern side and Medinipur district

which is situated at the western side of the Ghoramara Island. Sagar Island is situated at the south eastern side of this land. Latitudinal and longitudinal extensions are from 21°53' N to 21°55' 30" N and 88°06' 30" E to 88° 09' E.



Aim & Objectives

There are different islands which area situated in the active deltaic location in the Sundarban region. These are settled by the migrated people of East Pakistan or Bangladesh and

Medinipur, adjacent area of Orissa. Most of them are affected by the tides and coastal erosion and some island is abolished or abolishing by these agents. Physiographic ally these islands are an unstable due to tidal and coastal erosion by tidal surge and cyclonic hazard. As a result some islands are abolished or abolishing by these agents. Such as Lohachara and Ghoramara, Lohachara is abolished and Ghoramara is abolishing. Therefore the settlers of this area are affected by the abolition or destruction of these lands.

The Main Objectives are:-

- i. To find out the causes of endangerment of these island.
- ii. Identify the different issues of deltaic area.
- iii. Find out the needs of Rehabilitations.
- iv. Suggestions for the process of rehabilitation of this area.

Material and Methodology

Different Standard methodologies are used in this paper. At first different types of map are collected from NATMO, and internet source (Google Earth Maps). Primary data is collected from this island. Secondly analysis of these data and help different types of journal and Books to supports this Paper. At last these with the help of different types of software maps and diagrams are drawn.

Back Ground Of this Study area:-

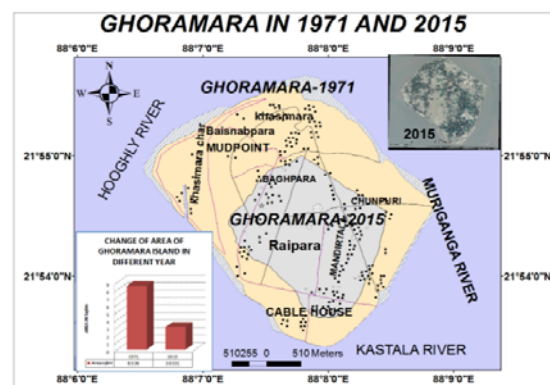
- i. Ghoramara, Lohachara, Suparibhanga, Agunmari islands were a part of Sagar Island till 1904. But due to tidal erosion, tsunami or super cyclone, one way river current of the river Hooghly this island isolated from the Sagar Island.
- ii. This area was covered a dense forest BY wildlife at the beginning of the spread of settlements. This settlers of this area flocked from Medinipur and adjacent coastal areas Orissa. This immigrated people built up settlements cutting up dense for about last three hundred years.
- iii. Monsoon tropical climate is dominated here and this area is affected by the cyclone in the early summer season, which is called 'Kalbaishakhi' and last monsoon season is called 'Ashiner Jhar' affecting the islands.
- iv. This island is situated near about 3.5 km out way from the mainland.
- v. This area is made with the transported sediments of the distributaries of the river Ganga.
- vi. The Ghoramara and surrounding islands are the undivided part of the Sagar Island but the oceanic Hazard, erosion Tsunami this island is isolated from the Sagar Islands.
- vii. This Islands, including Sagar, Ghoramara, Lohachara, Agunmari are covered a dense mangrove till 1811. Next time this mangrove is cleared by the British era to build up Colonial principlally.
- viii. More than 98 % of people of former the British Colony are flocked from the Medinipur and Orissa and adjoining area because to save the cyclonic hazard of Coastal area of Midnapur, as a save shelter of freedom fighter, and attract of land.
- ix. This area is reclaimed from the sea by the construction of the embankments with soil and mud

Cause of Rehabilitation

- i. **Physical set up:-**This Island is made by alluvium, which is transported by the different distributaries of the river Ganga and others river and situating as a lonely isolated island in the Hooghly river. So this area is easily affected by different

hazard like tidal surge, tsunami. Moreover, it is situated at the confluence of the Hooghly river one way river current is mostly eroded at the north-western part of this island as a result population needs rehabilitation of this part.

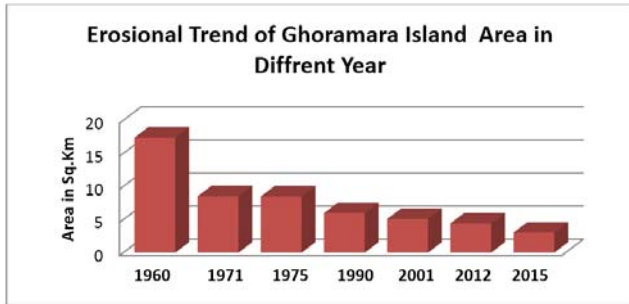
- ii. **Isolated Location:** - This area is isolated by saline water bodies from the mainland and about 4km waterway distance from the mainland. In this reason every people depend on the outside area to expend their daily life. Moreover most of climatic hazards are effect on the island for its islandic location. So settlers of this area want to rehabilltee from this island. More than 65% people of this area have given opinion in favour of rehabilitations with adequate packages from this land during primary survey.
- iii. **Lack of infrastructure:** - Infrastructure is poorly developed for isolated location of this land. Lacks of electricity, hospital, road transport, School, Road have urged the people to get rehabilitated. Solar light, kerosene lamp only source of light at night. There is only primary health centre, three primary schools, and one high school. Moreover there is lack of teacher. Three teachers are teaching in the secondary school and primary school have only one teacher each school. There is no higher secondary school or even a college. It is remarkable that the transport of this area is maintained by an engine operated boat which operated two or three times daily with the main land.
- iv. **Lack of entertainment:-** There are no any means of entertainment due to non-availability of electricity and isolated location. As a result they cannot make contact with the mainland. Of course the local festivals like Durga puja, Basanti puja, Dolyatra etc are held at the core of the island.
- v. **Environmental Hazard and Loss of own settlement area:-** Most of people have lost their own dwellings by the tidal surge of the river and climatic hazard like Aila. Maximum settlements have been swallowed by the river. Therefore Ghoramara is an endangered island and others isolated island Lohachara, Agunmari, Suparibhanga have become unattractive islands. It is mentioned that the total area of the Ghoramara Island was near about 8.536sq.km in the year of 1971 as reported by the Survey of India but at presents 2015 it is only 3.0331sq.km only as per Google map. So, nearly about 5.5029sq.km is swallowed by the river. Khasimara mouza is totally and other Mouzas are partly eroded in between four and half decade.



Source:- Top sheet Map & Google Earth Map

The decaying trend of the area of Ghoramara is as following:-

YEAR	1960	1971	1975	1990	2001	2012	2015
AREA/SQ.KM	17.3997	8.536	8.51	5.99	5.11	4.43	3.0331



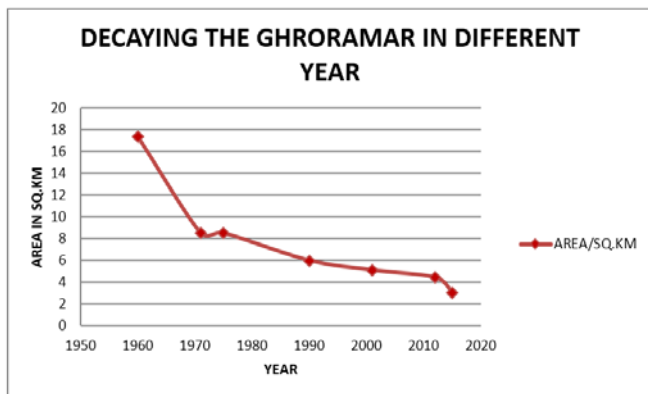
Data Source:- Us Army Map, Toposheet Map, Google map.

A large no of people are suffering from the crisis of shelter and need rehabilitation in this area. As per different census year the existing population and expected population are widely different.

vi. **Socio-economic status:-** Though these islands are isolated from the mainland, this area is found to be backward socio economically. According to the last census (2011) total population of this area is near about 5138 but as per ration card total population is 5362 in the land. Socially this area is isolated from the other parts of the West Bengal and no person could build up wedding relation in this isolated island. Agriculture and deep sea fishing are the main occupations in this area. Near about 75% of the population of this area are engage in agriculture producing paddy, beetle leave culture etc and other is depend on the sea fishing. There are no developed in secondary and tertiary sectors due to lack of infrastructure.

Conclusion

For the above mentioned causes this area is suffering an uncertain environment and it is threaten that this area may be abolished by analysis the decaying trend.



Therefore population of this area may be rehabilitated to the mainland or well protected lands in the island. Rehabilitations may be arranged in situ or ex situ. It may be noted that a few people of this area have already rehabilitated from this land to the Sagar islands and others.

Suggestions

- This area should be protected from the coastal or river erosion by building up embankment building or plantations along the shore.
- People of this area should be rehabilitated by the administrative level and simultaneously announcing adequate package.
- Transport should be improved as early as possible.
- Infrastructures should be developed in the form of hospital, primary health centre, electricity, portable drinking water.
- New means of live hood should be introduced to increased income.
- Flood rescue centres should be built up to rescue the people from sudden tsunami, tidal surge etc.
- Means of entertainments should be introduced and developed.
- Marketing of local products should be improved.
- Tourism may be developed here at the administrative level.
- People should be educated about the environmental hazards.

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