

Nature and Characteristics of Migration and Its Linkage with Climate Change: A Case Study of Hatiya and Manpura Islands

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Background of the Research

Almost two decades ago in 1990, the Intergovernmental Panel on Climate Change (IPCC) suggested that the greatest effects of climate change will be those on migration – causing millions of people to be displaced worldwide. As Bangladesh is regarded as one of the most vulnerable country to climate change; so, there is a growing concern about the adverse effect of climate change on population particularly the mobility behaviour or displacement of the affected people.

Aim

The aim of this research is to identify the **nature and characteristics of the migration** in the off-shore islands in the Meghna Estuary region of Bangladesh, as well as **identifying the climate change factors** working as a driving mechanism for this migration.

Objectives

- ✓ To identify the **trends, pattern and characteristics** of migration in off-shore islands of Meghna Estuary.
- ✓ To identify the **driving factors** influencing this migration and also the influence of climate change and the natural hazards intensified by climate change on this migration.

Research Methodology

Inductive approach of geographical research.

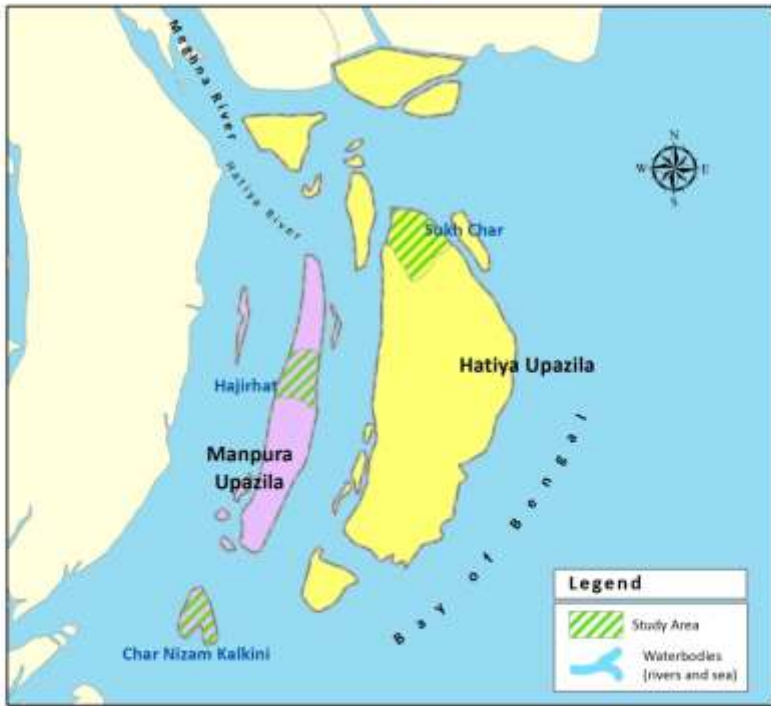
This is a descriptive type of research, analysing all the causal relationship of the observed population with the research statement.

Selected Study Areas

Off-shore islands are selected for this research, as these are the most vulnerable zone for adverse effect of climate change in our country. (IPCC, 2004)

- ✓ **Sukh Char Union** of Hatiya
- ✓ **Char Geyan** and **Daser Hat** mouzas of Hajirhat Union in Manpura
- ✓ **Char Nizam Kalkini** of Uttor Sakuchia Union in Manpura.

Map : Location of the Study Area



Study Area



Design for Research

The research was sequentially divided into the following stages:

At first stage, intensive literature review and secondary data were collected and consulted and a reconnaissance visit has undertaken to the coastal areas and islands.

At second stage, a field census survey has conducted in the selected areas. For this survey, the respondent households were selected from the Union Parishad's '*household list*'. Some FGD has been conducted.

At third stage, some of the households from the census survey were selected for in-depth sample survey.

Sample and Sampling Design

Field Census Survey: For census survey, the chosen method of sampling was “*Simple Random Sampling*”.

Study Union	Number of Households (N) in Union Parishad household list	Targeted household for census survey (approx. 10% of N)	Surveyed Households
Sukh Char Union	2630	290	223
Hajirhat Union	677	85	70
Char Nizam Kalkini	296	26	24
Total	3603	401	317

In depth Sample Survey: Sample Size: 54 Households
This households were selected from the 317 households surveyed in the field census survey.

Focus Group Discussion (FGD): 20

Study Union	Surveyed FGD
Sukh Char Union	10
Hajirhat Union	8
Char Nizam Kalkini	2



Sukh Char Union Parishad members at FGD

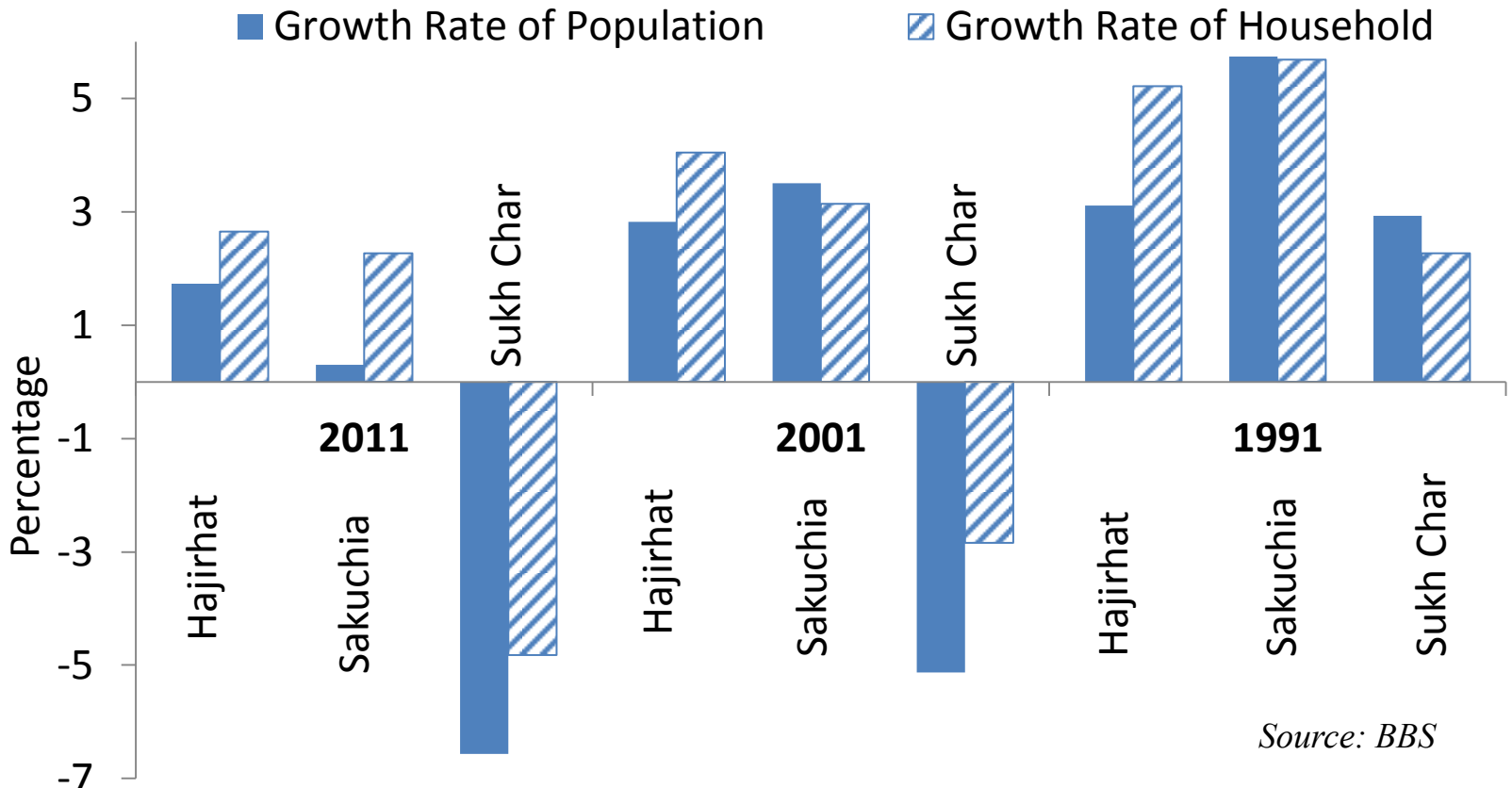
1. Permanent household migration : Predominantly out – migration.

- ✓ The rates of in-migration in these areas are far lower than any time before.
- ✓ The Most preferable destinations for out-migration are further remote islands into the Bay of Bengal or newly accreted lands
- ✓ At present, In Sukh Char Union and Hajirhat Union out-migration is more prominent and in Char Nizam Kalkini, it is in-migration that is noticeable.
- ✓ People with good economic solvency are more willing to leave the study areas (islands). if not disturbed by any natural or social problems most of the respondent wanted to live in their present location.

Research Findings: Types, characteristics of Migration in the study areas

Percentage of households surveyed in field census survey				
Study area	Targeted households (approx. 10% of the total household number in UP household lists)	Number of households missing	Households found in Census Survey, 2012	Percentage of households missing due to their out-migration
Hatiya Upazila	290	67	223	23.103%
Manpura Upazila	85	15	94	15.310%

Growth rate of population and household in the studied areas



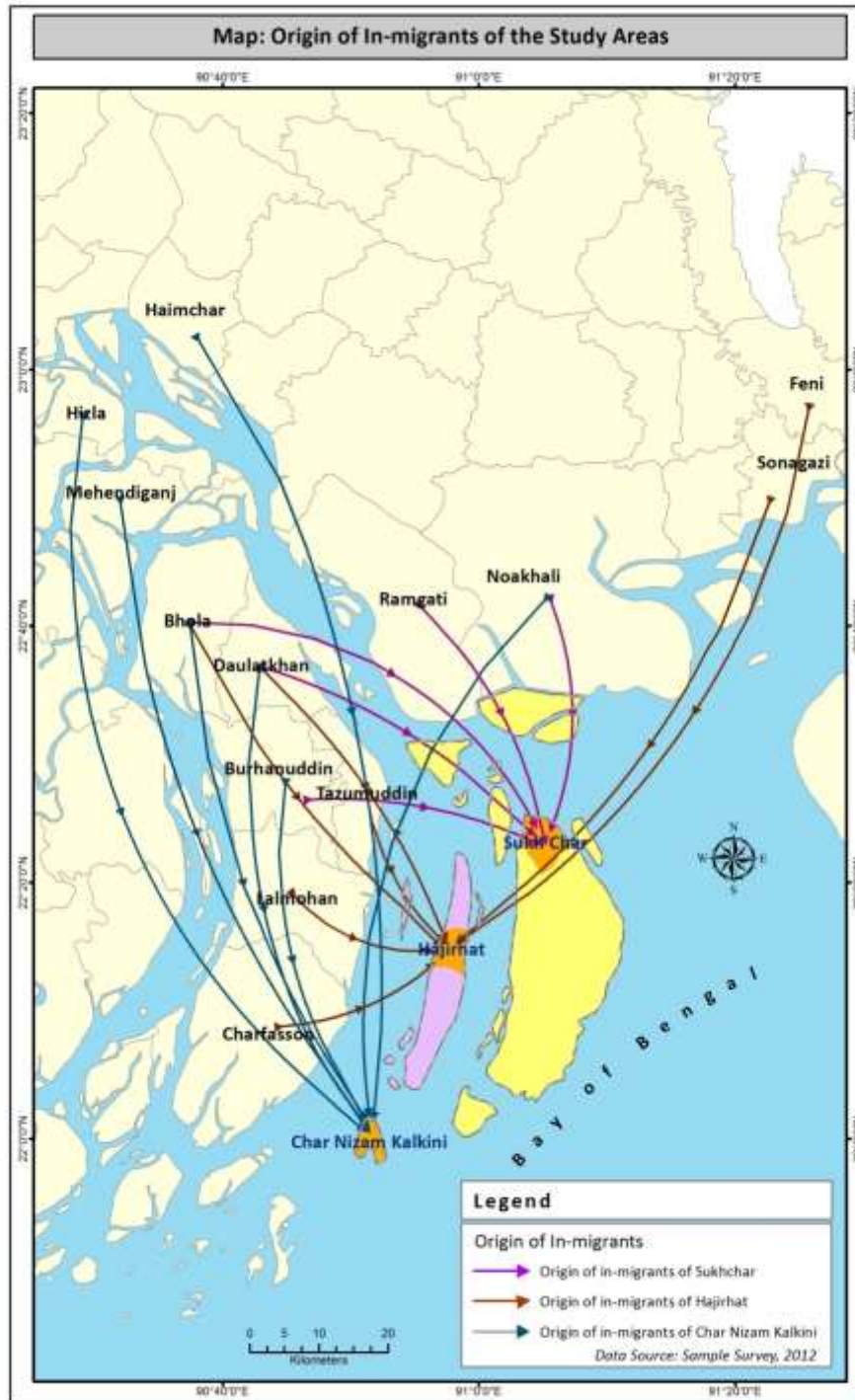
Source: BBS

2. Seasonal circular migration: Mainly within poor farmers, fishermen and day labourers.

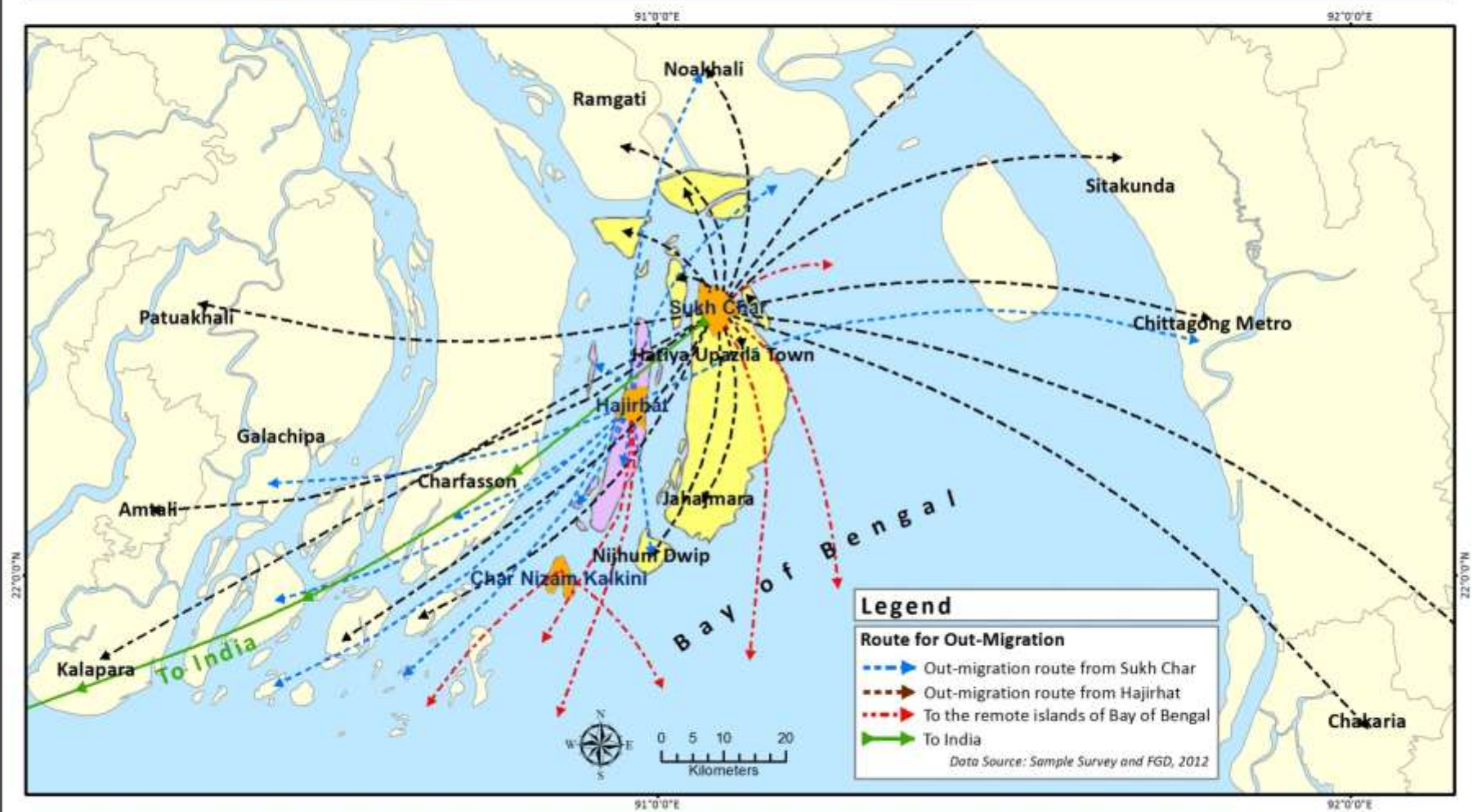
Pattern of seasonal circular migration in the study areas.				
Time Period	Mid April-Mid June	Mid June-October	October – Mid December	Mid December-Mid April
		Fishing and Cultivation Season		
Live in	Outside the village for work, mostly in other villages of mainland	Within their village	Mostly in their village, some starts to move outside.	Outside the village for work, mostly in other villages of mainland

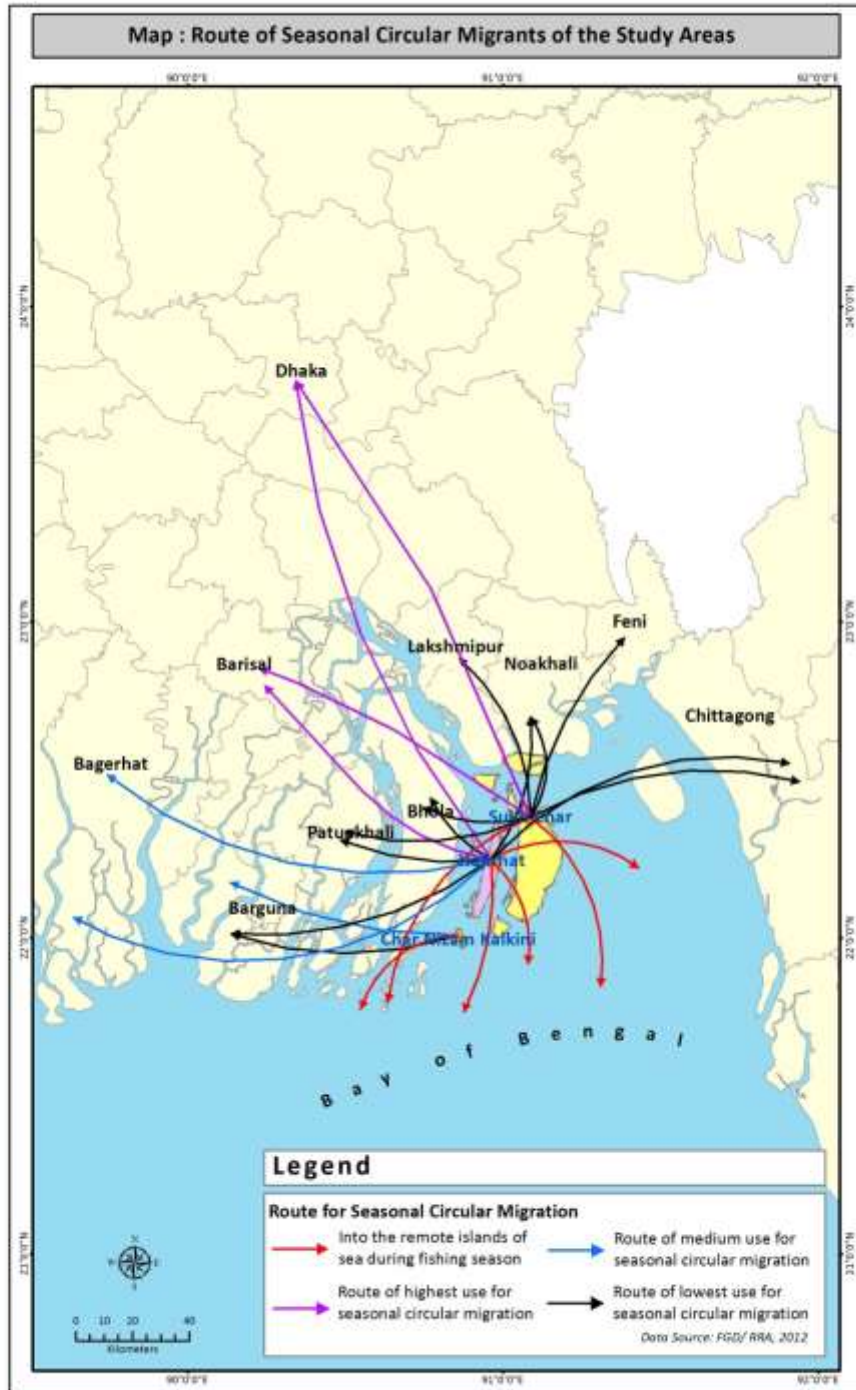
Source: FGD, 2012

3. Non-seasonal circular migration of any family member(s):
Most prominent in the family with better economic solvency

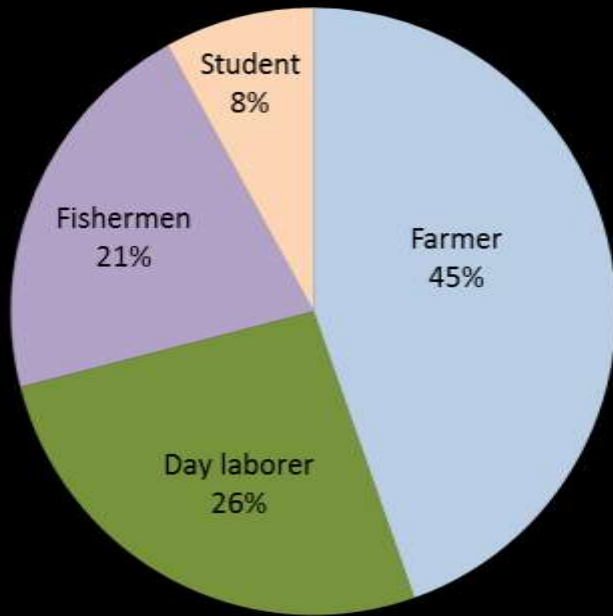


Map: Destination of the Permanent Out-migrants from the Study Areas





Occupation of the household head/ elderly family members of permanent migrant families



Source: FGD, 2012

- ✓ All the families with monthly income more than Tk 15000 have someone of the family living out side the village.

Fishermen from these areas sometimes temporarily moved to further remote islands and chars inside sea, to catch fish for a duration of 7-30 days.

During fishing season In Sukh Char, every year around more than 2000 people come and stay from outside

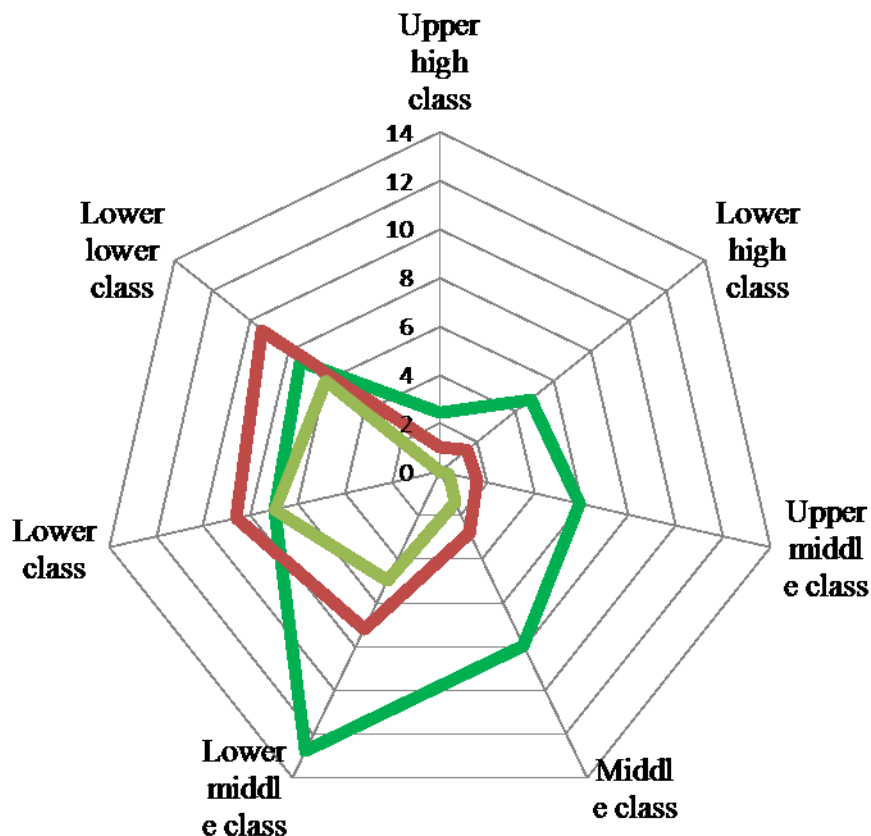


Image: This photo was taken from Sukh Char of Hatiya. A family has gathered all its household materials at river ghat to move out. This family has lost their household land last year and managed to buy some land at a cheaper rate in Dhal Char (a further remote island in the Bay of Bengal).

Source: Taken by researcher, 2012

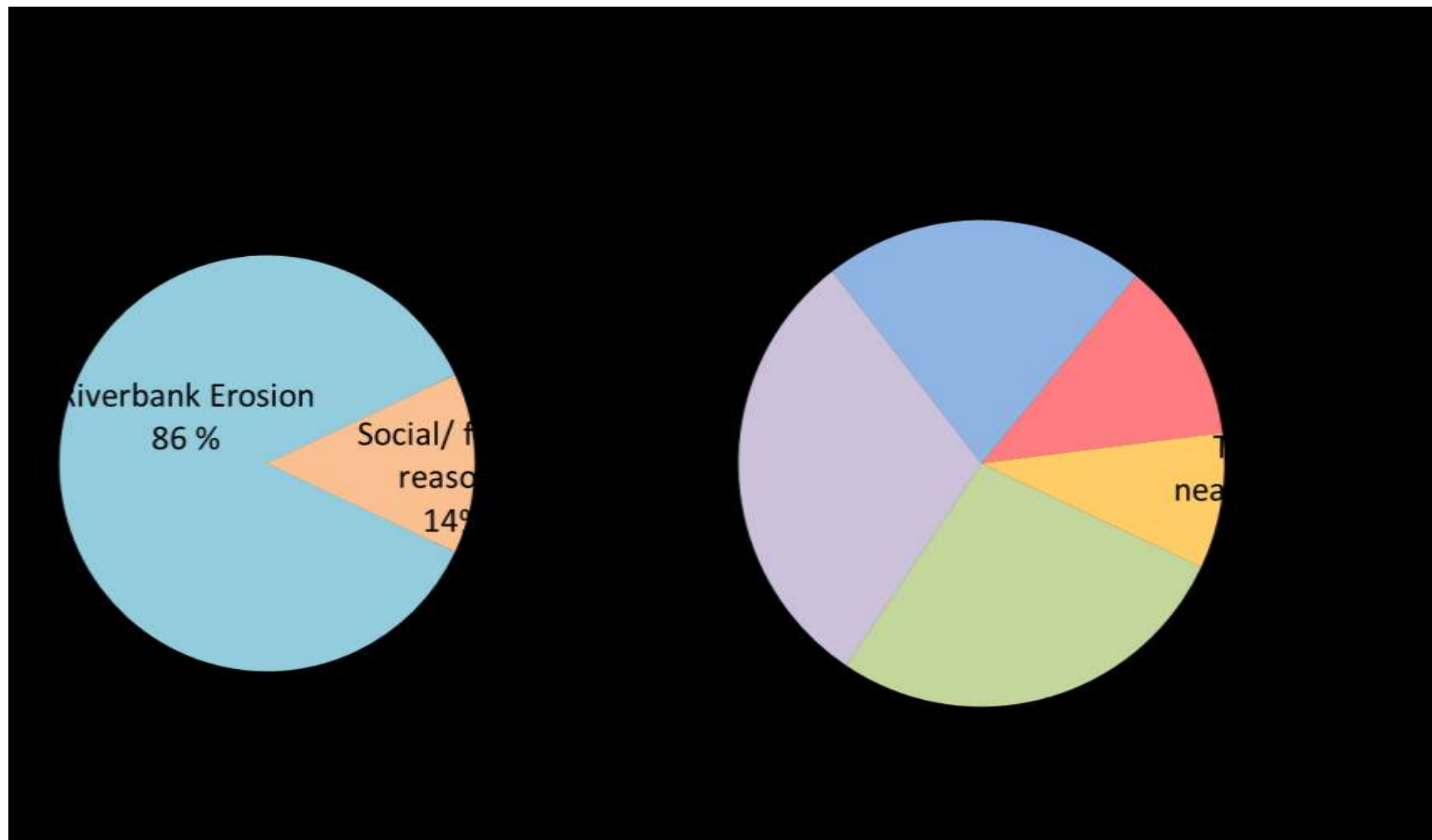
Willingness to migrate among respondents from the study areas

- Never wished to leave the village
- Might leave the village in future
- Wished to leave the village, but cannot



- ✓ Among all the respondent of the field census survey day labourers and farmers were most willing to move out from the study areas.
- ✓ Businessmen and job holders were less willing to move out from the study areas.
- ✓ Increasing Natural hazards are creating more problems on the inhabitation of the people than their livelihood

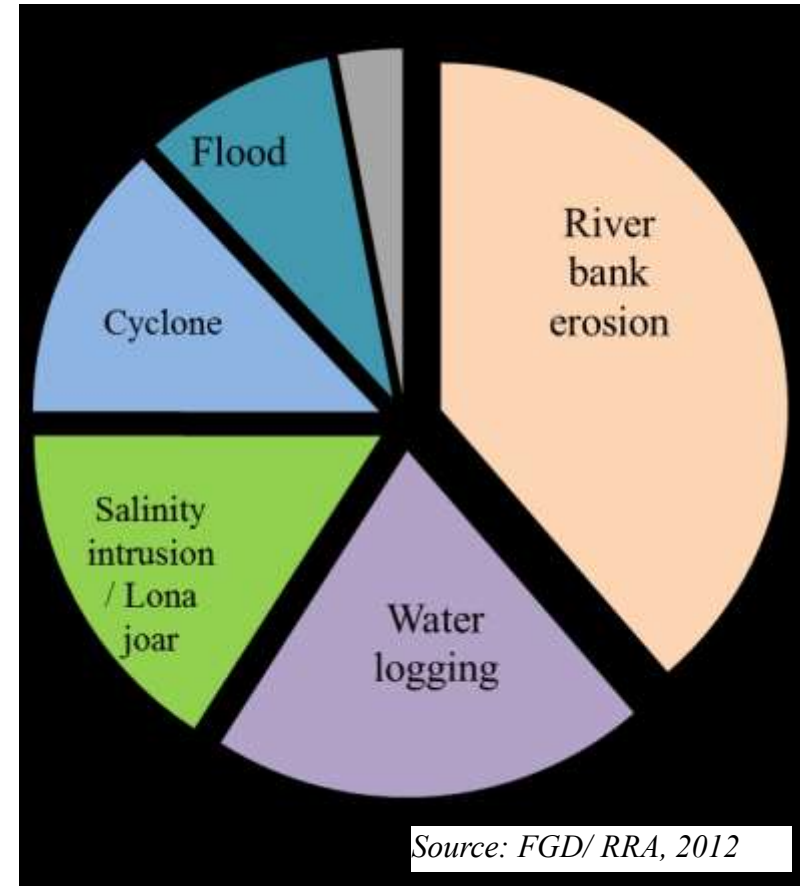
Factors of in-migration for the study areas



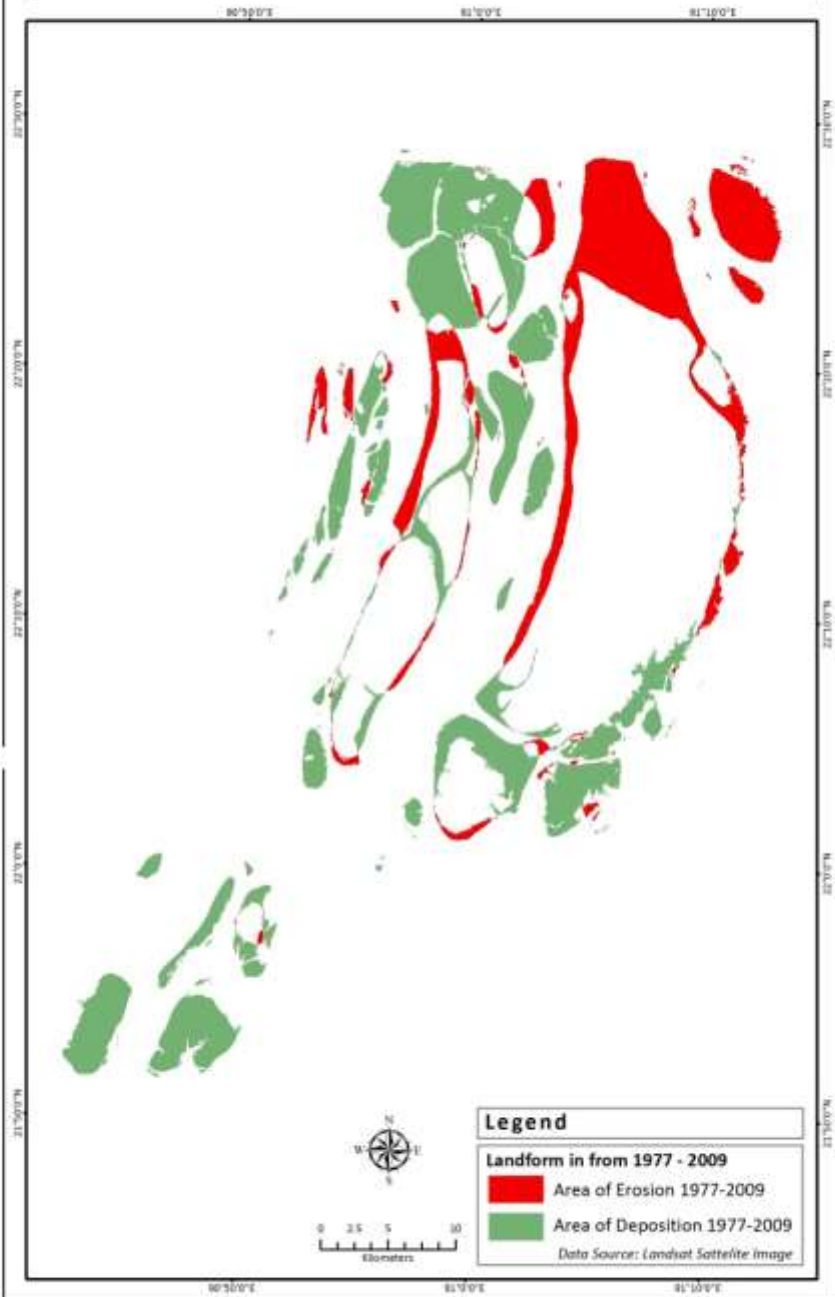
Natural Factors

- ✓ 92 percent of the respondents from survey have opined that the intensity and frequency of natural hazards have increased
- ✓ Around 80 percent have stated that, the destructions created by these natural hazards are far more devastating than past
- ✓ 95 percent of respondents in FGD mentioned the name of any natural disasters as a major cause for out migration.

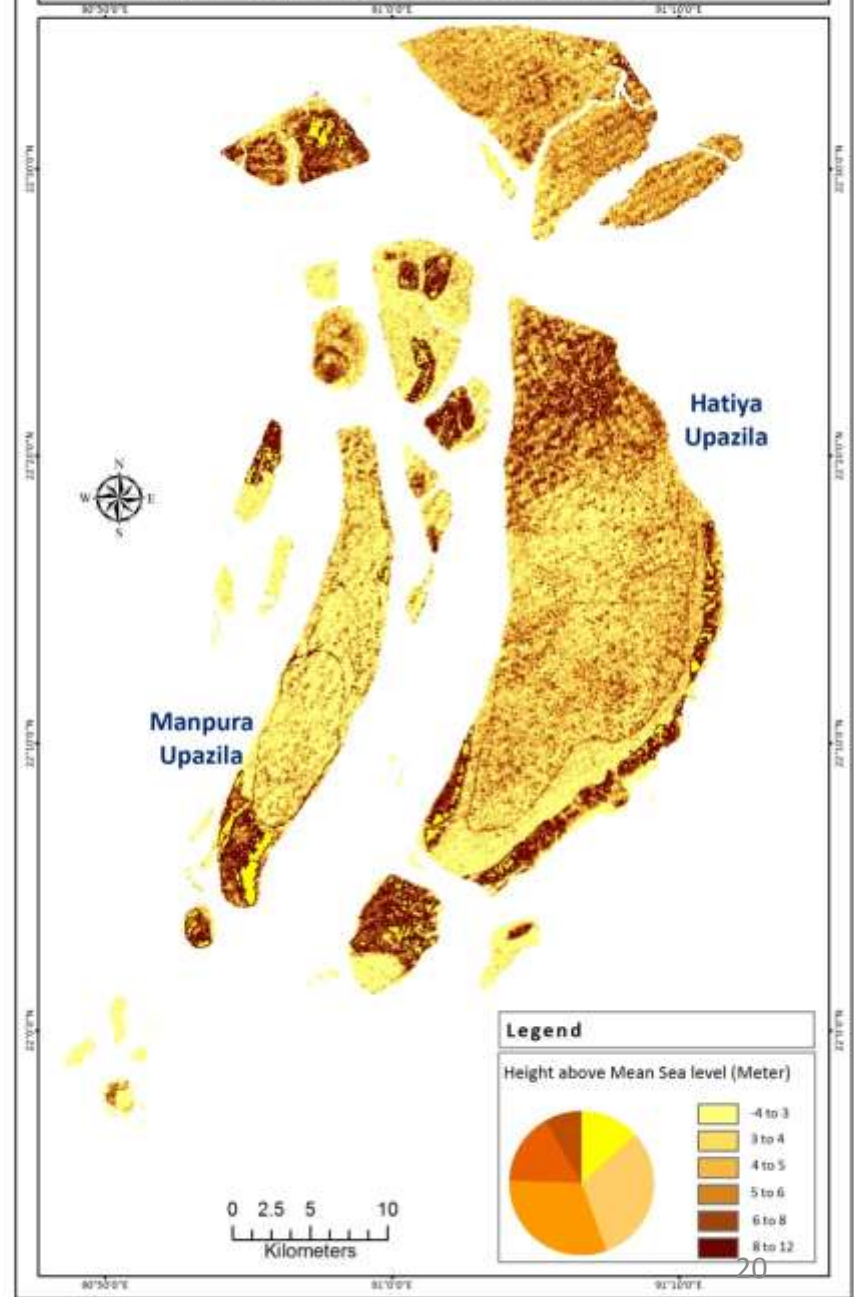
Influence of natural hazards to take out-migration decision



Map 4.2: Area of Erosion and Deposition (1977 - 2009)



Map 4.4: Height of the Study Area above Mean Sea Level



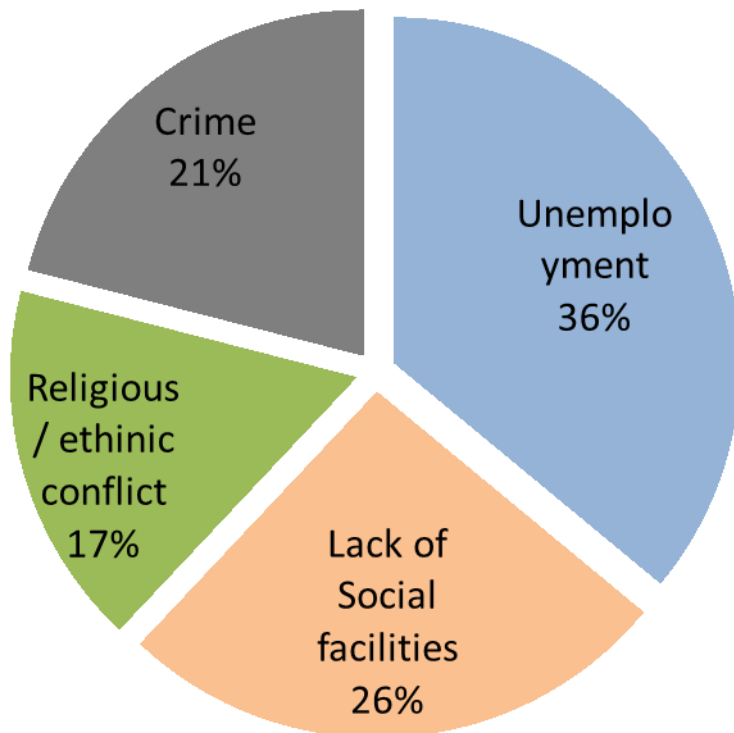
Households prone to tidal flood and water logging



Md Nasir Majhi, a fisherman of Manpura has lost his home 7 times for natural hazards, riverbank erosion, cyclone etc. Now he has built his last stand by taking loan from NGO's. But it is also vulnerbale as it lies very close to Meghna River. He said, he doesn't know what will happen if he lost this home too.

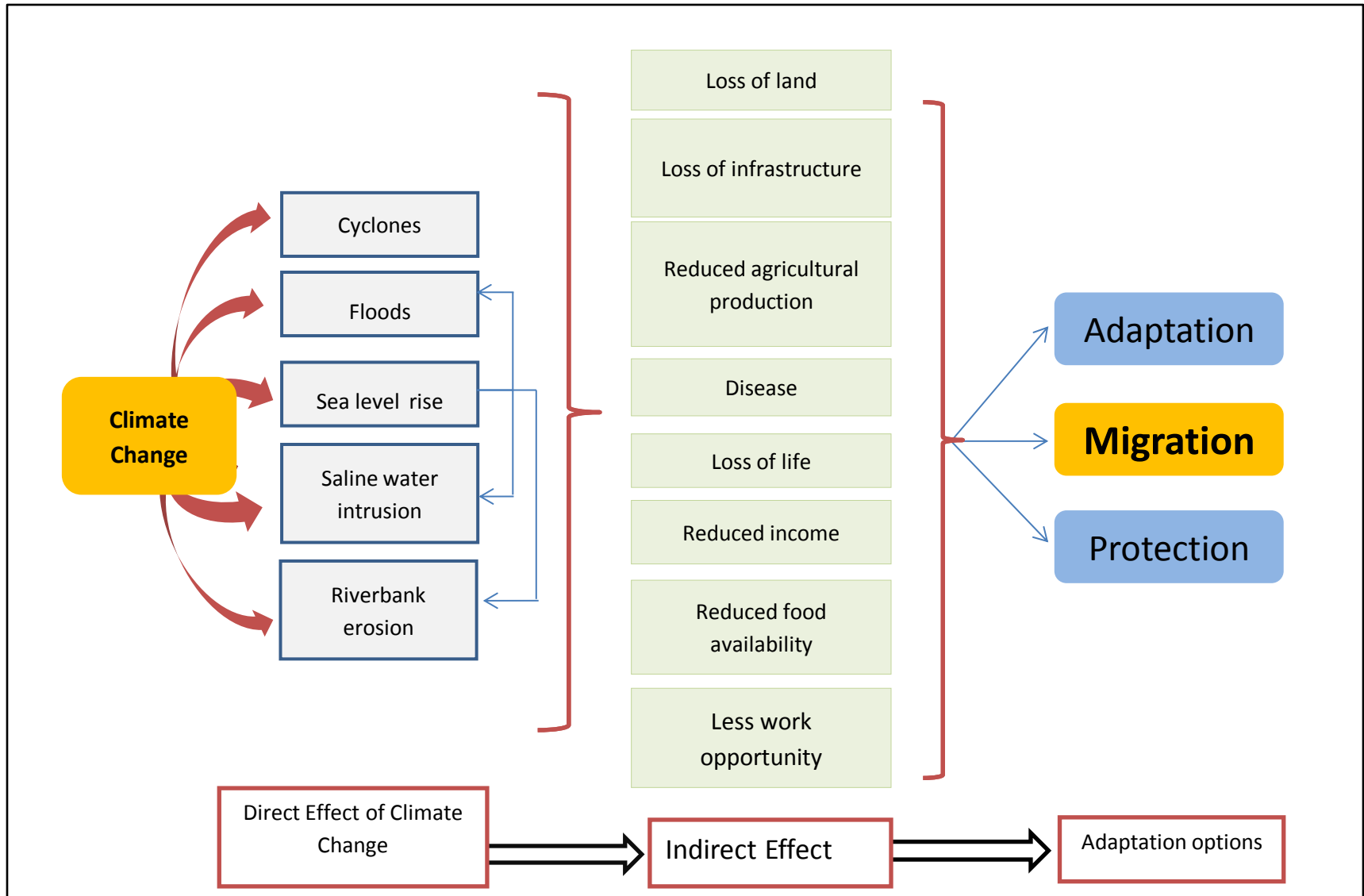
Social Factors

The social factors for out-migration from the study areas



- ✓ 87 percent of the respondent have opined that agricultural production have decreased
- ✓ 96 percent of the respondent have opined that production in fisheries sector have decreased
- ✓ The respondents blames the natural hazards for their low economic and social condition

Conclusion



Simplistic model of relationship between climate change and human migration

Thank You