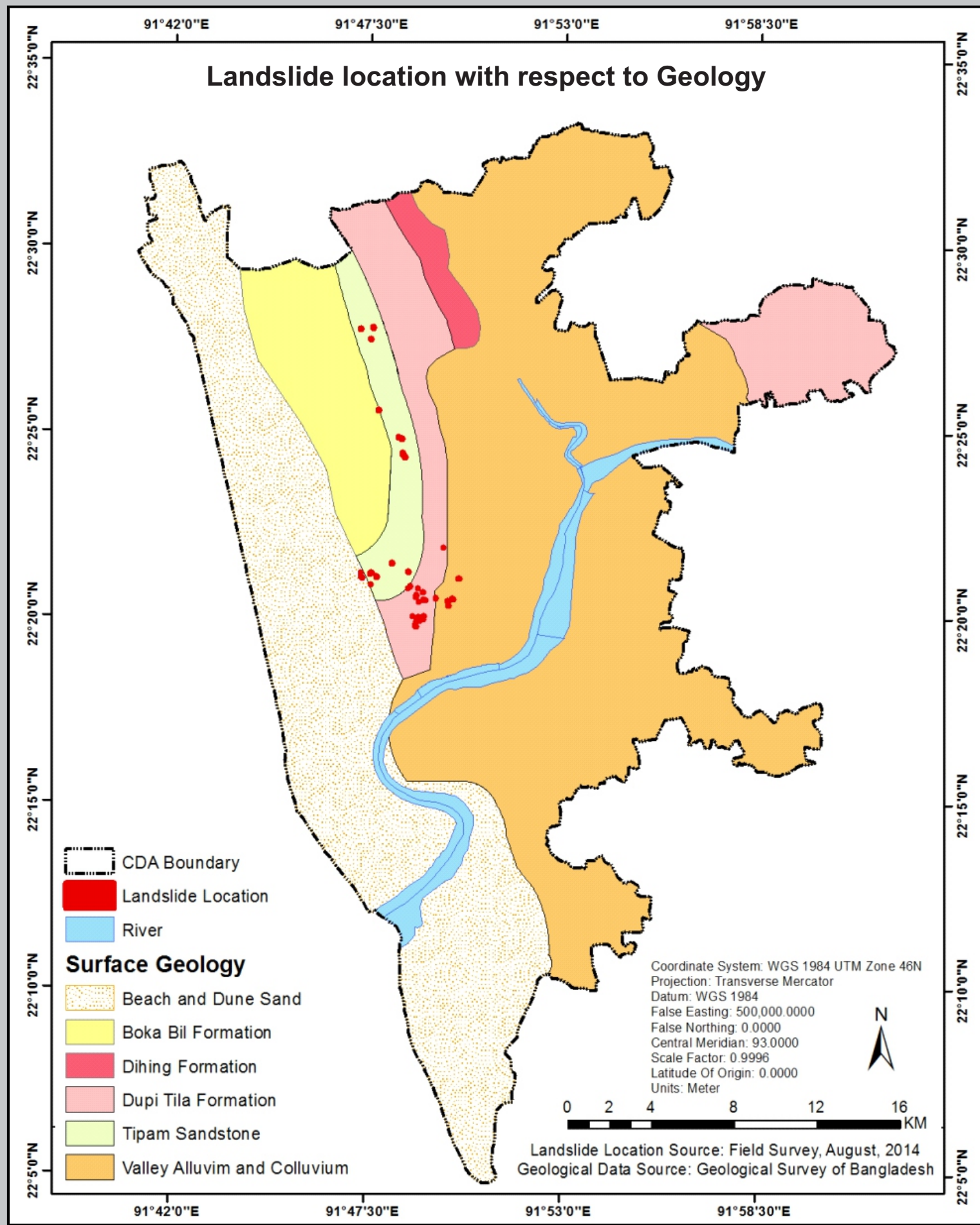


# Developing Dynamic Web-GIS based Early Warning System for the Communities at Landslide Risks in Chittagong Metropolitan Area, Bangladesh

## Aim of the Project:

To create a dynamic website that will warn the landslide vulnerable communities of Chittagong Metropolitan Area (CMA), Bangladesh



## Social Survey and Community Survey (Moti Jharna Area)

### Economic Condition of the People and Housing Condition

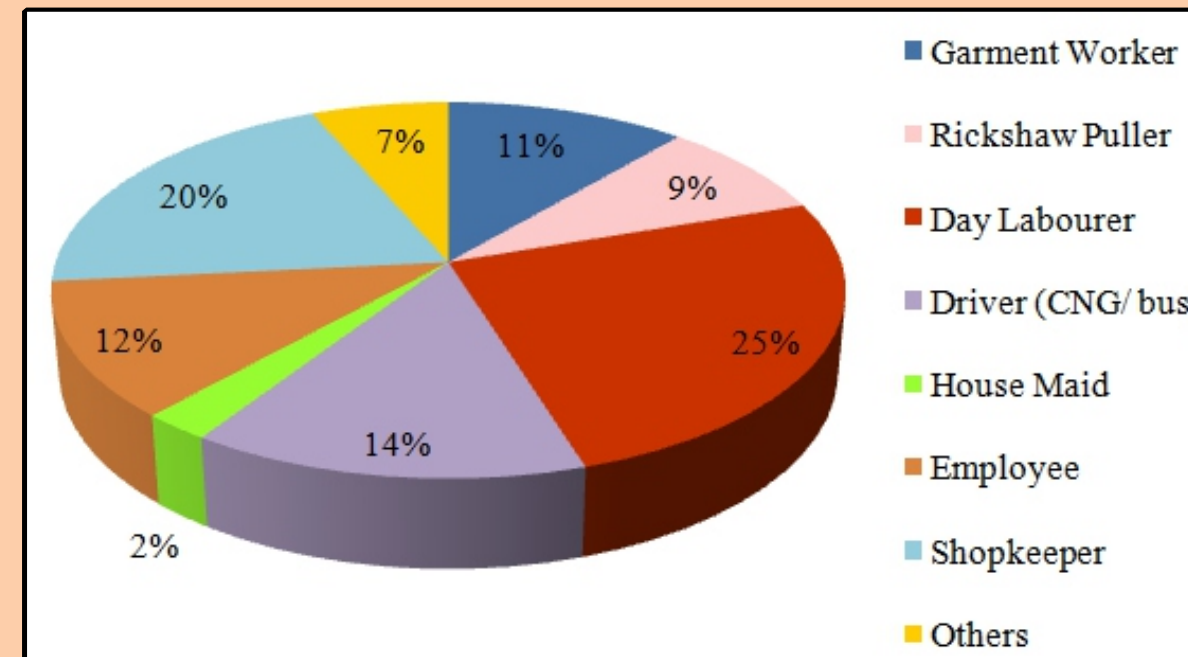


Figure: Main income sources (occupation) of the households

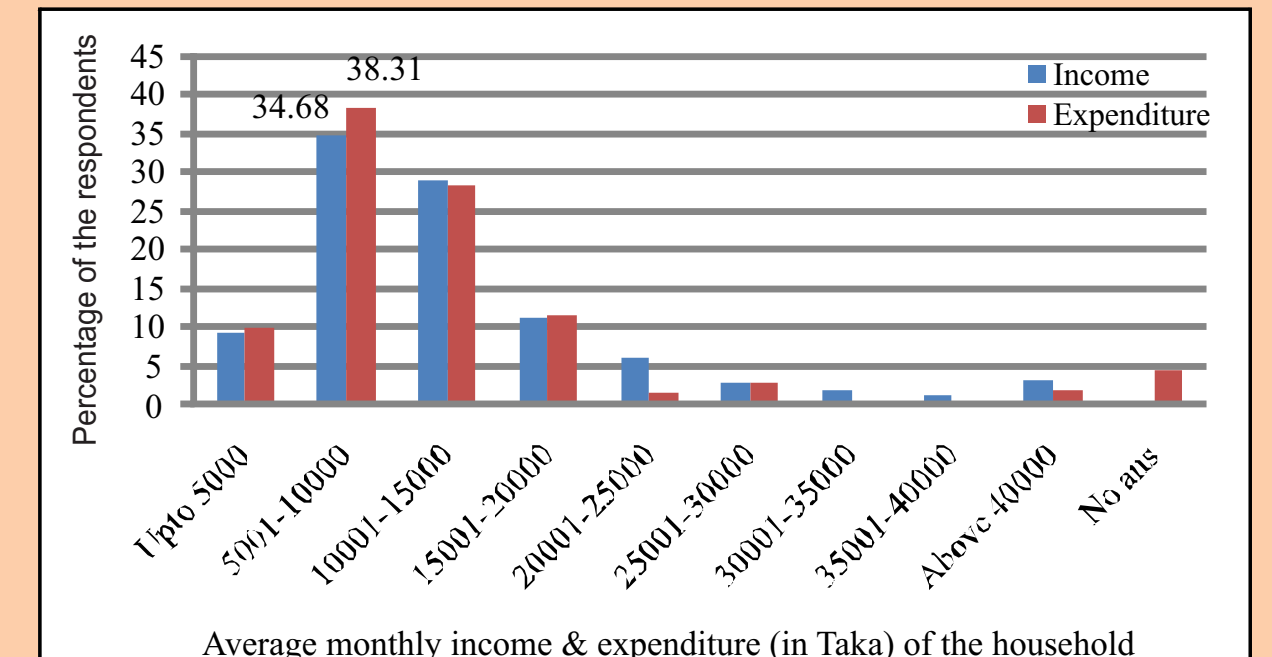


Figure: Economic status of the inhabitants



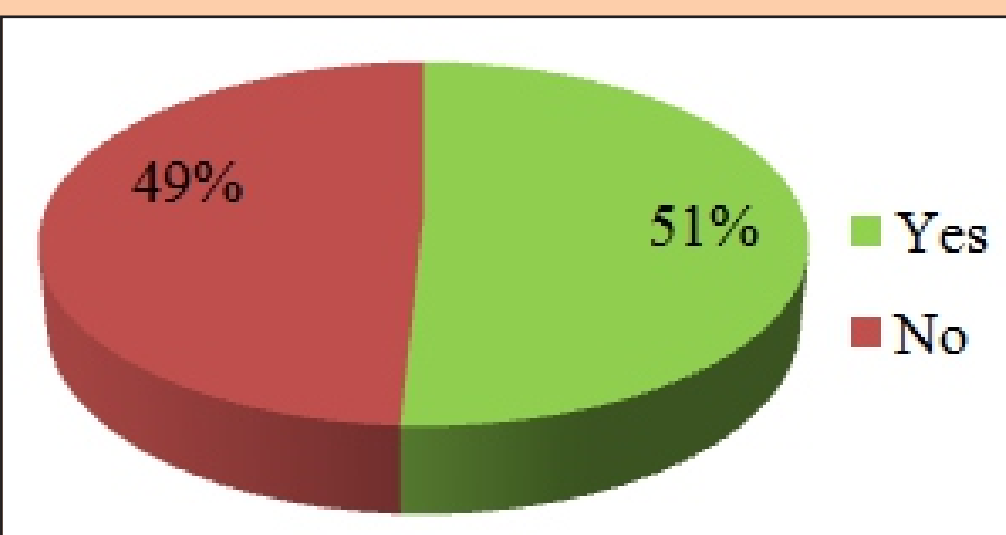
Figure: Semi-built, one storey Houses beside Hill



Figure: Interaction with the inhabitants of Moti Jharna area

## Problem of the inhabitants if evicted

\* 51% respondents will be in a more problematic situation.



**Main problem:**  
Homelessness, increased house-rent and identity crisis

\*37.3% people have **no future plan** to improve present living standard.

## Landslide as a problem to the inhabitants

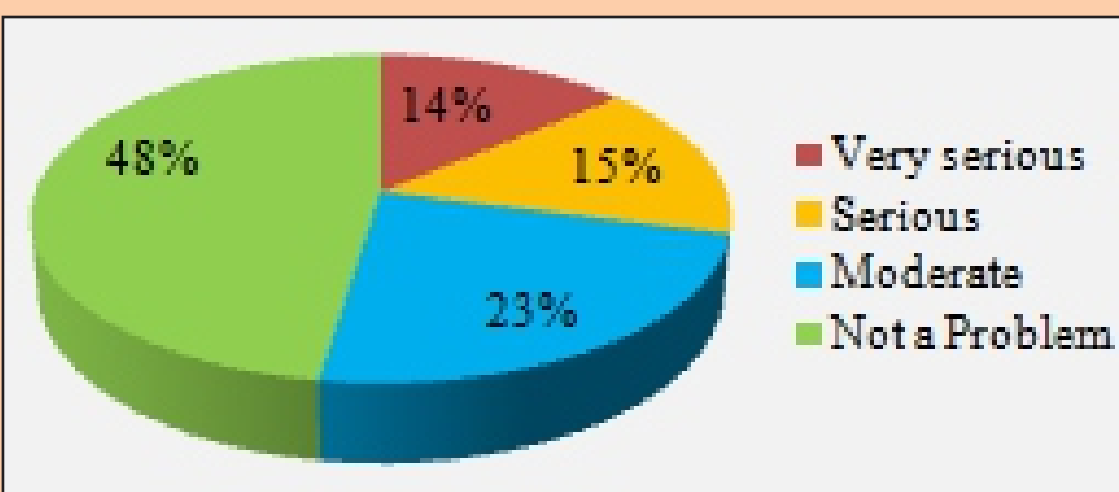


Figure: Intensity of landslide problem

**Cause of landslide:**  
High precipitation and hill cutting

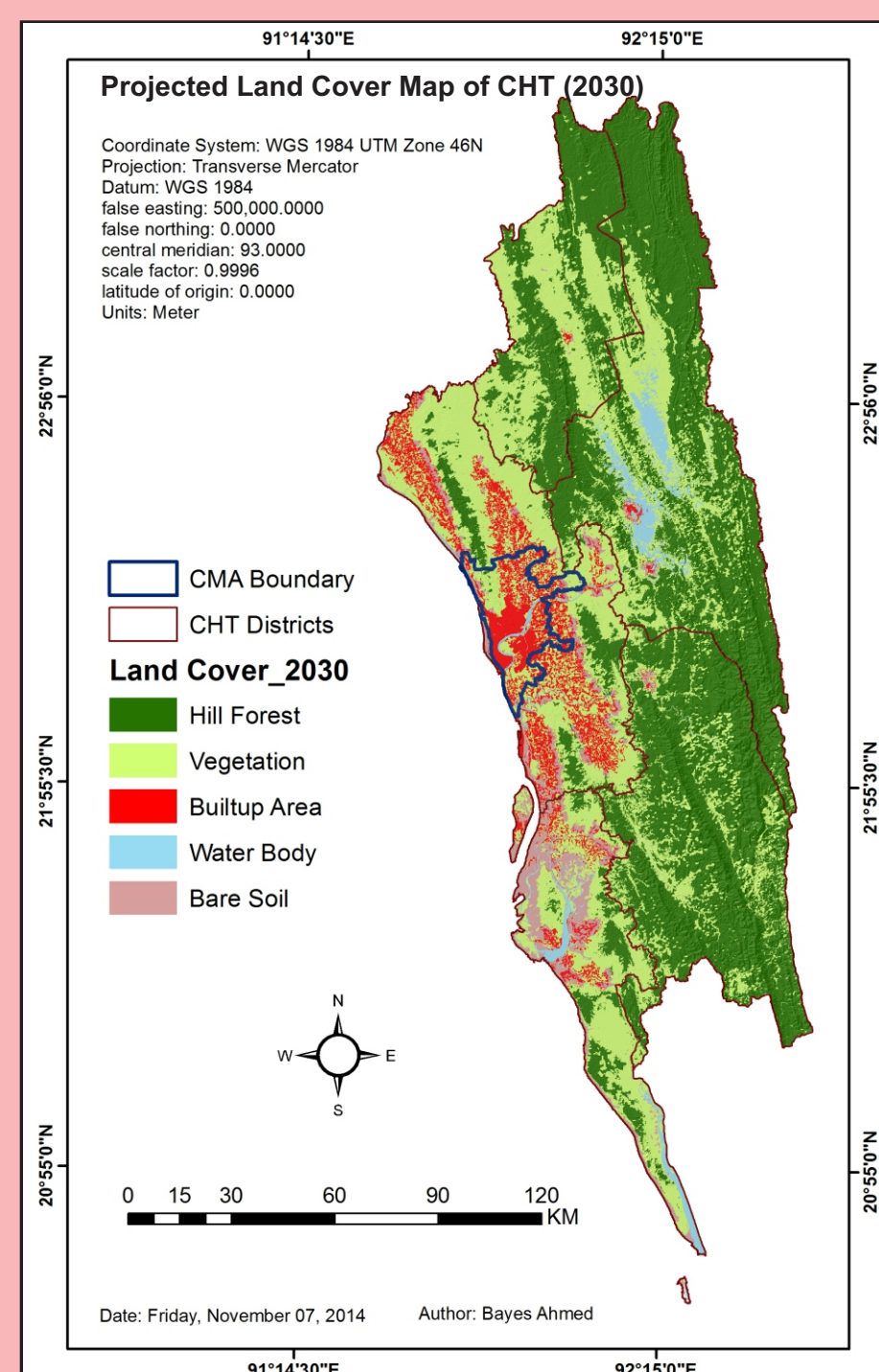
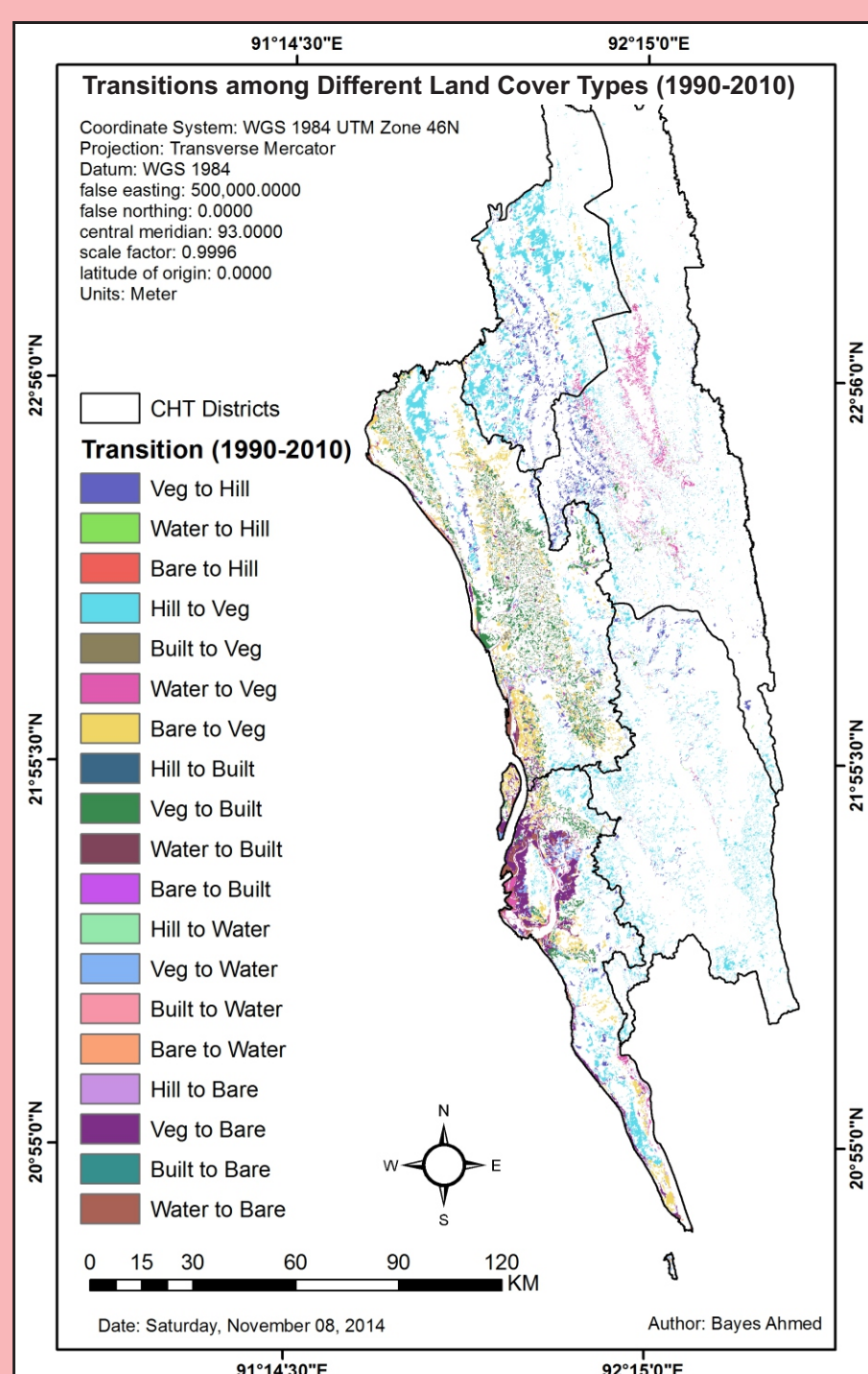
**Effect of landslide:**  
\* Destruction of houses,  
\* Property damage and  
\* Death of people



## Existing Early Warning System:

- § Announcement through mike (72.5% said).
- § 81.25% respondents stay at their houses after getting warning.
- § **One person attended training in Nearby School.**

## PROJECTED LANDUSE IN CHITTAGONG HILL TRACT



## Identifying the Rainfall Pattern in Bangladesh

