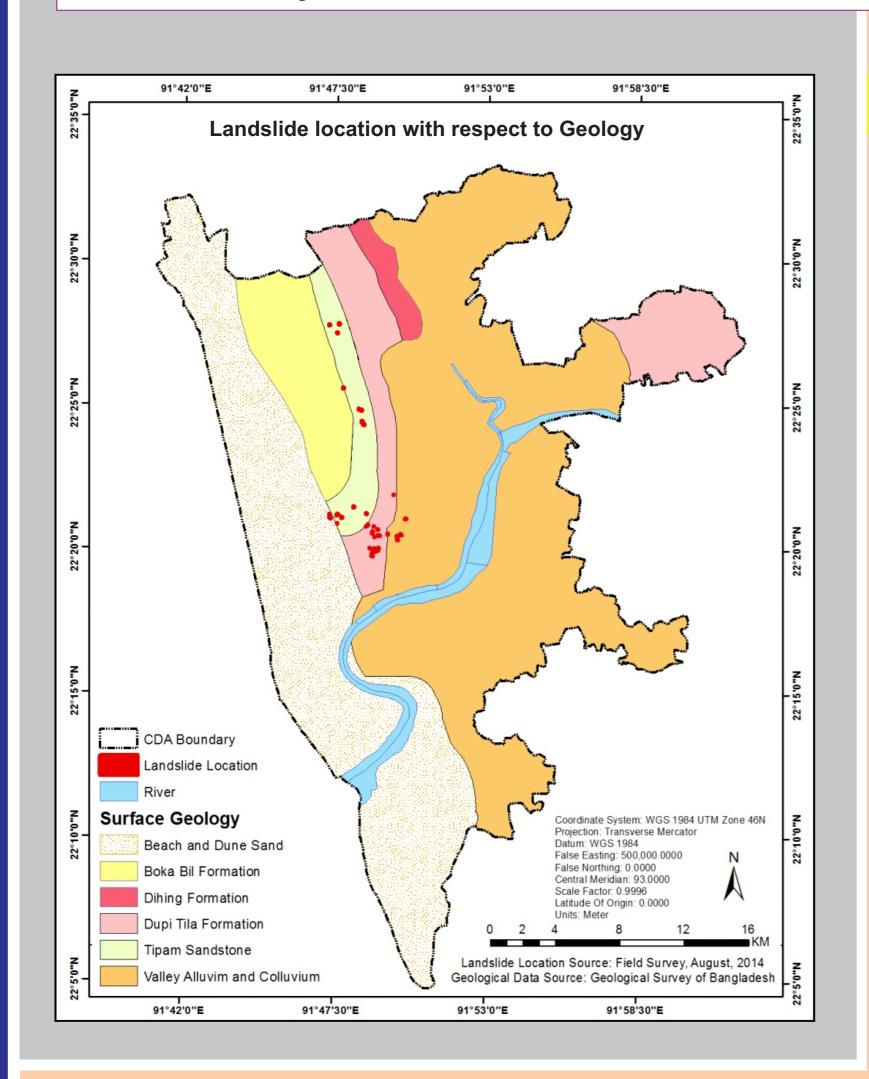
# Developing Dynamic Web-GIS based Early Warning System for the Communities at Landslide Risks in Chittagong Metropolitan Area, Bangladesh

# **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**

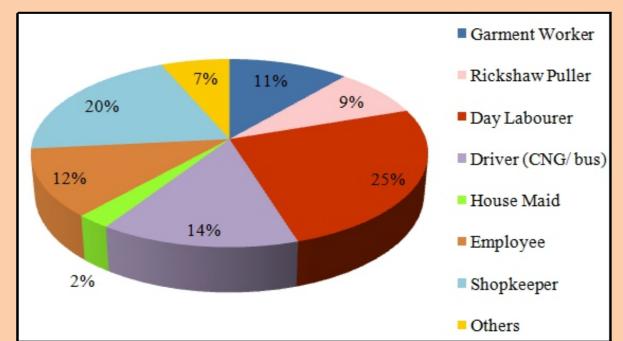


Figure: Main income sources (occupation) of the households

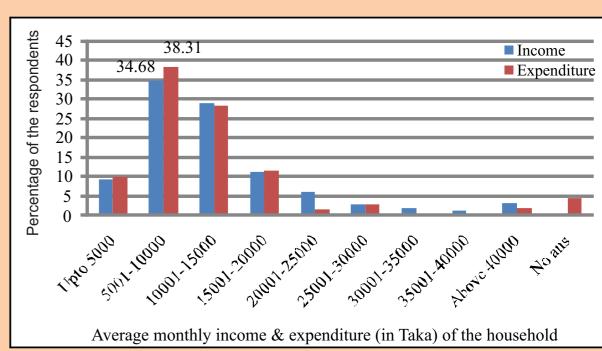


Figure: Economic status of the inhabitants

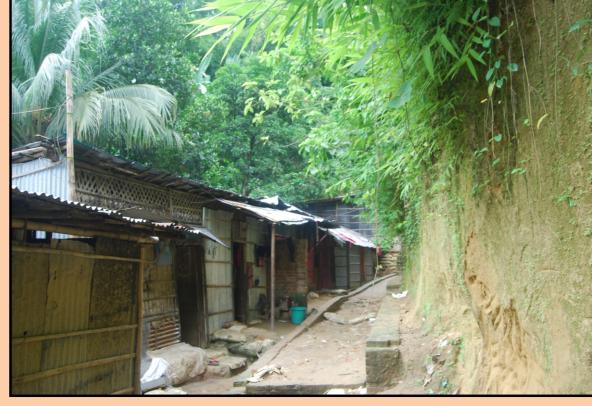


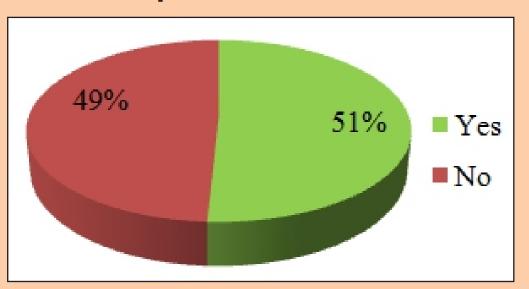
Figure: Semi-built, one storey Houses beside Hill



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

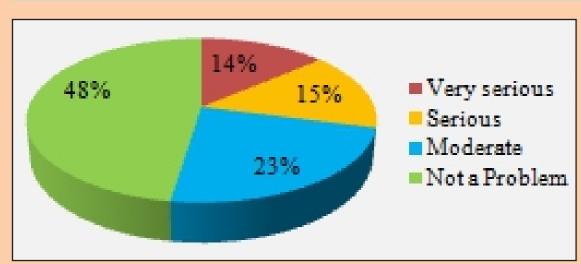


Figure: Intensity of landslide problem

#### **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).

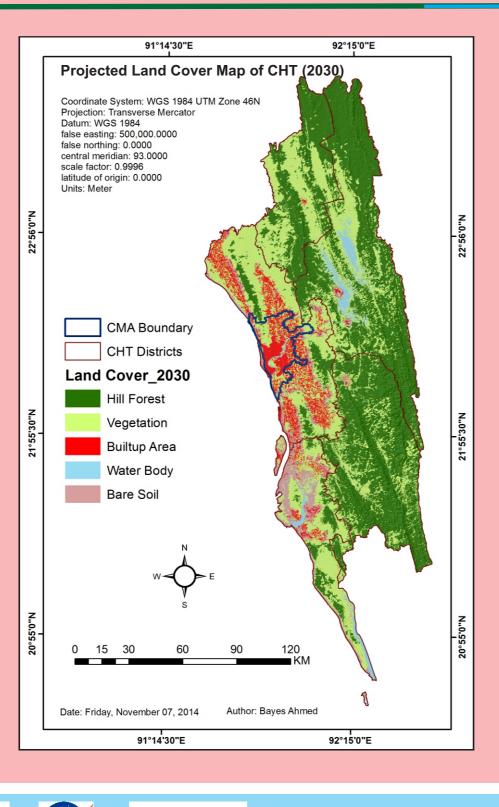
§ 81.25% respondents stay at their houses after getting warning.

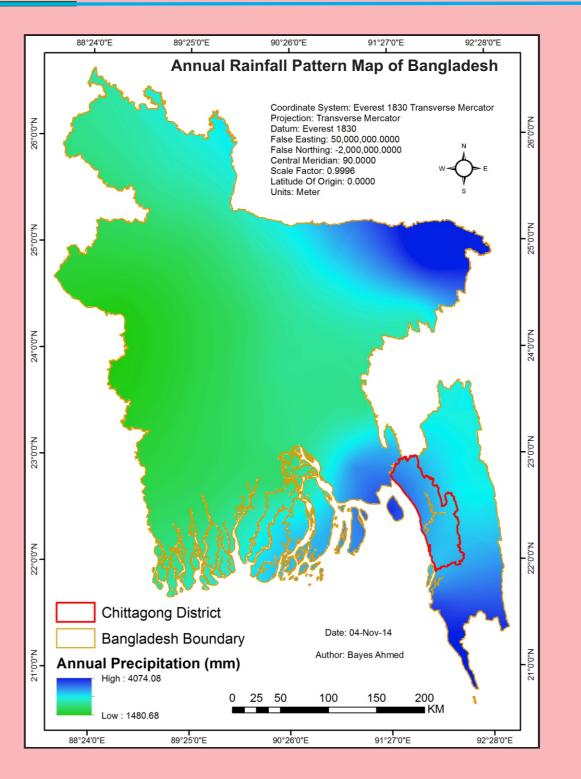
**Identifying the Rainfall Pattern in Bangladesh** 

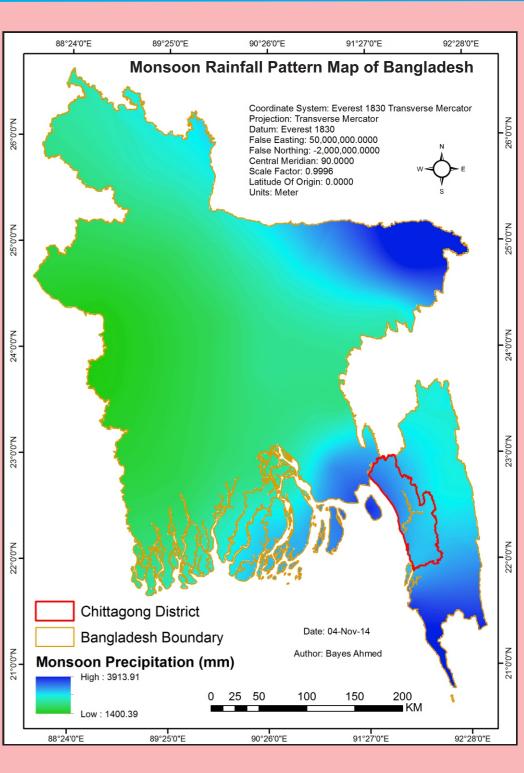
§ One person attended training in Nearby School.

#### PROJECTED LANDUSE IN CHITTAGONG HILL TRACT

#### **Transitions among Different Land Cover Types (1990-2010)** Coordinate System: WGS 1984 UTM Zone 46N false easting: 500,000.0000 false northing: 0.0000 central meridian: 93.0000 latitude of origin: 0.0000 CHT Districts Transition (1990-2010) Veg to Hill Water to Hill Bare to Hill Hill to Veg Built to Veg Water to Veg Bare to Veg Hill to Built Veg to Built Water to Built Bare to Built Hill to Water Veg to Water Built to Water Hill to Bare Veg to Bare Built to Bare Water to Bare Date: Saturday, November 08, 2014 Author: Bayes Ahmed 91°14'30"E 92°15'0"E













ICIWOD