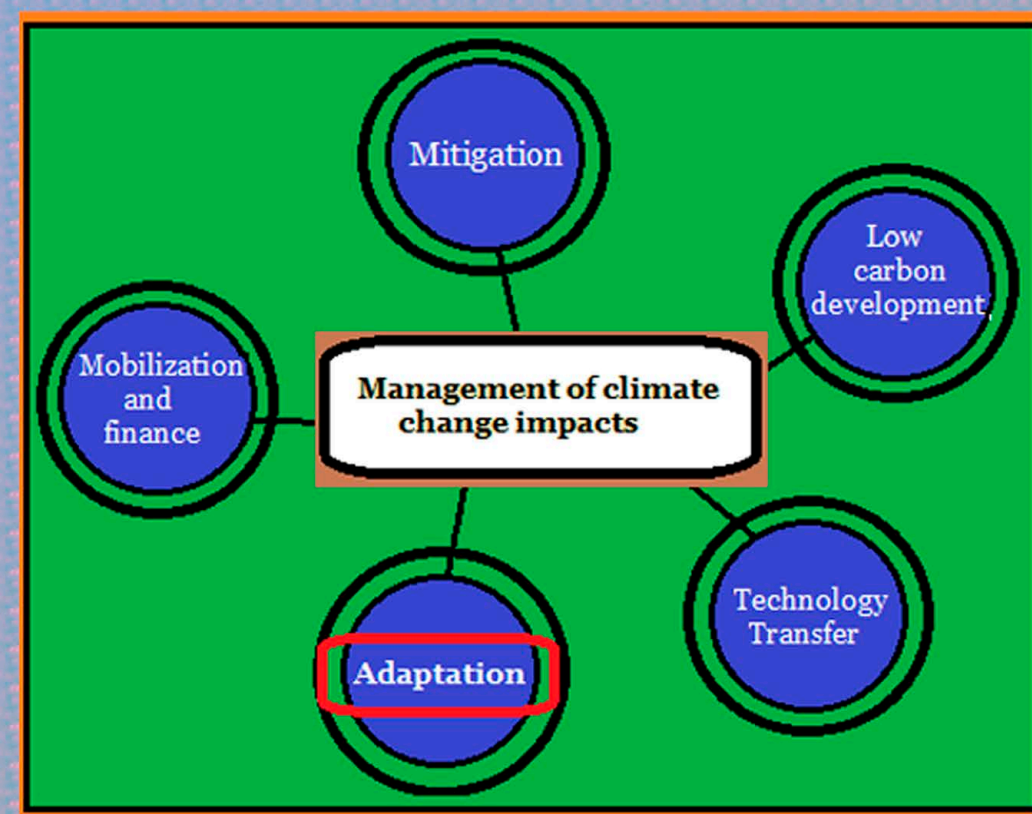
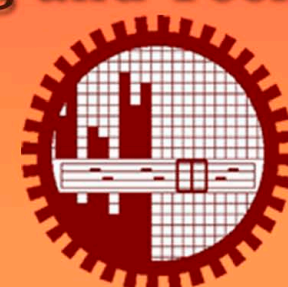




Debanjali Saha, Lecturer, Institute of Water and Flood Management (IWFM), Bangladesh University of Engineering and Technology (BUET)



Bangladesh is highly vulnerable to climate change impacts and adaptation is the most prominent choice to manage these impacts. A large number of potential adaptation options have been formulated in Bangladesh and many of them have been practiced. This analysis was based on the adaptation practices in the coastal region of Bangladesh. These practices were documented in the adaptation inventory prepared under the project 'Deltas, Vulnerability and Climate Change: Migration and Adaptation (DECCMA)'. Depending on some criteria including geographical locations, forms and sectors of adaptations, providers and beneficiaries of the adaptations, timing of the adaptations, stresses and shocks in response to which adaptation measures were taken, barriers to adaptations, sustainability issues and gender perspectives, etc., these adaptation practices were analyzed and represented through some images and graphical illustrations.

## Spatial Distribution of the adaptations

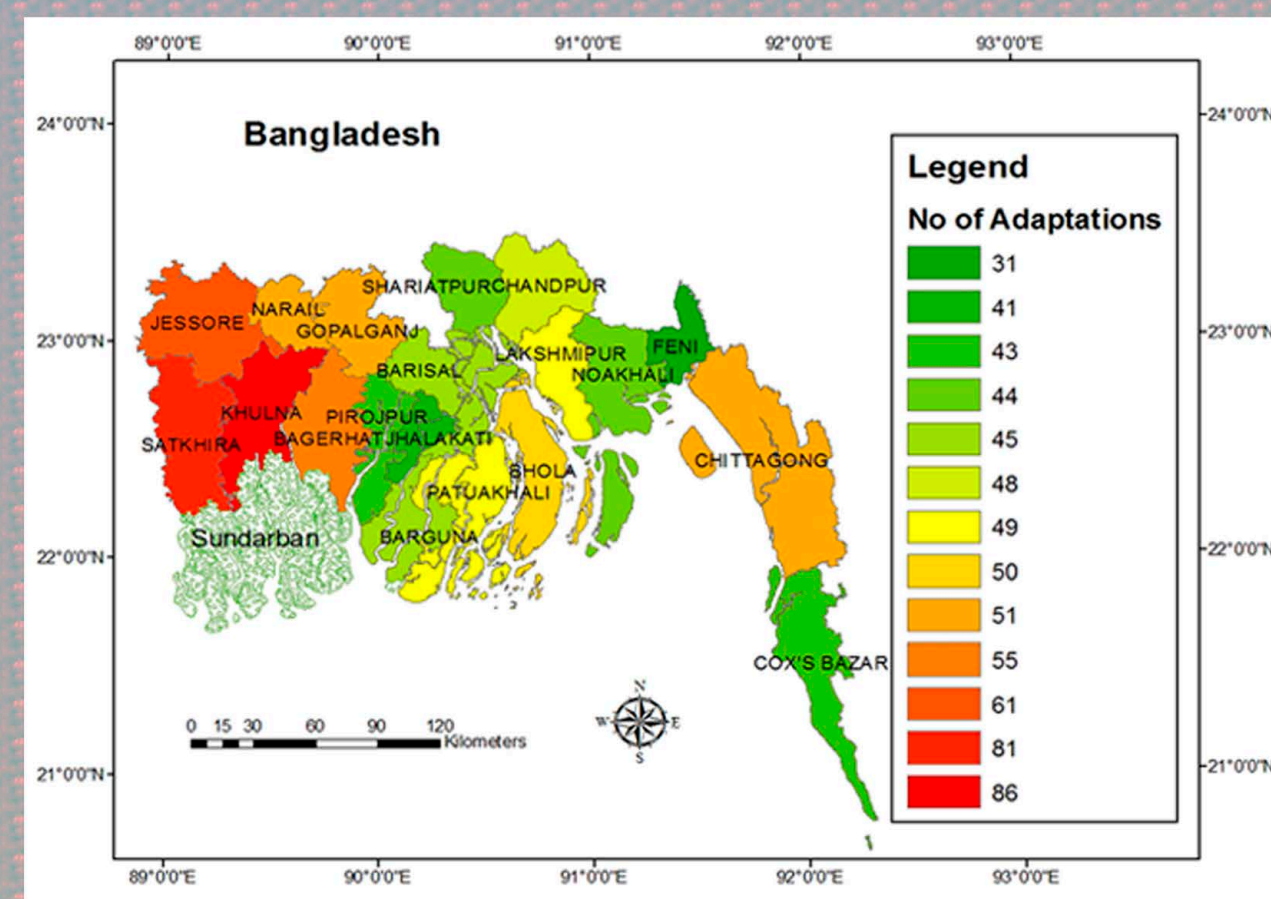


Figure 1: Number of adaptations in different coastal districts

## Sectoral Distribution of the adaptations

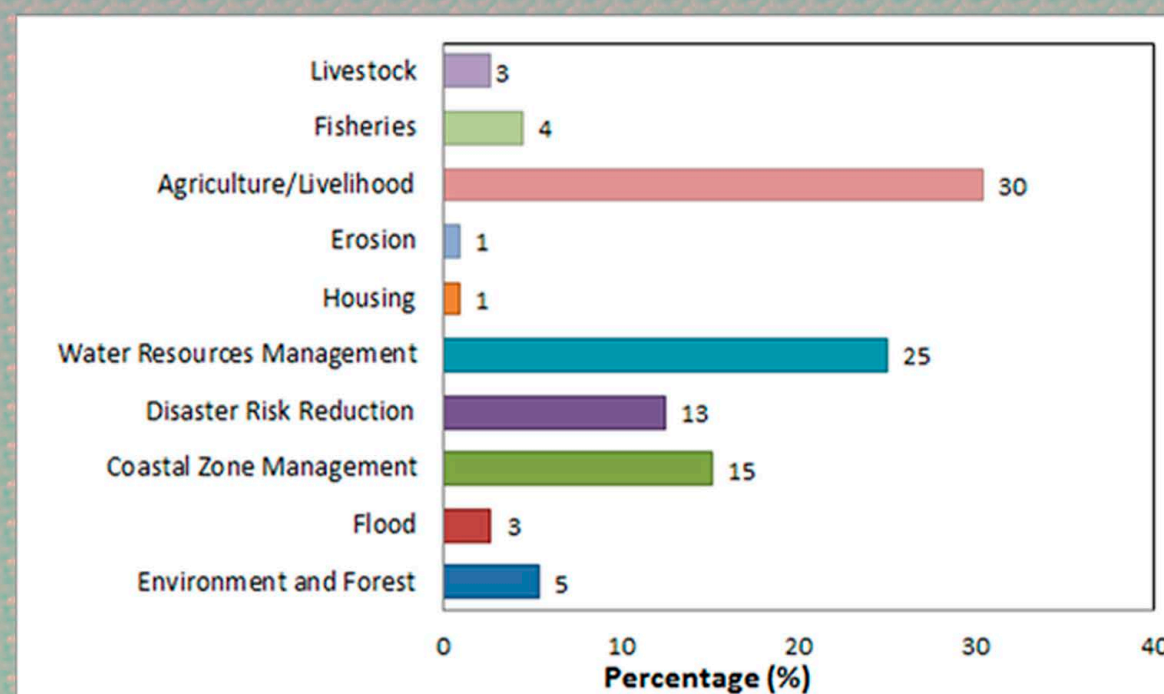


Figure 2: Sectoral distribution of the adaptation practices

## Forms of the adaptations

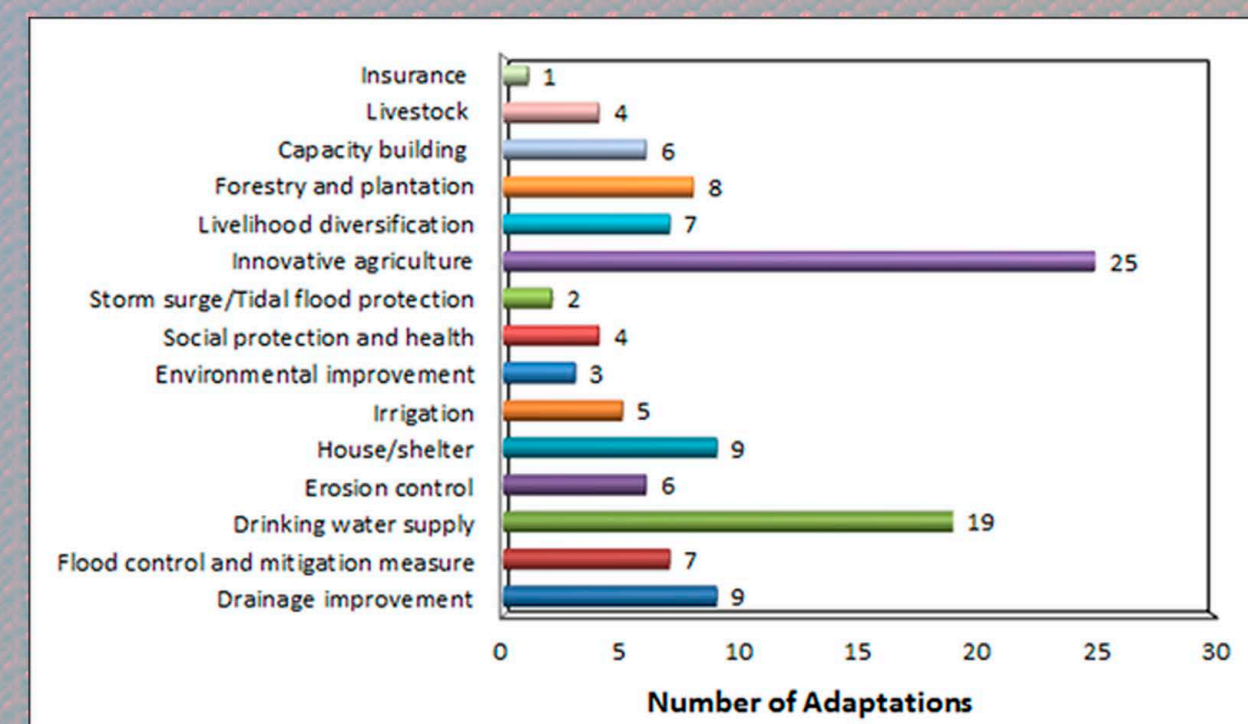


Figure 3: Different forms of the adaptations

Most of the adaptation measures were found to be linked with innovative agriculture followed by drinking water supply/sanitation.

## Timing of the adaptations

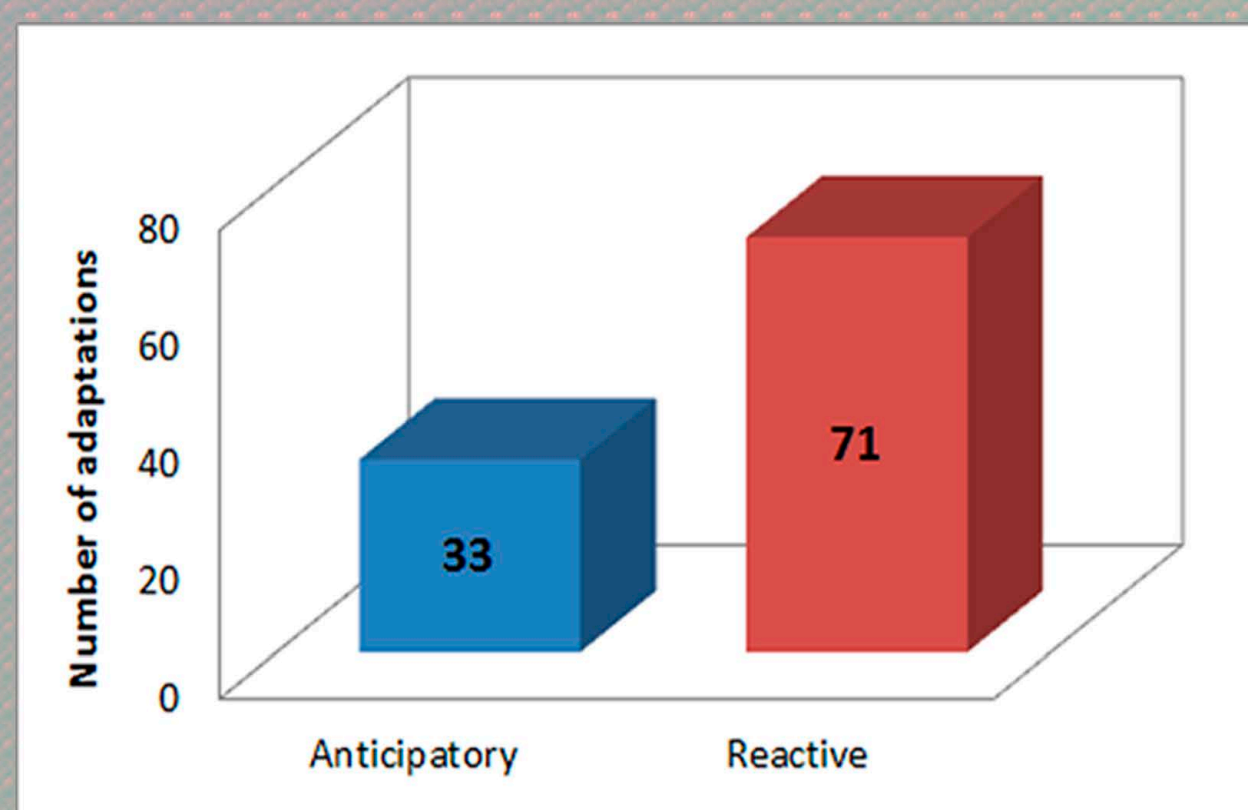


Figure 4: Classification of adaptation measures according to timing

## Providers and beneficiaries of the adaptations

- Government sector is the major provider of the adaptations (63%) followed by the non-governmental organizations (23%)
- Different ministries and their departments are the major government providers
- Along with different national and international NGOs, individuals and community people provide some adaptations (14%)
- The local communities including farmers, fishermen, disaster affected and vulnerable people, women, children and disadvantaged groups are the major beneficiaries of the adaptations in the coastal region.

## Adaptations in response to stresses and shocks

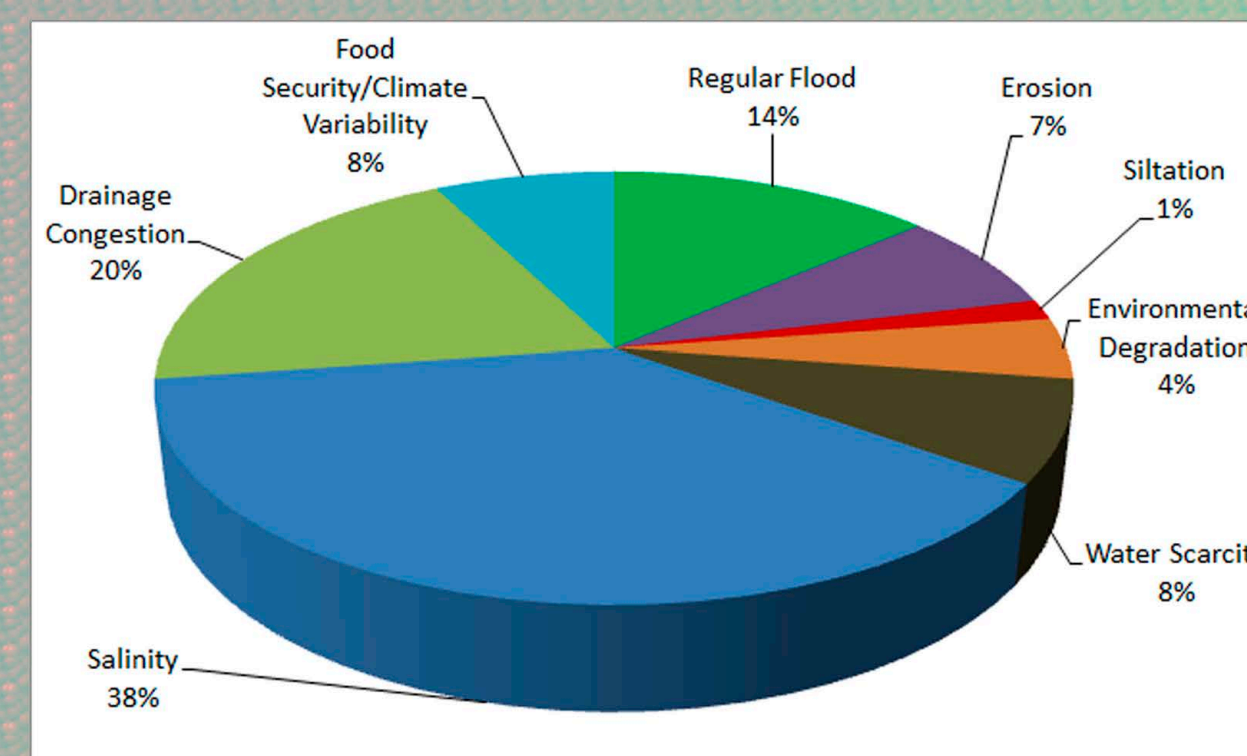


Figure 5: Percentage of adaptations taken in response to chronic stresses

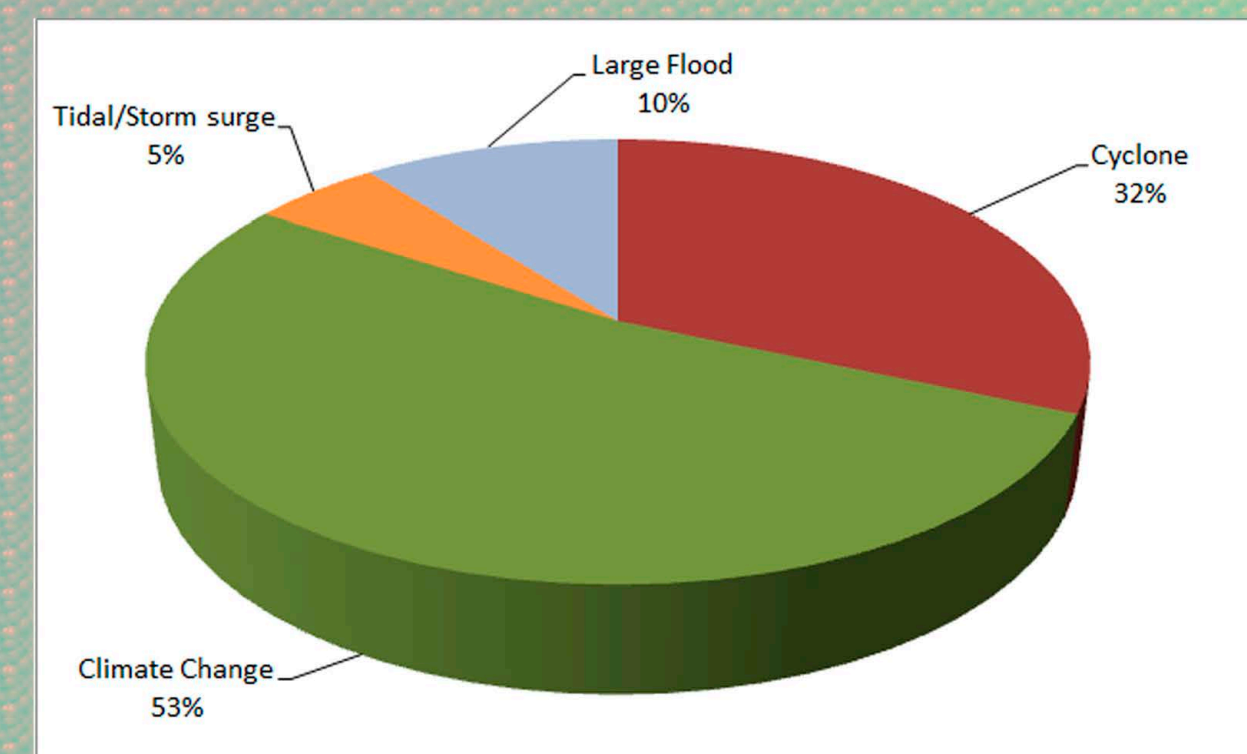


Figure 6: Percentage of adaptations taken in response to sudden shocks

Salinity, drainage congestion and regular floods are the major stresses in response to which maximum adaptation measures were taken

Cyclone and large floods are major shock events while climate change is considered as a trigger (shock) for almost half of the adaptation measures

## Barriers to the adaptations

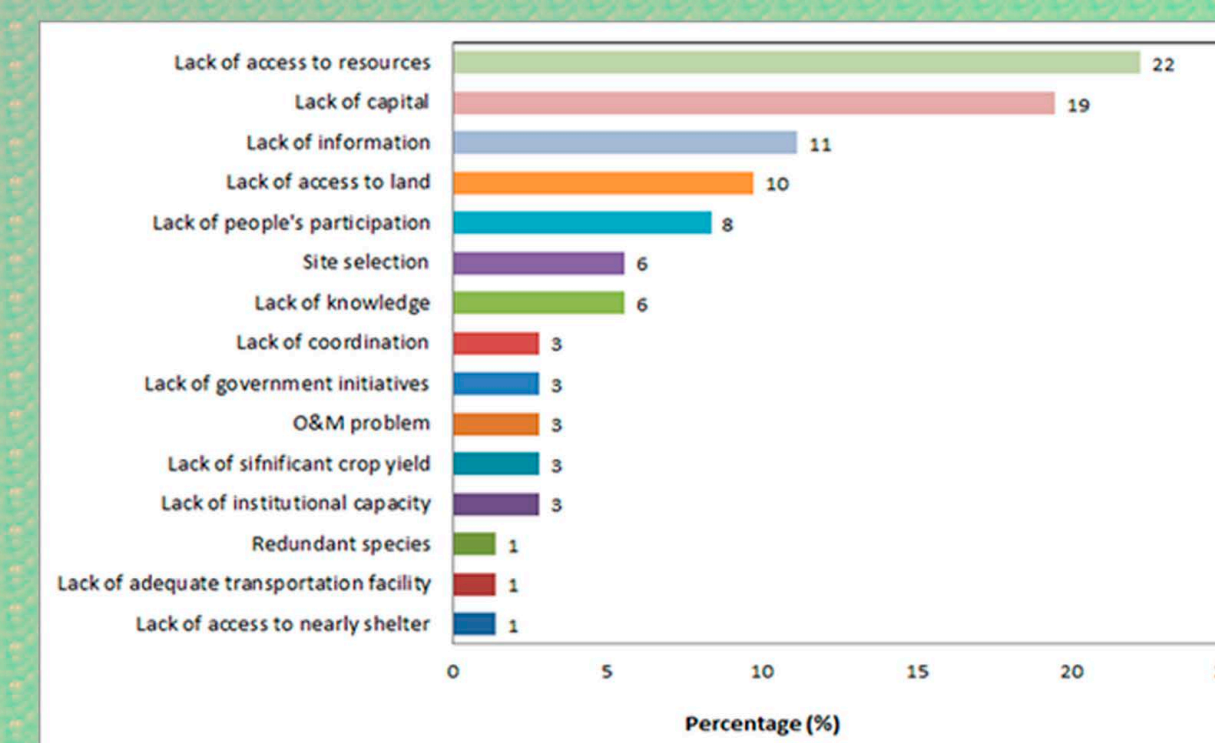


Figure 7: Classification of barriers faced by the adaptations

## Sustainability Issues

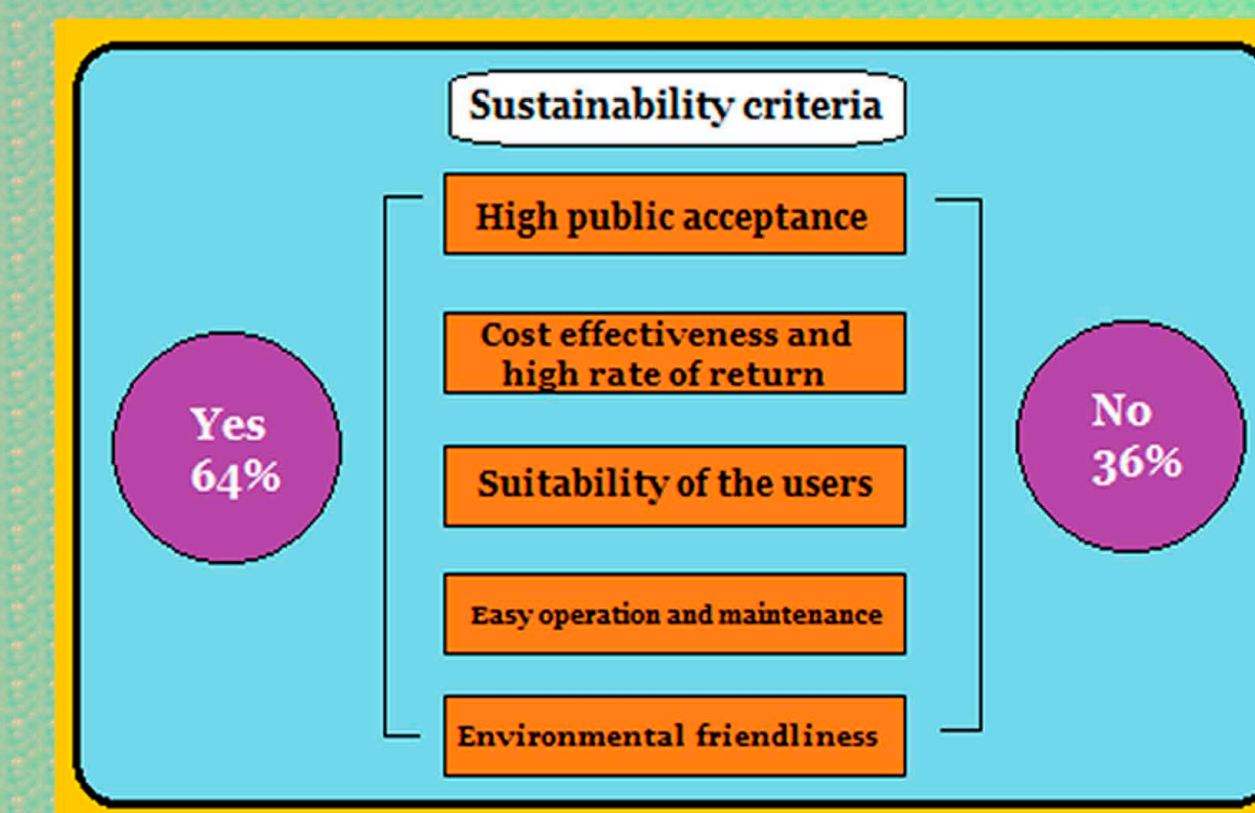


Figure 8: Percentage of sustainable adaptations

## Gender perspective of the adaptations

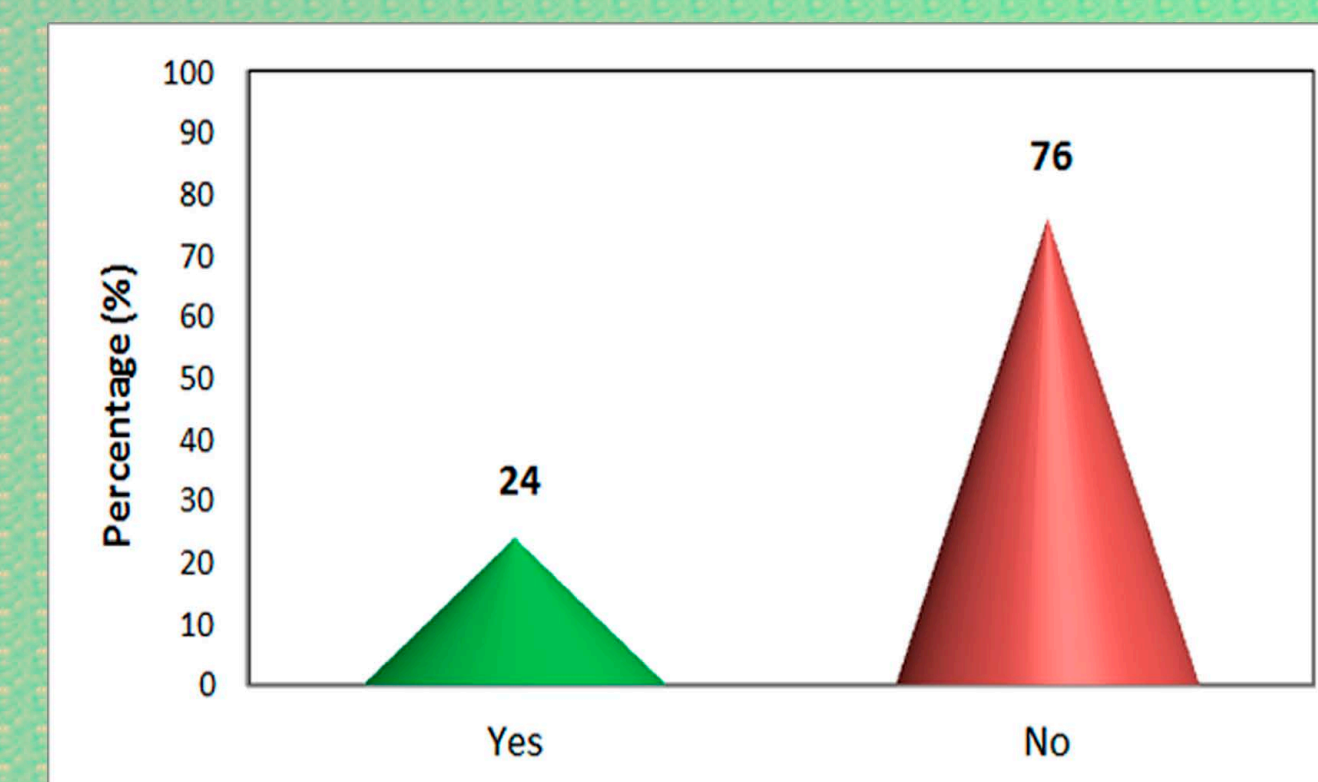


Figure 9: Percentage of gender sensitive adaptations

## Vulnerability and resilience aspects of the adaptations

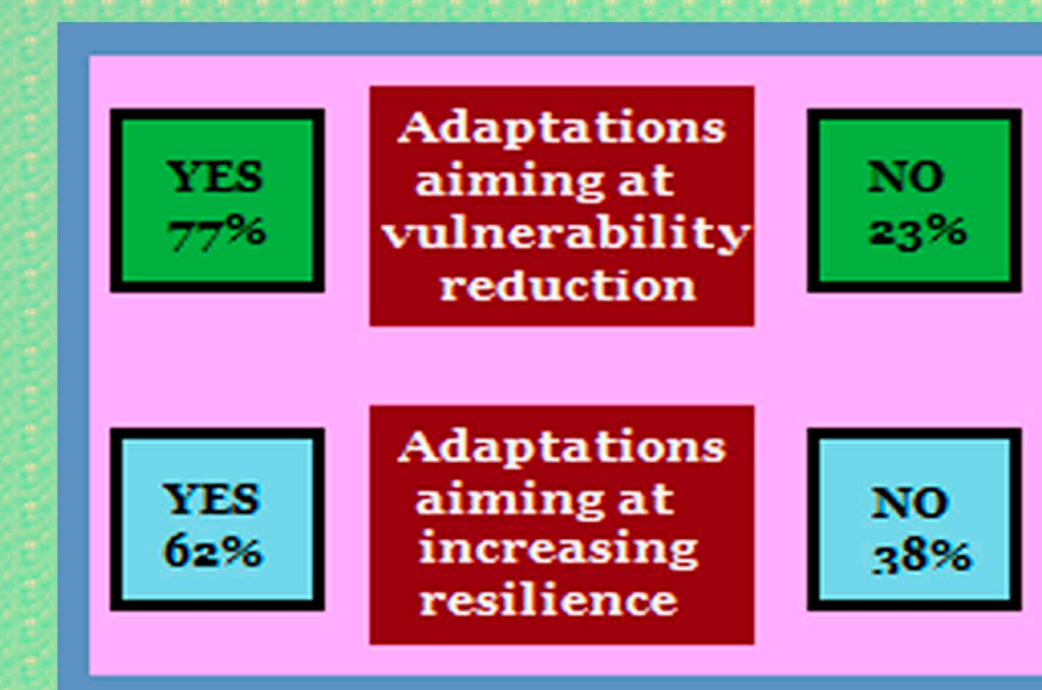


Figure 10: Percentage of adaptations aiming at vulnerability reduction and increasing resilience

## Acknowledgement

This work is carried out under the 'Deltas, vulnerability and Climate Change: Migration and Adaptation (DECCMA)' project under the Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA) program with financial support from the UK Government's Department for International Development (DFID) and the International Development Research Centre (IDRC), Canada. The views expressed in this work are those of the authors and do not necessarily represent those of DFID and IDRC or its Boards of Governors.