



COPING WITH CLIMATE CHANGE AND CLIMATE VARIABILITY : PERCEPTION OF LOCAL PEOPLE IN BANGLADESH

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and

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OBJECTIVES OF LOCAL LEVEL CONSULTATIVE MEETINGS

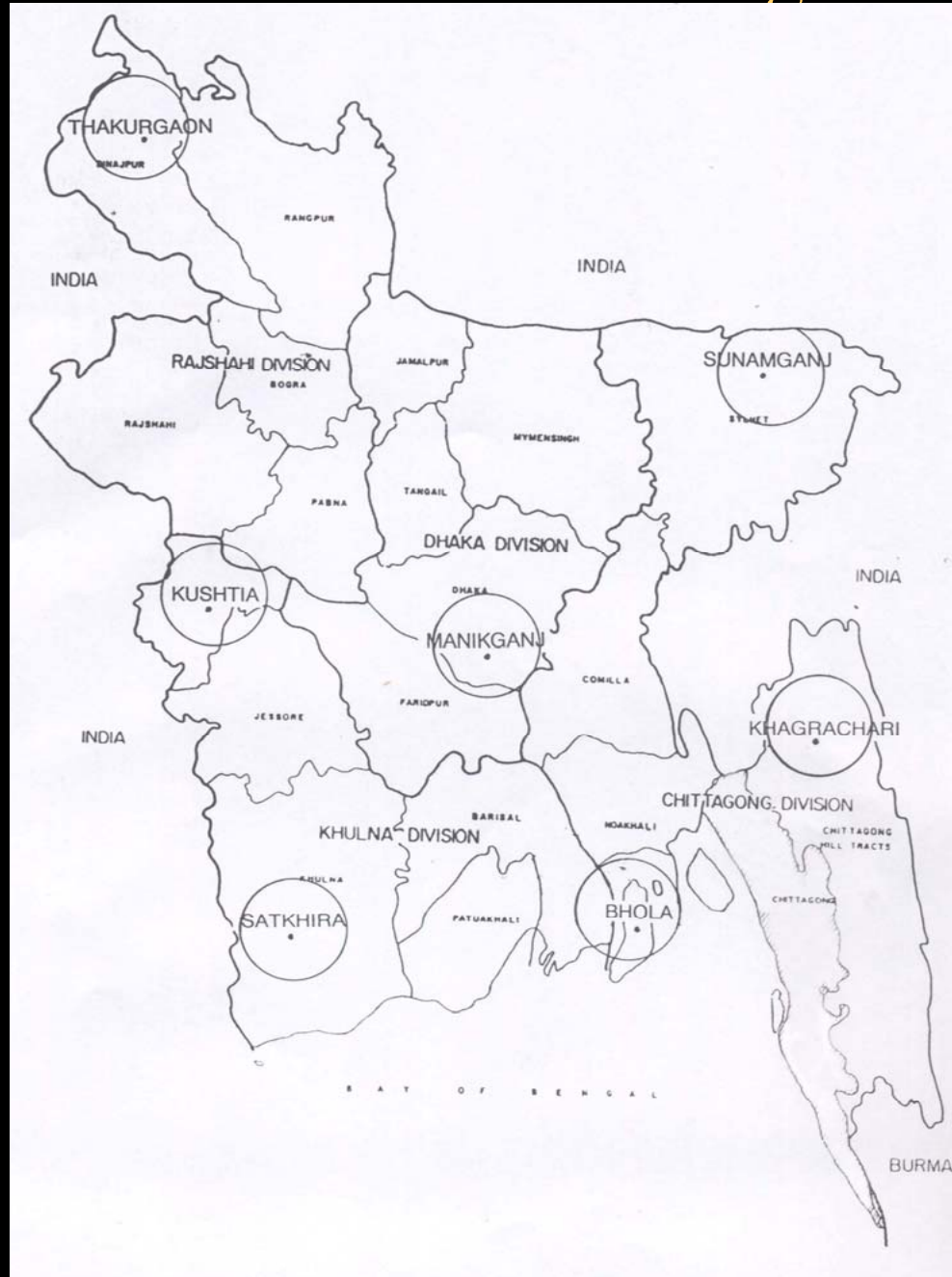
- ✘ **Assessment of any indication of climate variations;**
- ✘ **Issues and concerns resulting from climate variability;**
- ✘ **Local knowledge and / or practices that may be adopted in adaptation to climate change;**
- ✘ **Level of current awareness on issues pertinent to water and climatic variability;**
- ✘ **Strategy for adaptation to climate change based on a consensus of stakeholders;**
- ✘ **Research requirements for adaptation;**
- ✘ **Approaches on awareness raising to climate variability issues and adaptations.**



Location of Consultation Meetings

- ◆ Thakurgaon
- ◆ Kushtia
- ◆ Satkhira
- ◆ Manikganj
- ◆ Sunamganj
- ◆ Bhola
- ◆ Khagrachari

Locations of meetings



PROFILE OF MEETING LOCATIONS



◆ Thakurgaon :

- Hot summer, cold winter, moderate rainfall, short monsoon duration; prone to drought.
- Foot hills; undulating terrains with acid soil; sandy soil; small fresh water river and channels.

◆ Satkhira :

- Hot summer/ fairly heavy rainfall; prone to cyclones and storm surges.
- Semi-evergreen and Mangrove forests; poldered agricultural land; saline and brackish water river and canals; fresh water *Beels*.

PROFILE OF MEETING LOCATIONS



◆ Sunamganj

- Heavy rainfall/ mild summer / cloudy cool winter; prone to flash floods.
- Evergreen and semi-evergreen forests, wetland forests; wetlands and haors;

◆ Bhola

- Heavy rainfall/ small range of mean temperature; prone to cyclones and storm-surges.
- Estuarine coastal and marine ecosystem; poldered as well as non-poldered coastal plain;

PROFILE OF MEETING LOCATIONS



◆ Manikganj :

- Mild summer/ fairly heavy rainfall.
- Low lying floodplain converted into agricultural land and chars; prone to river floods.

◆ Kushtia :

- Hot summer and dry/ moderate rainfall, prone to low rainfall; prone to long dry spells.
- Floodplain converted into agricultural Land; Fresh water river, beels, haors, baors or oxbow lakes.


PROFILE OF MEETING LOCATIONS



◆ Khagrachari

- Heavy rainfall/ mild summer/ cloudy cool winter.
- Evergreen and semi-evergreen hill forests. Fresh water rivers and canals; lakes.

EDUCATIONAL LEVEL OF STAKEHOLDERS



Educational level	Total	Percentage
School level	38	15.93
SSC	33	14.60
HSC	32	14.17
Diploma	5	2.21
Graduate	74	32.74
Post-graduate	46	20.35

AGE DISTRIBUTION OF THE STAKEHOLDERS

Age distribution

Total

Percentage

25 - 35 yrs.

103

45.58

36 - 45 yrs.

79

34.95

56 - 55 yrs.

35

15.49

+ 55 yrs.

9

3.98



GENERAL INDICATORS OF CLIMATE VARIABILITY AS IDENTIFIED BY STAKEHOLDERS



- ☛ **Excessive rainfall at times, untimely and irregular heavy rain,**
- ☛ **Increase in tidal bores, increase in number of cyclonic conditions, variation in tidal flow**
- ☛ **Increase in frequency of flash flood,**
- ☛ **Temperature variation, change of seasonal cycle, cloudy and cold winter,**
- ☛ **increase in droughts and dry spells,**
- ☛ **Storms and hailstorms,,**
- ☛ **Increased surface temperature,**
- ☛ **Intensity of mist/fog increased in the winter.**



LEVEL OF CURRENT AWARENESS

- The professionals and practitioners such as journalists, physicians, senior NGO workers and teachers are aware of climatic change related phenomena.
- Farms and non-farm agriculturists are not very much aware of the science and background of the climate change.
- However, they have experienced the effects and vulnerabilities of climatic variability.



ADAPTATION TO RAINFALL VARIABILITY

- **Collection, preservation and supply of improved local paddy seeds.**
- **Provide irrigation to protect crop against drought.**

ADAPTATION TO TEMPERATURE VARIATION



- **Blast resistant variety of potato should be available.**
- **There should be large-scale plantation and afforestation;**
- **Integrated pest management (IPM) be widely practiced.**
- **High temperature and drought tolerant indigenous varieties of crops should be restored and introduced.**

ADAPTATION TO INCREASED SALINITY



- **To stop intrusion of the tidal water height and width of embankment should be raised;**
- **Ensure natural flow river.**
- **There should be a good drainage system in the area.**
- **Salinity tolerant varieties of plants be introduced.**
- **Traditional/indigenous saline tolerant varieties of crop should be restored and introduced widely.**



ADAPTATION TO CHANGES IN SEASONAL CYCLE

- **Information and technology about photo-neutral varieties of crops should be available.**
- **Forecast about seasonal variation and also forecast on storm, hail storms, flood etc. at the beginning of the each crop season.**

ADAPTATION TO FLOODS

- **Disaster management training at grassroots level**
- **More flood control structures be constructed and properly maintained.**
- **People be encouraged to adopt with alternative professions and they should be given skill development training.**
- **Health related information should be provided and improved health services. Mobile medical service should be available. Special health services for newborn and pregnant mothers should be ensured.**



ADAPTATION TO STORM SURGES AND CYCLONES



- **Local voluntary organizations should be strengthened**
- **Coastal afforestation program should be strengthened. The Sundarbans should be preserved and protected. Creation of reserved forest.**
- **More cyclone shelter should be constructed.**
- **Arrangement of proper and accurate weather forecast. Special arrangement should be taken to disseminate weather information.**



ADAPTATION TO INCREASE IN DROUGHT

- Support should be available for excavation and re-excavation of canals and water bodies.
- Afforestation and plant protection program should be enhanced.
- Major irrigation program should be initiated.

ADAPTATION TO SEA LEVEL RISE



- **All coastal polders should be repaired and raised in old area, new polders to be constructed in new area.**
- **Legal initiatives should be taken to protect embankment.**
- **Sufficient measures to be taken to drain-out flood and river water.**

FUTURE RESEARCH REQUIREMENTS



- **Farmers require short period vegetable seeds.**
- **Innovation of hill friendly seeds that require no ploughing.**
- **Innovation of drought resistant variety of wheat.**
- **Research needed to innovate photo-neutral variety of vegetables and rice.**
- **Adaptation strategies should be based on local knowledge and local participation.**