

# Change Impacts on Women and Gender Responsive Adaptation in Bangladesh

## *Study Team:*

Eshrat Sharmen Akand, Zahirul Islam, and Khalilullah

**International Science Conference 2016**

January 8, 2016

Venue: Independent University of Bangladesh



*Study Conducted by:*  
Bangladesh Centre for Advanced Studies (BCAS)



*Supported by:*  
Christian Aid, UK

# Background: CC Impact on Women and Gender Responsive Adaptation

- Women are more vulnerable due to the impact of CC and disasters
- Higher level of risks and greater vulnerabilities are more obvious and inevitable for women.
- *CC and Disasters* erode essential elements of **human security** for women through jeopardizing *security of survival, security of livelihood* (food, water, energy, environment, shelter, economic), and *dignity*.
- Depending on economic class, CC impact on women varies
- Women would be needed effective and gender-responsive adaptive capacity to address CC risks and vulnerabilities.



# Framework of the study

## **This study has tried to find:**

- Women's risk and vulnerabilities related to Climatic disasters
- Potentials, skills and adaptive capacity of women for reducing risk and vulnerabilities
- Women's role in identifying both problems and solution of climate change, livelihoods DRR and implementation of development activities.
- Geo-physical and geo-logical context of women vulnerabilities
- Gender specific needs, priorities and interest for adaptation, mitigation and DRR.
- Advocacy issues and program at different levels to influence the relevant policies institutions, programmes and practices.

# Objectives of the study

- To explore the adaptive capacity of the women and the potential of women in local level adaptation planning;
- To explore the gender responsive adaptation (in small agriculture, home gardening, integrated fish culture, poultry and livestock, small business and entrepreneurship, health and sanitation etc.), DRR and livelihood options
- To Initiate action research by CA partners on gender responsive adaptation
- To identify advocacy issues for changing policies and practices at local, regional and national levels.

# Methodology

- Participatory Vulnerability Assessment (PVA) tools used to assess the impact of climate change on women and develop gender responsive adaption action plan. PVA included in-depth interviews, FGDs, KIIs, vulnerability matrix, disaster trend analysis, and hazard mapping.
- Following steps were followed:
  1. Selection of Study Village;
  2. Preparing community profile with primary and secondary information;
  3. Transect walk;
  4. Analyzing hazard trend;
  5. Livelihood Calendar interface with hazards;
  6. Resource and Hazard risk mapping;
  7. Preparation of Hazard Seasonal Calendar;
  8. Developing vulnerability matrix of women;
  9. Focus Group Discussion (FGD), Key Informant Interview (KII);
  10. Case studies and In depth interview (knowledge score card);
  - and 11. Organize workshop for formulating Gender Responsive Adaptation strategy and Plan

SI	Tools	Objectives	Process
1	Community profile/ Village profile	To know about geo-physical, socio-economic condition of women, natural, social and physical resources and major climatic disasters	Information were collected through format (RRA) and secondary data collection from relevant organizations
2	Transect walk	To know about natural and social resources major disasters of the areas, and vulnerabilities of women due to disasters	Walk across the villages with some knowledgeable people
3	Hazard mapping	To learn about major hazards and impact on resources and communities	Draw a map indicating social and natural resources disaster impacted areas
4	Hazard trend analysis	To learn about the trend of hazards and disasters of the last 30 years and their impacts.	List of major hazards, intensity and frequency of hazards and compare hazards of last ten years and before.
5	Livelihoods calendar of women activities interface with hazards	To know about livelihoods activities of women, CC impact on women's livelihoods due to climatic disasters, livelihoods seasonal variation and interface with hazards. How women's livelihoods become vulnerable due to disasters	Draw a livelihood seasonal calendar indicating livelihood options and variations of income in different months of the year. Write down the reasons of variation, whether disaster impact on women livelihood.
6	Hazard Seasonal calendar	To know about the major disasters and know the seasonal variations and impacts of disaster, especially on women's activities	To draw a calendar indicating disasters and its degree of impact in different seasons of the year.

7	Vulnerability matrix	To learn about the disaster impact and their intensity on different development sectors of women involvement	Draw a table containing disasters in a column and different sectors in a row and mark intensity of disasters on women activities
8	Focus Group Discussion (FGD)	-To learn about major disasters of the study areas, risk and vulnerabilities of women specially, impact on women's survival, security and dignity; women friendly adaptation measures; existing coping mechanism to disasters. Future adaptation needs were also identified through FGDs	FGDs were conducted with 4 groups in each study areas. The groups will be working women, housewife, Group of women headed family and multi stakeholders group that will include NGO worker, women leader, religious leader, teachers, political leader and UDMC representatives.
9	Key Informant Interview (KII)	To learn in-depth about the risk and vulnerabilities of women, their access to resources, probable adaptation and mitigation options, capacity of women, Future Needs of Women	Interview were taken from key informants like NGO worker, women leader, religious leader, teachers, UDMC representatives.
10	Case Study	To know history of women who were most affected by climate change and about successful or good story of women friendly adaptations in the study areas	Case/ life history were documented from most vulnerable women and successful women friendly/responsive adaptation
11	Stakeholder workshop	To develop women friendly and gender responsive Adaptation strategies and Plan	A day long stakeholder workshop in each union of study areas, Sharing PVA findings and get feedback from the participants, then make a women friendly adaptation action plan through 4 group exercises

# Study Sites

No.	Location	Eco-zone	Livelihoods	Climatic factors
1.	Dacope, Khulna	Coastal	agriculture, fish culture, fishing, day labor	cyclone, salinity, water logging, heat wave
2.	Gopalganj	Floodplain, Waterlogging	agriculture, fishing, livestock, poultry, day labor, tailoring	flood, drought, river erosion, cold wave, heat wave
3.	Nikli, Kishoreganj	Haor	fishing, agriculture, poultry and livestock, small business, day labor, boat driving, handicraft, tailoring	flash flood, water logging, drought, erratic rainfall, cold wave, heat wave
4.	Nacole, Chapi- nababgonj	Drought	agriculture, fish culture, day labor, poultry and livestock, handicraft, tailoring	Drought, cold wave, tornado, heat wave
5.	Noria, Shariatpur	Charland	Agriculture, fishery, day labor	Flood, drought, river erosion
6.	Rangamati	Hilly	Agriculture, fishery, small business, bamboo collection, forest	Erratic rainfall, dense fog, drought, landslide

# Women's socio-economic condition and position in the society

- Women work in both household and income generating sectors, but enjoy very minimal rights compared to men
- Productive and livelihood works of women include agriculture, day labor, livestock and poultry rearing, homestead agriculture, fishing, fish fry, crab and snail collection, sewing, tailoring etc.
- Only minor family decisions are taken by women
- Positive changes are occurring due to NGO interventions which is increasing women's visibility in social forums, but not changing their ability to influence social actions and decisions
- Social conservativeness and patriarchy coupled with religious norms and practices denigrate women's autonomy and social position
- Women do not own lands and are afraid of claiming paternal property
- They receive social safety nets facilities, but that cannot meet their basic needs

# Climate Context

- Major climate change in all areas is felt through increased intensity of temperature, erratic rainfall, high pressure of wave causing river erosion, frequent flood, densely fog etc.
- Six seasons declined into three



- Climate change impacts specific to each eco-zone are: increased cyclone and salinity in Khulna, frequent flood and river erosion in Shariatpur, water logging and flood in Gopalganj, high temperature and frequent drought in Chapainababganj, and early flood and *afal* (high wave) in Kishorganj among other climatic disasters

# Similarities and Dissimilarities Between Eco-Zones

- Poverty is the main reason of vulnerability of women in all areas. Lack of control over family property, social and natural resources make women more vulnerable in all areas
- Women's health and well-being are ignored in all areas and remain as a common problem.
- Barriers to women empowerment and mobility due to conservative and patriarchal mindset in Kalwir of Chapainababganj (*drought prone area*) are higher and stricter compared to other areas.
- Climate induced migration is high in all areas except Gopalganj that creates more vulnerability for women
- Fuel crisis is higher in coastal, drought and haor areas.
- Crisis of safe drinking water is acute in coastal and drought prone areas
- Using saline water during menstruation causes uterus problems for women in coastal areas

# Risk and vulnerabilities of Women

- Disaster damages crops, fish, food stock at home, hampers income from poultry, duck and livestock rearing and wage earnings
- Reduces food purchase capacity of poor families and increases their food insecurity
- Women's food consumption decreases further (less food intake is common in normal period too) and they suffer from malnutrition
- Women's workload increases due to scarcity of food, water, and fuel
- Women intake inadequate and unsafe water which increases incidence of diseases
- Damage of sanitation systems creates sufferings for women and girls. Lack of toilet facilities increases physical insecurity for women and girls.
- Salinity and long exposure to water causes skin disease and other illnesses.

# Risk and Vulnerabilities of Women

- Damage of communication system hampers mobility of sick persons and pregnant women accessing health facilities.
- Non-availability of fuel during disasters increases women's work load and stress.
- Women are compelled to work outside of the home leaving their children at home and suffer from tension during work.
- Absence of male members during disaster creates additional stress and sense of vulnerability for women and girls for many reasons including safety and security.



# Gender Responsive Adaptation Needs

## Coastal Areas:

- Saline tolerant vegetable gardening, vegetable gardening in Hanging system and bed system
- Support for crab culture and fish culture, boat and net support
- Support for tailoring, packet making, Poultry, Livestock and pig rearing
- Rain water harvesting systems for individual household (Coastal)
- Boat and rickshaw van supply for collecting water from distance areas
- Covering ponds with nets and building water purification systems with proper management
- Making cyclone shelters women and disabled-friendly with separate bath room, easy access and so on.
- Proper communication and transport system for elderly, disabled and pregnant.
- Shelter for livestock
- Established health centre at every ward of union
- Cyclone tolerant housing, Social Plantation for fuel
- Make strong embankment, re-excavation of canals and preserve rain water for irrigation.

# Gender Responsive Adaptation Needs

## Water logged and low lying areas:

- Expansion of floating gardening
- Supply of pump machine for irrigation
- Installation of deep tubewell at raised land
- Establish sanitary latrine at raised land
- Raising of house plinth
- Supply of boats for poor families during flood
- Support for alternative income like cow fattening, vanity bag making, Sweetmeat packet making, duck rearing, mat making and arrangement for marketing
- Appoint trained doctors for community clinic
- Construction of cyclone shelters
- Ensure participation of women in adaptation planning
- Sluice gates for proper management of water



# Gender Responsive Adaptation Needs

## **Drought Prone Areas**

- Increased support for homestead gardening
- Support for women run plantation of fruit trees and orchards
- Support for alternative income for women like tailoring, poultry and livestock rearing, pigeon rearing, involve women in social afforestation
- Support for marketing of products produced by women
- Installation of deep tube wells
- Water supply by pipeline through BMDA
- Establish rain water harvesting systems
- Canals digging for irrigation
- Ward-based community clinic

# Gender Responsive Adaptation Needs

## Char and Flood Plain Area

- Vegetable gardening in bed systems
- Drainage systems for pumping out water from vegetable garden
- Alternative income generating activities like tailoring, bamboo baskets making, fish trap making, duck hatchery, net making and packet making.
- Arrangement for marketing of products
- Appointment of gynecologist at community clinic
- Dredging in river, piling, making embankment
- Introduction of drought tolerant crops production
- Supply of boat for shifting houses affected by river erosion



**Adaptation in Charland**

# Gender Responsive Adaptation Needs

## Haor Areas

- For resilient livelihoods-Duck, Poultry and Livestock rearing; tailoring, Small business like grocery shop, vegetable selling, cloth business, Embroidery in cloths, fish drying and marketing
- Installation of tube well at raised land
- Pump machine for irrigation
- Digging of canals in haor for irrigation
- Arrangement for vet nary doctor
- Appointment of MBBS doctor for community clinic
- water ambulance for caring serious patient and pregnant women to remote hospitals
- Flood shelter with women-friendly options



# Initial Recommendations

## **Government:**

- Government planning process and climate change adaptation and mitigation project/program needs to be gender responsive.
- Government initiatives are needed to identify, initiate and support women focused adaptation measures and ensure women's participation in the process.
- Infrastructural development (e.g., road, cyclone and flood shelter, clinic, etc.) needs to be gender responsive and based on community experience and opinions.
- Promote and transfer relevant knowledge and technology to support gender responsive adaptation.

## **Development partners and NGOs:**

- Create alternative employment with higher skills and value for women
- Provide awareness and skill development trainings
- Support to implement gender responsive adaptation and mitigation activities identified and undertaken by the community
- Organize and support advocacy initiatives of the community

# Initial Recommendations

## **Community:**

- Promote gender equality in the community
- Ensure and provide greater space for women's voice, leadership and participation
- Awareness building on DRR and CCA
- Organize for climate justice

## **Researchers:**

- Innovate saline, drought and flood tolerant paddy and vegetable varieties
- Innovate low-cost, appropriate and transferable technology for mitigation
- Identify gender responsive adaptation and mitigation issues for advocacy

Thank You