



# Disaster Risk inclusive Social Safety Net for Resilience

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National Resilience Programme (NRP) Department of Disaster Management Ministry of Disaster Management and Relief











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# **1. Introduction**

Bangladesh is often said to be the most vulnerable countries of the world in terms of natural and anthropogenic hazards. Data suggests that country's economy is at risk of growing loss and damage due to frequent disaster events and climate stresses over the years. Bangladesh is the seventh most climate change vulnerable country (Global Climate Risk Index (CRI) 2021). Bangladesh is losing a large amount of its gross domestic product (GDP) each year due to the disaster events making the economy more vulnerable and unpredictable. The impact of natural hazards in the country has significant implications for public finance: increasing expenditure and simultaneously reducing domestic revenue. However, Bangladesh is globally cited as a country with efficient disaster management. It has now become the source of global knowledge on disaster management and climate change adaptation. Despite the disasters impact, the country has maintained over 7% GDP growth by the last decade while disaster risk management played a vital role in protecting development gain. This has been instrumental for reducing the economic and environmental vulnerability that contributed the in LDC graduation process to declare a developing country by the UN Development Policy Committee.

Disaster risk remains unmanaged, as residual risk, for the poor and most vulnerable communities even when disaster reduction measures are in place and for which emergency response and recovery capacities must be maintained. That means the presence of residual risk implies a continuing need to develop and support effective capacities for socio-economic supports such as safety nets and risk transfer mechanism along with the emergency, preparedness, response and recovery activities (UNISDR, 2017).

Rahman H. Z. *et al.* (2011) in their analysis of "Social Safety Nets in Bangladesh, Review of Issues and Analytical Inventory" explained that Social safety net Programmes are important instruments that countries like Bangladesh may utilize to facilitate such transfers. By mitigating the shocks of various types, both of an idiosyncratic and covariate nature, well functioning safety nets can reduce the impact of such shocks in the short-run and improve the long term growth prospects of the poor by reducing the compulsion among households to adopt coping strategies in the aftermath of a shock that leads to loss of human and physical capital and income generating capacity. What is very significant about the Bangladesh case is that given the massive nature of poverty in Bangladesh and low per capita income, corresponding size of vulnerable population in Bangladesh at the risk of falling into or deeper into poverty is very large. The most frequently reported shocks for all households have been of an idiosyncratic nature in the form of shocks relating to illness (expenses related to illness and/or forgone income), and, dowry and wedding related expenses.

Khandker *et al.* (2011) examined the impacts of Food for Work (FFW) to improve rural road projects using household-level panel data from Bangladesh and found that rural road investments reduced poverty significantly through higher agricultural production, higher wages, lower input and transportation costs, and higher output prices. Rural roads also lead to higher girls' and boys' schooling. Road investments are pro-poor, meaning the gains are proportionately higher for the poor than for the non-poor.

Ahmed *et al.* (2009) assessed the operational performance of food or cash transfer delivery, beneficiary preferences for the transfer form, targeting accuracy, impact of Programme

participation on food security, livelihood and gender related outcomes using propensity score matching approach.

Taking into account growing government annual development budgets, its extensive portfolio of social safety nets and the likelihood of declining international aid, the National Resilience Programme does not only aim to implement local risk reduction activities at scale but to provided strategic support to enhance government capacity to do so through its own structures and programmes. The programme focused in developing replicable, cost-efficient and gender-responsive models for disaster risk reduction and resilience-building. This effort involved identifying opportunities to enhance existing government and civil society organization capacities in activity plans and implementation, as well as systematic and strategic evaluation (including value for money) of project interventions.

There is extensive social safety net programme of GoB for the poor and vulnerable people. While MoDMR have large scale safety net initiatives through its Test Relief, Food for Works and Employment Generation Programme for the Poorest (EGPP) for reducing vulnerability of poor people including women and persons with disability.

# **Employment Generation Program for the Poorest (EGPP)**

Social Safety Net Programme came first into the discourse during the 1980's in response to the (presumably short-term) adverse effects of structural adjustment (Adato et al., 2004). The major safety net programs (SNPs) in Bangladesh can be divided under four broad categories: (i) employment generation programs, (ii) programs to cope with natural disasters and other shocks, (iii) incentives provided to parents for their children's education, and (iv) incentives provided to families to improve their health status. These four broad categories can be divided into two types, depending on the mode of payment: (a) cash transfers, including conditional cash transfers (Cashfor-Education Program, Primary Education Stipend Program, Female Secondary School Assistance Project, Old Age Allowance, and Rural Maintenance Program); and (b) food transfers (Food-for Work Program, Vulnerable Group Development Program, Vulnerable Group Feeding Program, Test Relief and Gratuitous Relief).

The aftermath of the food price hike of 2007 saw new policy thinking on workfare programs that sought to strengthen the safety net aspect through the introduction of an innovative element of employment guarantee scheme. The employment guarantee programme for the poorest that was initially known as the 100 days employment program when first introduced in 2008, and was renamed as EGPP in 2009. This workfare program has quickly emerged as a flagship safety net program both for its scale- it is one of the top ten safety net programs in operation- and the high level of policy engagement that has seen incrementally systematic improvement in operation and outcomes. Employment Generation Program for the Poorest (EGPP) Program for Bangladesh provides the short-term employment on community sub-programs to enable households to better cope with vulnerability, while strengthening program implementation. This provides short term employment to manual workers during lean season over two cycles 80 days work is done.

First cycle starts from the month of October to December and second cycle starts from the month of March to April. The EGPP targets the most vulnerable in society in a number of ways. First, a

greater proportion of funds are channeled to the poorest Upazilas (sub-districts), especially along the coastal regions. Second, only households with less than half an acre of land and where the household head is a manual laborer are eligible. Third, wages are set at below market wage level to attract only those who need the money the most. Furthermore, one-third of all beneficiaries include women. This gender quota increases the probability of particularly female-headed households who are particularly vulnerable, to benefit from EGPP.

EGPP is a cash-based workfare programme targeted to the rural extreme poor that provides a hitherto unavailable element of employment guarantee. Each participant has access to two seasonal packages of bulk employment of 40 days each- one in March through May and the other in October through December. The program typically requires participant to do physical work for rural community infrastructure through schemes chosen by the local community and local government bodies. The program utilizes the banking process to make payments.

EGPP is being implemented by the Ministry of Disaster Management (MoDMR) and is supported by the World Bank through an IDA funded investment operation that supports the existing Government program. Purpose of EGPP is to (i) provide short-term employment to the hardcore poor in lean seasons over two cycles (March to May and October to December) and (ii) develop rural infrastructure by constructing various programs under EGPP, mainly earthworks. Special characteristics of EGPP are –

- Employment of ultra-poor targeted who need the money the most, one third is female
- 95 percent of sub-programs help to build and repair rural roads
- 50 million work days have been created per year
- 100 percent of payments are made via beneficiary bank accounts

One of the implicit objectives of the EGPP program is reducing exposure to/monetary losses due to disasters and shocks. Exploring the huge potential, **the sub-project has developed an approach to make Social Safety Net DRR flexible** to leverage the resource for building resilience. It's has been promoting a pilot to develop a cost-effective, gender-responsive risk informed model for supporting disaster risk reduction and resilience building through the EGPP or other SSP of MoDMR.

The NRP: DDM part piloted 15 gender responsive, disability inclusive risk informed SafeNet schemes through EGPP in four Upazilas of Kurigram and Jamalpur districts. Local level DDM officials and Union DMCs used the ward level risk reduction plan that was developed by Community Risk Assessment process for develop risk reduction interventions with the active participation of community and disaster Management Committees (DMCs)

Since its beginning NRP-DDM developed a practical guideline to facilitate GoB in the inclusion of DRR elements in the entire cycle of safety nets including identification, selection, preparation of the safety net project/schemes and implementation.

# **1.1.** Purpose of the Piloting:

The NRP, Department of Disaster Management (DDM) part, works towards improving community resilience by creating replicable, cost-effective models for local disaster risk reduction and risk management through Social Safety Nets. NRP also works on Ward-Level Earthquake Preparedness and institutionalization the Flood Preparedness Programmes that have shown promise in earlier initiatives. One area of focus for the National Resilience Programme (NRP) will be creating models to leverage existing social safety nets of the Ministry of Disaster Management and Relief MoDMR.

# 2. Study findings of the National Resilience Programme (NRP):DDM

The National Resilience Programme has been conducted a Study on 'Assessment of Existing Disaster Resilience Dividends of Employment Generation Programme for the Poorest (EGPP) and Identification of Options for Implementing Disaster Risk Reduction in EGPP' under following scope:

- Identify and review relevant literature on social safety nets in Bangladesh, adaptive social protection, resilience dividends, UNDP projects with transferable knowledge, flood risk and other relevant issues;
- Consult with NRP, Ministry of Disaster Management and Relief, Department of Disaster Management, SMoDRRPA/EGPP programme, UNDP and other key stakeholders to identify key opportunities, challenges, strengths and weaknesses for implementing flood risk reduction and resilience building through EGPP;
- Conduct an in-depth study of current EGPP programme to identify the extent of impacts, strengths and weaknesses of EGPP towards disaster risk reduction (DRR), and. Specifically, the resilience dividends to be assessed should include:
- Past EGPP contribution to (a) directly reduced impact of disaster events in past decade in terms of loss of lives, affected population, damage to critical infrastructure, and economic loss; and (b) building capacity of participating households and community to take action to reduce future impact of disaster and climate change;
- EGPP contribution in faster and resilient recovery of social and community function from disasters in the past decade, in terms of restoration of key services, business continuity, and incorporation of risk reduction in activities;
- Past EGPP contribution to create opportunities for development (as set out in the SDG and Sendai agenda), including creation of sustainable development, coherence and integration with disaster risk reduction and climate adaption projects, and inclusion of gender equality and persons with disability;
- An outline of advocacy agenda on the adaptive social protection programme in reducing the risk of disaster and climate change;

- Based on the assessment of past resilience dividends, the study has tried to further identify missed opportunities and future options for increasing flood resilience dividends of the safety net programme in the future;
- Develop progarmme package for piloting activities with operational guidelines in consultation with NRP, Department of Disaster Management (DDM) and Ministry of Disaster Management and Relief (MoDMR);

# 2.1 Objectives of the study

One area of focus for the National Resilience Programme (NRP) is to create a model to leverage existing social safety nets, such as the Employment Generation Programme for the Poorest (EGPP) in the Ministry of Disaster Management and Relief, so it does not just create employment for the poor but also works to reduce risk in flood-affected areas. The programme will identify and pilot options for risk reduction activities that can be implemented through the Employment Generation Programme for the Poorest. The model will be thoroughly documented and evaluated for scale-up and advocacy purposes.

The purpose of designing the model to be piloted, NRP DDM will procure the services of a national consultant to (a) make an assessment of existing disaster resilience dividends of the EGPP, and (b) identify options for implementing flood risk reduction activities through the programme.

The objective of the consultancy is to produce two reports (i) on existing resilience dividends of EGPP and (ii) on options for disaster risk reduction and resilience building of EGPP.

# 2.2 The Study area and findings

Islampur upazila of Jamalpur and Chilmari upazila of Kurigram are the most vulnerable areas due to flood and river erosion. Both the districts and upazilas are situated along the mighty Jamuna, Brahmaputra and Tista rivers and are annually flooded from the onrush of water from the upper catchment. Vast areas of the upazilas are eroded every year due to river erosion and the poor local residents are forced to leave the ancestral land and take shelter in and thus settle mostly in the riverine chars of Jamuna river along the upazilas. Recent flood in 2017 damaged the crops, houses and other assets of both Islampur and Chilmari upazilas of Jamalpur and Kurigram.

Jamalpur and Kurigram are the most flood affected districts of Bangladesh due to their geographical location, river system, history of deltaic formation and alluvial formation. The districts are exposed to natural hazards such as, flood, flash flood, river erosion, droughts, cold waves etc. The episode of these natural events are often coupled with vulnerability of local communities results in disasters that further drive the area towards greater environmental degradation, hunger, poverty and socio-economic deprivation. The livelihood base of the local community suffers significantly due to the recurrent exposure of diverse natural hazards.

The flood damage potential in Jamalpur and Kurigram is increasing due to climate change, urban concentration, encroaching of settlements into flood-prone areas, and overreliance on the safety provided by flood control works such as embankments, levees, reservoirs and other structures. Due to the various unplanned development work and rapid growth of settlement in rural and urban

areas, the floodwater is likely to increase inundation depth and duration of flood. Both annual floods and low-frequency floods of high magnitude can inundate up to 20% and more than 35% of the area respectively of Jamalpur and Kurigram<sup>1</sup>.

The assessment work was conducted in Islampur Upazila of Jamalpur and Chilmari Upazila of Kurigram districts. The districts and upazilas were selected purposively considering their disaster and vulnerability context and also the potential of DRR interventions in the on-going EGPP/Safety net activities in the areas. Assessment was done with a range of respondents from the national (Dhaka) to local (district, upazila and union) levels. They included govt officials, public representatives, local elites, school teacher, NGO staff, social workers and project beneficiaries.

# 2.2.1 Study Findings:

Various types of construction, reconstruction and repair works were getting implemented in the project unions as found during the field visit and discussion with different types of respondents. The beneficiaries reported to have been constructing/reconstructing roads, repaired damaged infrastructures and grounds such as school grounds, madrasha grounds, eid gaon, mosques, bazar, flood shelter etc. The list of major activities done under the EGPP, MoDMR sponsored safety net project/s, as received from the respondents include, for example, as follows (Box-1).

✓ Rural road construction	✓ Raising and repairing	$\checkmark$ Planting trees along the
✓ Rural road re-	existing community	road, embankment
construction, repair	place, grave yard	✓ Allowance/stipend for
✓ Raising and repairing	$\checkmark$ Raising and repairing	the students
existing school,	flood shelter (cum	✓ Allowance for the
madrasha ground	school) ground	pregnant and lactating
✓ Raising and repairing	✓ Repairing damaged	mother
existing eid gaon, high	embankments, culvert,	✓ Widow allowance
ground/killa	U-drain etc	✓ Gratuitous Relief (GR)
✓ Bridge, culvert	✓ Excavating/re-	Materials like tin for
construction and	excavating pond	house
repairing	✓ Restoring drainage	
	system	

**Box-1: List of Scheme/Project/Activities** 

Similarly, as the respondents reported, other departments like the Social Welfare, Women Development, Education had been implementing various social safety net programmes for different vulnerable groups like mother, widow, students etc as above.

<sup>&</sup>lt;sup>1</sup> The Multi-hazard, Vulnerability, and Risk Assessment Report, DDM, 2015.

# **Current Status: Case Study EGPP**

The EGPP beneficiaries work for 80 days in two phases of the year and earn a total of BDT16000.00 per person and most of them could hardly earn this sum based on their ability. They termed the benefits they had been receiving from involvement in the EGPP activities are excellent and helpful to their well-being in comparison to their earlier days while there was no EGPP. The benefits or dividends may **be explained as follows:** 

#### **Economic incentive**

One of the implicit objectives of the EGPP is to reduce the monetary loss of the beneficiaries due to man-made, natural and socio-economic socks. During the FGD almost all of the beneficiaries acknowledged the wage as an assured and regular income that supports their families a lot. Recognizing themselves as the poorest of the community/population, they did not have enough skill for other jobs available in the area. While they were found satisfied with the employment and income opportunity from the EGPP, they showed some discontent about the amount/rate of wage in comparison with the present market values of livelihood commodities.

### Food and livelihood security

As the respondents described they were in better position in regard to food and livelihood security, once they failed to ensure food for all the family members. Most of the FGD respondents affirmed that they could manage three square meals for their family members, at least with plain rice and some other available items. The findings are almost consistent with the findings of the BIDS which said that the beneficiaries were relatively less exposed to food insecurity<sup>2</sup>.

#### Risk reduction and resilience to flood/disaster

The beneficiaries could not talk much about the disaster risk and resilience as such. However, they explained well about the capacities they have gained over the period and how they could use the capacities to cope with the flood/disaster situation and manage to ensure foods, clothing and other emergency requirements. Findings from the field were also supported by the essence of discussion with the senior officials of Safety Net Systems for the Poorest (SNSP) and others of the MoDMR. Examples of some of the contributing factors to improve their resilience to disaster are presented hereunder:

- Stable income beneficiaries believed that due to the regular income they had been able to maintain a stable economic condition and they could save money to be utilized for emergency purpose especially during/after the flood/disaster.
- Stored food for emergency almost all of them assured that they had started to save some food because they are financially better off from EGPP income. Could utilize the saved/stored food to feed the family members during and after the flood/disaster.
- Raised house plinth only a few of them claimed that they had spent some of their savings and raised their house plinth a little above the previous level and that could save them, their house and assets from regular flood/disaster.

<sup>&</sup>lt;sup>2</sup> Bangladesh Institute of Development Studies (BIDS), June 2018.

• Better preparedness – project beneficiaries were found to assert that they had been better prepared against any disaster like flood since they faced natural disasters such as flood, heavy rain fall, riverbank erosion for long and they were adapted with the situation.

# **Environmental and other co-benefits**

The beneficiaries had been receiving some more benefits from the EGPP activities in addition to regular income. The road and other structures built in the areas provided them easy communication facilities to the growth centers, bazar, community centers, health centers and other place/destinations. The road/embankments built in the areas (if high enough) could save them, their houses, crops from on-rush of sudden flood water. Trees planted in some of the roads, education institution, other places provided them some environmental co-benefits to protect infrastructures and adaptation as well as mitigation.

### **Community solidarity**

Members of many local poor families had been involved in the EGPP, other safety net programmes. A strong community relationship and solidarity had been developed among the worker/beneficiaries while the male and female members had been working for a whole cycle of the EGPP/other safety net programmes. The members were found happy to share that they provided support and help each other in any need or emergency like during and after any disaster/flood.

#### **Current Features of the Safety net & EGPP Projects in the Assessment Areas**

Many EGPP projects were getting implemented at the unions in Islampur upazila of Jamalpur and Chilmari upazila of Kurigram. Salient features of the observed project/activities are presented below.

# **Earthen Rural Road**

#### EGPP tried to risk informed infrastructures

- This has been done to ensure the connectivity. Number road with inadequate height not enough to mitigate the flood risk
- There need culvert or structure (U-Drain) to facilitate drainage of flood water, so, damage is obvious after each flood.

# **Eidgaon Ground (community Place)**

- With it's usual purpose, the Eidgaon (high ground) is used by the local community and take shelter and keep their livestock for certain period of time during regular/yearly flood;
- The side/edge of the ground is filled-up with soil from EGPP support, however, there needs protection measure to make the ground intact.

# **House Plinth**

- EGPP Labourers belong to the poorest section of the community who own poor living house/hut mostly with tin/ thatched roof/structures;
- Since the area (along the might Brahmaputra river) gets flooded every year, by normal flood water, and the number of house goes under water at varying depth; and
- The number community people live in the flooded home or leave for elsewhere and incurred huge loss. This suggested to raise the plinth to protect from flood, which would maximize the resources through adaptive social protection

# Flood Shelter cum School

- A number of flood shelter cum school ground is used as temporary shelter. Some of the school ground needs to be raised to consider the flood level.
- The ramp of the flood shelter cum school are used by the persons with disability. This can be improved further for its effectiveness.
- The tube well (and the latrine) is used and many of them can be improved for its usefulness.

# IGA for Building Livelihood Resilience

- EGPP labours are poor people with hand to mouth and do not have other occupation, mostly depend on the income/ wage from the EGPP work that meets their daily needs for some months of the year. They need to other options as livelihoods
- EGPP labours are the unskilled people, however, they have interest to learn some new skills to do some additional work and earn more money to support the family in the lean period (while there is not EGPP work or if they are graduated in any case).

# Scope and Opportunities for DRR/resilience Interventions

Assessment of the social safety net (SSN) programmes under MoDMR reveals that there is some scope/opportunities for addition and adjustment in regard to the reduction of disaster risk of the communities and thus enhance their resilience over the period of time.

# **SSN Implementation Guidelines and Process**

The SSN programmes (FFW, TR, EGPP, others) of MoDMR follow guidelines for implementation of the project/schemes. The guidelines have a detailed guiding rules and steps of activities as how to draw and utilize the resources (food, cash etc). Roles and responsibilities of the agencies and officials concerned are also described in the guidelines. Identification, selection and implementation process of project/scheme are detailed out so that the people involved in the entire process are conversant and apply the same as well.

The guidelines currently in use presents following goal/objectives with the focus on hazard/disaster reduction.

EGPP		FFW	TR	HA/VGF/GR
Create		Provide food aid to the	Develop and	Provide food
employment		poor rural community to	maintain rural	aid to reduce
opportunities	for	reduce disaster risk and	infrastructure to	disaster risk,
the poor	by	enhance climate change	reduce disaster risk	improve CCA
constructing si	mall	adaptation by	by providing food	during and
scale r	ural	constructing rural	aid to the poor rural	after any
infrastructure		infrastructures	community	disaster

Similarly, the project/scheme selection process is asked to use environmental and social screening form, as below.

E	GPP		FF	W			TR		
Undertake	environmental	Conside	er hi	ghest	flood	Consider	hig	hest	flood
screening		level	to	fix	the	level	to	fix	the
		road/embankment height			road/emb	oankme	ent he	ight	

The project/scheme would add additional/new hazard for the local/vulnerable communities. The project can be

focused on Risk Reduction along with resource driven approach for poverty reduction.

#### Selection of project/scheme through risk assessment

Field visits and discussion with the implementers revealed that they followed the guideline/s (FFW, TR, EGPP, others) to identify, review and finalization of the project/schemes. The guideline/s writes about the use of social and environmental screening tools (EGPP), checklist/question to very if any project/scheme reduce disaster risk (FFW). As per the guideline/s height of a road/embankment has been fixed to be higher than the highest flood level (previous) as indicated in the design description. Standing Orders on Disasters clearly advices undertaking the Community Risk Assessment (CRA) and preparing Risk Reduction Action Plan (RRAP) at the Union level by the UDMC and follow the plan while undertaking any risk reduction and/or development project/s. The study recommended to the CRA or other community participatory approach for ensure risk informed interventions for building resilience.

# 2.3. Develop a Technical Guideline for DRR inclusive Safety net programme

The study developed a draft Technical Guideline to use in the current piloting. The outcome of the piloting would be referred for recommending future safety net DRR inclusive and resilience driven. The guideline can be useful in revising the EGPP/EGPP+ and other SSN Guidelines as necessary to make the interventions risk proof for reducing the community risk. The Guideline suggest some important areas for DRR Inclusion in Safety Nets - Scope and Opportunities.

The MoDMR safety net programmes aim to reduce disaster risk and enhance adaptation to climate change and thus increase food security of the vulnerable poor community through the development of rural infrastructure. Risk reduction (due to socio-economic and natural disaster) has been the key objective of the safety net programmes of MoDMR like FFW, TR and EGPP as highlighted in their 'Implementation Guidelines'<sup>3</sup>.

Risk and vulnerability reduction have been highlighted in almost all acts, policies and plans in relation to disaster management and disaster risk reduction in Bangladesh. Given the critical importance of risk reduction of the vulnerable people, it needs use and translate the same into action/implementation, to make sure that DRR is integrated in planning, execution and evaluation. Inclusion of DRR elements is sought to suggest **in all three domains – policy/guideline, knowledge/motivation and implementation/practice.** Some piloting are completed and some are ongoing which tried to use screening and key suggestions. The findings and knowledge from the piloting interventions and draft technical guidelines are presented in the way forward (section 5) of the report.

# 3.1 Methodology: Scheme Selection Process for ensuring DRR inclusive Social SafetyNet

Community Risk Assessment (CRA) has been made facilitating document for undertaking/implementing any risk reduction and development project/interventions for the community people. Given the critical need of inclusion of DRR in the safety net programmes, undertaking risk assessment is a pre-requisite to understand and document the risks, problems and prepare the local level plans in order to include DRR elements in the safety net project/schemes at the ground in a more precise way. The risk assessment work may be done according to the implementation flow as under (Figure-4).

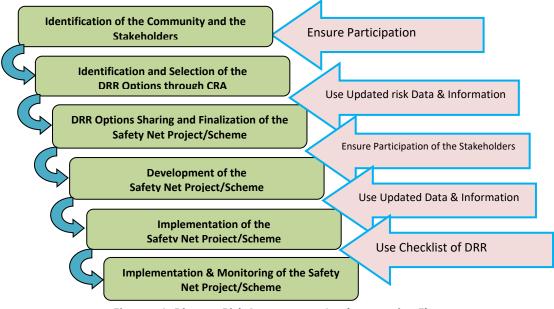


Figure - 1: Disaster Risk Assessment - Implementation Flow

<sup>&</sup>lt;sup>3</sup> Implementation Guidelines of FFW, TR and EGPP, MoDMR, GoB

According to the broader framework of PRA, basic methodological outline of CRA is proposed to be followed for the purpose of identification of DRR options, preparation of local DRR plan, validation and preparation of DRR Inclusive Safety Net Project/scheme. The 'Practical Guidebook for Community Risk Assessment and Developing Local level Risk Reduction Action Plan' prepared under Comprehensive Disaster Management Programme (CDMP II)<sup>4</sup> of the Ministry of Disaster Management and Relief (MoDMR) has been suggested for the purpose of the work

To develop a risk informed plan that ensure the effective participation of community people, mostly women, persons with disability, child, elderly there need a well-designed and useful toll. Through CDMP, Ministry of Disaster Management and Relief (MoDMR) developed Community Risk Assessment (CRA) tool to identify and better understand the local level disaster risks. CRA is a participatory process for assessing hazards, vulnerabilities, risks, ability to cope, preparing coping strategies and finally preparing a risk reduction action plan (called Risk Reduction Action Plan, RRAP) by the local community. The CRA method recognizes that the vulnerability, disaster loss, reduction or mitigation strategy and coping mechanism vary from community to community. So, it ensures representation of professional, community and other groups so that their views are reflected in develop risk proof interventions at local level. CRA tool plays an important role in assisting communities and disaster management committees to identify "all hazards" risk, together with the most appropriate range of risk reduction options that can be introduced to either eliminate or reduce risk to more manageable means. The well-structured and useful tolls yet remail to use its full potential and widen its scopes towards DRR and CCA. NRP has been used CRA that developed Risk Reduction Action Plan (RRAP) in 20 Unions that analyzed 180 Union Wards (the lowest administrative unit) level risk and vulnerability to undertake most effective interventions for community resilience.

# 3.1.1 Use of Risk Reduction Action Plan on selecting the piloting scheme

The piloting interventions are applied a participatory process named Community Risk Assessment (CRA). The output of the CRA is Risk Reduction Action Plan which are integrated from selection to implementation of the schemes that are most useful for risk reduction and can benefit the community people. The process is critical that looks the risk information and suggested interventions of DRR and CCA. Community people including Disaster Management (DMcs) were engaged in the CRA process. The FPP volunteers were facilitated the process. Community people prepared social map, hazard map, livelihood's seasonal calendar through Focus Group Discussion. Based on gathered information they selected a number of potential scheme. The project and local DDM officials Organized Local Level Planning meeting with WDMC, UDMC and other stakeholders at the local level

<sup>&</sup>lt;sup>4</sup> Practical Guidebook for Community Risk Assessment and Developing Local level Risk Reduction Action Plan, CDMP II, Ministry of Disaster Management and Relief (MoDMR), GoB, 2015

# 3.1.2 Implementation modalities/partnership:

Considering the objectives and scope of the assigned DRRiSSN Piloting project of NRP, ESDO followed below mentioned approaches for successful and quality implementation of the assignment.

- **i) Community Mobilization Approach**: From the inception of the project, ESDO followed the community mobilization approach through the following guiding principles:
  - Engaged the whole community (Circles of Influence),
  - Facilitated a Process of Social Change,
  - Provided repeated exposure to Ideas,
  - Used a Human Rights Framework,
  - Promoted community ownership.
- ii) **Community Action Plan Approach:** Conducted need assessment through PRA like; social mapping, wealth ranking and van diagram. Based on need assessment, prepared Action Plan based on the community action plan. During community action plan preparation project staff assists to the community to ensure that reflection of the demand is included.
- iii) Local Level Capacity Building Approach: For ensuring the effective participation of targeted participants in planning, monitoring, evaluating and reporting local level capacity building approach will be ensured through a systematic manner. Through this approach, community have participated as key actors and all activities executed by communities' active participation under the project guideline.

To address the targeted participants need ESDO followed participatory steps:

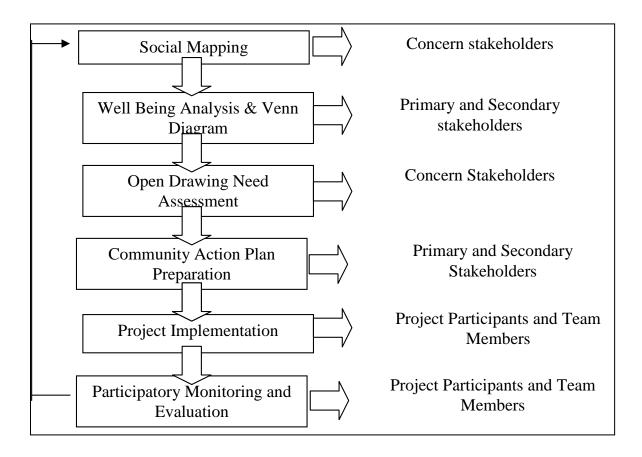


Figure 1: Participatory steps of ESDO for addressing participants needs

To implement interventions of DRRiSSN piloting, ESDO followed bellow mentioned steps:

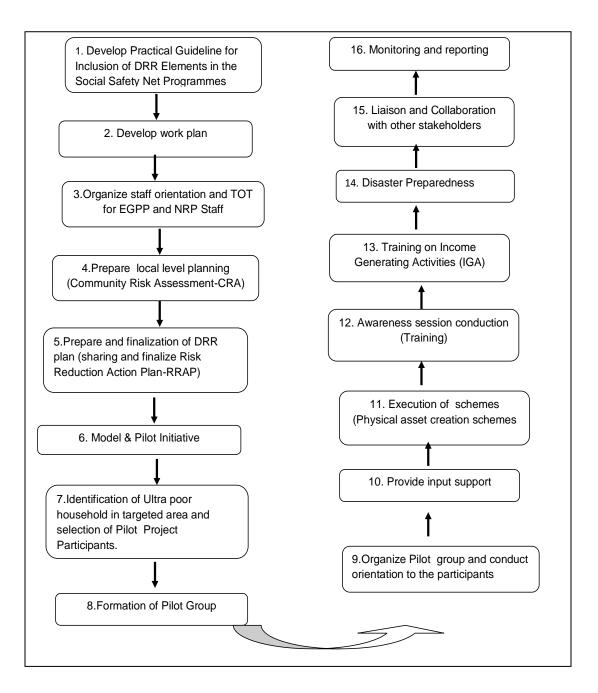


Figure 2: Steps for implement interventions of DRRiSSN piloting of ESDO

To implement interventions of DRRiSSN piloting, ESDO followed bellow mentioned steps:

- Develop Practical Guideline for Inclusion of DRR Elements in the Social Safety Net Programmes: MoDMR developed a guideline for Disaster Risk Reduction Inclusive Social Safety net as a guideline for piloting. This Guideline helps ESDO since inception to till to date for the achievement of DRRiSSN, participatory planning, coordination, collaboration, integration of DRR in Employment Generation for the Poorest Programm (EGPP).
- Work plan development and beneficiaries criteria: ESDO conducted a project staff planning workshop with all project staffs including the senior team member of ESDO Head Quarter and prepared a detailed draft work plan. This team also developed a draft selection criteria of beneficiaries based on EGPP criteria and disaster related project. To finalize the work plan and beneficiaries selection criteria ESDO organized two workshop at upazilla level (01 in Chilmari and 01 in Islampur) for validation of the proposed work plan and beneficiary selection criteria. Local administration like; UNO, Upazila Chairman, UP chairman, Project Implementation Officer (PIO), representatives from DDM and UNDP, line departments (DAE, DLS, DoF, etc.), likeminded NGOs and other relevant actors and project beneficiaries ( EGRR participants) were actively participated. After incorporating feedback and recommendations from the participants of the workshops ESDO developed revised work plan and beneficiary selection criteria and beneficiary selection criteria and submitted to the DDM for final approval. After getting the clearance from DDM, they started to implement accordingly.

The work plan and beneficiaries selection criteria were developed in consultation with the representatives from Upazila (UNO, PIO), UP (Chairman, members), line department, DDM, UNDP, Line department, NGO representative and also with the project beneficiaries. This process made this project acceptable to all categories of stakeholders and gave ownership to them.

Beneficiaries selection process: ESDO prepared the beneficiaries list based on community consultations and households visits in the most affected areas/unions of the upazilas being targeted. After cross checking and verification, the proposed final list were prepared. PIO, representatives of Upazilla & Union Parishad visited the households on random basis from the proposed final list (at least 5-10%) and provided feedback. ESDO adjusted the list according to feedback. Based on DDM's clearance, ESDO submitted the final beneficiary list (targeted households) to the PIO, Upazila Nirbahi Officer (UNO) and the Upazila Chairman for their review and endorsement. Upon endorsement of the household list at the upazila level, the enlisted households would be eligible for project entitlement. This selection process helps the project to identify the appropriate participants among the EGPP participants.

- Staff orientation and TOT for EGPP and NRP Staff: To strengthening capacity of the EGPP & NRP staff, ESDO's conducted 5 day long TOT to the Trainer cum Supervisor on safety net and disaster management initiatives, awareness raising and IGA activities, DRRiSSN project. This training enhanced capacity and understanding of the project staff on implementation process, capacity building, technical support, monitoring, coordination with local administration and line department, etc.
- Prepare local level planning and finalization of Risk Reduction Action Plan: ESDO conducted a total of 9 Community Risk Assessment (CRA) in 3 union and utilized the CRA of Kulkandi UP of Islampur upazila under Jamalpur district which was conducted by SHOUHARDO program of CARE Bangladesh. In each union 3 CRA was conducted by facilitation one CRA in 3 wards(??). As a process of CRA a draft Risk Reduction Action Plan (RRAP) was developed. In each CRA session 3 community representative from each ward , 3 government official participate d for prepare RRAP (local level plan) and ESDO representative facilitated the process. It was finalized after sharing with the local administration, line department, up representatives and community.
- Identification of Ultra poor household: To select the appropriate project beneficiaries among the EGPP beneficiaries for DRRiSSN Piloting, ESDO developed participant selection criteria in a participatory way. beneficiaries selection criteria's are as follows:
  - Extremely poor households, who were severely affected (remain displaced or were displaced or house got damaged) by the flood;
  - Households with disable members
  - Elderly households
  - Women headed households
  - Depend on casual labour, especially that of a woman;
  - No family members with regular source of income;
  - Have a high number of dependants i.e. children, elderly or physically and mentally challenged members, PWD, adolescent girls, school going children;
  - Landless or only have a homestead; marginal farmers/ fishermen in vulnerable condition.

As these criteria were developed through a participatory process by engaging community people, representatives of UP and Upazila, it helps to select the appropriate one. Due to participation of community and local administration of UP and upazila along with the ESDO, DDM and UNDO it is well accepted by the all stakeholders.

- Model & Pilot Initiative: NRP is piloting DRRiSSN Project in Islampur upazila and Kurigram Upazila to develop disaster (flood) risk inclusive EGPP. Disaster risk inclusive EGPP may reduce vulnerability of extreme poor and poor community through reduce threat by infrastructure, enhance resilience by awareness raising and capacity building on flood resilient on-farm and off-farm IGA.
- Group formation: Total beneficiaries number of DRRiSSN piloting is 200 in two upazila 100 participants in Chilmari upazila and 100 participants in Islampur upazila under Kurigram District and Jamalpur District respectively. ESDO organized 10 groups consisting of 20 members including one president and one secretary. Each group opened a savings account in a commercial bank with the name of "Group" and on behalf of the group, President & Secretary operating the group account with the consultation of PIO & ESDO. ESDO staff is assisting for keeping records in the prescribed format. The group organize regular weekly meetings where to discuss their issues and take necessary steps to resolve.
- Organize Pilot group and conduct Orientation to Pilot Participants: ESDO organized orientation for the project beneficiaries on DRRiSSN pilot project including participatory monitoring system. Orientation on project is important for the beneficiaries, as a result they get the full idea about the goal, objectives and activities and contribute accordingly.
- Execution of schemes (Physical asset creation schemes: ESDO assisted group members to implement their activities. Project staff of ESDO maintained liaison and network with PIO and UNO, Upazila Chairman, UP chairman for designing by Sub-Assistant Engineer, supervision, monitoring and maintenance of the scheme. ESDO will provide Feedback to DDM,PIO and UNDP as per supervision report on implementation of scheme as per requirement.
- Awareness session conduction (Training): According to training plan project staff conducted session on social issues like; disaster risk management, health and sanitation, food and nutrition, legal rights, savings management, group formation, etc. Raising awareness on different important livelihood activities of a household enhanced their resilience and empowerment.
- Training on Income Generating Activities (IGA) : ESDO conducted a Training Need assessment before organizing IGA Training and prepared a training plan. Participatory approaches were followed during training facilitation. Resource persons from respective line department facilitated the said training. For better learning the along with the participatory method, practical (works in hand), role playing, etc. were followed. Through these training a linkages and network also developed among the participants and the respective line departments. Each participant receive one IGA training based on their needs and skill and resource availability. After adoption of IGA activities a daylong refresher training is required to enhance their knowledge and skill up to the mark. It would

be better to provide minimum two IGA training to each participants for getting year round income covering one on-farm and one off-farm IGA.

- Disaster Preparedness: Project staff of ESDO prepared awareness building on disaster preparedness and development of mitigation plan/ strategy/ in consultation with the project participants. According to the disaster preparedness plan, the project participants identified scheme like-homestead, school ground, market ground raising, road and embankment raising and maintenance. In life case of skill training, the participants will gain message how to take pre preparedness and respond during disaster period and post disaster situation.
- Liaison and Collaboration with other stakeholders: Project staff of ESDO will ensure effective work relation with local level stakeholders including Upazila officials to smoothly implementation of the program.

**Monitoring and Reporting:** ESDO staff designed and develop appropriate monitoring formats, questionnaires with the consultation with DDM & UNDP.

# 4. Piloting Interventions and Impact

# 4.1 DISASTER INCLUSIVE SCHEME:

Along with the capacity building for income generating and other activities of the project beneficiaries DRRiSSN Piloting project implemented 15 schemes (infrastructure) based on the local plan (RRAP) of Community Risk Assessment (CRA).

# 4.1.1 Scheme identification:

Scheme was selected based on the local plan in Community Risk assessment (CRA) which was validated by sharing with the community, representatives of UP, UNO office, UDMC, WDMC, line department and NGOs working, community leaders, etc. Design of the scheme by the Sub Assistant Engineer, PIO Office, preview of the scheme, on-the-job visit and post-work measurement. WDMC provided monitoring support to the scheme and ensure the maintenance of the scheme in the future.

# **4.1.2 Construction of infrastructural schemes:**

# a). Improvement of facilities of School cum flood shelter:

To improve and ensure safe drinking water, toilet facilities and hand washing at Belgachha High School come Flood Shelter at Miapara village, ward No-04, Belgachha Union, Islampur Upazila in Jamalpur District DRRiSSN Pilot project project implemented 3 schemes. These are construction of Ramp for Person with Disability, installation of hand washing point and renovation of a latrine for women and children.

Figure 50: Installation of	Figure 51: Renovation	Figure 52: construction of ramp for
Hand washing point	of toilet	Person With Disability (PWD)

# b). Cluster Based homestead raising (HHs plinth raise):

To protect household assets, houses, livestock, etc, and reduce migration DRRiSSN Piloting project took initiatives to raise homestead in cluster basis. Out of 15 schemes project raised 4 cluster based homestead in Islampur and Chilmari Upazilas and one homestead raised for Person With Disability at Ramna UP under Chilmari upazila.

# i). Cluster Based homestead (HHs plinth raise):

A total of 4 schemes of cluster based homestead raising was completed under the DRRiSSN Piloting project and provided direct support to the 16 households. Out of which two are cluster of 5 household in Islampur Upazila two cluster of 3 households in Chilmari Upazila. These household were raised 5 feet above the existing height considering highest flood level in 2019. Household owners planted fruits trees, cultivated vegetables in the raise homestead. Sanitary latrine and tube-well were installed for better sanitation facilities. In each of the raised cluster based homestead there are space for vegetable gardening, tree plantation and free space for shelter of community people and their livestock during flood.

Ward Disaster Management Committee (WDMC) members were involved in scheme selection based on the CRA findings. Upazila Sub-Assistant Engineer designed the scheme and project Implementation Officer (PIO) UNO Office preview of the scheme, on-the-job visit and completed post-work measurement. WDMC provided support through regular monitoring and supervision in the implementation of the scheme. They ensure the maintenance of the scheme in the future.

Figure 53. Raised	Figure 54. Raised	Figure 55. Raised	Figure 56. Raised
cluster based	cluster based	cluster based	cluster based
homestead in	homestead in	homestead in	homestead in
BelgachaUP in	BelgachaUP in	RanigonjUP in	RanigonjUP in
Islampur upazila	Islampur Upazila	Chilmari upazila	Chilmari upazila

# ii). Raising model house of a Person With Disability(PWD):

ESDO raised height of a Model House for Person with Disability at Ramna UP under Chilmari upazila through CFW scheme based on Implementation of Technical guidelines on DRR inclusive SSNP, RRA and CRA Process in consultation with local government representative. Sub-assistant developed the design of homestead raising including accessible facility for PWD which was approved by Upazila Project Implementation Officer & UP Chairman. height of household raised about 5 feet, considering highest flood level of 2019. Under the scheme, a total of 20 workers including 13 women, 07 Men, out of which 01 persons with disabilities worked.



# c). Eid gaon cum Flood shelter:

Community of Ramna Union in Chilmari upazila affected by recurrent flood and compel to leave their house and take shelter to the neighbours' houses. Sometimes, neighbours showed reluctance to give shelter flood affected family with their belongings and livestock. During CRA it was identified that there is a Eid gaon (Praying field) in that area which may be converted to flood shelter and incorporated in RRAP accordingly. Based on the local plan DRRiSSN Piloting project raised height of the Eid gaon field around 100 feet length and 60 feet width with 4 feet height.



# d). Raised road height:

During flood most of the road of project area inundate along with some household. It creates difficulty to the community for their need based mobility and communication facilities. According to local plan in CRA, project initiated to raise the road height considering the last flood level in 2019. Through 2 scheme DRRiSSN Pilot project raised road height about 4 feet of 2 Km road at Ranigonj UP at Chilmari Upazila and 2 feet height of 1 Km road at Kulkandi UP in Islampur Upazila. Considering the highest flood level on 2019, raising of road height 2 feet is not protected from inundation. Finally Union Parishad Chairman of Kulkandi UP able to re-allocate fund from Islamic Relief to raise height 2 feet more according to the LLP / CRA considering the flood level. To protect erosion vetiver grass and tree planting has been completed on both sides of the road.

Figure 61: Watering transplanted tree on raised road	Figure 62: Renovated road at Kulkandi UP	Figure 63: About 185 feet connecting road renovated at Ramna UP in Chilmari Upazila,

Beside this about 185 feet connecting road was renovated from Jorgach Bazar to Jorgach Eid gaon field Flood Shelter Center at Ramna, Chilmari by raising 4 feet height and completed plantation of Vetiver Grass & Trees in both sides.

# e) . Guide wall construction:

Roads and approach road of bridges erode during flood disrupted smooth communication and make difficult for mobility of flood affected communities. To protect road and approach road of bridge DRRiSSN Piloting project completed construction of two guide walls. One is 150 feet guide wall and another one is 100 feet guide walls in both sides of the road in Kulkandi UP of Islampur upazila.



Village	Under	Kulkandi	UP	In	Under Belgachha UP In Islampur,
Islampu	r,Jamalpu	ur.			Jamalpur.

# f). Foot over culvert construction:

Bere gram village is located in Parthoshi union under Islampur Upazilla of Jamalpur District. This village is most vulnerable for landslide and flash flood because it is surrounded by some hills and canals. Due to flash flood, this village often goes under water. As a result villager's movement and student's schooling are seriously hampered. Based on the local plan DRRiSSN Piloting project built a Foot over culvert in Parthoshi union under Islampur Upazilla of Jamalpur District.

<section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header>	
Figure 66: Published news on guide wall construction	Culvert at Beregram,I slampur
	Upazila .

# 4.2. RESULT/IMPACTS:

#### i). Reduced risk and threat for life and asset loss:

- a). Plinth raising: Reduced risk of 17 HHs for flood related risk by inundation, asset loss, evacuation of family members with belongings and livestock, insecurity, etc. of those HHs who are living in the raised 5 HHs both cluster form and individual (PWD) approaches. Reduced risk to access of potable water and sanitation facilities which they faced during previous floods. Reduced maintenance cost of house and others of these project beneficiaries(??). In addition to the benefit of existing households, about adjacent 70 HHs including 389 family members along with their belongings and live stocks may get shelter facilities on the raised plinth of cluster HHs during flood.
- b). Vetiver grass and tree plantation in slope of raised road, guide wall and box culvert construction: More than 4000 people of the community got benefit for easy movement to local market, school and other places by using with vetiver grass and tree planted raised 3 Km. road. People are able to move by small and light vehicle on the road which reduced their hurdles for emergency need. Construction of box culvert reduce breach risk of road by flood water. It also improved drainage facilities and enhance recede of flood water to river easily.

c). Renovation of facilities of school cum flood shelter, land raising of Eid gaon flood shelter, raised connecting road to flood shelter: People of the scheme area get facilities to take shelter with their family members, belongings and livestock in the project renovated and developed flood shelter. Safe water facilities, sanitation facilities for women and construction of ramp in the school cum flood shelter reduced the hurdles of women, children and Person With Disability along with the other community people. Facilitating safe water and of hand washing point in the shelter may reduce water borne disease during flood period and in normal situation students of this school will get benefit for safe water and hand washing facilities. A connecting road to raised Eid gaon field flood shelter ensure easy access to the shelter which may reduce hurdles of the community and reduce risk for other accidents.

### ii). Enhance resilience of project beneficiaries:

#### a) Awareness raising:

Resilience of project beneficiaries enhanced through capacity building on disaster risk reduction and other awareness related session. Now they know the IVR mobile number of MoDRR for water forecast information and aware about disaster preparedness.

### b). Income from IGA:

Income of project beneficiaries increased by capacity building and implementing different IGA activities appropriate or resilient to flood.

# 4. IMPACT ON DIRECT BENEFICIARIES & INDIRECT BENEFICIARIES :

#### i). Impact on direct beneficiaries:

#### Employment generation for extreme poor:

A total of 3969 man-days employment generation was created by accomplished 15 schemes of SSiNDRR pilot project for 268 project beneficiaries @ 300 Tk. wages per day. Out of which 125 were female and 148 were male beneficiaries including 21 person With Disability (PWD). Along with the project beneficiaries local 71 masons get opportunity for employment generation for 696 man-days.

#### ii). Impact on indirect beneficiaries:

Indirect beneficiaries of the community of scheme areas are now using roads easily and able to muse small and medium vehicles for emergency purpose. They can easily move to market, office and other purpose. Community around the raised plinth of cluster based HHs would get shelter facilities during flood. People around the renovated and raised flood shelters would get shelter facilities in these shelters in flood situation. As these flood shelter are developed by the project in case of next time flood comparatively less people of the flood affected area would take shelter to their neighbour houses.

#### 5. DRR INSTIGRATION:

In case of all schemes flood related all risk are considered and incorporated during designing, construction of respective schemes. Through conducting Community Risk Assessment (CRA) in the project area flood and other risk were identified and incorporated during development of

Risk reduction Action Plan (RRAP) or local plan by sharing with the community, UP/ TNO office, NGOS, etc. During design phase Sub-Assistant engineer developed design of all schemes considering identified flood and other risk through CRA and community consultation.

# Risk Reduction through Transformative Social Safety Net- A Case of Employment Generation for the Poorest (EGPP)

To develop a risk informed plan that ensure the effective participation of community people, mostly women, persons with disability, child, elderly there need a well-designed and useful toll. Through CDMP, Ministry of Disaster Management and Relief (MoDMR) developed Community Risk Assessment (CRA) tool to identify and better understand the local level disaster risks. CRA is a participatory process for assessing hazards, vulnerabilities, risks, ability to cope, preparing coping strategies and finally preparing a risk reduction action plan (called Risk Reduction Action Plan, RRAP) by the local community. The CRA method recognizes that the vulnerability, disaster loss, reduction or mitigation strategy and coping mechanism vary from community to community. So, it ensures representation of professional, community and other groups so that their views are reflected in develop risk proof interventions at local level. CRA tool plays an important role in assisting communities and disaster management committees to identify "all hazards" risk, together with the most appropriate range of risk reduction options that can be introduced to either eliminate or reduce risk to more manageable means. The well-structured and useful tolls yet remain to use its full potential and widen its scopes towards DRR and CCA. NRP has been used CRA (???)that developed Risk Reduction Action Plan (RRAP) in 20 Unions that analyzed 180 Union Wards (the lowest administrative unit) level risk and vulnerability to undertake most effective interventions for community resilience.

The NRP: DDM part piloted 8 gender responsive, disability inclusive risk informed Safety Net schemes through EGPP in four Upazilas of Kurigram and Jamalpur districts. Local level DDM officials and Union DMCs used the ward level risk reduction plan that was developed by Community Risk Assessment process for developing risk reduction interventions with the active participation of community and DMCs

Since its beginning NRP-DDM developed a practical guideline to facilitate GoB in the inclusion of DRR elements in the entire cycle of safety nets including identification, selection, preparation of the safety net project/schemes and implementation.

Meanwhile, a total of 8 innovative DRR inclusive social safety net schemes were introduced that prepared using the risk information and chosen most vulnerable location and community from RRAP that prepared by NRP-DDM supported project at Kurigram and Jamlpur. The project facilitates to address the flood risk and its height in design of rural infrastructures like road. The project also supported the most vulnerable households through plinth rising, common community ground for flood shelter of human and livestock. The DRRiSSN schemes employed 237 extreme poor (female-81, male-156 in which 9 are persons with disability) for 2500 mandays. In addition, a total of 10 extreme poor households members including 8 females, 2 persons with disability were received in average 40 days employment through working with tree plantation, grass for vegetation, turfing and watering to protect road, raised homestead, flood protection ground (Eid-gah) from flood for supporting resilient infrastructures. The project also supported with guide wall and mobilized the resources from UNDP's logic project and ADP fund of Ups to build culvert for reducing water logging. Additionally, 632 people from different sectors

trained on local level disaster preparedness. Another 200 EGPP beneficiaries received training and inputs on resilient livelihood aimed to support the EGPP beneficiaries get out from extreme poverty and building community resilience. It has provided inputs to incorporate DRR elements in revising guideline EGGP + which is being developed by the DDM and MoDMR for leverage the resource in building resilience. The project is also working for developing technical and policy brief for advocacy and influencing to bring the transformational change of DDRiSSN through widening scopes across the sector and GoB agencies and beyond.

# Disability inclusive and Gender Responsive Disaster Risk Management for Recurrent and Mega Disasters

NRP DDM's has been piloting to promote disability-inclusive disaster risk reduction (DiDRR) through partnership with CDD. A total of 2981 persons with disability have been identified and mapping out in the 4 unions at Chimari and Kurigram Sadar. It has also worked through developing guidelines, capacity building of persons with disability, DPOs on inclusive preparedness and response, and mainstreaming at the local level. 98 first responders developed and trained on disability inclusive search and rescue who delivered significant service on response during last monsoon flood. 35 Persons with disability trained on Disability Inclusive DRR, leadership and advocacy. 36 Disaster Response Coordination Groups and DMCs at Upazila, Union and Ward level are being activated according to SoD 2019. While inclusion of persons with disability in the DMCs are confirmed to represent in the meeting to influence in decision making process for enhancing DiDRR in planning and implementation process. IEC materials, training module including audio-video developed on DiDRR which were used in awareness building for COVID 19 with a sign language. The project also facilitated the accessibility to infrastructure, assistive device for mobility, resilient livelihood, and rehabilitation services to persons with disabilities. The project has been working with the focus areas of accessible early warning and action through build the capacity of DPOs and local DMCs and active participation of community to reduce the disproportionate impact of disaster to the persons with disability.

# Capacity Building support for local Disaster Management Committee:

From Upazila Disaster Management Committee to Ward Disaster Management Committees are activated through project support in 4 floods prone Upazilas of Kurigram and Jamalpur districts. The local Disaster Management Committees are received training on their role and responsibilities as per SOD 2019. The project supports to ensure the active and effective participation of women, persons with disabilities and youth through their enrollment in the revised, newly constituted committees. The committees are featured with:

- Promote women's participation and leadership in local-level disaster management committees (DMCs) and work with these committees to ensure gender responsiveness and an enabling environment for women members.

- Promote inclusive DMCs through active participation and leadership from the persons with disabilities

- Enhance representation and leadership of women and persons with disability at all levels of climate change adaptation and disaster risk management for transformational change

ESDO conducted Training Need Assessment (TNA) of project beneficiaries. Based on the TNA report a total of 200 beneficiaries of DRRiSSN Piloting project received Orientation on Project/Scheme Implementation, need based capacity building and skill training on different on-farm and off-farm related Income Generating Activities (IGA) which are appropriate for flood prone areas. These are, improved technology on vegetable cultivation and seed production (61), poultry rearing (#26), goat and rearing (#30), nursery & grass production (#16) and, different type of skill development training like; fish capturing (#2),LSP vaccinator (#2), small business (#41), tailoring (#9), bamboo craft (#1), Auto mechanics (#1), solar mechanics (#3), masonry (#2), electric house wiring (#2). Each of the project participant received only one type of IGA training on either on-farm or off-farm. A total of 200 project beneficiaries received relevant input support from project. ESDO has provided 02 days long non-residential training to 100 Person With Disablity &including selected FPP volunteer as EGPP Participant on basic training on Gender & Disaster Preparedness.

Project organized 36 Ward Disaster Management Committee according to the guideline of SOD 2019. Project provided daylong basic training on DRR Preparedness for 436 member of WDMC and organized 4 meeting of Union Disaster Management Committee (UDMC) in 4 Union Parishad of project area.

Project implemented 15 need based infrastructural schemes in 4 Union under two upazila, which were selected according to Risk Reduction Action Plan (RRAP)/ Local Plan under union wise Community Risk Assessment (CRA) conducted by the project. Through conducting Community Risk Assessment (CRA) in the project area flood and other risk were identified and incorporated during development of Risk Reduction Action Plan (RRAP) or Local Plan by sharing with the community, UP, TNO office, UDMC, WDMC, community, NGOS, etc. In case of all schemes flood related all risks are considered and incorporated during designing, construction of respective schemes. During design phase Sub-Assistant engineer developed design of all schemes considering identified flood and other risk through CRA and community consultation.

Over the reporting period, ESDO implemented 15 infrastructural schemes in Chilmari Upazila and Islampur Upazila of Kurigram and Jamalpur Districts respectively under the DRRiSSN Pilot project of National Resilience Programme (NRP). Out of 15 scheme, 5 schemes on raised plinth of homestead, 4 in cluster approach for 16 HHs (4 HHs/ cluster) and one in individual approaches for PWD (#1), 2 scheme on vetiver and tree plantation is in raised 3 Km road ( # 2 road), one scheme on box culvert construction, 2 schemes on guide wall construction, 3 schemes on renovation of school cum flood shelter by construction of ramp, installation of hand washing point and renovation of a toilet for women, one scheme on raised Eid-gaon field as flood shelter with one scheme for raised connecting road to access Eid-gaon field flood shelter and one scheme on vetiver and tree plantation in raise connecting road to Eid-Gaon field flood shelter.

A total of 3969 man-days employment generation was created by accomplished 9 schemes of DRRiSSN pilot project for 268 project beneficiaries @ 300 Tk. wages per day. Out of which 125 were female and 143 were male beneficiaries including 21 person With Disability (PWD). Along with the project beneficiaries local 71 masons were get opportunity for employment generation

for the period of 696 man-days by implementation of 6 schemes. It is estimated that around 6000 community people of the project area of DRRiSSN in Kurigram and Jamalpur districts will get benefit from those schemes (infrastructure) like; uninterrupted communication through raised road, shelter facilities, reduce road breaching, reduce homestead inundation during the upcoming floods.

# 5. Way forward

The importance of DRR and resilience have been captured well in the overall purposes of the safety net programmes, FFW, TR and EGPP in particular, which might be in compliance and conformity with the regulatory requirement of the disaster management of Bangladesh. That means that the areas and interfaces for inclusion (of DRR and resilience) are already there in the documents which could be taken forward for greater incorporation, adaptation, practice and promotion throughout the programmes – from raising motivation to creating momentum. The flowing areas could be addressed to enhance the safety net programme for more on Disaster Risk Reduction and adaptation to reduce the risk of disaster and climate change:

- Incorporate some DRR elements in the EGPP guideline for risk informed scheme with resource integration from similar other sources and stakeholders to make the interventions risk proof
- Non-wage resource allocation is an integral part that need to ensure to make the intervention risk informed for building resilience
- Apply the RRAP or apply customized CRA to ensure the risk elements in the intervention through EGPP and other social safety net. Few questions may be added to the screening tool/checklist to take care of DRR, resilience and gender aspects as applicable and as possible
- Increase the amount of wage rate around BDT 500 would be critical to address the market and get maximum outcome through effective use human in the interventions for disaster risk reduction
- Cluster based plinth rising are found an effective option to reduce the flood risk of poor people and use as community ground for temporary shelter
- Renovate of flood shelter cum schools can be potential options for employment and flood risk reduction but the issue of non-wage resource needs to be accounted to maximize the benefit
- The Union Committee may be made responsible to make sure that the scheme/project includes DRR ingredients/criteria while they identify/select it.

### 7. Case Studies

#### A TALE OF NOMITA RANI

Nomita Rani a housewife lives in a village named Kodaldhorpar in Ranigonj Union of Chilmari Upazila under Kurigram District. She has a family of 5 members including two daughters and one son. Her husband is Mr. Dhirandro Nath Roy is an agricultural day labour and only earning member of the family. Nomita Rani has to work in other family to earn & manage her family. Her eldest daughter got married about 02 years ago when she was studying in class eight (VIII). Her 2nd daughters is now studying in class six (VI) and son in class three (III). In normal time, her



Figure 81: Nomita Rani with her husband is involved in intercultural operation of vegetables family was running any way with their limited income. But during Corona crisis her husband could not able to maintain their family with limited income. She had no other earning opportunity or asset except 02 decimal of homestead land. Before involvement in DRRiSSN pilot scheme of NRP she did not know about the cultivation technology of different vegetables. Even she was not aware about the importance of vegetable in diet. She was not aware about vaccination of poultry and livestock which is an effective preventive measure to save poultry & livestock from the sudden death. She could not able to take care of her family members due to her ill health, and lack of awareness about hygiene & nutrition knowledge. In this situation according to her

social &economical status, she was selected as a participants of EGPP. After participating on-farm training session Nomita learned about maximum utilization of

homestead land, name of suitable vegetables for homestead gardening, quality of seeds, bed & pit preparation methods, cultivation techniques, compost preparation, fruit tree plantation, improved technology of poultry and goat rearing, etc.

After receiving on-farm training session Nomita Rani acquired sufficient knowledge on highest utilization of homestead area, compost preparation, homestead vegetables cultivation techniques, quality seed, fruit tree plantation, health hygiene & nutrition issue, business planning, improved technology of goat & poultry rearing, etc.

During training session she prepared a business plan with the assistance of program people. The program people visited her



Figure 82: Nomita Rani is involved with intercultural operation of vegetables

homestead and also provided necessary guidance and technical support to her on vegetables production, goat and poultry rearing, importance of savings etc which will be helpful for their livelihood development. She is using improve technology in her homestead vegetables garden, prepare trellis (*mucha*) for vine crop, and fencing around the garden for protection. As project beneficiary and based on her business plan, Eco-Social Development Organization (ESDO) provided cash input support Tk. 1500/- including seed & material under DRRiSSN pilot scheme of national resilience programme (NRP).

Now Nomita Rani adopted different new technologies for vegetable cultivation. She has cultivated different type's vegetable and fruit like; jackfruit, guava and papaya, etc. around her household areas. She sold vegetable about TK. 2,000 after fulfill her family needs. Out of which earned Tk. 1500.00 from bottle gourd, Tk. 300.00 from sponge gourd and Tk. 200.00 from indian spinach. She has sold bottle gourd: 1500/- sponge gourd: 300/- and Indian spinach: 200/- after fulfill her family needs. About 01 months ago she bought a goat 3500/- from her savings. Now she is sincere & takes care properly herself so that she maintains everything for her livelihood development, healthy future & survives from the unwanted situation. She takes fresh vegetables, use sanitary latrine, feel empowered than before, increased social status. She is also trying to highest usage of her homestead area & leased land for better income.

Nomita Rani express with a smile on her face that, "I have return back my confidence. Hard work and support from ESDO & NRP changed my life. Now I want to purchase a piece of cultivable land & construct a suitable home."

# A JOURNEY OF SUFIA TO BECOME A SUCCESSFUL BUSINESSMAN

A village named Kharkharia which is situated in Ramna Union of Chilmari upazila under Kurigram District. Sufia Begum (39) and her husband Bojlu Rahman with their three children one daughter and two sons lived there. Bojlu Rahman is an agricultural day labor. Sufia Begum got married in 24 year ago when she was only 15 years of old and she studied in class five (V).

After marriage Bojlu Rahman maintained his family by doing agricultural work and day labor. In every year Kharkharia village is affected by recurrent flood. During flood period he did not get much work to maintain his family properly. At that time they did not able to manage three meals in a day. In this context their family life became uncomfortable.

Sufia had a mini poultry farm. She rears chicken after managing her family work. She earned money by selling chickens and eggs. She deposited her income to overcome coming disaster

period . She paid 8000 from her deposited money to relieve some of her worldly deficiency at the time of disaster. Based on the selection criteria of DRRiSSN piloting project Sufia was selected as a EGPP beneficiary in 2016.

Then she started the earth working as welzl as others EGPP Members. At that time Sufia attend in a IGA Small Business training organized by ESDO under DRRiSSN of National resilience Program(NRP). By attending this training she learned about the small business process, different dimension of business and develop a business plan. After that she discussed it with her husband about to start a business of tea stall. They jointly have plan to rent a shop to start their tea stall in local market.



Figure 83: Sufia is running a Tea Stall at Ramna Bazar, Chilmari

According to Training Need Assessment (TNA) report of ESDO NRP Provided 1500 Tk. as cash support and 4500 Tk for material support, then she started their tea stall. Now they are running the Tea stall jointly. They are selling tea and other food items about 1000 to 1500 TK. per day and getting net profit about 400 to 500 Tk. per day. In each month she started to deposited a amount of money in a local bank for savings. She bought a goat by her savings. No she is an

example of a successful women in the community and getting respect from all. Now her husband did not take any decision without discussing with her. She installed a tube-well from their income and get a support from respective Union Parishad for construct a sanitary latrine in her house. Now she started to cultivate vegetable in the homestead.

"Sufia said that her income increase as a result of activities and support from DRRiSSN of ESDO and NRP, now she has found a way to live a happier and better life. She is very much thankful to DRRiSSN piloting scheme of ESDO under National Resilience Program(NRP) of Ministry of Disaster Management and Relief (MoDMR)."

# **NEW LIFE OF SHAHIDUL**

Ramna Union is one of the most flood prone area in Chilmaria upazila under Kurigram District. Chilmari is geographically located in a beautiful scenic bank of the Tista and Jamuna rivers. In



every year most of the area of Chilmari is flooded by recurrent flood. Mr. Shahidul Islam is a 46 years aged man living a miserable life. His father's name is Mr. Azizul Islam. Shohidul has three daughters. He has no asset except a small piece of homestead land. Once Shohidul became very ill and after recovery he started to work in a hotel & restaurant on daily basis. Wages was only Tk. 200.00 per day. In 2016 he was selected as a beneficiaries under EGPP. Then he started the earth cutting work as well as others EGPP members. He has no previous experience on earth work except working experience in hotel work. A few days ago he married his daughter and became destitute again. Due to the closure of hotels in

Corona crisis he began go to poor to extreme poorest. After a certain time, he went to Dhaka for seek a job but returned again without getting any job in Dhaka.

One day he heard that DRRiSSN pilot scheme of ESDO under National Resilience Program (NRP) is selecting project beneficiary's of EGPP. He showed interest to become a project beneficiaries. Following the selecting process he was selected as a EGPP beneficiary's in the DRRiSSN Pilot Scheme of ESDO. At that time Shahidul attend in a IGA training on small business development which was organized by the ESDO- NRP. By attending IGA training he learnt about the different aspect of small business process as well as discussed with rural collector and seller. After receiving training based on the TNA ESDO NRP provided 1500 Tk. as cash support and 4500 Tk. for material support for running small business. He rent a Rickshaw-van and a mike then he started a small business by purchasing essential items or goods. He travels to different villages in the area by van . He is selling different items about 700 to 800 Tk. and getting profit about 200 Tk. per day. Shahidul says that "if I don't get training through ESDO- NRP, may be I had to earned by begging. Through what work I got my new life"

#### AN UNDEFEATED WOMAN: NURJAHAN

Nurjahan Akhter (19) Person With Disabilities (PWD) lives with her husband Rubal (20) at Ramna Mistri Para village of Ramna union of Chilmari Upazila. They have only two decimals of homestead land. They are living there in a tin shed with two rooms and a kitchen. Her husband Rubal also a Person With Disabilities . She has passed Secondary School Certificate (SSC) examination in 2020. She is staying with her husband at father-in-law's house. Her father-in-law is an agricultural day labour. He is maintaining family with his irregular income and struggling to meet the family needs .

Flood is a common scenario of this village in each year. During flood, Nurjahan's father-in-law has no work to earn and the family suffers for food crisis. Even they cannot eat three times in a day properly. For the sake of poverty, Nurjahan and her husband always quarrels with each other and that caused an unhappy situation of their family & conjugal life.

In 2020, ESDO, Care & CDD start to implement DRRiSSN Pilot Scheme under national resilience program (NRP) of Ministry of Disaster Management and Relief (MoDRM) in Ramna UP of Chilmari Upazila in Kurigram.

Nurjahan was selected as a participants of CDD.. ESDO NRP provided IGA training of some beneficiary's in which Nurjahan was selected as a PWD. She discusses with her husband and



Figure 85: Nurjahan is sewing dress at her house

enlisted her name in the training course. ESDO organized a 05 days long training on tailoring course where they trained to make different tailoring items. After successfully completing the training, she learnt about making different types of tailoring items of women and children which increased her work in wider scale. Considering the COVID situation she also learned how to make a mask. ESDO funded by NRP provided 2000 Tk. as cash and 4500 Tk. as material support. This financial support from ESDO has helped to make Nurjahan's dream a reality.

Now a days, people especially women from nearby villages came to her for sewing their dresses. Now she is earning about 2500 Tk. per month. During COVID situation she made 300 mask and sell per mask 10 Tk. at local market and get one thousand taka profit. She applied to Chilmari College for admission in HSC course. Nurjahan overcome her disability and expecting to established in the society through her tailoring skill.

(Case studies collected and prepared by: Md. Amir Hasan, Project Manager, ESDO NRR, Islampur and Chilmari)

### 8. Lessons Learned

- Inception workshop play an important role for proper implementation of project intervention by sharing with the local administration Upazila and UP, line department at upazila and district level, NGO representatives, community leaders, project beneficiaries, journalists, etc.
- Participatory method of beneficiaries selection by involving community, UP Chairman. members, representative of UNO Office (PIO or other), local leaders, etc. help to select appropriate/ actual participants and minimize dissatisfaction among the communities.
- Ministry of Disaster Management and Relief (MoDMR) allocate EGPP fund by centrally, it is a top down based not need based. Need based fund allocation of EGPP would contribute to sustainable development by reducing threat and enhancing resilience of extreme poor and poor peoples in the vulnerable areas of Bangladesh.
- Daily wages of EGPP is Tk. 200/ day/ person, it is less than other safety net programme like; Food For Work (FFW) and Work For Money (WFM), which are Tk. 500/ day/ person. Need to revise the rate of daily wages of EGPP in consideration with daily wages of FFW, WFM, and relevant policy of Bangladesh government.
- Each union have to develop a disaster inclusive CRA through participatory method involving all stakeholders at UP level and finalized RRAP by sharing with community, local administration, (Upazila, UP), line department, community, etc. It would be effective if the CRA of UP could be endorsed by respective ministry.
- Capacity building of all UP representatives including Project Implementation Officer (PIO) of upazila Administration is required to enhance knowledge and skill on how to develop disaster inclusive development plan at UP level.
- All development work at UP level/ upazila level should be designed (infrastructure and non-infrastructure) considering the developed RRAP of Community Risk Assessment report.
- Each of the project participant of DRRiSSN Piloting project of ESDO received training and input support for one IGA only. Participant's are not getting sufficient income from one IGA. So, it would be better to provide capacity building and input support for two (2) IGA to each project participants' in combination of on-farm and off-farm interventions for enhancing year round income.
- Need to sensitize Union Parishad to consider the RRAP of CRA during preparation of annual development budget. UP representatives may raise this issue at Upazila Coordination meeting to sensitize Upazila Administration to take in to consideration.

- DRRiSSN project contribute to reduce threats of the project area by construction of disaster (flood) risk inclusive construction work of different structures and also enhance resilience of project participants by awareness raising and capacity building on disaster resilient Income Generating Activities (adaptation technologies).
- Allocation of budget for UP is comparatively less than the required amount to make the infrastructure to disaster resilient. To address this issue need to coordinate with other funding sources like; NGO, other safety net allocated budget of UP( FFW,CFW, etc.), UNO office, local institute, line department (DAE, DoF, DLS, etc.).
- As the fund allocation of safety net programm is approved by MoDMR and implemented through district administration, upazila administration and finally by UP. So, sensitization is required for stakeholders of all level for shifting social safety net programme in to Disaster Risk Reduction Inclusive Safety net programme to ensure sustainable development.

# CHALLENGES:

- Heavy rain fall hampered to implement the target of schemes on time.
- Ensure the design and lay-out of the scheme of infrastructures
- During flood some schemes implemented was not possible due to unavailable earth cutting point.
- Ensure bKash account for all EGPP participants
- Accomplishment of planned activities delayed due to COVID-19 situation.
- Participant knows the benefits / importance of platform for goats, vaccination for goats, poultry but they don't continue it.
- Duration of piloting scheme was comparatively less to observe the improvement of livelihood status of project beneficiaries.
- Single Income Generating Activities (IGA) is not enough to ensure year round income of a project beneficiaries..
- The geographical distance from Chilmari Upazila to IslampurUpazila is one of the big challenge for one Project Manager and one Program Assistant (Admin & Finance) for providing required support.
- organization faced challenges for successfully implementation of the project, expected outputs/deliverable with the limited manpower and time of the DRRiSSN Piloting scheme.

## জনগোষ্ঠীর (গ্রামের) ঝুঁকি নিরূপন নির্দেশিকা [Community Risk Assessment (CRA) Guidelines]

ভৌগোলিক অবস্থন গত কারণে বাংলাদেশ একটি দুর্যোগ প্রবণ অঞ্চলে অবস্থিত। পাশাপাশি জলবায়ু পরিবর্তনের প্রভাব এ অঞ্চলের প্রাকৃতিক দুর্যোগের মাত্রাকে বাড়িয়ে দিয়েছে। তথাপি বাংলাদেশ তার উন্নয়নের ধারা অব্যাহত রেখেছে। দুর্যোগ ঝুঁকি হ্রাস ও ব্যাবস্থাপনাকে উন্নয়ন কর্মকান্ডের মুলধারায় নিয়ে আসার জন্য বিভিন্ন পদক্ষেপের মধ্যে জনগোষ্ঠীর (গ্রামের) ঝুঁকি নিরূপন কার্যক্রমকে এ কর্মসুচিতে অন্তর্ভুক্ত করা হয়েছে যাতে এলাকাবাসীর অংশগ্রহণের ব্যাবস্থা নিাশ্চত করা হচ্ছে।

## টুল সমুহের ব্যাখ্যাঃ

১। ঐতিহাসিক সময় রেখাঃ ঐতিহাসিক সময় রেখা থেকে প্রাপ্ত ক্ষয়ক্ষতি, ঝুঁকি পূর্ন /বিপদাপন্ন খাতসমুহ চিহ্নিত হবে। ঝুকির/বিপদাপন্ন খাতসমুহ ব্যাখা করার সময় নিম্নলেখিত বিষয়সমুহ বিবেচনা করতে হবে (তাদের জীবিকা, কর্মকাণ্ড, সম্পদ, মানসিক অস্থিরতা /অবস্থা, স্বাস্থ্য)

২। মৌসুমি/ঋতু পঞ্জিকাঃ মৌসুমি/ঋতু পঞ্জিকা মুলতঃ ঐতিহাসিক সময়রেখা থেকে প্রাপ্ত ঝুঁকি সমূহ এবং আপদ দ্বারা আক্রান্ত হওয়ায় সময় নির্ধারন করা হয়ে থাকে।

৩। ঝুঁকি ও সম্পদের মানচিত্রঃ এই অনুশীলনের মাধ্যমে ঝুঁকি ও সম্পদসমূহ চিহ্নিত করা হয় যেন কার্যকরী পরিকল্পনা ও ব্যবস্থা গ্রহণ করা যায়।

 জেন্ডার বিশ্লেষণঃ এই অনুশীলনের মাধ্যমে নারী, শিশু, কিশোরী, বৃদ্ধ ও প্রতিবন্ধীদের দুর্যোগ ঝুঁকি, ঝুঁকির কারণসমূহ ও করণীয় নির্ধারণ করা হয়।

৫। প্রাপ্ত ফলাফল ও বিশ্লেষণঃ ঐতিহাসিক সময়রেখা থেকে চিহ্নিত আপদসমুহ ও ক্ষয়ক্ষতি থেকে ক্ষতিগ্রস্থ খাত সমুহ নির্নয় করতে হবে । ক্ষতিগ্রস্থ খাত সমুহ কেন ক্ষতিগ্রস্থ হয়েছিল প্রশ্ন করে এর কারণ সমুহ নোট নিতে হবে।

৬। ঝুঁকিহ্রাস ও আপদকালীন কর্ম পরিকল্পনাঃ ঝুকির কারণ বিশ্লেষণ থেকে প্রাপ্ত সুপারিশ সমুহ কাজ হিসাবে বিবেচিত হবে।

সহায়ক দল গঠন : ১. ফিল্ড ফেসিলিটেটর -মুল সহায়ক।

২. দুর্যোগ স্বেচ্ছাসেবক: ২ জন (১ জন নোট টেকার এবং ১ সহ: সহায়ক)।

উপকরণ: ১. ব্র্র্যাউন পেপার

২. স্কেল

৩. রঙ্গি্ন মার্কার

8. নোট প্যাড, কলম।

ধাপসমুহ:

ঐতিহাসিক সময় রেখা

লক্ষ্য:

- অতীতে সংঘটিত আপদ, তাদের প্রকৃতিগত পরিবর্তন, মাত্রা ও আচরণ সম্পর্কে স্পষ্ট ধারণা অর্জন - জলবায়ুর বর্তমান প্রবণতা এবং পরিবর্তন সম্পর্কে মানুষকে সচেতন করা - ঝুঁকির ব্যাপকতা বিশ্লেষণ, ভবিষ্যৎ পরিকল্পনা ও বিনিয়োগ মূল্যায়ন

সময়: ১ ঘণ্টা সময় লাগবে: ৪৫ মিনিট সময় রেখা তৈরিতে এবং ১৫ মিনিট আলোচনার জন্য।

অংশগ্রহণ কারী: ১৫-২০ জন নারী - পুরুষ (গ্রামবাসী ও সংশিষ্ট্র ওয়ার্ড মেম্বরসহ)

প্রক্রিয়া: এই কাজে আলোচনাসহ আনুমানিক সহায়ক এই কাজটি টেবিল ফরমেটে করা হবে নাকি গ্রাফিকাল লাইন ফরমেটে করা হবে তা অংশগ্রহণকারীদের মতামতের ভিত্তিতে সিদ্ধান্ত নেবেন। ১. অংশগ্রহণকারীদের কাছে জানতে চান তারা অতীতে সংঘটিত বড় দুর্যোগগুলো সম্পর্কে তার মনে করতে পারে কি না, যেমন: - বড় আপদ ও তাদের কারনে সৃষ্ট ক্ষয়ক্ষতি - ২০-২৫ বছর আগের তুলনায় আপদসমূহের মাত্রা (কম/বেশী অর্থাৎ ব্যপকতা) ও ধরণে (ঘন ঘন বা কম) কোন পনিবর্তন লক্ষ্য করেন কিনা - ফসল, বনভূমি, বসতি ইত্যাদির ক্ষয়ক্ষতি -খাদ্য নিরাপত্তা ও পুষ্টি পরিস্থিতিতে পরিবর্তন - মৎস, গবাদিপশু ইত্যাদিও ক্ষয়ক্ষতি

২. সহায়ক এই গল্পগুলো বড় কাগজে ধারাবাহিকভাবে লিখে নিতে পারেন।

৩. যে সকল তথ্য ইতিমধ্যে জানা গেছে তা বারবার উল্লেখ করুন এতে করে তথ্য দাতাগণ অতীতের ঘটনাবলি মনে করতে পারবেন এবং সঠিক তথ্য প্রদানে সক্ষম হবেন। এক্ষেত্রে শুধু প্রধান বা উল্লেখযোগ্য ঘটনাবলির উপর জোর দিন।

নোট: মনে রাখতে হবে সময় রেখা সম্পর্কে বিদ্রান্তিকর/মতপার্থক্য মূলক তথ্য আসতে পারে। যেহেতু আগের ও সাম্প্রতিক সময়ের ঘটনাবলি নোট নেওয়া হয়।

ঐতিহাসিক সময়রেখা অনুশীলণ ব্র্যাউন পেপারে নিম্নলিখিত ছক করে বিষয়গুলো লিখতে হবে। লেখার সময় অংশগ্রহণকারীদের দ্বারা লেখানো তালো । ছকের নমুনা নিচে দেয়া হলো:

সাল	দুর্যোগ/আপদের নাম	বড় ধরণের ক্ষয়ক্ষতির বিবরণ

সহায়ক প্রশ্নাবলীঃ সময়রেখা তৈরির কাজ শেষ হলে অংশগ্রহণকারীদের নিচের প্রশ্নগুলো করুন:

১। বিগত বছরগুলোতে ঘটনা/আপদ সংঘটনের সময়, ধরণ, পরিমাণ ইত্যাদিতে কোন পরিবর্তন পরিলক্ষিত হচ্ছে কি না?

২। দুর্যোগের ধারাবাহিকতা/সময়ক্রম ও মাত্রা বা অবস্থ্র দেখে কি মনে হয় ভবিষ্যতে এধরনের ঘটনা আরো ঘটতে পারে? কম? বেশী?

৩। সংকট মোকাবেলার কি কি কৌশল ব্যবহার করা হয়েছিল?

৪। ক্ষয়ক্ষতির ঘরে কি কি খাত সমুহ ক্ষতিগ্রস্থ হয়েছে তা উল্লেখ করতে হবে। কেন ক্ষতিগ্রস্থ হয়েছে বা কারন প্রশ্ন করে নোট গ্রহিতা নোট নিবেন । যা পরবর্তি ধাপে কারণ বিশ্লেষণে ব্যবহার করা হবে।

৫। এক্ষেত্রে এলাকার এমন কি কিছু ছিল যার কারনে ক্ষতির মাত্রা কিছু কম হয়। অথবা মানুষ যার সাহায্যে কিংবা যা ব্যবহার করে রক্ষা পায় কিংবা যারা ঐ সময়ে তাদের সাহায্য করেছিল। এগুলো প্রশ্ন করে নোট গ্রহিতা নোট নিবেন।

০২. মৌসুমী/ ঋতু পঞ্জিকা

লক্ষ্য : 🛛

- বর্তমান ও ১৫-২০ বছর আগের তুলনায় জলবায়ু পরিবর্তনের ফলে দুর্যোগ/আপদের ধরণ, সময় ও মাত্রায় পরিবর্তণ বিশ্লেষণ
- 🛛 আপদ (দুর্যোগ), কৃষি ফসল, আপদ, রোগ-বালাই, খাদ্যাভাব, জীবিকায়ন, ঋণগ্রস্ত হওয়া ইত্যাদির সময়গুলো এবং বিপদাপন্নতার সময়গুলো নির্ণয় করা 🛛
- সময়ের ব্যবধানে (১৫-২০ বছরে) পরিবর্তিত সময় (মাস) চিহ্নিত ও তুলনা করা []
- জীবিকায়ন ও পরিস্থিতি মোকাবেলার কৌশল সম্পর্কে ধারণা লাভ করা
- 🛽 ঋতু পরিবর্তনের সঙ্গে কিভাবে পেশা পরিবর্তন হয় তা বিশ্লেষণ করা 🛽
- পরিকল্পনায় জলবায়ু তথ্যের ব্যবহার মূল্যায়ন

সময়: ৪৫ মিনিট। ৩০ মিনিট ঋতুপঞ্জিকা তৈরিতে এবং ১৫ মিনিট আলোচনার জন্য।

অংশগ্রহণ কারী: ১৫-২০ জন নারী - পুরুষ (গ্রামবাসী, ভিডিসি'র সদস্য ও সংশিষ্ট্র ওয়ার্ড মেম্বরসহ)

প্রক্রিয়া:

১. এই কাজ করতে বড় কাগজে নিচের নমুনা অনুযায়ী ছক করুন। উপরের সারিতে বিষয়ের পর আনুভূমিক (horizontal) বা আড়াআড়িভাবে ১২ মাসের নাম লিখুন।

২. অংশগ্রহণকারীদের বলুন যে, এখন আপনি সারা বছরের ঘটনা বা কার্যাবলী এই ঘরে তুলে ধরে একটি ঋতু পঞ্জিকা তৈরি করতে চান

৩. এবার অংশগ্রহণকারীদের সর্ববামের বিষয় কলামে উল্লস্জ্বাবে (vertical) ঐতিহাসিক সময়রেখা থেকে প্রাপ্ত উল্লেখযোগ্য আপদসমূহ, জীবিকায়ণ, কৃষি, ও অন্যান্য ঘটনা/কার্যাবলি, পরিস্থিতি জানতে চান এবং আলোচনার মাধ্যমে সম্মত হয়ে লিপিবদ্ধ করতে বলুন। প্রতি বিষয়েই বর্তমান ও ১৫-২০ বছর আগের সময়কাল তুলনা করুন।

8. তুলনার ক্ষেত্রে আগের সময়কাল কালো কালি ও বর্তমান সময়কাল লাল কালি ব্যবহার করতে পারেন। মূলকথা হলো বর্তমান ও পূর্বের সময়কালের জন্য ভিন্ন কালি ব্যবহার করতে হবে যার সক্ষেত লিখে হবে। এই তালিকায় নিচের বিষয়গুলো অন্তর্ভুক্ত করা যেতে পারে: ] আপদসমূহ (যেমন: ঘূর্ণিঝড়, খরা ও বন্যা) ও তার সময়

ফসল রোপণ/বপন ও আহরণের সময়সমূহ 🛛 খাদ্য সংকটের সময়সমূহ 🛛 স্থানান্তরের (Migration) সময়সমূহ

৫. মূল ঘটনাবলি তালিকাবদ্ধ হওয়ার পর অংশগ্রহণকারীদের মতামতের ভিত্তিতে সেগুলো ছকে মাসের ঘরে লিখুন। নোট গ্রহণকারী কোন ঘটনার/কাজের সময় নির্ধারণের ক্ষেত্রে অংশগ্রহণকারীরা সমস্যায় পড়লে তা ভালভাবে নোট করবেন।

ঋতু পঞ্জিকার নমুনা:

বিষয়	বৈশা	জ্যৈ	আষা	শ্রীব	ভা	আশ্বি	কার্তি	অঘহায়	পৌ	মা	উাল্পু	বৰ্য
	খ	ষ্ঠ	ঢ়	ণ	দ	ন	ক	ন	ষ	ঘ	ন	ত্র
আপদ:												
বন্যা												
জীবিকায়ন (ফ	সল ,গবা	দিপশু ,ব	কর্মসংস্থান্	v) ওয	ন্যান্য							
বোরো ধান												
আমন												
(রোপা)												
পাট												
সবজী চাষ												
(শীতকালীন												
)												

সহায়ক প্রশ্নাবলী: ঋতু পঞ্জিকা তৈরির কাজ শেষ হলে অংশগ্রহণকারীদের নিচের প্রশঞ্জলো করুন:

- বেশি সংখ্যক মানুষ বছরের কোন সময় কোন জীবিকা অবলম্ব করে বেঁচে থাকে? - সংকট মোকাবেলার বিদ্যমান কৌশলগুলো কি? এগুলো কার্যকর কিনা?

- ঋতু ও ঘটনাবলির (আপদসহ) সময় চক্রে কোন হেরফের হচ্ছে কি না (১৫-২০ বছর আগের তুলনায়)?

- পরিবর্তনশীল ঋতু বা ঘটনাবলির কারণে মানুষের জীবিকা/সংকট মোকাবেলার কৌশলের কোন পরিবর্তন এসেছে কি না? - কোন সময় কোন জীবিকা কৌশল নেওয়া হবে তার সিদ্ধান্ত কিভাবে নেওয়া হয়।

- শষ্য বপণ/ রোপণ সময় এর সাথে এলাকার সংঘটিত দুর্যোগর সময় মিলিয়ে দেখতে হবে।

- এক্ষেত্রে যদি ১৫ দিন আগে কিংবা স্বল্প মেয়াদি কিংবা স্বল্প মেয়াদি জাতের ফসল চাষ করলে ক্ষতি কম হত কিনা প্রশ্ন করে নোট গ্রহিতা নোট নিবেন এলাকার সেই কারন।

যদি কোন পেশার লোকের দুযোর্গের সময় কাজ না থাকলে ঐ সময় অন্য কোন বিকল্প পেশার কাজ করা যায় কিনা তা আলোচনা করা যেতে পারে।এই আলোচনার বিষয়বস্তু নোট গ্রহিতা নোট নিবেন। যা পরবর্তি অভিযোজন পরিকল্পনা করায় ব্যবহার হবে।

(নোট গ্রহণকারী সতর্কতার সঙ্গে আলোচনার মূল বিষয়/পয়েন্টগুলো নোট করবেন)

৩. ঝুঁকি ও সম্পদের মানচিত্র অঙ্কন:

ঝুঁকি ও সম্পদের মানচিত্র গ্রাম, ওয়ার্ড ও ইউনিয়ন পর্যায়ে করা যায়। প্রক্রিয়া মোটামুটি একই রকম । শুধু অংশগ্রহণ কারী আলাদা। ইউনিয়ন পর্যায়ে ইউনিয়ন দুর্যোগ ব্যবস্থাপনা কমিটি এটি করবেন। এখানে গ্রাম পর্যায়ে অনুশীলনের নির্দেশিকা দেয়া হলো।

লক্ষ্য:

১. সম্বব্য ঝুঁকি ও সম্পদ চিহ্নিতকরণ।

২. একটি ঝুঁকি ও সম্পদ মানচিত্রে বিভিন্ন সমস্যা ও ঝুঁকিসমূহ, ঝুঁকিসমূহ হ্রাসকরণে বিভিন্ন সম্পদ সেবা প্রতিষ্ঠান, অবকাঠামো (রাস্ত্র, শিক্ষা প্রতিষ্ঠান চিকিৎসাকেন্দ্র, হাট-বাজার) ইত্যাদি বিভিন্ন প্রতীকের মাধ্যমে উপস্থাপন করা।

৩. গ্রাম বা ইউনিয়নের দুর্যোগ ঝুঁকি হ্রাস কার্যক্রম গ্রহণ ও আপদকালীন পরিকল্পনা প্রণয়ন ও জনসচেতনতা সৃষ্টির উদ্দেশ্যে এই মানচিত্র তৈরি করা হয়। সময়: ২-৩ ঘণ্টা সময় লাগতে পারে।

অংশগ্রহণ কারী: ১৫-২০ জন নারী - পুরুষ (গ্রামবাসী ও সংশিষ্ট্র ওয়ার্ড মেম্বরসহ)

প্রক্রিয়া:

- ১. গ্রামের আগে আঁকা সামাজিক মানচিত্রটি সংগ্রহ করুন।
- ২. সেশন সহায়তা করার জন্য দায়িত্ব ভাগ করে নিতে হবে। বিশেষ করে প্রশাকরা ও নোট নেয়ার দায়িত্ব খুবই গুরুত্বপূর্ণ।
- ৩. এলাকার অনেক অংশগ্রহণকারী বসতে পারে এরূপ খোলামেলা স্থানে বসা ভাল। নারী-পুরুষসহ এলাকার ১২-১৫ জন উপস্থিত হলে উক্ত এলকায় যাওয়ার উদ্দেশ্য এবং সেই দিন কি করবেন তা ব্যাখ্যা করে বলতে হবে।
- 8. সামাজিক মানচিত্রটি খোলা জায়গায় বিছিয়ে দিন। প্রশ্বকরে জানুন এটি তাদের গ্রামের মানচিত্র কিনা? হ্যাঁ হলে এটি ঠিক আছে কিনা? ঠিক থাকলে অনুরূপ আর একটি ম্যাপ অংকন করতে বলুন এবং তাদের আঁকতে সহায়তা করুন। অঙ্কনকারী উত্তর মুখী হয়ে মানচিত্র আঁকলে ভালো হয় কারণ ম্যাপে উত্তর দিক নিদের্শ করতে হয়।
- ৫. ১০/১৫ মিনিটের মধ্যে তারা অত্যন্ত সুন্দরভাবে আঁকতে আরম্ভ করবে। আকার সময় ঝুঁকি ও সম্পদ কোথায় আছে তা নিয়ে আলোচনা করুন। এমনকি মাঝে মাঝে মত দ্বন্দ্ব ও দেখা দিতে পারে। সহায়ক প্রশ্ন: -

ঐতিহাসিক সময় রেখা ও ঋতু পঞ্জিকা থেকে প্রাপ্ত ক্ষয়ক্ষতি, ঝুঁকি পূন ⁄বিপদাপন্ন খাতসমূহ পুনরায় আলোচনা করুণ। এরপর গ্রামের আগে আঁকা সামাজিক মানচিত্রটি দেখিয়ে গ্রামের ঝুঁকি পূর্ন /বিপদাপন্ন এলাকা ও সম্পদসমূহ কি কি তা চিহ্নিত করতে বলুন।

- প্রশা করুন কারা বেশী বিপদাপন্ন? কারা বেশী ক্ষতিগ্রস্থ হয়? কেন? - কাদের ঝুঁকি বেশী? ধনী-গরিব? নারী, পুরুষ, বয়ঙ্ক? নারী ও কিশোরীদের বাড়তি ঝুঁকি/ অসুবিধা কি কি? কেন? তাদের জন্য বাড়তি কি কি ব্যবস্থা নেয়া দরকার ও কেন? নিশ্চয়ই গরিব।

- গরিবের মধ্যে কারা বেশী বিপদাপন্ন? নিশ্চয়ই নারী, শিশু, কিশোরী ও বয়ঙ্করা। কেন?

(হতে পারে - দায়িত্ব বেশী, কাজ বেশী, সম্পদ ব্যাবহার ও আশয়কেন্দে<sub>এ</sub>যাওয়ার সিদ্ধান্ত নিতে পারেনা/স্বাধীনতা নেই, পোশাক, চুল, রান্না-বান্না,ছেলে-মেয়ে পালন, গরু-ছাগল ও অন্যান্য কাজদেখা ইত্যাদি। দুর্যোগের সময় নারীদের ঝুঁকি আরোবেড়ে যায়।) - দুর্যোগের সময় কি করেন? মোকাবেলার উপায়/কোশলসমূহ কি কি? - আবহাওয়া ও দুর্যোগের পূর্বাভাস কি? প্রয়োজন কেন,কোথায় পাওয়া যায়?

- দুর্যোগ কবলিতদের কারা সহযোগিতা করে? প্রতিবেশী, চেয়ারম্যান -মেম্বর, সরকার, সেচ্ছাসেবক, এনজিও? (হতে পারে ত্রাণদেয়, উদ্ধার করে, ভিজিডি, ভিজিএফ ইত্যাদি) -কোন কোন সংস্থা দুর্যোগ, কৃষি, স্বাস্থ্য, নারীর ক্ষমতায়ন, নারী নির্যাতন প্রতিরোধ ইত্যাদি নিয়ে কাজ করে? - নিজেদের কোন পরিকল্পনা দরকার কিনা? কিভাবে করেন

- কি কি করেন? - সঞ্চয়, সম্পদ, সামাজিক ঐক্য/একতা বা সামাজিক বন্ধন ইত্যাদি কিভাবে ভুমিকা রাখে?

- দুর্যোগ মোকাবেলায় কাদের সাথে যোগাযোগ করা দরকার? কেন? কিভাবে যোগাযোগ করেন? ইত্যাদি....

৬. সবাই (নারী, পুরুষ ও কিশোর-কিশোরী) অংশগ্রহণ ও মতামত ব্যক্ত করার সুযোগ করে দিন। অনেক সময় দেখা যায় যে কিশোর-কিশোরীরা তাদের এলাকা সম্পর্কে অনেক ভাল তথ্য প্রদান করে।

৭. গুরুত্বপূর্ণ বিষয়সমূহ (ঝুঁকি ও সম্পদ) চিহ্নিত হলে ভিন্ন ভিন্ন প্রতীকের মাধ্যমে দেখান। ভিন্ন ভিন্ন প্রতীকের জন্য ভিন্ন ভিন্ন রংয়ের কলম ব্যবহার করতে সহায়তা করুন। পুরো প্রক্রিয়াটিকে আনন্দপূর্ণ করে তুলুন।

৮. ঝুঁকির জন্য লাল রং ব্যাবহার করুর।

৯. আশ্রয়কেন্দ্র্বাক্য শিক্ষা প্রতিষ্ঠানের ক্ষেত্রে আশ্য্রকেন্দ্রের প্রতীকে প্রাইমারী হলে চ, হাইস্কুল হলে ঐ এবং কলেজ হলে ঈ লেখা যেতে পারে।

১০. এই কাজটি (ম্যাপ অংকন) করার জন্য পর্যাপ্ত সময় দিন। তাড়াহুড়া করবেন না নিদের্শ দেবেন না। ১১. আপনার চেকলিস্ট এর সাথে মিলিয়ে দেখুন । আর কি কি তথ্যের দরকার আছে এবং সেই অনুযায়ী সহায়তা করুন। ১২. ম্যাপ আঁকতে আঁকতে যে উন্মুক্ত আলোচনা হবে তা নোট নেবেন যা পরবর্তীতে আপনার প্রয়োজন হবে।

১৩. মানচিত্রের অপরিহার্য তথ্য: দেখুন ম্যাপে STAND আছে কিনা অর্থvr Scale, Title, Author, North and Date আছে কিনা। সাধারণত: গ্রামে অনুশীলনের সময় স্কেল মেনে ম্যাপ অংকন করা হয়না; অর্থাৎ ম্যাপের নিচে লিখতে হয় "ম্যাপটি স্কেলে অংকিত নয়"। বিস্তারিতভাবে বললে, ম্যাপের শিরোনাম, তারিখ, ওয়ার্ডের নম্দ্র, ইউনিয়ন,উপজেলা, গ্রামের পূর্ব, পশ্চিম, উত্তর ও দক্ষিণে অবস্থিত গ্রামের নামসমূহ, ব্যবহৃত প্রতীকসমূহের ব্যাখ্যা ইত্যাদি। ম্যাপ এঁকেছে ও আঁকতে যারা সহায়তা করেছে তাদের নাম (যদি সম্ভব হয়)। মনে রাখবেন ম্যাপের উপরিভাগ সবসময় উত্তর দিক।

## মানচিত্রের সর্বনিম্নে থাকবে:

অংকনে: সহযোগিতায়:

দষ্ট্রব্য: ঝুঁকি ও সম্পদের মানচিত্র এ প্রদত্ত বিভিন্ন তথ্য ও পরিসংখ্যানের সাথে আপদকালীন পরিকল্পনার অবশ্যই সামঞ্জস্য থাকতে হবে। ০৪. জেন্ডার বিশ্লেষণঃ

লক্ষ্য: এই অনুশীলনের মাধ্যমে নারী, শিশু, কিশোরী, বৃদ্ধ ও প্রতিবন্ধীদের দুর্যোগ ঝুঁকি, ঝুঁকির কারণসমূহ ও করণীয় নির্ধারণ করা হয়।

সময়: ১ ঘণ্টা সময় লাগতে পারে।

অংশগ্রহণ কারী: ১৫-২০ জন নারী - পুরুষ (গ্রামবাসী ও সংশিষ্ট্র ওয়ার্ড মেম্বরসহ)

প্রক্রিয়া: ১. ঝুঁকি ও সম্পদের মানচিত্র তৈরির সময় দুর্যোগ ও জলবায়ু ঝুঁকি সম্পর্কে যেসকল প্রশ্ন করেছিলেন সেগুলো পুনরায় আলোচনা করুন।

২. প্রয়োজনে নিচের প্রশঞ্জলো আবারো জিজ্জেস করুন যেন বিশেষ করে নারী ও কিশোরীদের এবং বৃদ্ধ ও শিশুদের দুর্যোগ ঝুঁকিসমূহ চিহ্নিত হয়। কেন তদের ঝুঁকি বেশী তা বিশ্লেষণ করুন, তাদের জন্য দুর্যোগের সময় করণীয় কী তা বের করুন। - দুর্যোগের সময় কাদের ঝুঁকি বেশী? ধনী-গরিব? নারী, পুরুষ, বয়ঙ্ক? নারী ও কিশোরীদের বাড়তি ঝুঁকি/ অসুবিধা কি কি? কেন? তাদের জন্য বাড়তি কি কি ব্যবস্থা নেয়া দরকার ও কেন? নিশ্চয়ই গরিব।

- গরিবের মধ্যে কারা বেশী বিপদাপন্ন? নিশ্চয়ই নারী, শিশু, কিশোরী ও বয়ঙ্করা। কেন? (হতে পারে -দায়িত্ব বেশী, কাজ বেশী, সম্পদ ব্যাবহার ও আশয়কেন্দ্রেযাওয়ার সিদ্ধান্ত নিতে পারেনা/স্বাধীনতা নেই, পোশাক, চুল, রান্না-বান্না,ছেলে-মেয়ে পালন, গরু-ছাগল ও অন্যান্য কাজ দেখা ইত্যাদি। আশ্রয়কেন্দে ্রদুর্যোগের সময় নারীদের ঝুঁকি আরোবেড়ে যায় নির্যাতনের শিকার হতে পারে/হয়।)

- দুর্যোগের সময় কি করেন? মোকাবেলার উপায়/কোশলসমূহ কি কি? - আবহাওয়া ও দুর্যোগের পূর্বাভাস কি? প্রয়োজন কেন,কোথায় পাওয়া যায়?

- দুর্যোগ কবলিতদের কারা সহযোগিতা করে? প্রতিবেশী, চেয়ারম্যান -মেম্বর, সরকার, সেচ্ছাসেবক, এনজিও? (হতে পারে ত্রাণদেয়, উদ্ধার করে, ভিজিডি, ভিজিএফ ইত্যাদি)

-কোন কোন সংস্থা দুর্যোগ, কৃষি, স্বাস্থ্য, নারীর ক্ষমতায়ন, নারী নির্যাতন প্রতিরোধ ইত্যাদি নিয়ে কাজ করে?

- নিজেদের কোন পরিকল্পনা দরকার কিনা? কিভাবে করেন - কি কি করেন?

- সঞ্চয়, সম্পদ, সামাজিক ঐক্য/একতা বা সামাজিক বন্ধন ইত্যাদি কিভাবে ভুমিকা রাখে?

- দুর্যোগ মোকাবেলায় কাদের সাথে যোগাযোগ করা দরকার? কেন? কিভাবে যোগাযোগ করেন? ইত্যাদি...

- প্রাপ্ত তথ্যসমূহ নোট রাখুন।

নমুনা ছক নিচেদেয়া হলো:

ক্রমিক নং	নারী ও কিশোরীদের ঝুঁকিসমূহ	ঝুঁকির কারণসমুহ	করণীয় সমুহ

02	নিরাপত্তা/মৃত্যু ঝুঁকি	সাতার না জানা লম্বা কাপড়/লম্বা চুল সিদ্ধান্ত নিতে না পারা	সিদ্ধান্ত গ্রহণে স্বাধীনতা দেয়া (পুরুষদের পক্ষথেকে) - সম্পদ ব্যবহারে, আশ্রয়কেন্দে <sub>এ</sub> যাওয়া এবং অন্যান্য ক্ষেত্রে
०२	নারী নির্যাতন	আশ্রয়কেন্দে ্রনারীদের আলাদা ব্যবস্থা না থাকা	পুরুষদের পক্ষথেকে সহায়তা করা আশ্রয়কেন্দে <sub>এ</sub> নারীদের আলাদা ব্যবস্থা করা
00	অসুস্থ হওয়া	অতিরিক্ত কাজ অসাস্থ্যকর পরিবেশ	পুরুষদের পক্ষথেকে বাড়ির কাজে নারীদেরকে সহায়তা করা

০৫. প্রাপ্ত ফলাফল, ঝুঁকির কারণ বিশ্লেষণ ও অগ্রাধিকারকরণ :

মূলত: প্রতিটি অনুশীলনের শেষে বিশ্লেষণ করা হয়ে থাকে এবং নোট নেয়া হয়। চেকলিস্ট দেখুন কিছু বাদ পড়েছে কিনা।

প্রয়োজনে যা বাদ পড়েছে সেগুলো আবার আলোচনা করুন এবং নিচের নমুনা ছক অনুয়ায়ী লিখুন। সময়: ১ ঘণ্টা সময় লাগবে

জলবায়ু ও দুর্যোগ ঝুঁকির কারণ বিশ্লেষণ এবং অগ্রাধিকারকরণ: (নিম্নে উদাহরণ দেওয়া হলো)

আপদ	ঝুকির	খাতসমুহ	বিপদাপন্নতা/ঝুঁকি	ঝুঁাকহ্রাস	છ	সুপারিশ
/আপদসমুহ	(কি হয়)		(কেন হয়/কারন	অভিযোজন		
				সক্ষমতা (কি	কি	
				সম্পদ আছে)		

নোট: ১. আপদ সমুহ ঐতিহাসিক সময়রেখা থেকে নিতে হবে।

২. ঝুকি পূর্ন খাত সমুহ প্রতিক্রিয়া থেকে ক্ষতিগ্রস্থ খাত সমুহ নিতে হবে

৩. বিপদাপন্নতা কেন /কারন সময় সময় ঐতিহাসিক সময়রেখা থেকে প্রশ্ন করে যা নোট নেওয়া হয়ছে তা উল্লেখ করতে হবে।

 সক্ষমতা, ঐতিহাসিক সময়রেখা থেকে প্রশ্নোত্তর থেকে প্রপ্ত উত্তর গুলো আলোচনা করে লিখতে হবে।

ধাপ-০৬

ঝুঁকি হ্রাস ও আপদকালীন পরিকল্পনা তৈরি

সময়: ৪৫ মিনিট

১। ঝুঁকি হ্রাস ও অভিযোজন পরিকল্পনা: ঝুঁকির কারণ বিশেষ্ণ ণ থেকে প্রাপ্ত সুপারিশের ভিত্তিতে গ্রামের ঝুঁকি হ্রাস পরিকল্পনা করতে হবে। নিচে নমুনাদেয়া হলো:

কাজ	সংখ্যা/	স্থ্ৰন	দায়িত্ব কার	সময়	সহযোগিতা
	পরিমান				
আবহাওয়ার					
পূর্বাভাস বা					
সতর্কসংকেত					
সংগ্ৰহ					
বাড়ি উঁচু করা					
ভিজিডি/ভিজিএফ					
(নিরাপত্তা জাল)					
কর্মসূচিতে অতি					
দরিদ্রদের					
অন্তর্ভূক্ত করণ					
রাস্তা তৈরী/উঁচু					
করণ/বাঁধমেরামত					
করণ					
ধান চাষ					

২। আপদকালীন পরিকল্পনা: আপদকালীন পরিকল্পনা মুলত: আপদ আসার আগেই তৈরী করতে হয় যেন আপদের সময় সেঅনুযায়ী ব্যাবস্থা নেয়া যায়। প্রয়োজনে পরিকল্পনা পরিবর্তন করা প্রয়োজন হতে পারে।

কাজের নাম	স্থ্ন	দায়িত্ব কার (সুনির্দিষ্ট করুন)	সময়/কখন করবেন	কিভাবে করবেন / উপকরণ	কার/কাদের সহযোগিতা লাগবে
উদ্ধার - যাদের উদ্ধার করতে হবে তাদের নাম ১.২.	উত্তর পাড়া থেকে আশ্রয়কেন্দ্রে				
গভর্বতী/বৃদ্ধদের উদ্ধার					
আবহাওয়ার পূর্বাভাস বা সতর্কসংকেত সংগ্রহ শুকনা খাবার সংগ্রহ/মজুত					
আলগা চুলা ও খড়ি/ জ্বালানি					
ঘরবাড়ীমেরামত (ঝড়/বন্যার আগে)					
সম্পদ স্থানান্তর (গরু/ছাগল, গহনাপত্র, দলিলপত্র/বইপত্র)					
সঞ্চয় করা/জমা করা					

গ্রাম ভিত্তিক কর্মপরিকল্পনা থেকে ইউনিয়ন ভিত্তিক একটি পরিকল্পনা প্রনয়ন করেত হবে, যাহা ইউনিয়ন দূর্যোগ ব্যবস্থ্রপনা কমিটিতে আলোচনা করতে হবে এবং গুরুত্বপূর্ণ কাজসমূহ ইউনিয়নের উন্নয়ন পরিকল্পনায় অন্তর্ভূক্ত করার উদ্যোগ নিতে হবে। ইউনিয়ন ভিত্তিক কর্মপরিকল্পনা উপজেলা ও জেলা সমন্বয় সভায় আলোচনা করতে হবে।