

# RESILIENCE

News Bulletin of  
National Resilience Programme (NRP)  
Programming Division Part  
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Programming Division  
Bangladesh Planning Commission

## NRP on COVID 19 response

The COVID-19 pandemic is exacerbating human suffering in different ways. Our health care systems are stretched. People's livelihoods and food security are impacted. Millions of people living just above the poverty line could fall back easily, reversing years of poverty reduction gains. Amidst the pandemic, the world must step up action to address another urgent crisis- Climate Change which is increasing the frequency and severity of extreme weather events. COVID-19 recovery efforts need to be integrated with scaled up climate action to maximize investments towards building greener, cleaner and more resilient societies. The Government of Bangladesh is giving topmost priority to combating the COVID-19 spread and mortality, focusing on the enormous challenges faced by the health sector as well as the immediate economic impacts on the poor and working labour. It is felt that the country needs to advance post-pandemic reform in major economic sectors to benefit their citizens both in the immediate crisis as well as in the long term.

### NRP team held a team meeting online.

Amidst this crisis, on 4th April 2020, an online meeting with all the NRP sub-projects, and technical focal points of UN Partners was held to discuss COVID-19 impact on the project and potential COVID response activities that project can propose to support government. It was agreed that NRP has the strength and should support government responding to COVID-19 by reprogramming NRP to help citizens and

stand by the government in this critical moment. The sub-projects will make necessary adjustments in AWP to incorporate new activities in response to Covid-19, and explore how we can better prepare for future pandemics.

NRP programming Division is actively seeking to integrate the health hazard such as the Covid-19 pandemic in the ongoing study on Risk Profile for Industry Sector and the Formulating DIA Framework and Tool.

This issue highlighting the new activities undertaken on COVID 19 and the events that have taken place from February to June 2020.

**Rapid Survey by NRP - PD Part:** In April 2020 NRP-PD Part carried out a quick survey to assess Behavioral Change of RMG Workers in COVID 19 Context. The Ready Made Garment (RMG) industry, which has been pivotal in the economic growth of Bangladesh, is facing an uncertain future following the COVID-19 pandemic. Against this backdrop, brands and retailers are postponing the delivery of completed garments from the current orders that have already been produced by apparel factories. The health impact of garments workers is also a major issue. The RMG factories abide by the rules of the GoB and BGMEA to prevent the transmission of Covid-19 virus while re-opening the factories, but there are many challenges.

In this survey, NRP attempted to understand the level on awareness among RMG workers on COVID 19 preventive issues and find out level of knowledge, attitude and practice for minimizing risks to COVID 19 virus. A set of questionnaires was prepared with a total of 15 questions related to how health behavior of RMG workers are changing due to Corona crisis. The survey was conducted among 100 RMG workers of several factories of Dhaka division. The survey found remarkable response from the workers to maintain proper hygiene and own cleanliness. The health behavior of RMG workers changed due to this pandemic situation. Now it is a matter of concern whether they can maintain the changed behavior. This will largely depend on the workers' attitude and how the factory management extends cooperation to them. The survey found that most of the workers have knowledge on what to do to prevent infection from Covid-19 virus. Living in congested places and poor financial status pose challenge to maintain the guideline properly.

## Study on Private Sector Resilience Launched in Chittagong

NRP is promoting resilience in business sector and facilitating access to risk information for risk informed development. As part of this initiative, in association with the Chittagong Chamber of Commerce and Industry (CCCI), the NRP launched a study on **Economic Impact of Waterlogging on Local Trade of Chittagong**. The inception workshop

examples from other countries, it was proposed for revitalization and reconnection of water-based transportation in the supply-chain, 'Uploading' the trade and the inventory on to the ecommerce network, integrating and generating urban tourism economy and looking at the bigger picture.



of this study was held in World Trade Center Conference Hall of CCCI on 12 March 2020. In the same venue launching of another ongoing parallel study “**Industry Sector Risk Profile**” was also organized.

Mr. Md. Nurul Amin, Secretary, Planning Division attended the inception workshop as Chief Guest and Mr. Md. Mahbubul Alam, President, CCCI chaired the event. A total of one hundred representatives from business community, public departments research organizations, professional bodies, CSOs, and academia participated in the workshop. Dr. Nurun Nahar, Deputy Chief and Project Director, NRP-Programming Division delivered welcome address and Mr. Arif Abdullah Khan, Program Analyst, UNDP Bangladesh made complimentary remarks.

### Technical sessions

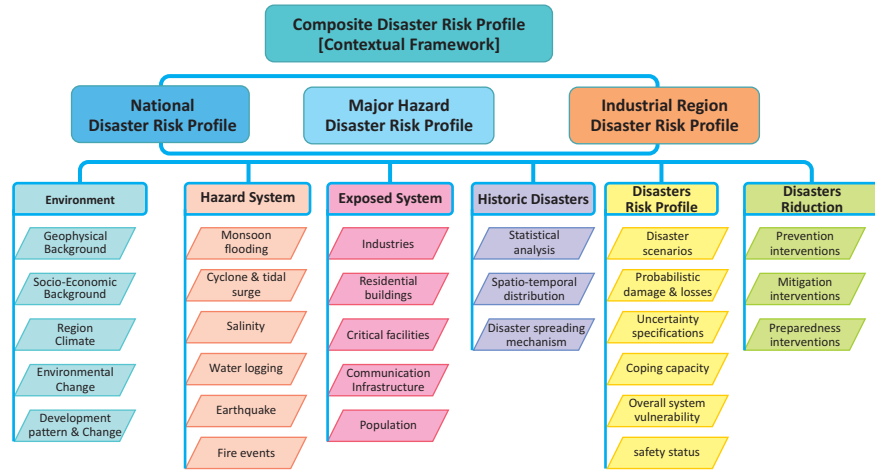
In first technical session, NRP Consultants for waterlogging study portrayed a historical evolution of trade in ancient Bangla and its link with Khatunganj. It was illustrated that the waterlogging problem should be examined from scale and intensity of the problem and investigate causal relationships to identify strategic interventions. While sharing

NRP consultant team for the Waterlogging study composed of three experts: Dr Abu Taib Mohd. Shahjahan, Architect and Urban Planner; Md. Reaz Akter Mullick, expert on Climate Change and Hydrology and Dr A K M Nazrul Islam, Environmental Economist.

In the second technical session, the idea on how a risk profile could be developed for the Industry Sector was shared by Institute of Water Modeling (IWM) contracted for developing the risk profile, which will include risk information from KEPZ ( Karnaphuli Export Processing Zone Areas) and also from a non EPZ area (Kalurghat Industrial Area). This profile will disclose risk information to the investors so that any public or private sector investment plan can incorporate the risk factor issue in the decision-making process for investment planning.

Presenting the methodology and work plan, Dr. Mollah Md Awlad Hossain, Director, IWM and Team Leader, mentioned that, the risk profile will provide a comprehensive view of hazard, risk and uncertainties for selected natural disasters in a changing climate, with projections for the period 2030-2050.

## Composite Disaster Risk Profile



“The risk profile will consider different possible scenarios and provide visual information, essential data on hazards, exposure and risks and estimated impact of disasters on industry sector for policy decision making, development planning and infrastructure investment. The risk modelling/scenario will be undertaken focusing on flood, cyclone, tidal surge, earthquake, salinity, landslides, waterlogging and fire incident”.

### Open discussion

Following the technical presentations, an interactive open discussion took place moderated by Mr. Ali Asgar, Deputy Secretary, CCCI, where representative from public and private sector participated.

Mr. Ahmed Moinuddin, Project Director (Water Logging Project), Chittagong Development Authority, stated that there are 36 canals in the city. His project has digitized 35 canals and one is missing. The city has no masterplan for gas and WASA. He expressed to support IWM for his study. He suggested that in the case of Chattogram hard engineering is required than green engineering. Additionally, he emphasized on changing psychological/behavioral aspect of residents in order to eradicate this problem. He requested elites to support Chittagong Development Authority to address waterlogging in the city.

Mr. Nurul Amin, Executive engineer, WASA, mentioned about salinity problem in water project during summer period. Mr. Nazer Hossain, Vice-president, CAB, requested for immediate

supports for waterlogging problem. He recommended for engagement of all stakeholders for solution of waterlogging problem and urged to respective authority for a holistic approach to address the problem. Architect Ms. Zerina Alam emphasized on effective coordination of service sector and allocation of business of the respective organizations.

Ms. Yasmin Parvin Tibriji, Deputy Director (Local Government) in the Office of Deputy Commissioner, Chattogram mentioned that, the study is a timely action, it will be useful to local administration for relevant decision making.

In closing remarks, Dr. Nurun Nahar, Deputy Chief and Project Director shared the background information of the risk profile and highlighted that the NRP has initiated the study to overcome the information gap on risk issues which will contribute towards risk informed resilient business. ■



## Steps for DIA and Operational Approaches Discussed in 2nd Consultation



used to screen DPPs prepared by different Ministries/Department/Agencies to check whether (a) the proposed development initiatives will be impacted by existing disasters in the development areas, (b) whether the development activities could increase the extent of existing disaster risks in those areas, and (c) generate new potential disaster threat (risks) in the development sites where there was no such disaster in the past. Furthermore, the process will suggest

The second consultation on Disaster Impact Assessment (DIA) was held on 27 February 2020 in NEC Committee Room, Planning Commission with Mr. Md. Khalilur Rahman Khan, Chief, Programming Division in the Chair. Mr. Md. Nurul Amin, Secretary, Planning Division attended the program as Chief Guest and Mr. Md. Mohsin, Director General of the Department of Disaster Management attended as Special Guest. Mr. A K M Mamunur Rashid, Climate Change Specialist, UNDP Bangladesh took part in discussion as guest of honor. Dr. Nurun Nahar, Deputy Chief and Project Director, NRP-PD welcomed the participants and shared background information of DIA.

In working sessions, NRP Consultants Professor Rezaur Rahman and Mr. Syeedul Huq presented steps for DIA and proposed institutional arrangement for DIA in planning process. Prof. Rezaur mentioned six steps for DIA to identify potential impacts on certain development projects. The steps includes - locating project site on hazard map, identify impact of hazards, propose counter measures, assessment of resilience, estimate cost of DRR and reporting residual risk.

Mr. Md. Syeedul Haque, National Consultant: Development Planning Specialist shared a policy review and analysis to operationalize DIA tool and guideline into national development planning process of Bangladesh. He mentioned that, DIA tool will be

appropriate actions or effective countermeasures that would be required at each stage of project form.

### Open discussion

In open discussion, Mr. Mirza Ali Reza, Deputy Secretary, Physical Infrastructure Division suggested that DIA can be an inbuilt part of DPP/TAPP as well as be a part of the feasibility study of the identified project. He asked for establishing a coordination mechanism for operationalizing DIA. He proposed to adopt abroad definition of hazard considering the emergence of new diseases such as corona, Ebola and SARS virus. He also recommended to engage stakeholders in every process of DIA.

Ms. Ummea Saima (Senior Assistant Chief, Industry and Energy Division, Planning Commission stressed on enhancing the capacities of government officials to carry out DIA and feasibility study. She opined that from several reports of the feasibility studies of projects in this sector, it is evident that the feasibility studies are not carried out effectively and has quality issues, which impact negatively on the formulation of a DPP.

Mr. Md. Ahashan Habib (Lead auditor & Director, KGS) expressed deep appreciation for the initiative to develop DIA tool and guideline. He pointed out that DIA needs standardization, if it is needed to mainstream into international organizations, particularly for private sector. He mentioned that already there are few mechanisms, such as ISO

certification for risk assessment. So, DIA can aligned in those ISO certifications for gaining acceptability to national and international investors. He also suggested for accreditation mechanism for DIA.

Mr. Abu Sayed Md. Kamruzzaman (PD, Establishment of National Academy for Development Administration (ENADA) project) pointed out that there is no content (or specific format) for feasibility study. NEC/ECNEC Wing of the Planning Division is working on developing a 'format' for feasibility study where DIA can be considered for assessing the impact of disaster and climate change. Regarding DIA tool, he suggested that at the initial level, checklist will suffice. He opined that Logical Framework and Ecological Critical Areas (ECA) can be considered for DIA and advocated for capacity building on DPP preparation.

Mr. Md. Mohsin, DG, DDM appreciated the deep engagement of relevant stakeholders in DIA tool formulation process and expressed satisfaction with the progress of work by the consultants. He contended that DIA does not have any conflict with EIA, rather they both will complement each other. He requested the consultants to work for piloting the DIA framework within the given timeframe with LGED following the suggestions made in the consultation. He advised to finalize the DIA tool and guideline so that the draft outline can be shared in the upcoming

meeting of the National Disaster Management Council (NDMC) headed by the Honourable Prime Minister.

Mr. A. K. M. Mamunur Rashid stated that in the DIA process we should consider all the elements of risk for disaster and climate change risk assessment. He added that the proposed DIA only focused on redundancy and robustness of resilience components, but it should take care of other components as well. Considering his previous work experiences with Planning Commission, he said that capacity is not enough for doing feasibility study and it requires incentives. He mentioned that good development can also reduce disaster risks. He gave example of Delta Plan to illustrate about the types of development required for reducing disaster risks.

In the address of Chief Guest, Mr. Md. Nurul Amin, Secretary, Planning Division and Member, Programming Division, emphasized on incorporating disaster, women & children and environmental issues into project feasibility study. He shared his personal work experiences in field administration and explained the significance of DRR integration into development. He thanked participants for their interactive role in the workshop. Finally, he hoped for developing an effective tool that could make our public investment sustainable and disaster resilient. ■

## Community Resilience in Hotspots

*(NRP-PD conducted a study in six hotspots as mentioned in Delta Plan and captures DRR needs in the community. A synopsis of the study presented here. Full report is available in NRP-PD. The draft report was validated in an interministerial workshop held on 30 January 2020.)*

Community resilience is a prime need for sustainable development. Different parts of Bangladesh is frequently affected by different disasters, affecting local people in various ways. Bangladesh Delta Plan 2100 (BDP 2100) has divided Bangladesh into six hotspots: (i) Coastal Zone; (ii) Barind and Drought Prone Areas ; (iii) Haor and Flash Flood Areas; (iv) Chittagong Hill Tracts (CHT); (v) River Systems and Estuaries; and (vi) Urban Areas.

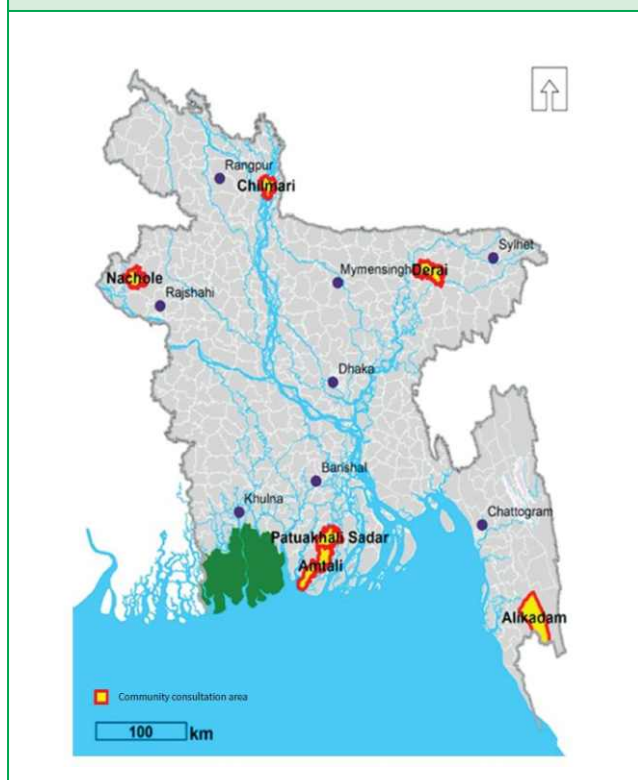
The people in the hotspots have diverse experience of facing disaster risks and it is important to capture community experience and learning on Disaster Risk Reduction (DRR). The 7th Five Year Plan mentioned key activities of Disaster Management and result indicators on some specific areas and the preparation of the 8th five Years Plan is under process. Understanding the community needs on DRR in these hotspots is important and need to be

addressed in the 8th Five Year Plan (8th FYP). Reflecting grassroots voice on resilience in the 8th Five Year Plan is crucial for placing the issues in the ADP and subsequent budget and allocation. This report explores resilience gaps of local people in the six hotspots identified in the Bangladesh Delta Plan 2100 and findings to relevant agencies to include the explored community voice in the upcoming 8th Five Year Plan.

Resilience needs in different parts of the country have been explored through literature review, community consultation, case studies and field observation. Community consultations have been conducted in each of these six hotspots to sense their own thoughts on regional resilience. Representative field visits were undertaken in undertaken in six upazilas as shown in the map.

Participants of the consultations covered wide range of people are i) Community, ii) Public Representatives and iii) Representatives of different offices of government. Community participants comprised a wide range of people including but not limited to freedom fighters, local elites, women, teachers, students, politicians, journalists,

## Resilience study areas



entrepreneurs, development activists, religious leaders, indigenous community, etc. Public representatives are Upazila Chairmen, Mayors, Ward Councilors, Upazila Vice-Chairmen, Union Parishad (UP) Chairmen, UP members, and Karbaris in the paras of CHT. Government officers or representatives from government offices includes respective UNO and officers or representatives of different offices at upazila or union level. Among all participants, Government Officers, Community and Public Representatives formed 39%, 34% and 27%, respectively. National and hotspot based recommendations have been indicated by respective community.

It was identified that resilience activities could be grouped under two main themes: i) Nationwide and ii) Hotspot-based. Keeping in mind the problems in Six Hotspots, ten Nationwide Resilience Tasks (NRT) have been identified by the community, which includes - **Upazila Based Resilience Programme, Resilient Housing and Emergency Shelter Reconstruction, Bank Protection, Drinking Water Availability, Excavation of Rivers and Canals, Rehabilitation Program for Disaster Affected People, Agro-Based Industry in Rural and Sub-Urban Areas, Food Storage Facilities, Electricity Facilities in the Rural Areas and Plantation.**

Hotspot based community resilience issues and concerns include but are not limited to:

**Coastal Zone:** Cyclone Shelter Centre (CSC) construction; Safer housing for coastal and flood affected people; and Embankment building along eroding riverbank and flood vulnerable areas.

**Barind and Drought Prone Areas:** Groundwater Recharging; and introducing less water consuming variety of crop.

**Haor and Flash Flood Areas:** Addressing Thunderstorms and Lightning; Flashflood Preparedness Volunteers (FfPV); and Water tolerant variety (submergible variety).

**Chittagong Hill Tracts (CHT):** Slope Maintaining Programmes; Landslide Preparedness Volunteers (LPV); Addressing Thunderstorms and Lightning; and Special treatment for snake-bite Patient.

**River Systems and Estuaries:** Flood Shelter Centre (FSC) construction; Embankment along eroding riverbank and flood vulnerable areas; expansion of the coverage of Social Safety Net Program (SSNP); and Flood Preparedness Volunteers (FPV).

**Urban Areas:** Water logging management; Drinking water availability; and Building and maintaining Critical Infrastructures. ■



## Upcoming events

in August and September



- DRIP Inception Workshop
- DIA Tools Sharing
- Communication Training
- Sharing RMG Supply Chain Research Findings
- Sharing on waterlogging study report
- DIA Training

# NRP key Joint Initiatives among the sub-projects

## Updates of the Joint initiatives

Activity	Lead	Role of sub project
Monitoring & Implementation Sendai	DDM	<ul style="list-style-type: none"> <li>Programming Division: Developing disaster resilience indicators for 8<sup>th</sup> FYP in line with SFDRR.</li> <li>DDM: Drafting monitoring &amp; reporting framework of SFDRR, working on the revision of D-Form</li> <li>LGED: Participation in workshops, seminars; inclusion as pilot agency in Monitoring &amp; Implementation of Sendai Framework</li> <li>DWA: Consultation with 56 women led CSO on SENDAI monitoring framework and identify their role in the process</li> </ul>
Earthquake	DDM	<ul style="list-style-type: none"> <li>Programming Division: Technical inputs and learning from DIA.</li> <li>DDM: Assessment on mega disaster response capacity and facilitating NPDRR</li> <li>LGED: Through providing technical opinion and inputs available within LGED</li> <li>DWA: Provide technical support with regard to gender in the process.</li> </ul>
Sex, Age, Disability Disaggregated Data (SADDD)	DWA	<ul style="list-style-type: none"> <li>Programming Division: Data inputs for DIA tools and guideline and risk information platform.</li> <li>DDM: Revise the D-Form</li> <li>LGED: keep the communication within the Gender Marker to ensure alignment</li> <li>DWA: SADDD protocol and guideline finalized; ToT for BBS officials and field level training for local statistical committee pending due to COVID situation.</li> </ul>
Flood Preparedness Programme (FPP)	DDM	<ul style="list-style-type: none"> <li>Programming Division: Providing technical inputs from Planning Commission perspective.</li> <li>DDM: Piloting to develop a model on FPP for institutionalization</li> <li>LGED: Through providing technical opinion and inputs available within LGED</li> <li>DWA: Capacity enhancement of FPP volunteers on inclusiveness and gender issues (Coordinate with DDM Part); training content developed</li> </ul>
Mainstreaming Gender Marker within Infrastructure	LGED	<ul style="list-style-type: none"> <li>Programming Division: Mainstream into DPP and Public Investment Management project.</li> <li>DDM: Assist in the development of gender marker</li> <li>LGED: Develop and pilot a Gender Marker within LGED</li> <li>DWA: Supporting LGED to develop gender marker for gender responsive resilient infrastructure.</li> </ul>
Gender Responsive Guidelines for DPP	DWA	<ul style="list-style-type: none"> <li>Programming Division: Developing tool and guidelines.</li> <li>DDM: Knowledge sharing with MoDMR</li> <li>LGED: Participation in workshops, seminars; inclusion as pilot agency in developing gender guidelines</li> <li>DWA: Supporting MoWCA and Planning Commission to revise/update gender guidelines for DPPs on going and KII delayed due to COVID situation.</li> </ul>

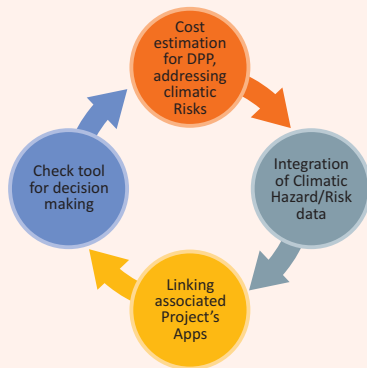
DDM - Department of Disaster Management  
DWA - Department of Women's Affairs  
LGED - Local Government Engineering Department

Source: PCMT presentation in 7th JPIC Meeting

Bangladesh stands at a vital crossroads in its development path. It is about to lift itself from the list of least developed nations, its recent progresses on a number of indicators have surpassed its neighboring developing nations in South Asia (Social Progress Imperative, 2014). As Bangladesh is one of the country most vulnerable to climate change, as well as disaster prone, to keep its pace in achieving sustainable development goals, the country needs to walk through a resilient path that can be achieved through sustainable public and private investment that are risk informed. Natural climatic hazards like flood, cyclone, river bank erosion and geo-physical hazards like earthquake, landslide have a high human cost in terms of casualties that affect the economy. NRP - Programming Division is establishing Digital Risk Information Platform (DRIP) and developing disaster impact assessment tool for disaster and climate change risk screening of projects in Annual Development Programme.

The specific objectives of establishing the Digital Risk Information Platform (DRIP) are:

- Integrate disaster and climate risk information into development projects, plans, programs and policies to ensure risk-informed public investment;
- Facilitate access to risk information from a common platform;
- Assisting the Planning Officials in different ministries with available risk information in different sectors.



A background study has been conducted for DRIP to study the existing datasets of the country related to natural disaster/risk and finding out the rationality of establishing the digital risk information platform. After reviewing the existing datasets (climate and disaster related) of the country and also studying relevant projects, some overall findings have been accumulated in this study:

- I. Most of the web based datasets are merely storing data from various source. The file type are not similar and scattered. Regarding Geo-database or Shapefile, no specific projection

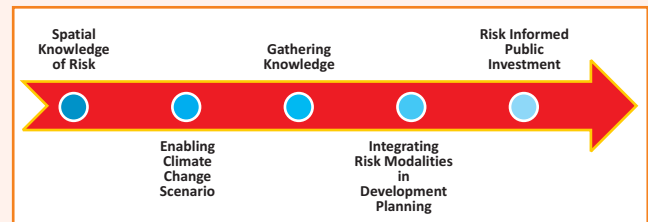
**Risk Informed Public Investment**

- Cost estimation while DPP formulation considering climatic hazard/Risk
- Integration of climatic hazard data from different Project/ organization/agency
- Linking with related project/Web based apps to establish an integrated supporting tool in future.

system is followed. Cluster wise data storing is not seen.

- II. There are few Project Risk Screening/ Project Assessment global tools but none of them are free of cost. The risk screening tools are sometimes complicated to use and may take long time to assess.
- III. Integration of climatic hazard data from different Project/ organization/agency into a single platform is not established yet.
- IV. A common platform needs to be established to assess the impact of climatic risk in development project all over the country.

With the increasing frequency of disastrous events, their effects on development are becoming increasingly evident. Thus, Mainstreaming risk reduction into the development process is one of the priority initiatives of DRIP. The proposed DRIP will link DRR and CCA into development planning in the process below:



The DRIP proposes the identification of impact areas from spatial coincidence of the hazard with the exposure layers. The scope is to anticipate the areas expected to suffer significant impact from hazards. By integrating hazard data and mapping areas of potential impact, it will provide means that serve as a starting point for prioritized local case studies on impacts to natural hazards, as well as the basis for the development of mitigation strategies. Data and maps generated from the completed ADB assisted study\* will be incorporated in the system. The DRIP will help Planning Officials in ministries and implementing agencies in advance identification of climatic risks as well as support information flow for the DIA framework of future public investment in Bangladesh. ■

(contributor- **Abid Kamal**, Researcher, NRP)

\* ADB Regional TA 8572: Action on climate change in South Asia-Establishing a Climate Risk Screening System for Mainstreaming Climate Change Adaptation into National Development Budgeting Activities in Bangladesh