

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পানি সম্পদ মন্ত্রণালয়
পরিকল্পনা-৩ শাখা
বাংলাদেশ সচিবালয়, ঢাকা
www.mowr.gov.bd

স্মারক নম্বর: ৪২.০০.০০০০.০৪১.১৬.০০৩.১৯.৯০

তারিখ: ৫ অগ্রহায়ণ ১৪৩১ বঙ্গাব্দ
২০ নভেম্বর ২০২৪ খ্রিস্টাব্দ

বিষয়: সরকারি খাতে উন্নয়ন প্রকল্প প্রণয়ন, প্রক্রিয়াকরণ, অনুমোদন ও সংশোধন নির্দেশিকায় Green and Climate Resilient Development (GCRD) তথা, ‘সবুজ ও জলবায়ু সহিষ্ণু উন্নয়ন’ বিষয় অন্তর্ভুক্তি।

সূত্র: পরিকল্পনা বিভাগের পত্র নম্বর: ২০.০০.০০০০.৪০৪.১৪.০৬১.২০২০ (অংশ-২)/৬৩ তারিখ: ১৩ ফেব্রুয়ারি ২০২৩।

উপর্যুক্ত বিষয় ও সূত্রের প্রেক্ষিতে পরিকল্পনা বিভাগের এনইসি-একনেক ও সমন্বয় অনুবিভাগ কর্তৃক জারিকৃত পরিপত্রের ছায়ালিপি পরবর্তী প্রয়োজনীয় ব্যবস্থা গ্রহণের জন্য নির্দেশক্রমে এতদসঙ্গে প্রেরণ করা হলো।

সংযুক্তি: পরিকল্পনা বিভাগের পত্রের ছায়ালিপি।

সকল সংযুক্তিসমূহ:

(১) পরিকল্পনা বিভাগের পত্রের ছায়ালিপি

২০-১১-২০২৪

আশেকুল হক

সিনিয়র সহকারী সচিব

২২৩৩৫৭২৩৪

plan3.mowr@gmail.com

বিতরণ (জ্যেষ্ঠতার ক্রমানুসারে নয়):

- ১। মহাপরিচালক (অতিরিক্ত দায়িত্ব), মহাপরিচালক-এর দপ্তর, বাংলাদেশ পানি উন্নয়ন বোর্ড।
- ২। মহাপরিচালক, মহাপরিচালক এর দপ্তর, বাংলাদেশ হাওর ও জলাভূমি উন্নয়ন অধিদপ্তর।
- ৩। মহাপরিচালক (অতিরিক্ত দায়িত্ব), মহাপরিচালকের দপ্তর, পানি সম্পদ পরিকল্পনা সংস্থা।
- ৪। মহাপরিচালক, মহাপরিচালক এর দপ্তর, নদী গবেষণা ইনস্টিটিউট।
- ৫। উপসচিব, পরিকল্পনা-৫ শাখা, পানি সম্পদ মন্ত্রণালয়।
- ৬। উপসচিব, পরিকল্পনা-১ শাখা, পানি সম্পদ মন্ত্রণালয়।
- ৭। সিনিয়র সহকারী সচিব, পরিকল্পনা-৪ শাখা, পানি সম্পদ মন্ত্রণালয়।
- ৮। সিনিয়র সহকারী সচিব, পরিকল্পনা-২ শাখা, পানি সম্পদ মন্ত্রণালয়।
- ৯। সিনিয়র সহকারী সচিব, পরিকল্পনা-৬ শাখা, পানি সম্পদ মন্ত্রণালয়।

স্মারক নম্বর: ৪২.০০.০০০০.০৪১.১৬.০০৩.১৯.৯০/১(২)

তারিখ: ৫ অগ্রহায়ণ ১৪৩১ বঙ্গাব্দ
২০ নভেম্বর ২০২৪ খ্রিস্টাব্দ

অবগতি/অবগতি ও প্রয়োজনীয় ব্যবস্থা গ্রহণের জন্য অনুলিপি প্রেরণ করা হলো (জ্যেষ্ঠতার ক্রমানুসারে নয়):

- ১। সচিবের একান্ত সচিব (অতিরিক্ত দায়িত্ব), সচিবের দপ্তর, পানি সম্পদ মন্ত্রণালয়।
- ২। অতিরিক্ত সচিব (পরিকল্পনা) এর ব্যক্তিগত কর্মকর্তা, পরিকল্পনা অনুবিভাগ, পানি সম্পদ মন্ত্রণালয়।



২০-১১-২০২৪

আশেকুল হক
সিনিয়র সহকারী সচিব

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পরিকল্পনা বিভাগ
এনইসি-একনেক ও সমন্বয় অনুবিভাগ

নং-২০.০০.০০০০.৪০৪.১৪.০৬১.২০২০(অংশ-২)/৬৩

তারিখ: ৩০ মাঘ ১৪২৯
১৩ ফেব্রুয়ারি ২০২৩

পরিপত্র


বিষয়: সরকারি খাতে উন্নয়ন প্রকল্প প্রণয়ন, প্রক্রিয়াকরণ, অনুমোদন ও সংশোধন নির্দেশিকায় Green and Climate Resilient Development (GCRD) তথা, 'সবুজ ও জলবায়ু সহিষ্ণু উন্নয়ন' বিষয় অন্তর্ভুক্তি

পরিকল্পনা বিভাগ হতে ১২ জুন ২০২২ তারিখে ২০.০০.০০০০.৪০৪.১৪.০৬১.২০২০(অংশ-১)/১৩৩ সংখ্যক স্মারকের মাধ্যমে "সরকারি খাতে উন্নয়ন প্রকল্প প্রণয়ন, প্রক্রিয়াকরণ, অনুমোদন ও সংশোধন নির্দেশিকা" শিরোনামে একটি পরিপত্র জারি করা হয়েছে। সরকারি বিনিয়োগকে অধিকতর কার্যকর, টেকসই ও ফলপ্রসূ করার নিমিত্ত উন্নয়ন প্রকল্প সনাক্তকরণ, প্রণয়ন, প্রক্রিয়াকরণ ও বাস্তবায়নের ক্ষেত্রে Green and Climate Resilient Development (GCRD) তথা, 'সবুজ ও জলবায়ু সহিষ্ণু উন্নয়ন' বিষয়কে অগ্রাধিকার প্রদানের লক্ষ্যে উক্ত পরিপত্রের ১.১.১১ ও ২১.৩ নং অনুচ্ছেদে যথাক্রমে ১.১১.১(ক) ও ২১.৩(ক) হিসেবে নিম্নবর্ণিত দু'টি উপ-অনুচ্ছেদ সংযুক্ত হবে:

১.১.১১(ক) বিনিয়োগ প্রকল্প চিহ্নিতকরণ, প্রণয়ন ও প্রক্রিয়াকরণের ক্ষেত্রে 'সবুজ ও জলবায়ু সহিষ্ণু উন্নয়ন (GCRD)' বিষয়টি উন্নয়ন প্রকল্প প্রস্তাবের (DPP) ২৫.৩ নং অনুচ্ছেদে একটি উপ-অনুচ্ছেদ [২৫.৩(ক)] হিসেবে সন্নিবেশ করতে হবে। এক্ষেত্রে সবুজ ও জলবায়ু সহিষ্ণু উন্নয়ন ধারণা অনুযায়ী সেক্টরভিত্তিক বর্ণনা ও বিশ্লেষণ ডিপিপিতে সংযুক্ত করতে হবে।

২১.৩(ক) বিনিয়োগ প্রকল্প চিহ্নিতকরণ, প্রণয়ন ও প্রক্রিয়াকরণের ক্ষেত্রে উপ-অনুচ্ছেদ ১.১.১১(ক)-এ উল্লিখিত নির্দেশনা অনুযায়ী 'সবুজ ও জলবায়ু সহিষ্ণু উন্নয়ন (GCRD)' বিষয়টি ডিপিপি ২৫.৩ নং অনুচ্ছেদের ২৫.৩(ক) উপ-অনুচ্ছেদে সংযুক্ত করতে হবে।

২. উন্নয়ন প্রকল্প প্রস্তাবের (ডিপিপি) ২৫.৩(ক) উপ-অনুচ্ছেদে 'সবুজ ও জলবায়ু সহিষ্ণু উন্নয়নে (GCRD) প্রস্তাবিত প্রকল্পের অবদান' বিষয়ক বর্ণনা, বিশ্লেষণ এবং সম্ভাব্য কার্যাবলী নির্ধারণের সুবিধার্থে সহায়ক হিসেবে জাতীয় পরিকল্পনা দলিলসমূহের ভিত্তিতে সেক্টরওয়ারি একটি তালিকা (পরিশিষ্ট 'ক') সংযুক্ত হল।


সত্যজিত কমরকার
সচিব
পরিকল্পনা বিভাগ

বিতরণ:

১. মন্ত্রিপরিষদ সচিব, মন্ত্রিপরিষদ বিভাগ, বাংলাদেশ সচিবালয়, ঢাকা।
২. প্রধানমন্ত্রীর মুখ্য সচিব, প্রধানমন্ত্রীর কার্যালয়, তেজগাঁও, ঢাকা।
৩. সিনিয়র সচিব/সচিব (সকল), -----
৪. সদস্য (সকল), ----- বিভাগ, পরিকল্পনা কমিশন।

সদয় অবগতির জন্য অনুলিপি:

১. মাননীয় প্রধানমন্ত্রীর একান্ত সচিব ১, প্রধানমন্ত্রীর কার্যালয়, তেজগাঁও, ঢাকা।
২. মাননীয় মন্ত্রীর একান্ত সচিব, পরিকল্পনা মন্ত্রণালয়, শেরেবাংলা নগর, ঢাকা।
৩. মাননীয় প্রতিমন্ত্রীর একান্ত সচিব, পরিকল্পনা মন্ত্রণালয়, শেরেবাংলা নগর, ঢাকা।

Guideline for Green and Climate Resilience (GCR) in Public Investment Projects

The Green and Climate Resilience (GCR) in public investment will aim at an affordable, realistic, and adaptable framework to make quantifiable progress in targeted sectors to simultaneously ensure sustainability, efficiency, and resilience throughout the development pathway. Additionally, the GCR solutions will ensure that nobody is left behind, creating opportunities to reduce disparities and help excluded groups realize a fair share of benefits. It implies that natural resources and environmental services can fulfill their full economic potential in a sustainable way. The table below further elaborates on the fundamental pillars of the GCR.

Green	Sustainability	Environmental, socioeconomic, and financial sustainability hinge on promoting development through initiatives that eliminate/reduce the adverse effects of activities that threaten growth. This also implies that countries must become better stewards of their renewable and non-renewable resources to prevent overuse, pollution, and irreversible climate consequences.
	Efficiency	To spend better and use better, there is a need to maximize output (in terms of returns to society) per unit of cost, including those that are financial, social, and environmental. Better spending can deliver the infrastructure and services that countries need, creating more competitive cities. The productive use of agricultural lands, fisheries, forests, and other natural resources are key to achieving prosperity and improving lives.
Climate resilience		Public and private sectors need to prepare for, mitigate, and adapt to a wide range of risks and uncertainties associated with climate change. Resilience allows countries to continue to grow instead of diverting resources to multiple recovery efforts.

GCR Activities for Annual Development Programme (ADP) Sectors

The 8th Five Year Plan of Bangladesh paves the way for a green and climate resilient development path by mentioning that environment and climate change considerations will be integrated in the growth strategy, as proposed under Perspective Plan 2021-2041. In order to achieve the GCR objectives of the Government of the People's Republic of Bangladesh, the following prospective activities have been compiled for the different ADP sectors in accordance with the objectives of the relevant policies/strategies and national plans. These are the Bangladesh Delta Plan 2100, Perspective Plan 2021-2041, 8th Five Year Plan (July 2020 - June 2025), Mujib Climate Prosperity Plan, Bangladesh Climate Change Strategy and Action Plan 2009, Nationally Determined Contributions 2021 (updated), National Adaptation Plan 2023-2050, and Climate Fiscal Framework 2020.

SECTOR 1 (S1): General Public Services

GCR in National Policy Frameworks: Climate inclusive finance; Fiscal framework for environment, climate change and urban governance; Mainstreaming of GCRD; Development of GCRD responsive policy, plan, and institutions.

Prospective GCR Priority Actions**Technical Assistance and Policy Reforms:**

- Develop a robust financial strategy for environment and climate change (policies should include both public & private sectors to increase access to global funds) *[in association with S9]*
- Better fiscal policies for climate change adaptation and mitigation, pollution control, clean energy, and energy efficiency (removal/repurposing of fuel and agriculture subsidies, green tax on fossil fuel consumption, taxation for air and water pollution, incentives for waste management, industrial effluents management and other pollution control, incentives for green technology, GCR infrastructure and energy efficient products/processes) *[in association with all sectors]*
- Mobilization of resources from financial markets for climate finance (green bond, blended finance, crowdfunding, and emission trading) *[involving S4]*
- Climate responsive financial sector policies (lending policies, insurance policy, and green banking)
- Climate inclusive planning and budgeting *[in association with S9]*
- Promote green accounting and green budgeting *[in association with S9]*
- Local climate fiscal framework (climate finance tracking for planning and budgeting of LGIs), complemented by carbon marketplace for generating additional resources for locally-lead adaptation and loss & damage by 2030 *[in association with S8 and S9]*
- Development of a national policy and strategy framework for risk transfer system (e.g., climate adaptive insurance mechanism with provision of premium subsidies and capitalization support for agricultural production and protection of critical infrastructure) *[involving S4, S5 & S7]*
- Introduction of sustainable procurement (mainstreaming environmental, social and climate dimensions into public procurement process) *[for all other sectors]*
- Reforms of urban finances (tax & fees, government transfers, and borrowings) *[involving S8 & S10]*
- Install intelligent software platforms for utilities, automation components (hard or soft), remote monitoring, energy management systems, or other essential distribution infrastructure upgrades *[involving all other sectors, in association with S14]*
- Develop and update of policies, guidelines, and institutional capacities across relevant sectors for promoting the blue economy *[in association with S9]*
- Develop a macro-econometric model to include the climate dimension in macroeconomic indicators, revision of budget circular of climate relevant ministries, inclusion of climate dimension in MBFs

SECTOR 2 (S2): Defence

N/A

N/A

SECTOR 3 (S3): Public Order and Safety

N/A

N/A

Harkin

Ej

SECTOR 4 (S4): Industrial and Economic Services

GCR in National Policy Frameworks: Green industries, energy efficiency, and green financial services

Prospective GCR Priority Actions

Priority investments :

- Energy efficiency, clean production and modernization measures installed in manufacturing, industrial and other built environment and across industry sub-sectors (for example, brick kilns, fertilizer and garments) *[involving S1, S6 and S9]*
- Renewable energy installations available to manufacturing and industrial areas to improve resilience and reduce emissions *[involving S1 and S6]*
- Improving capacity of 50-100% of CMSMEs (especially for women owned CMSMEs) in climate financial risk and opportunity by 2030 *[involving S1]*
- 50%-100% greening and electrification of the transport/logistics sector and strategic export industries by 2030 *[involving S6 & S7]*

Technical Assistance and Policy Reforms

- Establish Green Exports Programme (export diversification through harnessing green opportunities including green logistics, green power, and energy efficiency) *[in association with S6]*
- Technical assistance for LEED (Low Energy Electron Diffraction) certification of 3,500 factories including 100% of strategic export industries by 2030 *[in association with S6]*
- Policy reforms for enhanced use of energy efficient appliances in households, water and wastewater management systems and commercial buildings *[in association with S6 and S10]*

SECTOR 5 (S5): Agriculture

GCR in National Policy Frameworks: Climate resilient agriculture (livestock and fisheries), low carbon farming practices and nature-based solutions (NBS)

Prospective GCR Priority Actions

Priority investments:

- Reclamation and development of lands for the expansion of afforestation, agriculture, shrimp cultivation, and settlements
- Deforestation reduction, reforestation/ afforestation, forest restoration and increase tree cover *[in association with S9]*
- Extension of climate-smart technologies and practices for increasing irrigation, improving water use efficiency, and promoting climate resilient, pest and disease resistant crops. *[involving S1, S4 and S14]*
- Crop diversification/intensification and increased efficiency of fertilizer use for natural resources optimization, reduced climate stress and enhanced production *[involving S9]*
- Extension of climate resilient technology for combating climate-related stresses in aquaculture *[involving S9]*
- Validation and extension of indigenous knowledge-based adaptation techniques to combat climatic effects on fisheries
- Enhance agricultural productivity for climate resilient, environmentally friendly, context specific and culturally sensitive food security options and water security through protection or sustainable conservation of land, water, and biodiversity in Char, Haor and hill tract

Technical Assistance and Policy Reforms:

- Repurposing agriculture support programmes (fertilizer, water, energy subsidies)
- Incentives of solar power use in irrigation *[in association with S1 and S6]*
- Formulation of necessary laws and acts for spatial planning, land zoning, and land resource management *[involving S1, S8 & S10]*

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- Introduction and up-scaling of innovative and indigenous agriculture
- Monitoring, evaluation, and enforcement to ensure biodiversity conservation and protection of natural habitats *[in association with S1 & S9]*

SECTOR 6 (S6): Power and Energy

GCR in National Policy Frameworks: Low carbon development pathway, energy efficiency, renewable energy

Prospective GCR Priority Actions

Priority investments:

- Establish Green Exports Programme (export diversification through harnessing green opportunities including green logistics, green power, and energy efficiency) *[in association with S4]*. Energy efficiency measures installed in manufacturing, industrial and other built environment and across industry sub-sectors *[in association with S4]*
- Renewable energy installations available to manufacturing and industrial areas to improve resilience- *[in association with S4]*
- LEED certification of 3,500 factories including 100% of strategic export industries by 2030 *[in association with S4]*
- 50% -100% greening and electrification of the transport/logistics sector and strategic export industries by 2030 *[in association with S4 & S7]*
- Target for at least 30% energy production from renewable sources by 2041 in the context of being a prosperous country (including from offshore, tidal, and waste to energy)
- Establishment of 4GW Mujib Bongoposagor (Bay of Bengal) Independence Giga array (offshore wind) with parallel planning of a mangrove greenbelt by 2030
- Maximization of rooftop solar installation (industrial zones, industrial, commercial and public buildings, e.g., all railway platform to include solar power and other public places to maximize the use of solar power by 2025)
- Transmission and distribution extension and upgrades for fortifying grid infrastructure (e.g., substations, transformers, high-voltage lines, medium or low voltage lines, metering, and associated components)
- Implementation of renewable energy projects; enhance efficiency of existing power plants; and use of improved technology for power generation
- Improvement of fuel efficiency for transport sub-sector; and increase use of less emission-based transport system and improve Inland Water Transport System *[in association with S7]*
- Enhanced use of energy-efficient appliances in household (residential), water and wastewater systems and commercial buildings *[involving S4 & S10]*
- Implement Montreal Protocol targets for phasing down fluorinated gases (F – gases) *[in association with S1 & S9]*

Technical Assistance and Policy Reforms:

- Develop long term renewable energy policy as well as strategies and formulate a master plan for at least 50 years to harness the potential of renewable energy resources in the country involving public and private sector investments (including offshore, tidal and waste to energy)
- Devise innovative financing packages for grant funding and low interest financing to address affordability for both grid and off-grid renewable energy projects *[involving S1]*
- Integration of energy sector consideration, particularly renewable energy, in necessary laws and acts for spatial planning, Land Zoning, and land resource management
- Promote private investment in renewable energy and adoption of clean energy technology at the household level *[involving S1, S4 & S10]*
- Proper energy pricing policy for ensuring efficient use of critical resources, environmental protection, and financially sustainable power sector *[in association with S1 and S9]*

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<ul style="list-style-type: none"> Establishment of an ancillary marketplace for ramping products, fast frequency response by batteries, among others. Install intelligent software platforms for utilities, automation components (hard or soft), remote monitoring, energy management systems, or other essential distribution infrastructure upgrades <i>[involving S1 & S14]</i> Tax intervention to promote the trade of energy efficient products to facilitate adaptation and mitigation of climate change
SECTOR 7 (S7): Transportation and Communication
GCR in National Policy Frameworks: Green transport and logistic, fuel efficiency
Prospective GCR Priority Actions Priority investment: <ul style="list-style-type: none"> 50%-100% greening and electrification of the transport/logistic sector and strategic export industries <i>[involving S4, & S6]</i> Utilization of floating solar installation (all railway platform to include solar power and other public places to maximize the use of solar power by 2025) <i>[involving S6]</i> Improvement of fuel efficiency for transport sub-sector; and increase use of less emission-based transport system and improve Inland Water Transport System
SECTOR 8 (S8): Local Government and Rural Development
GCR in National Policy Frameworks: Climate resilient urban & local governance services, climate resilient spatial development, vulnerability reduction, nature-based solutions and protection of natural habitats.
Prospective GCR Priority Actions Priority Investments: <ul style="list-style-type: none"> Excavation of local water reservoirs (canals, ponds and <i>baors</i>) for restoration of water and rainwater harvesting <i>[in association with S9]</i> Sustainable solid waste and wastewater management, and reduction of air and water pollution in urban and rural areas <i>[in association with S9, S10 and S11]</i> Access to improved WASH facilities <i>[in association with S10]</i> Community-based rainwater harvesting through indigenous techniques and conservation of wetlands, reservoirs, and natural springs for drinking water supply in hard-to-reach and water stress areas <i>[in association with S10]</i> Construction and rehabilitation of safe and accessible multi-purpose and climate resilient cyclone and flood shelters with safe drinking water, sanitation, and livestock shelter facilities that are gender, elderly and disability sensitive <i>[in association with S15]</i> Improvement of natural and artificial urban drainage networks for reducing vulnerabilities of urban flood and drainage congestion Ecological restoration of river systems around Dhaka city, including developing incentives and enforcement to manage industrial effluents in and around Dhaka <i>[in association with S9]</i> Improved Municipal solid waste management with 3R (Reuse, Recycle, Reduce) principles <i>[in association with S9]</i> Technical Assistance and Policy Reforms <ul style="list-style-type: none"> Formulation/Update of necessary laws and acts for spatial planning, land zoning, and land resource management <i>[involving S1, S5, S6 & S10]</i> Financial reforms (tax & fees, government transfers, and borrowings) <i>[involving S1 & S10]</i>

- Establish a dedicated working group for Urban and Water sectors under the NDC-NAP implementation arrangements to promote mainstreaming climate resilience and adaptation in key urban-water services, including considerations on risk sensitive land-use planning and enhancing urban flood warning, response, and recovery system.
- Development of incentives to promote industrial effluents management in small and medium facilities in and around Dhaka
- Reform local government institutes for inclusion of community-based organizations, women, disability, and youth for implementation of locally led adaptation *[in association with S1 & S15]*
- Support local governments to fully implement the new MoLGRD's WSS (Water Supply and Sanitation) Guidelines to achieve universal, good quality and sustainable service standards.
- Support local governments to integrate investments to enhance the overall efficiency of urban-water systems, including mainstreaming principles of nature-based solutions, city-wide inclusive wastewater management, and water security into updated master plans for the urban areas
- Formulation of Local climate fiscal framework (climate finance tracking for planning and budgeting of LGIs) *[involving S1]*
- Mobilisation of USD 1billion per annum in locally led adaptation by 2030 *[in association with S1 and S9]*

SECTOR 9 (S9): Environment, Climate Change and Water Resources

GCR in National Policy Frameworks: Integrated use of land and water system, nature-based solution, biodiversity conservation, local participation, comprehensive disaster and climate risk financing

Prospective GCR Priority Actions

Priority investments:

- Implement the priority investments under the BDP2100 in alignment with its principles of adaptive delta management, climate resilience, multi-sectoral approaches, including: (i) Development, improvements, and restoration of embankments, barriers, and water control structures (incl. ring dikes) for economic priority zones & and major urban centres with eco-engineering solution; (ii) Local level integrated water management projects and studies on coastal areas as per BDP 2100 *[in association with S8]*; (iii) Construction of the barrages as per BDP 2100; and as per BDP's hotspots
- Basin wide management of major rivers for sustainable water management
- Improve flood management (Introduction of spatial planning and flood hazard zoning based on intensity of flooding, river management, excavation, and smart dredging)
- Ecological Restoration of natural reservoir and waterbodies (natural habitats) with their biodiversity conservation
- Irrigation schemes for the major rivers of the country *[in association S5]*
- Excavation of local water reservoirs (canals, ponds and *baors*) for enhanced water storage *[involving S8]*
- Smart dredging activities for all rivers and wetlands to maintain flow and transport as well as accommodate and smooth drainage of excess floods during climate-induced extreme events
- Effective management of existing polders for storm surge and salinity intrusion
- Developing strategies and action plan for managing and conservation of mangrove forest
- Strengthening river and estuaries management for maintaining ecological balance, flood risk reduction and prevention of salinity intrusion for the rivers in the southern zone during dry season
- Improve polder management for controlling seawater intrusion and salinity reduction
- Flood control programmes in the plains as well as in the *haor* areas
- Integrated management and protection of coastal polders, embankments, sea dikes, and flood & cyclone shelters against sea level rise, storm surge and flooding

- Management of freshwater resources and monitoring of salinity for reducing vulnerabilities in existing and potential saline prone areas *[in association with S8]*
- Strengthen early warning and dissemination services for climate change induced slow onset and sudden extreme water hazards (flood, cyclone, landslide and bank erosion) using ICT and AI *[involving S14 & S15]*
- Community-based rainwater harvesting through indigenous techniques and conservation of wetlands, reservoirs, and natural springs for drinking water supply in hard-to-reach and water stress areas *[in association with S8 & S10]*
- Reclamation and development of lands for the expansion of afforestation, agriculture, shrimp cultivation, and settlements *[involving S5]*
- Drought management measures for enhanced groundwater recharge and increased soil moisture in water stress areas
- Augmentation of surface water for irrigation and multipurpose use
- Extension and expansion of coastal greenbelt for protecting coastal habitats including Sundarbans, mangroves, salt marsh etc.
- Community-based afforestation and reforestation, wetland & watershed management, and agricultural landscape management, for biodiversity conservation, enhancement of ecosystem resilience, and increasing carbon sequestration *[involving S8]*
- Combat desertification through plantation of regenerative indigenous species
- Develop and update of ocean ecosystem management policies, guidelines, and institutional capacities for management of blue economy *[involving S1 and S5]*
- Implementation of local level integrated water management projects and studies on coastal areas as per BDP 2100 *[in association with S8]*
- Increase tree coverage from 22% to 25% by 2030
- National Rivers Stabilization and Land Reclamation Project *[involving S1]*
- Ecological restoration of river systems around Dhaka city *[in association with S8]*
- Improvement, expansion, and modification of the existing water resources infrastructures in drought prone and Barind areas
- Strengthen participatory forestry in forest and tress outside forest for sustainable supply for timber and non-timber forest products
- Reduction of emission from Rice Field, Fertilizer User, Enteric Fermentation and Manure Management *[in association with S5]*

Technical Assistance and Policy Reforms

- Develop a national water resources master plan (NWRP) including all Irrigation schemes for the major rivers and multiple uses of water, including for irrigation and aquaculture development of the country *[in association with S1 & S5]*
- Better fiscal policies for climate change adaptation and mitigation, pollution control, clean energy, and energy efficiency (removal/repurposing of fuel and agriculture subsidies, green tax on fossil fuel consumption, taxation for air and water pollution, incentives for waste management and other pollution control, incentives for green technology, GCR infrastructure and energy efficient products/processes) *[in association with all sectors]*
- Develop a robust financial strategy for environment and climate change (policies for public & private policies, and access to global funds) *[involving S1]*
- Strengthening institutional capacity for better environmental coordination and management *[involving all sectors]*
- Trans-boundary river basin management and basin level cooperation

- Development of basin-wide and participatory watershed management framework to restore, harvest, and optimize use of water resources *[involving S8]*
- Monitoring, evaluation, and law enforcement to ensure the conservation of biodiversity and protection of natural habitats *[involving S1]*
- Innovative, appropriate, and enhanced financial instruments for supporting GCRD, including support to BDP2100 projects financing.
- Private sector financing in leading CCA implementation
- Mobilization of resources from financial markets for climate finance (climate bond, blended finance, crowdfunding, and emission trading) *[involving S1 & S4]*
- Climate responsive financial sector policies (lending policies, insurance policy, and green banking) *[involving S1]*
- Climate inclusive planning and budgeting (integration of climate finance into DPP format) *[involving all sectors]*
- Introduction of sustainable procurement (mainstreaming environmental, social and climate dimensions into public procurement process) *[involving all sectors]*
- Formulate local climate fiscal framework (climate finance tracking for planning and budgeting of LGIs) *[in association with S1 and S8]*
- Mobilization of USD 1billion per annum in locally led adaptation by 2030 *[in association with S1 and S8]*
- Develop and deploy a tracking mechanism for quantifying adaptation efforts and assessing success for incentives
- Develop a multistakeholder platform for locally led adaptation to interact with market to achieve resilient and engaging private sectors *[involving S8]*
- Establishment of carbon marketplace for generating additional finance for locally lead adaptation and loss & damage
- Develop climate adaptive insurance mechanism (with provision of premium subsidies and capitalization support) for agricultural production *[involving S1]*

SECTOR 10 (S10): Housing and Community Amenities

GCR in National Policy Frameworks: Climate resilient/smart cities, urban transition, energy efficient & low emission, nature-based solutions, and urban climate fiscal framework

Prospective GCR Priority Actions

Priority investments:

- Development of flood proof WASH and critical infrastructure
- Sustainable waste and wastewater management and reduction of air and water pollution in urban and rural areas *[in association with S8, S9 and S11]*
- Flood resilient cities with proper drainage, modern sewerage, and proper waste management *[in association with S8 & S9]*
- Urban poverty reduction with no slum and minimum housing quality *[in association with S15]*
- Resilient urban infrastructure and strengthening public urban services
- Access to universal and safely managed WASH facilities *[in association with S8]*
- Enhanced use of energy-efficient appliances in household (residential) and commercial buildings *[involving S4]*
- Improved Municipal solid waste management with 3R (Reuse, Recycle, Reduce) principles *[in association with S8]*

Technical Assistance and Policy Reforms

- Better fiscal policies for climate change adaptation and mitigation, pollution control, clean energy, and energy efficiency (repurposing of fuel and agriculture subsidies, green tax on fossil

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fuel consumption, taxation for air and water pollution, incentives for waste management and other pollution control, incentives for green technology, GCR infrastructure and energy efficient products/processes) *[in association with all sectors]*

- Formulation of necessary laws and acts for spatial planning, land zoning, and land resource management *[involving S1, S5 & S8]*
- Financial reforms (tax & fees, government transfers, and borrowings) *[in association with S1 & S8]*
- Improved urban planning and monitoring for better investment

SECTOR 11 (S11): Health

Climate resilient health facilities and climate smart WASH system

Prospective GCR Priority Actions

Priority investment

- Increase access to water supply, sanitation & wastewater management, and hygiene services in cities for reducing exposure of flooding and water borne diseases during or post extreme weather events *[in association with S8]*
- Establishment of climate resilient health care facilities in urban areas
- Improvement of public health and WASH facilities and services for city dwellers *[in association with S8]*
- Sustainable waste management and reduction of pollution in urban and rural areas *[in association with S8, S9 and S10]*

SECTOR 12 (S12): Recreation, Culture and Religion

Priority investment:

- Development of legal and regulatory policies to mobilise private investment in the protection of environment to promote eco-tourism, including coastal areas (providing investment and tax incentives to tour operators/facilitators) *[in association with S9]*

SECTOR 13 (S13): Education

GCR in National Policy Frameworks: Training and skills development for climate resilient development

Prospective GCR Priority Actions

Priority investments:

- Development of women and young entrepreneurs' skills and livelihood improvement through vocational training on adaptation practices, green technology and ICT *[in association with S9 & S14]*
- Develop skills and trainings for women and youth particularly in STEM (science technology engineering and mathematics) sectors linked with green jobs
- Improve job intermediation (through internships and efforts to connect female STEM students and job seekers with professional business associations) to secure employment in nontraditionally female, high-demand sectors.
- Improving worker skills development or training opportunities for boosting productivity and efficiency (Reskill 3.83 million people through just transition programme) *[involving S4]*

SECTOR 14 (S14): Science and Technology

GCR in National Policy Frameworks: Digitalisation of disaster climate information services

Prospective GCR Priority Actions

Priority investments:

- Strengthen early warning and dissemination services for climate change induced slow onset and sudden extreme water hazards (flood, cyclone, landslide, and bank erosion) using ICT and AI *[in association with S9 & S15]*
- Extension of climate-smart technologies for increasing irrigation water use efficiency *[in association with S5]*
- Install intelligent software platforms for utilities, automation components (hard or soft), remote monitoring, energy management systems, or other essential distribution infrastructure upgrades *[involving S1]*

SECTOR 15 (S15): Social Protection

GCR in National Policy Frameworks: Protection of vulnerable, risk transfer mechanisms, disaster & climate inclusive finance and disaster & climate risk management

Prospective GCR Priority Actions

Priority investments:

- Extension and improvement of multipurpose cyclone shelters and its services along with emergency services *[involving S8]*
- Protection of agriculture and vulnerable communities from floods in haor and flash flood areas
- Urban poverty reduction with no slum and minimum housing quality *[involving S10]*
- Construction and rehabilitation of gender, elderly and disability sensitive multi-purpose and climate resilient accessible cyclone and flood shelters with safe drinking water, sanitation, and livestock shelter facilities *[in association with S8]*
- Strengthen early warning system and risk management Measures of flood, cyclone, landslide based on eco-engineering measures
- Increase the coverage of social security /social safety net programmes for building community-based resilience and adaptive capacity
- Expand coverage of social protection to support women with childcare services and support services for gender-based violence (GBV) survivors
- Development of women and young entrepreneurs' skills through livelihood improvement through vocational training on adaptation practices and ICT *[involving S13 & S14]*
- Financial protection against climate related disaster for 50-100% of the population living below the poverty line and at risk of falling below the poverty line *[involving S1]*

Technical Assistance and Policy Reforms:

- Development of a national policy and strategy framework for risk transfer system
- Effective insurance mechanisms (with provision of premium subsidies and capitalization support for agricultural production), and climate resilience fund for livelihood diversification to increase the resilience of vulnerable poor communities *[involving S1]*