A Synopsis of Strategic Approaches for Mainstreaming DRR, Climate Change & Environment: Making Markets Work for the Jamuna, Padma, and Teesta Chars (M4C), Phase III
Bangladesh is one of the most disaster-prone countries due to its geographical location and frequent hydro-meteorological hazards. Notably, people living on the chars (river islands) are vulnerable to disasters and climate change due to their high exposure to hazards, increased poverty, and thus limited coping capacity.

M4C has been addressing DRR from the beginning of Phase I to the extent possible. The following is a timeline of M4C’s DRR evaluation:

**2014**
The project prepared a Disaster Risk Reduction Strategy.

**2019**
M4C conducted an environment assessment to integrated climate aspects of crop cultivation, livestock, and post-harvest processing.

**2021**
Though an analysis on climate change and environment, M4C updated its approaches and outlined the way for integration into project management, processes, and activities.

The DRR strategy of M4C has evolved with time by identifying the main environmental-climate risk and impacts on different agricultural sectors and related project activities.

### MAJOR ENVIRONMENTAL AND CLIMATE RISKS IN THE CHAR REGION
- Riverbank erosion
- Flood
- Drought
- Cold wave
- Storm
- Pests and diseases

### MAJOR ENVIRONMENTAL AND CLIMATE CHANGE IMPACTS
- Reduced soil quality
- Inappropriate use of chemical inputs
- Greenhouse gas (GHG) emissions from the livestock sector

Table 1: Major environmental-climate risk and impacts identified
The Vision of Change regarding DRR, Climate Change and Environment:

A. Farmer’s climate and disaster vulnerability are reduced, and resilience is strengthened by generating additional income, diversification of the portfolio, and risk transfer mechanisms.

B. Climate and disaster risks of farmers and other market actors are reduced through prevention and mitigation of the impacts of hazardous events, e.g., by promoting access to climate-smart inputs and information and building capacities of farmers and other stakeholders. e.g., by building access and capacities of farmers and other stakeholders for improved application of risk reduction and climate change adaptation measures, including access to resistant varieties the timing of cultivation etc.

C. The project contributes to enhancing the resilience of ecosystems, which is a necessary precondition to reduce risk and prevent/mitigate adverse impacts of disasters.

D. The project contributes to climate change mitigation to prevent future disaster risks by actively supporting the respective priorities of the Government of Bangladesh.
OUTCOMES:
CONSIDERING THE PROJECT'S OVERALL OBJECTIVE AND FRAMEWORK CONDITIONS, M4C III FOCUSES MAINLY ON THE FOLLOWING DRR, CLIMATE CHANGE AND ENVIRONMENT-RELEVANT OUTCOMES.

Risk Reduction
(Prevention and Mitigation)

- Make agricultural production more (climate-)resilient by promoting products, services, and agricultural and livestock rearing practices that prevent or mitigate impacts from hazardous events.
- Contribute to improving the protection of livelihoods of farmers' households, particularly the protection of productive assets (crops and livestock).
- M4C promotes the diversification of crop (and income) portfolios as an essential risk management strategy.
- M4C promotes the sustainable management of natural resources, including climate change mitigation as a precondition for preventing new risks and increasing the resilience of the target groups and ecosystems.

Risk Transfer
(DEAL WITH RISK)

M4C improves access to risk transfer mechanisms for farmers in the chars to increase farmers' coping capacities through introducing financial services that provide risk-sharing options, i.e., seasonal loans, micro-insurances, resilience-funding.

Knowledge & Capacity Building
(TRANSVERSAL)

M4C contributes to strengthening the capacities of farmers, authorities, decision-makers, and other system actors, allowing them to take action to reduce risks adequately, adapt to climate change and improve environmental management.
M4C Approach:
In phase III, M4C increases its efforts and improved environmental sustainability and climate smartness through:

1. **Fostering the “greening” and diversification of existing profitable sectors**
2. **Developing partnerships with selected “green partners”**
3. **Promoting the dissemination of relevant knowledge which is not linked to a commercial product or service.**

Integration into the Project:
To ensure that the DRR, climate change, and environmental perspectives are considered in all project activities and that the identified measures are adequately implemented and monitored, M4C integrates DRR and CCA in all relevant processes and documents. The M4C ensures DRR and CCA (Climate Change Adaptation) in intervention planning and implementation, monitoring results measurement, partners selection and partnership agreements, knowledge management, policy dialogue and capitalization. The strategy at hand will be valid for the remaining time of M4C phase III. However, targets and concrete measures presented in the attached documents might be adopted during the implementation process.

Integrating DRR and CCA into the project while:

- Promoting access to products and services (agro-input services)
- Promoting post-harvest practices (agro-output services)
- Supporting Micro-Finance Institutes (MFI) to adapt their products and services
- Advocating for public actors/institutions to invest for the chars (anchoring and institutionalisation)
- Contributing to build knowledge and capacities of farmers and stakeholders (transversal)