Climate Challenges

- Frequent cyclone and tidal waves in coastal region wipes out shrimp ponds (7 in 10 years damaging USD 2.7 bl)
- Extreme temperature variability (highest 41.3°C and lowest 12.3°C in 2020) puts stress on pond ecosystem including oxygen level and PH level of water as well as physiological and digestion system of shrimp
- Erratic heavy rainfall (daily highest 18.5 mm in August 2020) reduce salinity level of water causing shrimps to die before maturation
- Lack of weather forecast data with farmers resulting poor management of climate risk
- Lack of education on climate resilient farm management
- Declining national production due to climate change puts risk on long term sustainability of the industry
- Export declined from USD 638 ml in 2013-14 to USD 456 ml in 2019-20
Climate Resilient Sustainable Shrimp Value Chain in Bangladesh

**Introduction**

Operation of *climate adaptive farming, inbound logistics, processing and export of shrimp* to global market

- Received DFCD Grant for piloting the project

**Intervention**

- Climate Resilient Supply Chain
- Cold Chain Network
- Quality Control System
- Automation & IT Infrastructure
- Worker Skill Development

**Innovation**

- Eyeball Chamber
- Mangrove Shrimp-farming
- Chilled-kill Harvest
- Farmer Microfinancing
- Farmer Laboratory
- Intelligent Decision Support System (IDSS)
- Electronic Farmer Payment
- Energy Efficient Cooling System
Impact of Project Intervention

• Increase capacity utilization of shrimp processing factory leading to higher profitability of the business

• Building climate and disaster resilience shrimp value chain through tackling climate change

• Foster global technology adoption and integration through regional partnership and joint venture

• Promote women empowerment from farming to factory