



#### MSC is recognized as the world's local expert in sustainable economic, social and financial inclusion



International sustainable financial, social and economic inclusion consulting firm with 25+ years of experience



300+ staff in 10 offices around the world



Projects in 68 developing countries







Some of our partners and clients





































































publications clients

Assisted development of digital G2P services used by 875+ million people

Developed 300+ FI products and channels now used by 1.7+ billion people

**Implemented** 950+ DFS projects

1,400+

Trained 11,100+ leading FI specialists globally



#### Sectors we work in

#### Providing impact-oriented business consulting services



Banking, financial services, and insurance (BFSI)



Water, sanitation, and hygiene (WASH)



Government and regulators



Micro, small, and medium enterprise (MSME)



Social payments and refugees







Education and skills



Digital and FinTech



Agriculture and food systems



Climate change and sustainability



Health and nutrition

#### Multi-faceted expertise

#### Advisory that helps you succeed in a rapidly evolving market



Policy and strategy



Products and channels



Research, evaluation, and analytics



<u>Organizational</u> transformation



Digital technology and channels



<u>Catalytic</u> finance



Design thinking and innovation



Marketing and communication



**Training** 



<u>Government</u> regulations and policy



Data Insight



Customer protection and engagement for responsible finance



### Our 'Climate Change and Sustainability' practice seeks to accelerate climate action for a just, inclusive and sustainable world.

#### **Our Vision**



A climate-resilient world where all communities lead dignified, secure, and sustainable lives through inclusive, locally-led, and transformative climate action.

#### **Our Mission**



To accelerate climate action for a just, inclusive and sustainable world by offering advisory services, informed by local knowledge and powered by digital solutions, to public and private sector actors.





### We work across six key themes for advancing climate action that cut across both mitigation and adaptation.

#### Agri-food systems



Agri-food systems theme prioritizes strengthening smallholder farmers' **resilience** against climate change by promoting carbon-smart farming and sustainable agricultural practices. **Locally-led adaptation** techniques are promoted to enhance this resilience. Wider adoption of sustainable and carbon-smart agriculture reduces agriculture's carbon footprint through practices like agroforestry, soil health, efficient water use, and localized production and consumption.

#### **Energy Systems**



Energy system theme focuses on expanding access to productive renewable energy assets and adoption of clean mobility. Expanding access to renewable energy enhances productivity and improves livelihoods. Wider adoption of cleaner mobility **improves** human mobility while simultaneously reducing greenhouse gas (GHG) emissions.

#### **MSMEs**



MSME theme builds financial resilience, and accelerates green transition and innovation.

Expanding access to financial solutions helps MSMEs mitigate climate risks and adopt sustainable practices. Supporting climate and agri-tech startups with technical guidance fosters innovation for scalable solutions.



### We work across six key themes for advancing climate action that cut across both mitigation and adaptation.

#### **Disaster Risk Reduction**



The DRR theme centers on reducing climate disaster risks through early-warning systems, insurance, and community resilience. Developing these mechanisms minimizes disaster impacts, while strengthening local capacities ensures communities are better prepared to face and recover from climate shocks.

### **Ecosystems and Biodiversity**



The ecosystem and biodiversity theme advances ecosystem financing for biodiversity conservation and sustainable resource use, while promoting nature-based solutions. It develops financial mechanisms and embeds ecosystem solutions into climate adaptation strategies.

#### Health, Nutrition and WASH



The health, nutrition, and WASH theme emphasizes climate-resilient water and sanitation, and public health systems. It supports climate-resilient water and sanitation adoption, enhances public health response to climate disasters, and strengthens resilience against broader climate-induced health risks from extreme weather.



#### Our advisory draws on the voices of local communities, businesses and the organizations embedded in them, like civil society organizations and financial institutions

#### **Enabling Locally-Led Approaches**

We have focused on building tools that enable locally led adaptation action for different segments of climate-vulnerable groups.



Participatory toolkit for communities

Tools to assess risks, identify strategies and conduct adaptation planning for vulnerable communities

Participatory toolkit for MSMEs

Tools to support Financial Service Providers identify and fund adaptation strategies of MSMEs

#### **Inclusive Climate Finance**

Our work on inclusive finance for climate action focused on both Financial Service Providers and their climate-vulnerable customers.





Tool to assess a Financial Service Providers' climate impact, and identify physical and transition risks.



An tool that can be used to rapidly identify the climate resilience of the borrowers of Financial Service Providers.



MSC is the current co-chair of the CIFAR Alliance, whose mission is to accelerate responsible innovation in digital finance for climate adaptation and resilience. MSC chairs the Climate Resilient Agriculture and the Elevating the Voices of Affected People Co-Labs as part of the CIFAR Alliance. MSC also authored the Alliance's Enabling and Financing Locally-led Adaptation white paper.



#### Our flagship adaptation projects in Asia and Africa



Deep research into climate change's impacts on vulnerable communities in India and Bangladesh

CGAP engaged MSC to work with <u>Decodis</u> to understand how climate change affected vulnerable communities in Bangladesh, India, and Nigeria. The research examined how these communities have responded, what role financial services have played, and what role they should play in supporting climate resilience and adaptation. CGAP and MSC then convened a workshop to discuss the report and fine-tune CGAP's climate change strategy.



### Enabling financial systems to address climate adaptation needs in Kenya and Mozambique

FSD-Kenya commissioned MSC in 2024 to assess the barriers low-income households face in adapting to climate change and the role of inclusive finance in enabling their adaptation. MSC, with partners, conducted a qualitative assessment involving farmers, women, and other vulnerable groups, generating evidence-based policy and programmatic recommendations to inform future investments in inclusive climate finance. Based on this work, MSC developed a methodology to expand this research to other markets. It is now being applied in Ethiopia, Nigeria, Rwanda, and Tanzania.



### Supporting the formulation of Fiji's sovereign Climate and Disaster Risk Financing (CDRF) strategy

UNDP engaged MSC to develop a comprehensive guidance note to inform the Government of Fiji's CDRFI strategy. An instrument highlighted by the guideline document was private sector-led parametric insurance products for the agriculture sector.

Based on the guidelines, the Fijian Government, with <u>UNDP</u>'s support, developed and launched a market-based parametric insurance product. By the end of 2021, 1,388 beneficiaries had registered for the product, of whom 442 (32%) were women.



#### Our flagship mitigation projects in Asia and Africa



### An assessment of India's flagship Liquid Petroleum Gas (LPG) distribution program

The Pradhan Mantri Ujjwala Yojana (PMUY) aims to provide clean cooking fuel to 50 million rural households by offering cash subsidies to switch from polluting fuels to LPG. MSC assessed the program from 2016 to 2018, identifying factors influencing LPG adoption and barriers to refilling. Based on the findings, recommendations were made, leading to a nationwide LPG safety campaign. By April 2022, the program had enrolled 92 million rural households, with an estimated 30% LPG adoption reducing CO2 emissions by 6.14 million metric tons annually.



### Catalyzing private sector financing of electric two- and three-wheelers in India

The World Bank, in partnership with India's NITI Aayog and SIDBI, launched the <u>Electric Vehicle Operations and Lending for Vibrant Ecosystem (EVOLVE) risk-sharing program</u> to encourage banks and non-banking financial companies to finance electric two- and three-wheelers.

SIDBI hired MSC as the lead consultant to structure a partial credit guarantee and low-cost loan facility. MSC was also tasked to design the facility's operating structure and bring on board 10 financial institutions to the facility.



### A study on GHG emissions from chemical fertilizer production and use in India

In 2021-22, India consumed 63.64 million metric tons (MMT) of fertilizers, with urea making up 54%. Government subsidies heavily favor urea, leading to nutrient imbalances that degrade soil quality, reduce yields, and increase GHG emissions.

MSC's study estimated current and future GHG emissions and identified eight key approaches to reduce, optimize, or replace synthetic fertilizers. The findings provide data-driven insights for policymakers to strengthen fertilizer optimization policies and promote more sustainable practices.



#### Our flagship cross-cutting projects in Asia and Africa



### Landscape study and business pipeline development for Manaaveeya Development and Finance (Oikocredit)

Maanaveeya Development and Finance Pvt Ltd (MDF), the Indian subsidiary of Oikocredit, secured a loan guarantee facility to support small and marginal farmers, especially women. In partnership with Rabo Foundation, Ikea Foundation, and Shell Foundation, MDF developed a strong ecosystem in targeted sectors. MSC conducted a landscape study to identify funding opportunities, risks, and challenges, mapping ecosystems, assessing market potential, and recommending lending products for 10 shortlisted enterprises per sector.



#### Identifying solutions to reduce postharvest losses for smallholder farmers in key value chains across India, Kenya, and Nigeria

Globally, one-third of food is lost before reaching consumers, with smallholder farmers (SHFs) in India, Kenya, and Nigeria heavily impacted by post-harvest losses (PHL). To address this, Shell Foundation commissioned MSC and its partners to investigate the PHL drivers across ten crop value chains. The study identified affected crop value chains, key drivers, SHFs' barriers to adopting PHL solutions, and renewable energy solutions. An innovation prize identified the solution with the greatest impact potential through techno-economic analysis.



### Supporting Indian MFIs to develop a portfolio on climate-smart agriculture.

Indian agriculture faces significant climate change threats, but Climate-Smart Agriculture (CSA) can improve resilience, productivity, and reduce GHG emissions. Microfinance Institutions (MFIs) can help unlock finance for CSA. MSC, through IDH, supported the AGRI3 fund and five large MFIs in India to assess opportunities for developing a CSA business line. This included research in Bihar, Tamil Nadu, and Uttar Pradesh, along with consultations with MFI management, IDH, and AGRI3 teams, providing recommendations to strengthen MFI capacity for CSA financing.







### Sustainable food system transformation

Insights to enable policymaking for sustainable food system transformation in Kenya and Ghana

#### Work areas:

Agriculture and food systems, policy support



#### The challenge

Emerging African economies, such as Kenya and Ghana, face challenges when they attempt to establish a sustainable food system in their countries and ensure nutrition security. <u>AGRA</u> (a member of the Food and Land Use (<u>FOLU</u>) coalition) helps the governments of these countries develop suitable programs and policies to transform their food systems into sustainable ones.

Yet, transformation into a sustainable food system is challenging. In these countries, the existing food systems face the following challenges:

- Agriculture is at subsistence levels, irrigation facilities are limited, and the countries have a high dependence on basic food grains.
- ➤ The food systems are not inclusive, and the countries depend significantly on animal sources for protein.
- ➤ Agriculture production is vulnerable to the effects of climate change.
- ▶ Despite the challenges in food production, food wastage at various levels remains significant.

#### Our engagement

MSC supported AGRA to drive policy advocacy and program planning to enable the governments of Kenya and Ghana to adopt food system transformation programs.

MSC conducted a landscape analysis of existing policies, programs, and institutions. This analysis sought to identify the gaps in the system that inhibit sustainable food system transformation. Based on the findings, MSC identified prospective partners of FOLU, determined the action plan for food system transformation, and prioritized FOLU's advocacy agenda.

#### **Expected outcomes**

The expected outcomes of MSC's interventions are:

- An increase in the number of FOLU members in Kenya and Ghana, including public and private sector entities;
- A defined action plan for FOLU to influence policymaking and program development to sustainably transform food systems;
- Involvement of public funds and donor support in the programs.

#### Clients and partners

AGRA - Growing Africa's Agriculture



## Catalytic financing for climate-adaptive agribusiness

Delivering insights to facilitate the design and delivery of catalytic financing for climate- adaptive agribusiness

#### Work areas:

Inclusive climate finance, financial instruments, climate adaptation



#### The challenge

GIZ and India's <u>National Bank for Agriculture and Rural Development</u> (NABARD) designed the <u>CAFRI</u> project to deliver blended finance instruments to attract private capital for climate-smart agriculture through the farmer producer organization (FPO) ecosystem. GIZ needed a consulting and implementation partner to assess the needs of smallholder producers to attract private financing for climate-smart agriculture and scale the program.

#### Our engagement

MSC supported GIZ to mobilize private financing through nudges to NABARD to design and deliver blended finance instruments to FPOs. Under the engagement, MSC conducted a pilot of CAFRI's approach with two FPOs in India's Bihar state.

The engagement was divided into two parts. In the first part, MSC sought insights on the climate change-induced physical risks and hazards that the FPOs face, their vulnerabilities against these risks, and their current coping mechanisms. Based on these insights, MSC's experts recommended climate-adaptive measures categorized into adaptation strategies in the short, medium, and long term.

In the second part, MSC assessed the financing needed to implement these adaptation strategies. Based on the assessment, MSC suggested a capital subsidy package to enable FPOs to set up warehouses to prevent post-harvest losses.

#### **Expected outcomes**

GIZ used these insights to nudge NABARD to design a blended finance program for FPOs.

#### **Clients and partners**

giz - Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH



## Scale-up of the seed replanting guarantee program

Advice on marketing strategies to scale up the adoption of a seed replanting guarantee program in Kenya

#### Work areas:

Agriculture and food systems, inclusive climate finance, financial instruments, crop insurance



#### The challenge

The lack of moisture in the soil during seed planting significantly threatens smallholder farmers' sustainability in Africa. <u>ACRE Africa</u> launched the <u>Replanting Guarantee (RPG) product</u> in 2009 in Kenya to develop resilience among these farmers. The RPG program involves an index insurance product that guarantees free replacement of maize seeds that fail to germinate due to a lack of soil moisture. The collaborative offering involves seed companies, Safaricom, ACRE Africa, and insurance companies.

However, ACRE Africa struggled to scale up the product's adoption. It suspected that marketing efforts remained inadequate for various stakeholders, such as seed dealers, agrovet extension agents, and farmers. The marketing plan needed revision.

#### Our engagement

In 2016, MSC agreed to offer technical assistance to ACRE Africa with financial support from the <u>Alliance for Green Revolution in Africa (AGRA)</u>. MSC conducted a qualitative primary survey that involved farmers, input dealers, and agrovet extension agents. The survey identified that the communication gaps at the level of various stakeholders stifled the product's marketing and distribution.

MSC designed a comprehensive marketing plan for ACRE Africa based on this assessment. MSC's key recommendations were as follows:

- Communicate the value proposition to seed dealers clearly and equip them with promotional material
- ➤ Train and equip extension agents to promote the product to target farmers; instruct them to deliver the technical aspects as clearly as possible
- ➤ Simplify the registration and settlement process to build trust; assign dedicated time slots for outbound calls aligned to the availability of farmers in a day; intensify communication during the planting season.

#### Outcomes and impact

- An impact evaluation of the program indicated that the insured farmers invested 19% more in their farms and earned 16% more than uninsured farmers in 2016.
- By 2018, ACRE had offered crop insurance products to more than 1.7 million farmers across Kenya, Tanzania, and Rwanda to cover agricultural assets worth USD 181 million.

#### **Clients and partners**

AGRA- Growing Africa's Agriculture, ACRE Africa



#### JEEViKA Special Purpose Vehicle for Agricultural Transformation (JSPVAT)

#### Work areas:

Agriculture food systems, inclusive climate finance, strategy and program design



#### The challenge

Smallholder farmers continue to count among the poorest of segments, with inadequate access to competitive markets, low and volatile incomes, and low resilience to manage livelihood-related risks and shocks. In addition, farmers lack adequate and low-cost access to value-added services. Access to institutional credit, agricultural and livestock insurance, and risk management products, such as commodity futures and options are also extremely limited.

#### Our engagement

As a part of the project, MSC is working on four key workstreams, which are as follows:

- ▶ BMGF contracted MSC to provide strategic and operational consulting to develop and expand farm and livestock market ecosystems in Bihar.
- At the time of writing, MSC was in the process of introducing new valuechain partnerships and has introduced new value-chain partnerships and sustainable business models for horticulture commodities (banana, mango, litchi, vegetables), cereals, and pulses.
- Led by technology and innovations, these partnerships and business models seek to enhance farm incomes and resilience for low-income households.

#### **Outcomes**

- Enabled over 10,000 farmers to trade 5,000+ metric tons of commodities; 1,500 metric tons traded on the futures market, yielding 5-7% higher returns.
- Project impacts include increased tech adoption, market linkages, and reduced seasonal price volatility, with plans for USD 31.73M funding.
- Facilitated 11,610+ metric tons in dry commodities, 420+ metric tons in F&V trading, and 2,420+ metric tons in agriinputs.
- ➤ Launched three Green Delights stores in Patna, produced branded food products, formed 26 partnerships for output and 11 for input marketing, and established the first goat producers' company for JEEViKA.

#### Clients and partners

**Gates Foundation** 



## Impact of climate change on smallholder farmers & their coping strategies

The impacts of climate change on the lives and livelihoods of Bihar's smallholder farmers and the role of livelihood assets to inform their coping strategies

#### Work areas:

Agriculture and food systems, inclusive climate finance, climate adaptation, financial instruments



#### The challenge

Climate change will intensify the impact of hydrometeorological events, and floods will be the most devastating climate hazard in the future. The agriculture economy and the financial health of smallholder farmers will be severely affected unless they develop mechanisms to mitigate the increasing risk of flood and land degradation.

The international inclusive finance community has a limited understanding of climate change's direct and indirect impacts on smallholder farmers and their strategies to cope with these impacts. Another challenge is the limited body of literature that reveals the role of livelihood assets to strengthen the climate resilience of smallholder farmers.

#### Our initiative

MSC undertook a qualitative research study to understand the impact of floods on the lives and livelihoods of smallholder farmers in Bihar. The study sought to understand:

- The kind of livelihood assets that help the smallholder farmers cope with the impacts of recurring floods;
- The role of financial institutions, social safety nets, and alternative income opportunities to shape their coping response.

Another major project objective was to identify metrics that can determine the smallholder farmers' resilience against climate change before, during, and after the interventions. We also adopted a cost-effective research model that could encourage programs and policymakers to use them extensively. The metrics would inform the effectiveness of interventions to strengthen the smallholder farmers' resilience against climate change.

#### **Outcomes and impact**

- MSC published the qualitative study findings.
- We are in the process of publishing the smallholder farmer resilience index.



### A study on fertilizers in Indian agriculture

Estimation of greenhouse gas emissions from India's fertilizer sector across its value chain, and identification of pathways to reduce emissions by 2030

#### Work areas:

Climate resilient agriculture, Policies and reforms, climate mitigation



#### The challenge

India is the world's <u>second-largest</u> fertilizer consumer. Over the years, the GoI has implemented many <u>subsidy policies and reforms</u> to increase the accessibility and affordability of fertilizers for farmers. These initiatives have encouraged increased consumption and use of fertilizers countrywide.

In 2021-22, India consumed <u>63.64 million metric tons</u> (MMT) of fertilizers, with urea making up 54%. Fertilizer subsidies from the Government of India are highly skewed toward urea, which leads to nutrient imbalances that degrade soil quality and reduce yields while increasing greenhouse gas emissions. To meet its 2030 target of reducing emissions intensity by <u>45%</u>, it is critical to devise pathways to optimize chemical fertilizer use, improve farmer resilience, and decrease GHG emissions from chemical fertilizer production and use.

#### Our engagement



Estimated the greenhouse gas emission profile of India's fertilizer sector across the entire value chain.



Analyzed initiatives at various levels to reduce emissions from fertilizer production and use, identifying factors behind successes and failures.



Examined fertilizer use trends over the past 10 years and BAU projections for 2030 across different fertilizers, states, and major crops.



Identified eight priority approaches to reduce, optimize, or replace synthetic fertilizer use, exploring associated opportunities and risks.



Investigated national and state policies to optimize fertilizer use, including motivations, outcomes, barriers, and differences across states, fertilizers, and crops.

#### **Clients and partners**

NDA

#### Outcomes and impact

- The comprehensive greenhouse gas emission profile for India's fertilizer sector provides data-driven insights to inform policymakers on the current and projected state of fertilizer use.
- Strengthened policy frameworks and more effective implementation of fertilizer optimization policies at national and state levels.
- ➤ The identified pathways can serve as a roadmap for transitioning to more sustainable fertilizer practices. By understanding the risks and opportunities, stakeholders can make informed decisions that balance environmental benefits with economic and practical considerations.



## Development of CSA loan products in Indian MFI portfolio

Supporting Indian MFIs to develop a portfolio on climatesmart agriculture.

#### Work areas:

Agriculture and food systems, inclusive climate finance, climate smart agriculture



#### **Objective**

Financing Climate-Smart Agriculture (CSA) in India faces challenges, including limited access to blended finance and inadequate MFI expertise in CSA practices. Enhancing MFI capacity requires tailored capacity-building programs to integrate climate-risk assessments and design flexible loan structures. Addressing these challenges can unlock opportunities for CSA financing and empower smallholders through MFI-driven financial inclusion.

#### Our engagement

- Review current MFI structures, product offerings, market segments, sectors, client base, agri and agri-allied product offerings across India.
- Review of CSA initiatives and practices in India that could be of relevance for MFI clients.
- Assess needs, opportunities and challenges for the select MFIs and their customers to identify the specific opportunities to intervene and promote adoption of CSA practices.
- Identify and prioritize CSA options together with MFIs that can be implemented and develop recommendations for meeting technical and capacity needs for that implementation.

#### **Expected Outcomes**

- Review the current structure of MFI and product offerings.
- A comprehensive landscape assessment of CSA projects in India to identify potential opportunities for financing,
- Assess needs and preferences of the customers to adopt CSA practices deploying MSC's MI4ID approach.
- Conduct consultations with the core MFI management and IDH and AGRI3 teams, and host a validation workshop and dissemination activities.
- Develop recommendations to augment the capacity of these selected MFIs, enabling them to effectively provide products and services that promote the adoption of CSA practices among their customers.

#### **Clients and partners**

AGRI 3 FUND, HSBC, idh



Solutions to reduce postharvest losses for smallholder farmers - Analysis of postharvest losses in key value chains across India, Kenya, and Nigeria

#### Work areas:

Agriculture and food systems, post harvest loss, climate adaptation, energy systems, gender responsive solutions



#### **Objective**

Globally, one-third of food produced for human consumption is lost before it reaches consumers, and smallholder farmers (SHFs) in India, Kenya, and Nigeria are among the most affected. These farmers experience significant post-harvest losses (PHL) due to inadequate storage, processing, and energy solutions, resulting in lower incomes (15% reduction) and food insecurity. The lack of affordable, scalable renewable energy technologies for post-harvest processes exacerbates these issues, particularly in rural areas.

#### Our engagement

- ▶ Phase I: Planning Conducted inception meetings with Shell Foundation and partners to set objectives, define research questions, and establish selection criteria for identifying the most affected crop value chains in India, Kenya, and Nigeria.
- ▶ Phase II: Value chain analysis and solution scoping Performed secondary and primary research to identify priority crop value chains experiencing the highest PHL impacting SHFs. Engaged with SHFs, farmer organizations, and value chain actors through interviews and focus groups to assess their needs for managing PHL and barriers to adoption.
- ▶ Phase III: Solution identification Supported an application process to identify affordable, practical, and scalable solutions that leverage renewable energy to reduce PHL. Solutions were identified based on affordability, scalability, performance, and gender impact through a techno-economic analysis (TEA).

#### Outcomes and impact

- Actionable recommendations: Provided Shell Foundation with detailed value chain analysis and demand-side insights into perceived drivers of PHL and their impact on SHF (incl. women).
- Landscape of emerging technologies: Mapped out renewable and no-energy solutions, highlighting those best suited to SHF for reducing post-harvest losses and barriers to solution adoption.
- ▼ Techno-economic analysis: Delivered comprehensive investment theses for each solution, providing insights into costs, market readiness, and economic viability. The most promising solution was awarded a \$50,000 prize.

#### **Clients and partners**

Shell Foundation, ISF, FACTOR[E]



### Soil health and fertility improvement

Consultative evaluation of India's soil health management program

#### Work areas:

Agriculture and food systems, climate adaptation, strategy and program design



#### The challenge

In April 2014, the Government of India launched the Soil Health Management (SHM) program to motivate farmers to optimize chemical fertilizer consumption, which would improve soil health, restore soil organic matter, enhance the soil's carbon capture capacity, reduce soil erosion, and restore the micronutrient profile. The government conducted soil sampling and issued Soil Health Cards to farmers to ensure the adoption of the recommended dose of chemical fertilizers.

However, the SHM program could not persuade farmers to use the recommended dose of chemical fertilizers based on their farms' soil health status, even after a year of its launch.

#### Our engagement

Between 2016 and 2019, MSC conducted a series of beneficiary-level studies to understand the reasons for the lukewarm response to the program.

In November 2016, we conducted a pilot study in Andhra Pradesh state's Krishna district. Based on its initial findings, we conducted a national-level study in 54 districts across 18 states.

MSC's study sought to uncover structural and behavioral barriers to the SHM system's adoption among farmers. We noted that the apprehension of reduced productivity due to the reduced chemical fertilizers' use is a key bias at the farmers' level.

#### **Outcomes and outcome**

Based on its studies, MSC suggested measures that could increase adoption. These included localization of awareness campaigns, timely delivery of soil health reports, and refinement of the recommendations on fertilizer use based on a crop's phenology.

Currently, the program has issued guidelines to establish soil testing facilities at the village level to meet the demand for localized awareness creation and timely delivery of soil health reports.

The second cycle of soil sampling and testing conducted between 2017 and 2019 saw an increase of 8.30% in the number of samples tested. The number of Soil Health Cards dispatched to farmers increased by 11.56%.

#### Clients and partners

**Gates Foundation** 



## Gender-inclusive aquaculture transformation

Market-systems-driven and sustainable development of aquaculture and fisheries, with improvements in gender equality and nutrition for women, adolescent girls, and children under five

#### Work areas:

Nutrition, livelihoods, women's economic empowerment, food systems



#### The challenge

Inland aquaculture and fisheries offer many opportunities to enhance the livelihoods, incomes, and resilience of women in India's Bihar state through the expansion of women's community-driven and sustainable fisheries. However, women in aquaculture and fisheries in Bihar face gender barriers, which make their contributions invisible, socially unacknowledged, and undervalued. Other barriers exacerbate the challenges fisherwomen face. These include inequitable work distribution at home, lack of control over decision-making and fisheries resources, insufficient capital, poor know-how and access to suitable technology to meet market standards and demands, and limited engagement in the value chain beyond production.

#### Our engagement

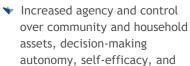
BMGF contracted MSC for a multi-year gender-inclusive inland aquaculture transformation initiative. The project sought to provide strategic and operational consulting to enhance the livelihoods, nutrition, and empowerment of fisherwomen in Bihar. MSC supports women's self-help groups (WSHGs) and smallholder fisherwomen to enhance their agency and control over resources and ownership of assets. MSC's support seeks to improve household nutrition, specifically for women, and increase their incomes and resilience. MSC has been driving high-impact interventions across the following core focus areas:

#### Livelihoods



- Enhanced livelihoods, incomes, and resilience for Bihar's fisherfolks
- Through improved, gender inclusive, sustainable, and market systems driven aquaculture

#### Women's economic empowerment



work-life balance

 Through the adoption of gender transformative practices in aquaculture and nutrition

#### **Nutrition**



- Increased access to affordable aquatic nutrition and its consumption
- Through behavioral design and communication by women, girls, and children

#### **Outcomes and impact**

- 22+ MT fish sold, and more than 100 women's self-help groups (WSHGs) have been engaging with 150+ seed suppliers.
- Reduced cropping periods lead to an additional 2-3 harvesting cycles every year.
- ➤ 50% increase in seeds stocked by WSHGs.
- Introduced low-cost fish technologies to increase access to affordable fish, which resulted in increased in-house fish consumption and led to improved nutritional outcomes.
- More than 1,500 women beneficiaries and WSHGs field teams trained in technical fisheries production.
- Created livelihood opportunities for more than 80,000 women's households.

#### **Clients and partners**

Gates Foundation, World Fish, Bihar Rural Livelihoods Promotion Society



#### Landscaping Inclusive Climate Finance in Kenya and Mozambique

Enabling financial systems to address climate adaptation needs

#### Work areas:

Inclusive finance, adaptation finance, livelihood pathways



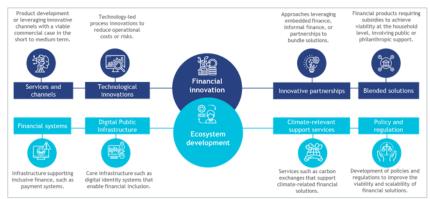
#### The challenge

Low-income households in Kenya and Mozambique are highly vulnerable to the impacts of climate change, including increased droughts, floods, and storms. However, the financial systems in these regions are not fully equipped to enable these households (HH) to adapt to these climate risks. There is a critical need to understand how inclusive financial services can be pivotal in enabling climate adaptation and resilience, particularly for vulnerable populations.

#### Our engagement

- ▶ Phase I: Preliminary research Analyzed existing literature on climate hazards, risks, and the financial inclusion landscape in Kenya and Mozambique. Identified key HH segments and livelihood pathways. Aligned project objectives with FSD Kenya, Mozambique counterparts, and key stakeholders.
- ▶ Phase II: Data collection and stakeholder engagement a) Demand-Side Analysis: Conducted interviews with smallholder farmers, women, and other vulnerable groups to understand their adaptation strategies, needs, and the financial services they rely on. b) Supply-Side Analysis: Mapped the existing financial services ecosystem, assessing the role of formal and informal financial services in climate resilience.
- ▶ Phase III: Synthesis and reporting a) Developed actionable insights and recommendations to inform future strategies in building an inclusive climate finance system.

To do this, we applied a livelihood-centric approach to assess specific adaptation needs for different livelihood segments



#### **Outcomes and impact**

- Generated in-depth insights into the choices and barriers lowincome HH face in adapting to climate change through demand-side analysis.
- Delivered actionable recommendations and models to finance adaptation strategies with high-impact potential for low-income HH.
- Provided evidence-based policy and programmatic recommendations to guide future investments in inclusive climate finance.
- Delivered a revised research methodology to replicate this research in other countries.

#### **Clients and partners**

FSD kenya, ISF





**Energy Systems** 



## Design and delivery of the EVOLVE-RSP

#### Work areas:

Climate finance, financial instruments, EVs



#### The challenge

The Government of India plans to achieve  $\underline{30\% \text{ EV}}$  penetration by 2030. As of 2022, electric vehicle sales accounted for  $\underline{4.98\%}$  of the total vehicles registered in the country.

Electric two and three-wheelers, which comprised more than 95% of the total electric vehicles sold in 2022, will be instrumental to reach the 30% EV penetration target. However, major barriers to the rapid growth of electric two- and three-wheelers are the high upfront cost of these vehicles compared to their internal combustion engine (ICE) counterparts and the lack of affordable financing.

The World Bank and NITI Aayog, India, formulated the EVOLVE-risk sharing program to address the financial gap. The program offers financial institutions USD 250 million in low-cost loans and credit guarantees to unlock private sector financing toward electric two- and three-wheeler segments.

#### Our engagement

The Small Industries Development Bank of India (SIDBI), the EVOLVE-RSP's Program Manager, contracted MSC to design the facility's structure and bring stakeholders on board. MSC undertook the following tasks:

- Validated the risks and de-risking measures involved in financing electric two- and three-wheelers, computed the resulting expected credit losses to the facility, and finalized the terms of the low-cost loan and credit guarantee facility under the program;
- Designed selection criteria, credit models, and due diligence checklists for various borrower categories, such as individual salaried segments, drivers, owners, fleet operators, and leasing companies, among others;
- Designed the criteria to identify and onboard the financial institutions participating in the program and electric vehicle manufacturers.

#### **Expected outcome**

- The EVOLVE-RSP plans to unlock private sector financing for 8 million electric two- and three- wheelers over the next 8-10 years.
- The earmarked USD 250 million can unlock USD 1.83 billion worth of loans from banks and non-banking financial institutions to this sector.
- ▶ Based on initial estimates, scaling up of electric two and three-wheelers supported by EV-RSP can potentially mitigate up to 9.5 million tons of CO₂ in GHG emissions during the vehicle's lifetime.

#### **Clients and partners**

SIDBI, KWPF- Korea-world bank partnership facility



# Improving outcomes for women-led clean energy enterprises through applied research

#### Work areas:

Energy systems, gender responsive solutions, inclusive climate finance



#### The opportunity

2X Global and IDRC are leading a research project: This project sets out to generate novel research insights to advance their understanding as a global field of gender finance on the following crucial yet unexplored questions, which 2X Global will address in close collaboration with local researchers. The objective of this actionable research is to help build the evidence base and contribute novel insights to the fields of gender and climate finance and locally grounded entrepreneurship from the perspective of the Global South while advancing the dissemination and engagement of these findings to key stakeholders across global regions.

#### Our engagement

Planned activities:

- Collaborative development of research design, theory of change, and overall approach and methodology in close coordination with the other 2 research leads and 2X global.
- Selection, on-boarding of selected fund managers and establishing buy-in and participation in the study.
- Co-create IMM based on qualitative consultations with the fund managers.
- ▼ Integrate the IMM within the different IMMs and conduct capacity building workshops for the fund managers.
- Collect IMM data across fixed intervals and finalise tools for supplementary data collection (in the form of qualitative interviews (FGDs and KIIs)).
- Data collection, transcription, analysis, peer review and case study writing.
- Developing the academic paper along with the working group and 2X global.

#### **Expected outcomes and impact**

- Generate knowledge on locally relevant climate- and gender-smart innovative finance solutions developed by local emerging fund managers enabling a gender-equitable low-carbon energy transition.
- Create a springboard of evidence and findings to attract further capital towards locally relevant clean energy solutions with a credible gender lens led by local fund managers. This evidence base on the business and impact case seeks to unlock more capital from a broad spectrum of investors and capital providers along the risk-return spectrum.
- Support local emerging fund managers to generate novel impact measurement insights at a compelling gender- and climate nexus.
- Disseminate academically rigorous and practitioner-relevant knowledge outputs in various venues and platforms to inform policy and practice.

#### **Clients and partners**

2X Global, IDRC- CRDI



## Access to debt for energy solution providers (MSMEs) in Kenya

A review of the framework, assumptions, and implementation strategy of guarantee fund programs managed by Energy4Impact in Kenya

#### Work areas:

Energy systems, MSMEs, inclusive climate finance



#### The challenge

Energy4Impact, a UK-based NGO, seeks to reduce poverty in East Africa through accelerated access to energy. It provides technical, commercial, and financial advice to MSMEs in the clean and reliable energy solutions sector. Energy4Impact runs programs that enable MSMEs to access debt markets and offer credit guarantees to lenders.

In 2016, Energy4Impact understood it needed to evoke greater interest from institutional lenders on the operational aspects of its flagship programs—Capital Access for Renewable Energy Enterprises (CARE2) and Developing Energy Enterprises Programme (DEEP).

#### Our engagement

Energy4Impact contracted MSC to conduct a consultative review of both CARE2 and DEEP.

MSC reviewed the framework, underlying assumptions, operational guidelines, impact parameters, and implementation progress. It critically examined the success criteria of the programs.

Based on the assessment, MSC advised Energy4Impact to rework the investee companies' cash flow and return parameters and highlight them in the DPRs. This would enable Energy4Impact to gain the interest of institutional lenders to fund MSMEs enrolled under these two programs.

#### **Outcomes and impact**

- The revised approach enabled Energy4Impact to support more than 4,000 microenterprises and 500 small enterprises and helped the programs mobilize institutional debt worth USD 136 million.
- The projects have provided clean energy access to 19 million people through 9,000 businesses and raised USD 180 million in debt.
- The projects claimed to have prevented 14 million tons of CO<sub>2</sub> emissions.

#### **Clients and partners**

Energy 4 Impact - Powered by Mercy corps



## Distribution of energy-efficient solutions

Formulation and execution of a market entry plan for an African "pay-as-you-go" solar product company in India

#### Work areas:

Energy systems, inclusive climate finance, strategy and program design



#### The challenge

M-KOPA Solar is a pioneer in home solar energy solutions in Africa. It has solar solutions for equipment that range from lamps to refrigerators. M-KOPA's "pay- as-you-go" model offers affordable and digital credit options to buyers to drive adoption.

M-KOPA Solar sought to test its model's scalability in markets outside Africa, such as India. The challenge was India's complex socio-demographic landscape and the lack of existing models to draw lessons from.

#### Our engagement

In 2015, MSC offered market entry support to M-KOPA Solar under its Digital Finance Plus intervention program for the Gates Foundation.

MSC undertook the following measures to support M-KOPA Solar:

- Identified the best potential market to pilot its products;
- Developed a framework for partner selection;
- Recommended changes in the distribution and financing potential partners to enhance compatibility with M-KOPA's processes;
- Formulated an operational business plan.

#### **Outcomes and impact**

- Our intervention helped M- KOPA Solar formulate an India-specific strategy to help it succeed at a scale similar to Africa.
- The company claims to have saved USD 650 for each customer over five years. It has also generated 2,500
- ▼ Jobs in East Africa and contributed to 46% of household income.
- M-KOPA Solar also helped decrease CO<sub>2</sub> emissions by 1.7 MT and recycled 55,000 electronic products, which contributed to a circular economy.

#### **Clients and partners**

Gates Foundation, M-KOPA SOLAR



## An assessment of India's flagship LPG distribution program

Consultative assessment of a subsidybacked LPG distribution program to drive the adoption of alternatives to polluting energy sources

#### Work areas:

Energy systems, policy support, gender responsive solutions



#### The challenge

The Government of India's Ministry of Petroleum and Natural Gas (MoPNG) launched the Pradhan Mantri Ujjwala Yojana (PMUY) to address the need for clean cooking fuel for 50 million households, especially in the country's rural and remote areas. Toxic fumes, such as carbon monoxide and carbon dioxide from burning firewood, kerosene, and peat, threaten human health. Household emissions also lead to higher greenhouse gases in the atmosphere, though their share is smaller than other sources of CO2 emissions. The program offered a direct cash subsidy to incentivize households to shift permanently from polluting cooking fuels to LPG.

The MoPNG's challenge was to reach the initial target of 50 million beneficiaries and ensure behavior change, which would lead to LPG's adoption as a permanent alternative to polluting cooking fuels.

#### Our engagement

MSC assessed the implementation in three phases from 2016 to 2018. The research team interviewed 574 PMUY beneficiaries across 124 villages and 44 districts in India.

The assessments enabled MSC to:

- Understand the behavioral triggers that facilitate the adoption of a cleaner energy source;
- ▼ Identify the deterrents that prevent the regular refilling of LPG cylinders;
- ➤ Identify the reasons for the continued coexistence of LPG and unclean fuels;
- Determine the impact on gender equilibrium, as women are the program's primary beneficiaries;
- Recommend measures to MoPNG to ensure the continued usage of LPG cylinders and permanent abolition of polluting cooking fuels.

#### Outcomes and impact

MSC published the <u>recommendations as a</u> <u>policy brief that was presented to</u> the key stakeholders.

- After the study's first phase, the Ministry accepted MSC's recommendations and commenced the nationwide LPG safety campaign targeted at PMUY beneficiaries. It removed some of the operational barriers that affect LPG's supply.
- The interventions helped the program enroll 92 million rural households up to April 2022. At this scale, MSC estimates that even a 30% permanent switchover to LPG will reduce CO<sub>2</sub> emissions by 6.14 million metric tons annually.

#### **Clients and partners**

Gates Foundation, Ministry of Petroleum and Natural Gas (MoPNG)



## Operationalization of a climate finance enterprise

Market research and product development advisory to a newlyformed entity in climate finance enterprise

#### Work areas:

Inclusive climate finance, energy systems, strategy and program design, EVs



#### The challenge

A newly formed entity planned to offer rooftop solar and electric mobility financing solutions in the Indian market. It wanted to understand the market potential for e-mobility financing solutions.

The rapidly changing battery technology, absence of charging standards, the developing nature of the electric two and four-wheeler market, and a disorganized electric three-wheeler market posed major challenges for the entity. It sought to identify an array of suitable financing solutions for the electric three-wheeler segment.

#### Our engagement

The entity engaged MSC to help understand the nuances of the electric mobility market and advise on suitable products. MSC conducted a market research and interviewed e-rickshaws and electric three-wheeler manufacturers, battery and charging solutions providers, dealers, and endusers.

Based on the market insights, MSC undertook the following tasks to help the entity:

- Rationalized its strategic business plan;
- Drafted a detailed product and process policy;
- Drafted an investment memorandum and operational budget.

#### **Outcomes and impact**

- MSC helped the entity finalize a product and business plan to finance electric three-wheelers. The entity has sought regulatory clearance to start operations from the Reserve Bank of India.
- Electric three-wheelers occupy 88% of the Indian market, the largest share of the electric mobility market.
- In FY 19, the annual sales of electric three-wheelers reached 1.10 million units.
- 400,000 units out of the 1.10 million were e-rickshaws. This offered an equal opportunity to generate income for low-skilled wage earners and manual rickshaw pullers.

#### **Clients and partners**

AMET



## Employment growth in the renewable energy sector

Policy advocacy for a group of ministers on employment generation in India's renewable energy sector

#### Work areas:

Energy systems, policy support



#### The challenge

India's renewable energy sector faced a 43% decline in capacity installation in Q1 2020 from Q4 2019 due to the lockdown measures imposed to curb COVID- 19's spread. The sector holds the key to economic recovery and employment generation post-COVID-19, though it is not immune to economic slowdowns.

The challenge for the Government of India has been the identification of policy enablers to actualize the sector's employment potential as part of economic recovery.

#### Our engagement

In April 2020, the Government of India constituted a Working Group of Ministers on Employment and Skill Development. The Ministry of Social Justice and Empowerment, responsible for the Group of Ministers' supervision, also set up a Group of Experts to advise on solutions and policy measures.

Mr. Manoj Sharma, Director-MSC, was appointed as the Group of Expert's Cochair. MSC provides secretarial support to the GoEs under this arrangement through the following measures:

- Engagement of sectorial experts, which includes those in renewable energy, in discussions and policy advisory;
- Validation of expert opinions through comprehensive research;
- Documentation of validated opinions and presentation of final recommendations to the GoM.

#### **Outcomes and impact**

MSC compiled a series of policy measures to improve the renewable energy sector's employment- generation capacity.

#### Clients and partners

Ministry of Social Justice & Empowerment



## Review and implementation assessment

Consultative review of the Punjab State Power Corporation Limited's "Save Water, Earn Money" program

#### Work areas:

Energy systems, strategy and program design



#### The challenge

Groundwater extraction in India's Punjab state has increased from 149% of the naturally-available recharge in 2013 to 165% in 2018. During the same period, the state experienced a 32.81% negative variance from normal annual rainfall, which further depleted groundwater recharge. Climate change has accentuated these periods of dry spells since 2009. In June 2018, the Government of Punjab's state electricity distribution company launched the "Paani Bachao, Paise Kamao" program with implementation support from J-PAL, TERI, and the World Bank. The objective was to promote groundwater's judicious use without harm to the agricultural economy. The stakeholders' challenge was to identify the behavioral triggers to motivate farmers not to exploit free electricity and deplete groundwater reserves.

#### Our engagement

MSC conducted a study of the program in July 2019. We observed that some farmers were skeptical about the metering process deployed to offer financial incentives and calculate the amount of power farmers save.

Based on the program observations, we recommended the following interventions to change beneficiaries' behavior toward the program and drive its adoption:

- ➤ **Strategic intervention:** Set up a dedicated project management unit (PMU) to train extension agents, develop SEDC officials' capacity, and incorporate beneficiary feedback to improve the program's delivery;
- Operational intervention: Deploy digital metering to instill trust in the power consumption monitoring mechanism and encourage farmers to self- monitor consumption;
- ➤ Stakeholder-level intervention: Mobilize smallholder farmers' opinions in the program's favor through timely communication of incentives credited into bank accounts.

#### **Outcomes and impact**

- The project stakeholders accepted most of our recommendations. They started to notify beneficiaries about the savings calculations through SMS.
- The SEDC did not issue <u>power bills to</u> <u>farmers</u>, even to those who consumed more than their eligible quota.
- The program's second phase plans to reach out to 50,000 farmers out of a staggering
- ▶ 1.25 million who use free power to run
   1.35 million groundwater pumps.
   However, till November 2021, only
   4.69% of the power consumers in 200
   villages had subscribed to the program.
   Farmers mainly opted out because they did not receive the promised incentives under the first phase.

#### **Clients and partners**

Gates Foundation, PSPCL



## The role of finance in enhancing access to clean energy in India

Market insights into the role of microfinance institutions as enablers of access to clean energy in rural India

#### Work areas:

Energy systems, inclusive climate finance, ecosystems and biodiversity



#### The challenge

The World Wildlife Fund (WWF) identified that the exploitation of forest resources and burning wood for fuel threatens India's forest ecosystem and local biodiversity. It envisaged that the transition from wood-based fuel to clean energy in rural India would minimize deforestation and the threat to biodiversity. WWF also believes such communities may have limited access to clean energy due to the upfront cost of adoption.

The WWF's challenge was to validate its hypothesis through research and reach out to a community of financial institutions to support its objectives.

#### Our engagement

In 2014, MSC undertook a study based on the WWF's hypothesis. It studied and documented the nuances of financing mass-market clean energy solutions.

The study involved various stakeholder interviews, which included microfinance institutions, banks, NGOs, clean energy solution providers, and sectorial experts.

The study produced an exhaustive <u>guidance note</u> on financing access to clean energy by pivoting the distribution prowess and financial strength of the grassroots financial organizations.

#### Outcomes and impact

- The delivery and financing model outlined in the guidance note served as a template for Indian microfinance institutions to partner with solar lighting solution companies to deliver solar lamps on credit.
- In FY 2017-18, Indian microfinance institutions financed 2 million solar lamp units worth USD 55 million.

#### Clients and partners

WWF



Strengthening adaptation planning for local communities: Enhancing Climate Resilience through Locally Led Adaptation (LLA)

#### Work areas:

Locally-led approaches, climate adaptation, inclusive climate finance, toolkit development, tribal communities



#### **Objectives**

- \* Assess the vulnerabilities of local communities to the impacts of climate hazards specific to their region.
- \* Empower community members to identify shared climate risks and evaluate their collective vulnerability.
- ➤ Support community members in developing a community adaptation plan (CAP) to reduce their collective vulnerability to climate risks.
- ▶ Identify the role of locally-embedded entities in enabling communities to implement their CAPs.

#### Our engagement

- MSC developed a Locally-Led Adaptation (LLA) toolkit to identify the challenges and needs of PVTGs to deal with climate risks.
- We implemented the toolkit through workshops with the Particularly Vulnerable Tribal Groups (PVTGs) in three locations: Odisha, Jharkhand and Rajasthan and prepared a research report highlighting the climate vulnerabilities, resilience strategies and adaptation options of the communities.
- We engaged with local government officials to discuss the integration of the CAPs into the local community development plans.

#### **Expected outcomes**

- Partner with Civil Society Organizations (CSOs) in the Gram Panchayats to facilitate the incorporation of Community Adaptation Plan (CAP) into existing programs and initiatives focused on enhancing climate resilience.
- Collaborate with and Financial Service Providers (FSPs) to support the development of customized financial products specifically designed to address the unique needs of vulnerable communities.
- Work towards integrating CAP insights into the Gram Panchayat Development Plans (GPDPs) to ensure climate adaptation measures are embedded in local planning processes.



## Developing a climate risk management training module for Uganda

Enabling locally-led adaptation by building the capacity of Ugandan local government.

#### Work areas:

Climate risk management, capacity building, training needs assessment, locally-led adaptation



#### **Objectives**

Local governments in Uganda face increasing risks from climate change, environmental degradation, economic disruptions, health pandemics, and natural disasters. However, many local government managers and leaders lack the knowledge and tools needed to effectively integrate climate change adaptation, disaster risk management, and resilience-building strategies into their development plans and budgets. This knowledge gap weakens the ability of local governments to protect vulnerable communities and mitigate risks.

#### Our engagement

- ▶ Planning and inception phase: Initiated with an inception meeting alongside UNDP and key consortium partners to define project objectives, set timelines, and clarify roles. Finalized research questions and selection criteria for identifying capacity gaps in local governments.
- Needs assessment and research: Conducted training needs assessment using both primary and secondary research. This included semi-structured interviews with key informants and a multi-day workshop with local government officials to understand their climate risk management challenges.
- ▼ Training module development: Developed a detailed climate risk management training module based on the findings of the needs assessment. The module addresses specific gaps in knowledge and governance practices, aiming to provide local governments with the tools and strategies they need to mitigate climate impacts.
- ▼ Validation and finalization: Held a validation workshop to test the training module with stakeholders, comprising a dry-run session. Feedback was collected and incorporated into the final version of the module, ensuring it meets local needs and is ready for implementation.

#### **Outcomes and impact**

Raised awareness:

Enhanced understanding of climate risks and how they can be mainstreamed within local governance structures and processes.

Capacity building:

Strengthened the ability of local government leaders to incorporate climate change risk management into governance, improving overall crisis response strategies.

Practical and scalable solutions:

Adapted the training to a practitioner's need with actionable insights, tools, and checklists that can be applied at scale, focusing on resilience-building measures tailored to the needs of vulnerable communities in Uganda.

#### **Clients and partners**

UNDP, Republic of Uganda - Ministry of local Government





**MSMEs** 



Landscape study and business pipeline development for Manaaveeya Development and Finance (Oikocredit)

#### Work areas:

Inclusive climate finance, financial instruments, gender responsive solutions



#### **Objectives**

- ▶ Maanaveeya Development and Finance Pvt Ltd (MDF), Indian subsidiary of Oikocredit, secured a loan guarantee facility aimed at strengthening its capacity to extend loans to high-impact sectors, with a particular focus on supporting small and marginal farmers (SMFs), especially women farmers.
- ➤ To further this initiative, Rabo Foundation, Ikea Foundation and Shell Foundation have collaborated with MDF to develop a robust ecosystem in specific target sectors.

#### Our engagement

- MSC is conducting the landscape study focused on 4 sectors and helping develop a funding pipeline for MDF
- Conduct detailed landscape study of each sector and identify key funding opportunities in each, also understanding the major risks, challenges and hindrances faced by the target enterprises

#### **Outcomes**

#### Market landscape

- Ecosystem mapping
- Identifying key products and services

#### Market sizing

- Assessment of debt market potential
- ➤ TAM, SAM, SOM
- Identification of key lenders and financial instruments

#### Identification of enterprises

- Long list of enterprises
- Shortlisting 10 enterprises per sector
- Recommendation of lending product

#### **Clients and partners**

OIKO CREDIT, Rabo Foundation, IKEA Foundation, Shell Foundation



# WEP-उन्नति (Unnati) - A dedicated accelerator for women greenpreneurs

MSC facilitated access to capacitybuilding, mentorship, networking, and financial support for 15 WLBs in the green economy.

#### Work areas:

MSMEs, gender responsive solutions, capacity building



#### Context

Women-led businesses (WLBs) constitute a significant portion of India's startup ecosystem, but a gender gap persists in established businesses. While women-founded startups account for 7.5% of all active startups, they form only 15% of Indian unicorns. To address these challenges, MSC, as part of the Women Entrepreneurship Platform (WEP), launched the "WEP-उन्निति (Unnati)" program with SIDBI. This initiative accelerates post-validation stage WLBs in critical sectors like climate, aiming to bridge the gap and foster growth.

#### Our engagement

- \* We designed and delivered a 1-year-long, dedicated accelerator program for WLBs, sourced applications from all across India, shortlisted 25, and selected 15 using proprietary scoring methods and an in-person jury round
- ▶ We facilitated 600+ person-hours of training on domain-specific and entrepreneurial skills, 50+ person-hours of personalized mentorship, networkbuilding with private- and public-sector stakeholders, and 10+ hours of financial support that comprised elevator pitches, a Pitchathon, and focused group discussions with financiers for investment strategy feedback
- **▼** We templatized the blueprint for 10 such women-only cohorts in sectors other than climate

#### Services provided



Sourced experts and Matched the cohort curated delivery of 21 capacitybuilding sessions



with 12 experts and facilitated 4-monthlong, 1:1 mentorship



Organized 2 networking mixers to connect the cohort with ~50 investors



Selected 2 WLBs for SIDBI-sponsored seed grant of INR 5,00,000 each

### Outcomes and impact

- ▼ 40% WLBs received funding through grants, equity, or debt before cohort closure
- ▼ 73% WLBs refined existing or implemented new business models post-4-month-long mentorship
- **▼** 80% WLBs reported a shift in their mindset toward profitability
- ▼ 100% WLBs reported an increase in confidence while networking, pitching, and asking for support

# Clients and partners

WEP, Climate collective, Grow - Greening of Finance by Women



# Strengthening climate resilience and adaptation through financial services

Insights into the impact of climate hazards on vulnerable communities in Bangladesh and the role of financial services to inform their adaptation strategies

#### Work areas:

Inclusive climate finance, climate adaptation, financial instruments



#### The challenge

Bangladesh's southwest region faces frequent tropical cyclones and storm surges that lead to soil and groundwater salinization. Cyclones have wreaked havoc on the lives and livelihoods of urban and rural poor communities.

However, the global inclusive finance community has a limited understanding of the cyclones' direct and indirect impact on the lives and livelihoods of poor and vulnerable rural and urban communities. Studies have yet failed to adequately reveal how these communities adapt to the increased intensity and frequency of these events and how financial services inform their adaptation strategies.

As a result, the global inclusive finance community cannot formulate programs to deliver inclusive financial services that meet these vulnerable communities' adaptation needs.

#### Our engagement

CGAP engaged MSC to study and uncover an understanding of the following:

- Direct and indirect impacts of cyclones and their associated perils on the lives and livelihoods of the affected communities in Southwest Bangladesh;
- Adaptation strategies of these poor and vulnerable households and the role of financial services in those strategies;
- ▶ Pathways to enhance the role of financial services in the adaptation strategies and strengthen the resilience of these communities against climate change.

### **Outcomes and impact**

- CGAP conducted a consultative workshop in Dhaka based on the first set of insights generated from the qualitative research.
- The workshop brought together leading climate adaptation and inclusive finance communities' members on a common platform.
- The workshop allowed these two communities to share their perspectives on the problems caused by climate change impacts on poor communities and how inclusive financial services can lead the pathway to climate adaptation.

## Clients and partners

CGAP, Decodis



Microfinance for climate resilience: MSC's approach to inform BURO Bangladesh's strategy to strengthen the resilience of its borrowers against the impacts of climate change

#### Work areas:

Inclusive climate finance, climate adaptation, financial instruments, capacity building



#### The challenge

Microfinance institutions (MFIs) in Bangladesh, such as BURO, have significantly advanced financial inclusion and improved livelihoods. However, climate change now threatens these gains by intensifying vulnerabilities.

To safeguard progress, MFIs must first rigorously assess how climate hazards disrupt borrowers' income and financial stability. Second, they need to evaluate and adapt existing financial products—such as loans and savings schemes—to better align with climate-resilient strategies. Finally, designing innovative, client-centric financial services, developed through partnerships, is essential to address accessibility gaps and scale climate-resilient solutions..

#### Our engagement

- Conducted a training needs assessment to identify skill gaps and developed tailored training materials to enhance staff understanding of climate impact research methodologies.
- Delivered four-day training sessions in four identified locations, equipping BURO's staff with qualitative research skills to assess climate risks and uncover customer adaptation strategies.
- Conducted in-depth qualitative research in climate-vulnerable areas to understand customer climate risks, adaptation strategies, and BURO's potential role in mitigating these risks.
- Compiled research findings into a comprehensive pitchbook report, providing actionable insights and recommendations to guide BURO's strategic climate resilience initiatives.

### **Outcomes and impact**

- Suggest strategies for BURO to effectively protect its agriculture portfolio from the impacts of climate hazards.
- Position BURO as a market leader in assessing and addressing the effects of climate hazards on poor and vulnerable populations.
- Derive key lessons to guide BURO's future lending approaches for climate-vulnerable populations in Bangladesh.

### Clients and partners

BURO - Bangladesh



# Financing energyefficient technologies

Dissemination of insights on the nuances of financing energy-efficient technologies' adoption by MSMEs in India

#### Work areas:

Energy systems, MSMEs, inclusive climate finance



#### The challenge

In 2013, the International Finance Corporation (IFC) undertook a project to promote capital access to MSMEs, which would enable them to adopt energy- efficient technologies. IFC identified that the key to this initiative's success was to encourage financial institutions to realize the potential opportunities, benefits, and returns in financing MSMEs willing to adopt energy-efficient technologies.

IFC's challenge was to elicit the Indian BFSI sector's genuine interest to finance MSMEs' energy efficiency needs.

#### Our engagement

MSC conducted primary research through engagements with MSMEs and financial institutions. We synthesized the findings into a strategy to finance MSMEs' adoption of energy-efficient technologies.

MSC successfully disseminated actionable insights to key stakeholders in the Indian BFSI sector through a knowledge series workshop in June 2013.

#### **Outcomes and impact**

- A clear outcome of the workshop was a consensus on the need to utilize financing to encourage MSMEs to adopt energy-efficient technologies.
- The Small Industries Development Bank of India (SIDBI) launched the 4E (endto-end energy efficiency) program in June 2014 to promote energyefficiency investments in MSMEs. The program provides subsidized finance ranging from INR 1-15 million (USD 13,333- 200,000) to MSMEs to implement the suggested energy conservation measures (ECM).
- The scale of environmental benefits to make more than 63.4 million MSMEs energy- efficient would be substantial for a developing like India.

## **Clients and partners**

IF







# Guiding climate and disaster risk financing strategy formulation

Development of a reference document to help formulate Fiji's sovereign CDRF strategy

#### Work areas:

Disaster risk reduction, financial instruments, risk insurance, climate adaptation



#### The challenge

The <u>Pacific Insurance & Climate Adaptation Program</u> sought to drive the market in Fiji for climate and disaster risk insurance. However, Fiji currently lacks a sovereign climate and disaster risk financing and insurance (CDRFI) strategy that could serve as a framework for policymaking.

Without a CDRFI strategy, Fijian Ministries and the Reserve Bank of Fiji cannot formulate enabling policies and regulations to help develop the country's CDRFI market.

#### Our engagement

UNDP engaged MSC to develop a comprehensive reference paper to inform the CDRF strategy formulation. The reference paper provides insights and guidance on the following aspects, among others:

- CDRFI's importance for Fiji, considering its vulnerability to climate change and disasters;
- Assessment of current mechanisms of government financing for disaster reduction, retention, and transfer, and gaps in such financing;
- Assessment of Fiji's insurance market and its needs and capacity to serve the demand for CDRFI products.

#### **Outcomes and impact**

- Based on the guidelines in the document, the Fijian Government with <u>UNDP</u>'s support led the development and launch of a market-based parametric insurance product.
- ▶ By the end of 2021, a total of 1,388 beneficiaries had registered for the product, of whom 442 (32%) were women.

### Clients and partners

UNDP, UNCDF, UNU-EHS



# Climate and disaster risk insurance in Asia

A pioneering sector-level study to understand existing CDRI solutions in 22 markets across South and Southeast Asia

#### Work areas:

Disaster risk reduction, risk insurance, climate adaptation



#### The challenge

International development agencies have struggled to drive the adoption of climate and disaster risk insurance (CDRI) products worldwide. Asia poses the greatest challenge due to its size, location, and presence of many countries with low socio-demographic indicators and complex financial markets. Climate change has already exacerbated the number and scale of disaster events in Asia. Hence, stakeholders need to understand the current landscape of CDRI products and work to scale up its adoption.

#### Our engagement

Against this background, MSC analyzed the status of CDRI across 22 countries in South and Southeast Asia. We collaborated with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Regulatory Framework Promotion of Pro-poor Insurance Markets in Asia (RFPI-Asia).

MSC undertook robust secondary research on the existing policy and regulatory environments around CDRI and existing CDRI solutions at the macro, meso, and micro levels.

Key informant interviews across Bangladesh, Indonesia, the Philippines, and Vietnam further complemented the findings.

#### **Outcomes and impact**

- The <u>findings</u> were the centerpiece of the official press statement of the 15<sup>th</sup> International Microinsurance Conference held in Dhaka, Bangladesh in November 2019.
- The study informs, for the first time, the inadequacy of existing CDRI interventions. It serves as a baseline for stakeholders to measure future progress and offer credible CDRI solutions in Asia.
- Our findings revealed that sovereign risk transfers and other insurance mechanisms in the region directly or indirectly cover just upward of 212 million lives. This still leaves more than 91% of the region without any disaster risk cover.

### Clients and partners

giz - Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, InsuResilience Global Partnership



# Disaster risk insurance for MSMEs

Development of microinsurance products for MSMEs in the Philippines to transfer natural disaster risk

#### Work areas:

Disaster risk reduction, financial instruments, risk insurance, climate adaptation, MSME



#### The challenge

The Philippines is particularly vulnerable to typhoons and tropical cyclones due to its geographical location. Over the past decade, the country has lost about 8,200 lives to super cyclones and experienced 1,077.8 mm of rainfall that flooded all of Baguio city in Benguet province. The super cyclone <u>Haiyan</u> claimed 6,352 lives and caused economic damages worth USD 2.98 billion. In 2018, GIZ, the Department of Trade and Industry (DTI), and the Government of the Philippines took up the challenge to study the nature of risks vulnerable MSMEs face and develop solutions to help them transfer this risk through financial products.

#### Our engagement

In 2018, the GIZ- RFPI Asia team engaged MSC to undertake research and develop products to help MSMEs transfer disaster risk. MSC covered a sample of 180 MSMEs and discussed potential financial products with insurance companies and collateral finance institutions. The exercise led to a product concept for business interruption insurance for MSME units.

#### Research



MSC deployed its proprietary research tools and extracted insights from interviews with MSMEs and insurance and credit service providers.

# Product development



MSC's rapid prototyping tool was used to assimilate information quickly and translate it into a product. This helped program managers launch the product by early 2019.

#### **Outcomes and impact**

- GIZ-RFPI rolled out the micro-DRI product in collaboration with the DTI. The Government of the Philippines aggressively promoted the product among vulnerable MSMEs.
- The product targeted 15,000 MSMEs in the Philippines, which included more than 2,000 enterprises in Davao City alone.
- The MSMEs benefitted from the minimal premium rate of PHP 900 (USD 18.56) per annum for annual coverage of up to PHP 500,000 (USD 10,309).

## **Clients and partners**

giz - Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH



# Weather-index based microinsurance

Research to deliver market insights into weather index- based microinsurance products for vulnerable communities in South and Southeast Asia

#### Work areas:

Disaster risk reduction, financial instruments, risk insurance, climate adaptation



#### The challenge

In 2013, weather-index insurance (WII) products that target smallholder farmers in Asia were nascent. Most WII product programs were donor-driven, except in India and Indonesia where private players were the frontrunners. The WII products faced an uncertain future due to a dependence on donor-led subsidies, lack of reinsurance products, unpredictable claim experiences, and a rudimentary data collection infrastructure. The Climate and Development Knowledge Network (CDKN), funded by DFID and the Dutch Ministry of Foreign Affairs, wanted to assess the WII market in five Asian countries. It sought to enhance the affordability and outreach of WII solutions and devise a program to develop a market for WII.

#### Our engagement

CDKN contracted MSC to deliver market insights on WII in India, Pakistan, Sri Lanka, Indonesia, and the Philippines.

MSC conducted extensive secondary research and industry expert interviews to deliver market insights. The report provided holistic information on WII in these countries, its advantage over traditional agri-micro insurance, growth drivers, constraints, diversification opportunities, and impact.

MSC also advanced CDKN's agenda in India through a <u>report</u> presented at the Microfinance India Summit. The report received a warm response from the microfinance and associated financial services industries.

# **Clients and partners**

**CDKN** 

#### Outcomes and impact

- Our findings emphasized that reinsurance serves as a necessary infrastructure to drive growth in WII. Convinced by the importance of such findings, the Central Bank of the Philippines permitted the Philippines Crop Insurance Corporation (PCIC) to offer index-based reinsurance in 2018. This also attracted global reinsurers, such as Swiss Re and Munich Re, which were earlier disinterested due to the PCIC's restrictive mandate.
- Our report also emphasized the significance of real-time weather data to help develop the WII market. In India, private players, such as Skymet, responded to this requirement and installed about 7,000 automatic weather stations in around 20 states countrywide.



# Microinsurance to mitigate disaster risk

Review of SDC's program targeted to develop resilience among the poor and vulnerable through risk transfer

#### Work areas:

Disaster risk reduction, financial instruments, risk insurance, climate adaptation



#### The challenge

Countries with a low socio-demographic index (SDI) have weaker resilience against natural disasters than those with higher SDIs. As per the latest available data, in 2017, the number of lives lost due to natural disasters was 10 times higher in low-SDI countries than in high-SDI countries. The Swiss Agency for Development and Cooperation (SDC) sought to combat this disparity in disaster resilience. It launched a program in India in 2015 to develop disaster risk transfer solutions for poor and vulnerable communities.

The challenge for SDC was to gather lessons from the project, develop a template for other low-SDI countries, and exit the project.

#### Our engagement

In 2016, MSC undertook a detailed assessment of the theory of change proposed by the project, its operating model, financial outlay, and replicability based on the performance and impact assessment.

MSC used its existing experience in developing pro-poor and customercentric financial solutions to evaluate the risk transfer solutions developed by the project.

MSC collated the findings, suggested the changes needed to globalize the template, and charted a successful exit plan for SDC.

## **Outcomes and impact**

- The project enrolled 87,000 poor beneficiaries from vulnerable sections across two Indian states.
- The dissemination of market insights on disaster risk transfer solutions across South and Southeast Asia engaged policymakers, market stakeholders, and development agencies. It led to a 43% growth in the active risk transfer programs available from 2012 to 2018, 80% of which were microinsurance programs.

### Clients and partners

Swiss Agency for Development and Cooperation (SDC) and State Secretariat for Economic Affairs (SECO)



# Diagnosing India's inclusive risk finance landscape

Review of SDC's program targeted to develop resilience among the poor and vulnerable through risk transfer

#### Work areas:

Disaster risk reduction, financial instruments, risk insurance, climate adaptation



#### The challenge

As part of its growing work in the inclusive insurance and risk finance (IRFF) space, UNDP conducts diagnostic exercises in several countries to understand the contexts, gaps, and opportunities for collaboration and technical assistance.

The diagnostic study in India sought to review the inclusive insurance and risk finance landscape with a focus on the supply and demand situation at an individual level and the legislative and regulatory environment around these instruments.

Based on this diagnostic, UNDP sought to inform its intervention strategy for the Indian market.

#### Our engagement

UNDP contracted MSC to undertake the diagnostic study. MSC conducted the diagnostic study using literature reviews and key-stakeholder consultations.

We consulted stakeholders, such as the Ministry of Agriculture and the National Disaster Management Authority, to reveal the connection between climate risk management in the agriculture sector and a broader set of disaster risk management mechanisms and instruments.

#### **Expected outcome**

The diagnostic study is expected to inform a program under UNDP's Insurance & Risk Finance Facility in India

### Clients and partners

**UNDP** 



# Digital crop microinsurance

Technical advisory and capacitybuilding support to translate an innovative concept into a feasible digital crop microinsurance product to develop climate change resilience

#### Work areas:

Disaster risk reduction, digital solutions, risk insurance



#### The challenge

Since early 2015, Ethiopia has been in the grip of the worst droughts in recent history, which threaten the food security of more than 10 million people. The digital technology platform Kifiya Financial Technology PLC sought to respond to the current crisis and seek solutions to Ethiopia's historical vulnerability to the prolonged drought. Kifiya conceptualized a crop microinsurance program for farmers based on satellite imagery (normalized difference vegetation index).

The entity, however, struggled to translate the concept into a commercial product. It engaged MSC to turn its vision into reality.

#### Our engagement

In 2016, MSC provided technical advisory and capacity-building support to help Kifiya translate its pioneering NDVI-based agriculture insurance product concept into a first-of-its-kind product in Ethiopia. MSC provided the following support:

- Translated the concept into an easy-to-understand, client-centric index insurance product
- Forged partnerships with a leading insurer and government agencies
- Analyzed the regulations in Ethiopia and obtained regulatory approval
- Mobilized government support and secured the commitment of financial aid to the project in the form of direct subsidy to beneficiaries
- Formulated a strategic business plan that aligned seamlessly with the client's existing DFS business

### Outcomes and impact

- The product was piloted with 2,000 farmers in 2016 and scaled up to 100,000 farmers in 2017-18.
- The project secured government support for the financial education and training of more than 100,000 farmers in 2017 and a commitment toward a direct premium subsidy for more than 200,000 farmers in 2018-19.

# **Clients and partners**

Kifiya Financial Technology



# The landscape of climate change adaptation mechanisms and instruments for rural India

A study on climate change's impact on rural India and the availability of mechanisms and instruments that strengthens resilience against climate change

#### Work areas:

Inclusive finance, climate adaptation, financial instruments, disaster risk reduction, policy support



#### The challenge

Through its Innovative Climate Risk Insurance (ICRI) project, GIZ seeks to strengthen the climate adaptive capacity of India's rural population through the promotion of innovative market-led mechanisms and instruments. The project team struggles with a lack of insights into the available market mechanisms and instruments that target specific climate risks in particular geographies.

#### Our engagement

The ICRI project team approached MSC to deliver insights into the available market mechanisms and instruments through desk-based research.

MSC's climate and disaster risk financing and insurance experts conducted a literature review to:

- Identify the various extreme weather events and climate hazards specific to a particular agroclimatic zone
- Outline the past economic impact of these extreme weather events and climate hazards on the rural regions in these agroclimatic zones.
- ➤ Identify cases of market mechanisms and instruments crucial to reduce the economic impact of these extreme weather events and climate hazards on the rural population
- Calculate the future estimates of economic losses due to these events exacerbated by climate change
- Comment on the gaps in existing market mechanisms and instruments that seek to strengthen the rural population's climate resilience
- Recommended insurance-led pathways to achieve climate resilience of India's rural population

### Outcomes and impact

The ICRI project team used the insights to inform policymaking in the insurance sector to enhance the insurance sector's capacity to offer better climate and disaster risk management solutions to India's vast rural population.

### Clients and partners

German cooperation Deutsche Zusammenarbeit, published by- giz



# Product feasibility study for crop microinsurance

An examination of the feasibility of effective microinsurance product delivery to paddy and maize smallholder farmers in Tanzania

#### Work areas:

Disaster risk reduction, risk insurance, financial instruments, climate resilience



#### The challenge

Smallholder farmers comprise more than 80% of Tanzania's farming community. A little over 1.9% of their total farmland is irrigated. The combination of small landholdings, rainfed sources of water, and lower adoption of technology exposes smallholder farmers to the vagaries of weather. Over the past decade, climate change has worsened heat waves and droughts in Sub-Saharan Africa.

The challenge for Alliance for Green Revolution in Africa (AGRA), a pan-African institution, was to develop resilience among smallholder paddy and maize farmers through risk transfer products. However, the market did not have suitable insurance products because most insurers did not find it feasible to serve smallholder farmers.

### Our engagement

AGRA engaged MSC from April to June 2018 to undertake a feasibility study around the delivery of crop microinsurance to smallholder paddy and maize farmers. The MSC team conducted thorough secondary and primary research through qualitative and quantitative research tools with the following objectives:

- Understand the features and benefits of crop microinsurance programs and products available in Tanzania
- ◆ Spot the nuances of services that different service providers offer
- Identify the sources of risks for paddy and maize crops managed by smallholder farmers
- ➤ Determine the level of risk of crop failure

MSC recommended that AGRA implement a crop microinsurance project based on positive inferences drawn from the feasibility study.

### Outcomes and impact

- AGRA accepted MSC's recommendations
- and forged partnerships with TAPBDS Co Ltd and Reliance Insurance Limited Tanzania to launch the Wekeza Kwa Uhakika (WEKU) project.
- ➤ In its initial phase, the project will improve the climate change resilience of smallholder farmers through crop insurance for 20,000 farmers in Tanzania's Ruvuma and Njombe regions.00

## Clients and partners

AGRA- Growing Africa's Agriculture



# A case study of India's early warning system

A study of the national Common Alerting Platform (CAP) enabled a multi-hazard early warning dissemination system in India.

#### Work areas:

Disaster risk reduction, Early warning systems, mobile network operators, digital solutions



#### The challenge

India's integration of Location-Based SMS and Cell Broadcasts into its national Multi-hazard CAP enabled Early Warning System offers valuable insights for the UN's Early Warning for All initiative. However, scaling this model globally poses challenges, including technological interoperability, inclusivity, public-private partnerships, and impact assessment. Addressing these challenges can help countries adapt India's experience to enhance disaster resilience worldwide.

#### Our engagement

- ▼ MSC was engaged by GSMA's Mobile for Humanitarian Innovation team to study India's tailored and inclusive Early Warning System (EWS), focusing on disaster preparedness and resilience in the context of climate change.
- ➤ We highlighted India's CAP-based alerting system, SACHET, which is globally recognized for its reach, impact, and advisory role to neighboring countries.
- ➤ The study emphasized the role of Mobile Network Operators (MNOs) and involves secondary research, stakeholder interviews, and a validation workshop with key organizations.

#### **Outcomes and impact**

- The project culminated in a published report documenting good practices and lessons learned from India's EWS approach with a focus on using mobile technologies for dissemination.
- MSC hosted a roundtable with participants from government, civil society, academia, and key commercial players to present research findings and facilitate collaborative discussions on expanding EWS in India through mobile technology, focusing on cell broadcasting.

# **Clients and partners**

**GSMA** 



# Climate impact and risk assessment tool

A self-service climate impact and climate risk assessment tool for financial services companies

#### Work areas:

Climate risk assessment, BFSI, toolkit development



#### The challenge

The banking and financial services sector is vital to help countries achieve nationally determined contributions' (NDCs) goals. However, the BFSI sector in developing countries lacks the necessary tools to evaluate their business's climate impact and identify physical risk and transition risk of climate change.

#### Our engagement

Developing World Markets (DWM), an international development finance institution, engaged MSC to develop a tool that can be applied to various types of financial institutions and deliver insights contextualized to the organization's size and country of operations. The tool will help financial institutions evaluate their business's climate impact and identify climate change-linked physical and transition risks.

MSC developed a climate impact and risk assessment tool for DWM's portfolio companies. MSC referred to the following standards and guides to develop the tool for DWM:

- ▼ Task Force on Climate-Related Financial Disclosures' guidance on metrics, targets, and transition plans;
- ▼ European Microfinance Platform's Green Index 2.0;
- World Economic Forum's guiding principles for effective climate corporate governance;
- PCAF's global GHG accounting standard for the financial industry;
- ▼ The Greenhouse Gas Protocol's emission factor computation tools.

#### **Expected outcome**

- MSC expects DWM's investee institutions to test and scale up the tool in their organizations.
- MSC will subsequently support the evaluation of the self- assessments' outcomes. DWM might seek MSC's support to potentially help some of its investee financial institutions enhance their climate action strategies.

## Clients and partners

**Developing World Markets** 



# Development of inputs for CGAP's climate lens

A mapping of key global actors and financial instruments for advancing climate resilience through inclusive finance.

#### Work areas:

Climate adaptation, financial instruments, inclusive climate finance



#### **Objectives**

- ➤ Explore how inclusive finance can enhance autonomous adaptation, unlock private capital, and scale climate adaptation projects.
- ▶ Understand how development agencies use financial instruments to fund climate adaptation and resilience projects.
- ▶ Document the role of inclusive finance in improving outcomes of climate adaptation projects funded or supported by development agencies.

#### Our engagement

- ➤ Categorized major international development agencies into 11 groups, analyzed their climate adaptation projects, and identified how inclusive finance can enhance outcomes.
- ➤ Used CGAP's framework to analyze adaptation finance projects and leveraged ReadCube via Perplexity.ai to generate detailed literature summaries and thematic insights.

#### **Expected outcome**

- A visual map of major climate adaptation actors, demonstrating how inclusive finance can enhance the outcomes of their funded, implemented, or supported projects.
- An updated ReadCube library of 1,030 curated pieces of literature, providing a comprehensive knowledge base to support further research and decisionmaking.
- This work will inform the larger strategy of CGAP to advance climate resilience through inclusive finance.

# **Clients and partners**

**CGAP** 





# Enhancing the climate resilience of marine fisherfolk

Support to an emerging Indian FinTech firm to extend livelihood finance to marine fisherfolk vulnerable to coastal floods

#### Work areas:

Inclusive climate finance, climate adaptation, ecosystems and biodiversity



#### The challenge

The World Bank <u>estimates</u> that 15% of the world's annual marine catch volume is illegal and causes irreparable damage to marine biodiversity. Awareness of the adverse impact created by fisherfolk involved in illegal and indiscriminate fishing and their participation in creating solutions can potentially create balance and reduce the harm to coastal biodiversity caused by large fishing vessels that organized chains operate.

<u>Numer8</u>, an emerging FinTech firm in India, sought to build robust credit offerings for underwriting loans to increase the participation of vulnerable fisherfolk in marine fishing value chains across several countries. Numer8 believed that credit is essential for fisherfolk to scale their livelihood activities and enhance their resilience against climate shocks.

#### Our engagement

MSC supported Numer8 through qualitative insights into the marine fishing value chain's economics, the credit needs of fisherfolk, and the nuances of financing the low-income segment. MSC interviewed more than 220 fisherfolk and value chain participants to develop these insights.

MSC has also been developing a robust credit engine for Numer8 that could apply to diverse countries with minimum customization.

MSC offered services to Numer8 as part of its umbrella engagement as a technical advisory partner of CIIE.CO's Bharat Inclusion Initiative.

### **Outcomes and impact**

- Numer8 has successfully registered more than 2,000 fisherfolk in India. It has been running pilot programs in Bangladesh, Sri Lanka, and the Philippines.
- Numer8 has a robust credit engine and a sophisticated analytics architecture. It seeks to support marine fisherfolk in Bangladesh, India, Indonesia, Papua New Guinea, Sri Lanka, and the Philippines.
- Our intervention has helped Numer8 offer credit to fisherfolk and promote sustainable fishing. This initiative is expected to protect the livelihoods of a significant percentage of the 120 million people who depend on fishing for their incomes and livelihoods.

# **Clients and partners**

Bharat Inclusion Initiative, Numer8







# Vietnam WSS landscape study

Assess the demand for water supply & sanitation MSME financing opportunities for financial institutions in Vietnam

#### Work areas:

Health, nutrition and WASH, inclusive finance, MSMEs



#### The challenge

The water supply and sanitation (WSS) sector is critical for sustainable development, yet financing remains a significant bottleneck. Despite the presence of micro, small, and medium enterprises (MSMEs) in the WSS ecosystem, their access to credit is limited due to perceived risks, lack of tailored financial products, and an underdeveloped market structure. Financial institutions are hesitant to lend, and existing funding mechanisms do not adequately address the sector's unique challenges. A structured approach is needed to bridge financing gaps, enhance the viability of WSS MSMEs, and promote sectoral growth.

#### Our engagement

MSC conducted an in-depth analysis of the WSS financing landscape to identify key players, existing gaps, and opportunities for collaboration. The team evaluated the attractiveness of the WSS MSME sector and highlighted competitive dynamics and potential growth areas. Additionally, MSC assessed the financing needs and debt absorption capacity of WSS MSMEs to determine viable funding opportunities for financial institutions.

To validate research findings and gather stakeholder insights, consultations were held with financial institutions, MSMEs, investors, and industry experts. MSC also analyzed MSME segments based on market size, profitability potential, and resilience to external risks, focusing on high-growth opportunities. As part of the intervention, MSC is developing tailored financial products and proposing blended financing structures to address the specific needs of WSS MSMEs, ensuring financial sustainability and sectoral expansion.

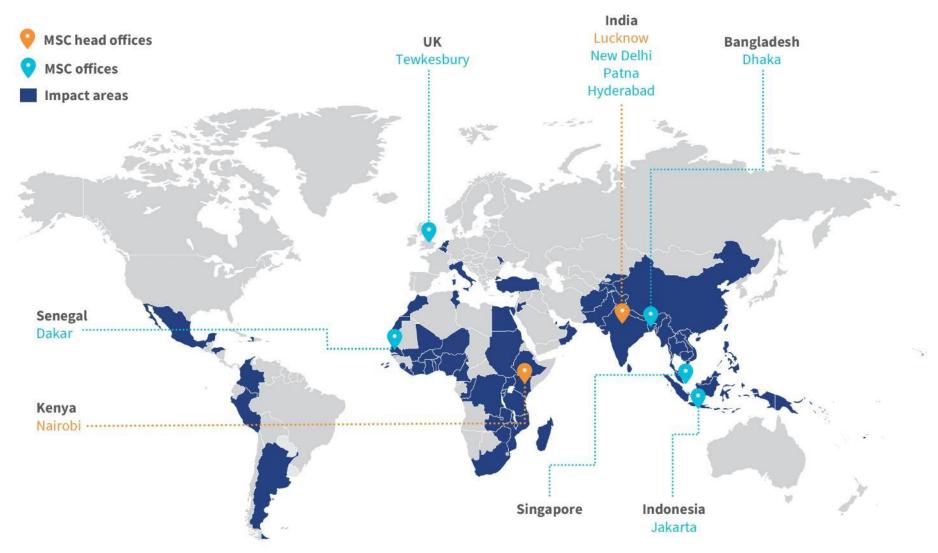
#### **Outcomes and impact**

- Market insights: A comprehensive analysis provided water.org with key insights to drive investment decisions.
- Focused investment: MSME segmentation helped water.org highgrowth opportunities.
- ▼ Tailored financing: Customized financial products and blended structures will improve credit access and reduced risks.
- Stronger collaboration: Engagement with financial institutions and investors will foster alignment on financing solutions.
- Sustainable growth: Identified funding opportunities support the long-term resilience of WSS MSMEs and sectoral development in Vietnam.

## **Clients and partners**

Water.org





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