

Climate Assessment Tool

Purpose

This Climate Assessment Tool is designed to help portfolio companies and Mercy Corps Ventures:

- Reach a shared understanding of the company's current risks from climate shocks - and how that might affect your business itself, as well as your end users
- Identify any potential opportunities that arise from climate change
- Identify potential mitigation strategies and/or ways to take advantage of opportunities

We have intentionally made this tool open-source for any company or fund to use.

Instructions

Start by reading our [Introduction Guide](#) (very short!). We recommend you complete this Climate Assessment with key members of your company (e.g. leadership and heads of teams). If you need support, get in touch with the MCV Venture Platform team. We can help you work through any questions you have.

Post-Investment Support

Based on your assessment, you may have identified areas where we could provide post-investment support for your climate journey over the next 6-12 months - please add notes below.

[Notes](#)

What do we mean when we talk about climate change?



The changing climate has an impact on us all, and particularly on people and businesses in emerging markets. The impacts of climate change can be **direct** or **indirect**, and affect many different parts of the system. Some key examples are included below.

Key risks from climate change	Examples include
Extreme weather events One-off or short-term	Wildfires Flash floods Extreme heat Severe storms + hurricanes
Changing climate patterns Longer-term, developing each year	Reduced / volatile yearly rainfall Increasing air pollution Rising sea levels Increasing air temperatures
Indirect changes due to climate change	Examples include
Regulatory	Increasing regulation (e.g. on emissions or supply chains) Green transition Energy use requirements / restrictions
Human behaviour	Changing preferences Increased migration



Direct impacts	
Infrastructure	e.g. damage to roads or train tracks
Supply chains	e.g. increased delays due to disrupted infrastructure, resource availability
Agriculture / food systems	e.g. reduced or increased growing seasons, reduced productivity in livestock due to heat
Aquaculture	e.g. water pollution, oversalination
Physical assets	e.g. collapsed buildings, damage to factories
Natural capital	e.g. pollution of lakes or air, coastal erosion
Indirect impacts	
Personal	e.g. negative health effects including respiratory diseases, heatstroke, or worse
Customers	e.g. increased costs passed onto customers, or health risks that affect their behaviour

Why is this important to our entrepreneurs?

BUSINESS These risks can pose a serious challenge to your supply chains, resources, or physical properties. This could threaten your business growth and ability to scale sustainably.
CUSTOMERS At the same time, your customers are also at risk of climate change, affecting their ability to harvest, generate income, pay for services, or participate in your business at all.

Where can you find more information?

Resources		Regional risk profiles	
Climate Collective	Measuring the Impact of Climate: Small + Growing Businesses	East Africa	Senegal
Climate Links	Climate Risk Screening and Management Tools	West Africa	Uganda
Lightsmith	Adaptation Solutions Taxonomy	Kenya	Cote d'Ivoire
McKinsey	Climate Risk + Response: physical hazards and socioeconomic impacts	Nigeria	South Africa
Deloitte	Why climate resilience is key to building the healthcare organization of the future	Mali	Mexico
USAID	Climate vulnerability assessment	Tanzania	Colombia
UN	Water at the center of the climate crisis	Tunisia	Brazil
World Bank Group	Agriculture, Climate and Disaster Risk Screening Reference Guide	Egypt	Indonesia
Cervest	How climate change is impacting your supply chain	Rwanda	
BCG	The importance of sustainability in business	Ghana	
Cervest	How heatwaves impact infrastructure and ecosystems		

		Risk	Severity	Probability	Risk rating	Risk management options			
		Based on the geography(ies) your business operates in, does your business have exposure to any of these climate events? And based on the geography your and users are in, do they have exposure as well? See table for the climate risk profiles of different regions.	How severely would the event impact your business? Low: <10% revenue loss Medium: 10-25% revenue loss High: >25% revenue loss	How likely is the event to happen? Low: unlikely in the next 5 years Medium: could happen in the next 5 years High: likely to happen within 1-2 years	This field will automatically populate based on your answers to the previous two questions. See right for the risk rating matrix.	Brainstorm ideas for addressing the high climate risks. See examples here ---> We can support you on this if you need - just reach out.	Examples could include: - train your and consumers in the basics of sustainable agriculture - encourage mixed-crop/livestock systems or other ways to improve productivity through varied/diversified agriculture - integrate early-warning systems into your product to help with preparedness - support your employees to protect themselves from extreme heat (e.g. home or office improvements) - provide extra support for particularly vulnerable populations (at the bottom) See the "Climate Opportunities" tab for more examples.		
Impact theme	Business								
	Infrastructure	Disruption in services (e.g. water, electricity) due to extreme weather events in the region where you operate Interruption of transport networks due to climate events Reduced communication, internet, or GPS capacities due to flooding or storms disrupting networks			#N/A				
	Supply chain	Disruption to supply chain due to extreme weather events (e.g. floods, wildfires, erosion) Reduced availability of core goods in the supply chain (e.g. flour, sugar)			#N/A				
	Physical assets	Lower availability of workforce in extreme heat events e.g. people can't get to work due to heat			#N/A				
	Customers	Reduced willingness of farmers to invest in sustainable agriculture practices that represent more of a risk due to uncertainty [] Health issues reducing customer ability to engage with your product			#N/A				
Impact theme	End users								
	Aq / food systems	Damage to crops and reduced yields due to heat stress, changes in rainfall, flooding or drought Increased prevalence of diseases, pests, and parasites affecting livestock or crops due to improved conditions for these organisms to grow e.g. certain parasites thrive in warmer weather Reduced water availability for livestock or crops due to drought and/or changes in rainfall Reduced soil fertility from prolonged drought			#N/A				
	Aquaculture	Reduced harvests and lower incomes from near shore aquaculture due to sea level rise and/or floods Desiccation of fish habitat and other aquatic species due to prolonged drought or oversaturation of fresh water, leading to reduced harvests / incomes			#N/A				
	Customers	Reduced water availability for customers due to drought, changes in rainfall, and/or contamination of water supply Ability of customers to prepare for climate shocks due to lack of accurate information on floods, droughts, etc			#N/A				
	Personnel	Temporary or permanent displacement of populations due to flooding and/or drought Higher incidence of health conditions related to extreme heat, injury or other vulnerability to climate shock			#N/A				
		0			0	---	If this number is greater than 4, you should consider putting in place or updating a climate risk mitigation strategy. You could also explore how to turn these risks into opportunities (see "Climate Opportunities" tab).		

		Probability		
		Low	Medium	High
Severity	Low	Low risk	Low risk	Low risk
	Medium	Low risk	Medium risk	Medium risk
High	High risk	High risk	High risk	

Climate Opportunity			Notes
How strongly do you agree with the following statements?			
	In the Risk Assessment, we identified some risks to our customers that could impact their income (e.g. reduced harvests).		Write down thoughts on how you could pivot to respond to those risks. e.g. providing health insurance or other forms of financial support e.g. supporting them to adapt their agricultural practices
	We see an opportunity from changing environmental and ESG regulations.		This could be 1) because your product already makes it easier for companies to abide by regulations, or 2) because you could pivot to provide that kind of service.
	We have explored the possibility of raising funding from climate investors.		Have these investors asked for specific information e.g. metrics, proof of concept? If yes, note it down here.
		Total	0 <-- If this box is red, you should think about how to maximise your climate opportunities. Start in the list below.
What are the opportunities for your business from climate?		Source	Is this a possible opportunity for us?
Reducing customer risk	Providing information about regenerative agricultural practices		
	Parametric insurance		
	Early warning systems for extreme coastal weather events		
	Remote sensing-based drought monitoring tool		
	Health insurance covering climate-related health shocks		
	Bundling insurance products with other offerings		
Improving customer products	Irrigation technologies (e.g. using sprinkler, drip, minisprinkler, or high-efficiency drip systems)		
	Water storage and harvesting		
	Water saving technologies / water loss reduction technologies e.g. smart water meters		
	Temperature regulation technologies for livestock		
	Drought tolerant crops		
	Land leveling to reduce runoff		
Data + monitoring	Constructed wetlands and artificial reefs		
	Crop data and analytics platform with mapping interface		
	Integrating climate monitoring and forecasting		
	Satellite imagery for monitoring and impact assessment		
	Water monitoring + modelling (e.g. water resource mapping)		
ESG + corporates	E-Health e.g. remote diagnostics, health and disease surveillance systems for outbreak detection		
	Building climate risk profiles for your suppliers (e.g. if required by corporate clients)		
	Selling your data to buyers who want to know more about their supply chains		
	Publishing your ESG policy		
	Pitching your product to governments / DFIs who want to improve their climate investments due to regulations		
Other	Develop your climate resilience impact measurement (we can support with this)		
	What other opportunities could there be?	Open-ended, for comment	

[1] This is from the perspective of the business losing customers, vs the section below where it's about the direct impact on end users from climate change.

To measure this, it would be quite specific to ag companies, where they would offer farmers protocols or inputs that are regenerative/sustainable and farmers say no because they don't want to take the risk.