

Private Markets for Climate Resilience:

Description of Methods

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Private Markets for Climate Resilience is a systematic evaluation of the potential market for climate resilience solutions in the private sector. Focusing on transport and agriculture, this initiative seeks to examine current best practices and investigate the opportunities in this emerging sector by identifying the leaders that will shape the emerging market, highlighting products, services, tools and innovative processes.

Resilience Dialogues

In order to ground the PMCR project in real stakeholder communities and ensure that the direction of the project was shaped by insights from local experts in the different sectors, a series of resilience dialogues was undertaken. The resilience dialogues involved an extensive process of engagement and one-on-one dialogue with key stakeholders in both the public and private sectors. Significantly, the subjects chosen for the resilience dialogues were not just sector experts from academia or research organisations but included a large number of representatives from companies involved at different stages of the value chains in the selected sectors. This ensured that the knowledge being fed into the project and synthesised by the country teams reflected current business practices and allowed a clear picture to emerge of the type of threat being posed by climate change, the degree to which it was a business priority, any measures being taken to manage these risks, and barriers to creating more resilient businesses.

As such the resilience dialogues allowed the project teams to crosscheck with experts in each sector to ensure that the information and its analysis reflected the actual reality of practice. Through the resilience dialogues we were able to build a robust understanding of climate risks, resilience options and other critical issues effecting the sector and to obtain a clear understanding of what decisions are being made in each sector, both on the supply and demand side of the market, and how climate resilience might be integrated into these processes.

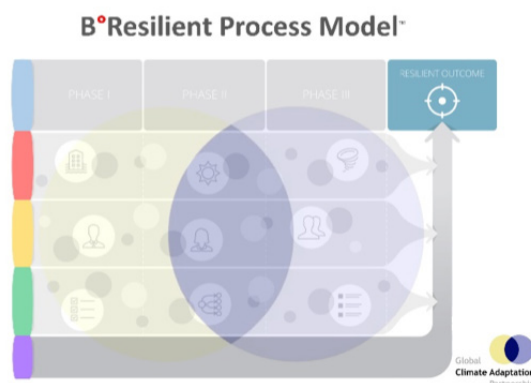
Key Outcomes from Resilience Dialogues:

- *Feedback on information obtained via global experts and literature review*
 - *List of key contacts for the sector*
 - *Data sets for analysis (budgets allocated for water management, expenses during El Niño year, or during La Nina year, costs in a normal year vs El Niño year, etc.)*
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BRPMs

The B°Resilient Process Model (BRPM) is GCAP's proprietary climate resilience interpretation of the standard Business Process Model. Our BRPM approach underscores the crucial link between the rich understanding of a decision space (actors, institutions, objectives, criteria and more) and the equally rich but very different world of climate information (including baseline vulnerability, historical climate impacts, scenarios of future climate states and more). The BRPM draws attention to enterprises that are often informal in addition to well-structured businesses, as is often the case for SMEs, linkages between each step in the process and climate information, and potential interventions and investments that increase resilience in the outcomes.

BRPMs were used in the PMCR project as a way of identifying the key climate risks and adaptation solutions for different business processes common to companies within a sector. The BRPM is designed to focus on a package of services that are required to work together to achieve the outcome as selling a specific technology is rarely going to achieve the outcome on its own. We then look to see how common this



BRPM is and what the potential demand might be for a package of options and services. The BRPM process is highly participatory and able to rapidly capture rich business and sector understanding from a range of different private sector stakeholders. In the PMCR project we used sector workshops and resilience dialogues in the different countries to engage participants from different parts of the sector in developing the process models.

Within the BRPM, **only** the climatic risks that are relevant to the process are considered. Some are specific to a phase or decision point; others are considered throughout the process. The output is a Risk Register, which might be a simple catalogue of risks to watch or a formal register with plans for managing risks in the process. There are many typologies of risks, and details are driven by the stakeholders in the process rather than assume a complete technical analysis is required. Some of the features considered are included below.

The B°Resilient Process Model:

- *Reduces complexity and highlights climate risks and adaptation options for specific business processes*
 - *Identifies the outcomes and the major decisions that lead to success*
 - *Associates actors with steps in the process*
 - *Flags linkages with other processes that influence success (e.g., marketing to bring a customer to the business)*
 - *Lays the foundation for improving the process and adapting to changing conditions*
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Process Related Climatic Risks

Risk	Description	Example
Trend	Some risks—particularly related to warming—are increasing with high confidence both in the observed record and in envelopes of climate futures	Average annual temperatures
New normals	The direction of change might not be known although change in variability and risk is likely	Average annual rainfall might increase or decrease by 20%, and be more variable from year to year
Extreme events	Short-term events are related to the systemic changes in climate systems but have their own features	Hail is very localised and would damage newly planted vines if not protected
Scale	Events and changes may be very local or part of a larger system, where changes in one region might affect the process	Crop suitability increases in a competing agro-ecological zone and the market may move location
Thresholds	Changing risks that are close to, or beyond, a threshold for tolerable risk are most important to document.	Average rainfall is adequate in 6 out of 10 seasons at present, but an increase in risk to a 50% failure rate is problematic
Criticality	The relevance to a decision varies for all of the above attributes. And there may be other risks or factors that mediate the impact of climate change.	Degraded soil quality due to mismanagement, with worse conditions expected as higher temperatures reduce organic matter

Once the relevant risks for each process had been identified, workshop participants also analysed the relevant actors related to the different processes and developed a long list of possible adaptation options that could address the risks identified. In the PMCR project, the focus was on practical adaptation options that were either already being implemented in the sector or were already being used in the country in a different context and could readily be adopted.

Process Selection and Options Appraisal

The procedure for selecting climate resilience solutions developed from the BRPMs and consisted of both process selection and options screening. For the PMCR project, the main criteria in process selection was if there was significant scope for private investment, meaning both that the private sector would have a business case to invest and that there were sufficient projects to justify an investment strategy in this process. Other considerations included if the process covered a spread of geographical conditions, including climate risks, agro-ecological zones and core/periphery market contexts, and if there were investment models applicable for different types of companies.

Once the processes were selected, the country teams needed to decide on the most promising resilience options. Options were assessed and scored according to:

- Potential to adequately address climate risks.
- Technical feasibility.
- Economic viability.
- Social co-benefits of the option (does it help to alleviate poverty? does it empower women? etc).
- Whether or not options are stand alone, support other options, or are required as part of a sequential plan to create resilience.

Prioritization and screening were completed with the country teams together with the global team and technical experts and allowed the country teams to select the 1-2 most promising resilience options for each sector which were then analysed in more detail. A standard set of questions was used in the screening, however country teams were also encouraged to adapt the template and add any other relevant criteria.