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CLIMATE RESILIENT DEVELOPMENT CASE STUDY SERIES | **GEORGIA**

Municipal Level Climate Resilient Development Planning

Beginning in 2011, Mercy Corps programming in Georgia focused on enhancing the capacity of local and regional stakeholders to develop climate resilient development plans. This case study highlights lessons learned from the program and offers insights for consideration in other global climate change adaptation programs.

PROBLEM

The Southern Caucasus is a climate-sensitive region due to its mountainous terrain. In particular, the Kura River basin which extends over Georgia, Armenia, and Azerbaijan, has experienced changing rainfall patterns and longer droughts over the last several decades. These impacts affect 50% of the population who are dependent on agriculture for their livelihood and who are also excluded by the national growth strategy.¹ Competing demands for water resources in the Kura River basin from agriculture, industry, hydropower and downstream users has the potential to escalate conflict. Poor

resource management, such as overgrazing and ecologically degrading agricultural practices, also contribute to the growing vulnerability of the region. Without adequate resource management practices and policies, climate change threatens to add a new layer of risk to existing challenges for those dependent on the already conflict-prone region of the Kura River basin.

To date, Caucasus nations have been slow to support strategies that adequately capture the unique climate risks to their vulnerable communities.^{2,3} This is due

1. World Bank, [The Jobs Challenge in the South Caucasus](#): Many small farmers in these regions lack the financial capacity to manage and cultivate land. Following the collapse of the Soviet Union, most local farms lost much of their agricultural infrastructure and institutions. Furthermore, Georgia's strong economic growth during the last 10 years was led by reform in the business environment and failed to reduce rural poverty.

2. University of Gothenburg, [Environment and Climate Change Policy Brief: Eastern Europe and Caucasus Region](#)

3. Georgia's second [National Communication to UNFCCC, October 2009](#).



in part to an absence of climate change awareness and policy at municipal, national, and regional levels; and a general lack of coordination between

government staff, NGOs, and other stakeholders in local communities.

OUR APPROACH

Mercy Corps has worked in Georgia since 2000. Our programs seek to support stable, resilient and secure communities by pioneering social and economic development initiatives in regions affected by poverty and conflict. In 2011, Mercy Corps and the Caucasus Environmental NGO Network (CENN), with support from the European Union, initiated a three year program was to enhance local capacity and regional cooperation for CCA and BC. Mercy Corps used a facilitative approach that included the following processes:



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Participatory Climate Adaptation Planning

Mercy Corps designed a participatory process to develop climate adaptation plans and pilots. At the outset, Mercy Corps and CENN developed vulnerability assessments to identify vulnerable communities. The analysis included municipal-level assessments on current socioeconomic conditions and development challenges, natural resources and key environmental services, multi-hazard maps, as well as historical climate trends collected from local meteorological stations. It also included an assessment of future climate trends over the next 30 years, based on a modeling analysis.

1. **Stakeholder mapping and mobilization** through formation of Local Working Groups (LWGs) that included representatives from farming communities, businesses, government, local NGOs, and the media.
2. **Vulnerability assessment** to deduce environmental, social, and economic impacts of climate change by assembling local expertise and scientific studies for each municipality.
3. **Municipal-level Climate Change Adaptation Plans** developed by LWG members with guidance from Mercy Corps. After analyzing the vulnerability and risk assessments, the LWGs conceived a list of adaptation interventions and prioritized projects by evaluating the costs and benefits of each.
4. **Funding for pilot projects** responding to climate change and environmental threats, selected and implemented by Mercy Corps and the LWG members to test and demonstrate value of particular investments.



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Information from the vulnerability assessments was used by the LWG to complete Climate Change Adaptation Plans as well as a list of Pilot projects. The entire process was divided into the following steps:

1. Identification of Current Development Challenges.

The LWGs identified and described socioeconomic and ecological challenges and impacts. For example, deforestation from firewood production in a municipality had resulted in a loss of natural windbreaks causing declines in agricultural yields.

2. Climate Scenarios, Direct, and Combined Impacts.

The LWGs compiled a list of climate trends and potential direct impacts from their respective baseline report. Subsequently, in order to better understand how climate change will interact with existing development challenges, the LWGs discussed the combined impact of development and climate change challenges.

3. Identification of Adaptation Actions.

Following the guidance from Mercy Corps, the LWGs developed a results chain to identify activities,

outputs, outcomes, and strategic objectives that addressed the combined impacts identified in Step 3. The results chain was used to develop frameworks that identified strategic objectives and interventions needed to meet those objectives.

4. Cost-Benefit Analysis.

The Local Climate Adaptation Plans were drafted by each LWG after conducting a cost-benefit analysis on the “activities” identified in Step 4. This was done by jointly identifying and rating each cost and benefit (economic, social, and ecological).

5. Prioritize and Strategize.

The LWGs prioritized the activities based on their cost-benefit score and developed a strategy for implementing them. The LWGs then estimated costs for implementation, verified existing funding for each activity, and identified potential partner institutions. Mercy Corps provided project proposals for each municipality.

Finally, based on their priority problems described in the Climate Change Adaptation Plans and Pilot Project proposals, Mercy Corps selected and funded two pilot projects per municipality.

OUTCOMES

The program successfully concluded in 2014 after launching seven pilot projects and building the capacity of local stakeholders across the South Caucasus. Several of the pilots have already been scaled up and replicated in other regions of the South Caucasus without funding from Mercy Corps. For example, the mist irrigation technology piloted by ten farmers in a village in Dmanisi municipality demonstrated the benefits of saved time and water resources. The project is a model of a longer-term and larger-scale strategy to combat drought and efficiently share scarce water resources. The pilot has now been scaled up to 50 farmers in the original village, as well as replicated by farmers in neighboring villages and municipalities.



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LESSONS LEARNED

The following lessons learned from Georgia and the South Caucasus reflect principles that Mercy Corps believes can be applied to adaptation strategies in other countries and contexts:

1. Local to national networks are essential.

The pilot projects were successful in testing solutions to localized climate impacts. However, climate change impacts in Georgia require a greater degree of coordination if they are to be addressed effectively. Adaptation planning should be a part of both national planning and development strategies. Both of which should respond to local capacity gaps.

2. Participatory processes lead to longer lasting gains in adaptive capacity.

While the pilot projects represent a milestone in the overall process, their implementation was a phase through which all other objects were employed and achieved. Mercy Corps' primary strategy was to build the capacity of municipal level planners through a process of identifying, designing, and implementing the projects. These gains will continue to have impact long after the program concludes.

3. Climate adaptation gains can be maximized through strategic advocacy.

Engaging government representatives through bureaucratic processes, technical assistance, or research, can help maximize the potential for leverage and advocacy. If strategically designed, pilot projects can also be used to create demand, and gain the attention of authorities for investment or policy change.

4. Measuring program impact takes time.

It takes time to see impact and learn from projects that focus on building capacity through process. Project outcomes are largely intangible and often generate impact over the long-term. While some immediate gains from the pilot projects were observed early on, the impact of the adaptation planning process and capacity building will take additional time to evaluate.

5. Policy and institutional environments are foundational.

International donors, NGOs, and host governments should include assessments of the policy environment and stakeholder mapping as core components of financial and technical support to local partners.

6. Facilitate transfer of expertise and experience.

One of main challenges for pilot projects relates to the application of specialized technical knowledge. Providing expert consultants is an effective but expensive tool for managing this. Alternatively, developing simple manuals (as in the case of Parizi school Tree Nursery) or providing in-person demonstrations to visitors (as in the case of the Pheasant nursery) can help transfer practical knowledge to multiple stakeholders at a lower cost. NGOs, governments, or cooperatives may also support this through exchanges, in which farmers or business can directly learn from each other.

7. Support research on effectiveness of adaptation actions

Individuals, communities and governments often make decisions about investment into new technologies based on perceived costs and benefits. Climate change means that these calculations are changing. Communities, local and national governments need support to understand their long-term impacts on reducing climate vulnerability. Moreover, they might undervalue longer term and larger scale benefits of investments such as water, energy, and soil conservation. Further research can help farmers, businesses, and government officials make decisions regarding the best forms of investment.



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