

International Finance Corporation and Tetra Tech

Zambia, Africa



Research
and Analysis



From 2009-2010, the IFC Adaption Program hired Tetra Tech to examine the role of private sector adaptation opportunities

to minimize the impacts of climate change. The specific project looked at the Kaufue Gorge Hydropower utility provider and the potential role it may play in climate change mitigation and adaption. It includes:

- Stakeholder Meetings. Tetra Tech will be facilitating meetings with IFC, national and local government agencies, the private sector, universities, and other organizations to discuss climate change, adaptation, gather data, and climate changes.
- Climate Change Modeling. Global climate change models are being downscaled for this region in Zambia. Scenarios looking 50 and 100 years into the future will be considered. A weather generator will be implemented by to determine future rainfall events.
- Hazard Assessment. Hazards, including floods and drought, are being identified for this region. Historic information concerning causation, frequency, severity, and geographic extent was collected.
- Vulnerability Assessment. Buildings and infrastructure owned by the hydropower operation were assessed for damage due to future flood events. Data concerning the structures is currently being collected for this effort.

- Risk Assessment. A flood and drought risk assessment will be conducted to estimate damage and losses due to 50-, 100-, and 500-year probabilistic events. Mitigation and adaption options will be considered using the benefit cost analysis and the STAPLEE considerations (Social, Technical, Administrative, Political, Legal, Environmental, and Economic). Financial modelling also is being undertaken for this task order.
- Transfer of Knowledge. A software tool is being developed to allow stakeholders to run mitigation scenarios to determine the benefits of mitigation and the impacts to their operations.

SSC provided the local Zambian liaison personnel, who identified the relevant stakeholders, coordinated meetings, and facilitated the in-country work by the Tetra Tech team. Our consultant was uniquely positioned, as he had prior experience with the Kaufue Gorge Hydropower utility, a thorough knowledge of the key players in the region, and a graduate degree in sustainability.

Client

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Industry

Environmental engineering

Contact

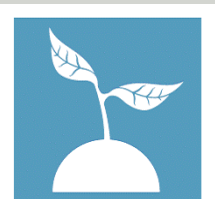
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Date

2009-2010

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