Strengthening Climate Resilience in Zambia
Supporting National Institutional Framework and Participatory Adaptation Processes and Sub-Projects in the Barotse Sub-Basin

PROJECT DATA

PARTNER ORGANIZATION:
Climate Investment Funds’ Pilot Program for Climate Resilience and the World Bank

ORGANIZATION TYPE:
Governmental agency

DELIVERY CHALLENGES:
1. Lack of consensus on national multi-sectoral institutional arrangements
2. Lack of clear direction on the process for integrating climate risk into district plans
3. High turnover and low capacity of district staff
4. Cumbersome and lengthy approval system for sub-projects
5. Limited community capacity to implement livelihood initiatives

DEVELOPMENT CHALLENGE:
Strengthen Zambia’s national institutional framework for climate resilience and improve the adaptive capacity of vulnerable communities in the Barotse sub-basin of the Zambezi floodplain

COUNTRY AND REGION:
Zambia, Africa

PROJECT TOTAL COST:
Strengthening Climate Resilience in the Barotse Sub-basin Project (PPCR USD 36 million, plus additional World Bank IDA finance of USD 14.6 million)

PROJECT DURATION:
2013 to 2022

CONTACT

CASE AUTHOR:
John Van Mossel (ICF)

PROJECT EXPERT:
Iretomiwa Olatunji (World Bank)
Chitembo Chunga (Government of Zambia)

In Brief

• Development challenge: The Strengthening Climate Resilience in the Barotse Sub-basin Project aims to strengthen Zambia’s national institutional framework for climate resilience and improve the adaptive capacity of vulnerable communities in the Barotse sub-basin of the Zambezi floodplain.

• Development solution: To address these challenges, the project provides capacity and financial support to an interim inter-ministerial national climate change secretariat in the Ministry of National Development Planning, as well as facilitation and technical capacity building for mainstreaming climate change into local-level development plans, community decision-making, and through direct sub-project grants to communities, wards, and districts for climate adaptation measures. This has required significant training and engagement across multiple levels of government and sectors, as well as with local non-governmental organizations that could act as climate risk adaptation facilitators.

This case study was financed by the Climate Investment Funds (CIF), and prepared by John Van Mossel from ICF International. A number of people contributed to the preparation of this case study. The author is grateful to Iretomiwa Olatunji and Chitembo Chunga and their respective teams for sharing their knowledge and experience coordinating this project. The author is also grateful for the valuable contributions provided by Emmanuel Kouadio, Sandra Romboli, Salias Nyareza, and Rocio Sanz Cortes from the CIF. Support from the World Bank’s Science of Delivery team was essential to ensure the final quality of the case study and prepare it for publication. In particular, Jacob Bathanti provided extensive input and guidance on the case study.
Executive Summary

This case study examines the experience of the Strengthening Climate Resilience in the Barotse Sub-basin Project from its approval in September 2013 through to its near-completion in 2018 when additional funding was provided to extend the project to 2022. This project aims to strengthen Zambia’s national institutional framework for climate resilience and improve the adaptive capacity of vulnerable communities in the Barotse sub-basin of the Zambezi floodplain. It receives support from the Climate Investment Funds’ Pilot Program for Climate Resilience (PPCR) and is implemented by the World Bank and executed by the Government of Zambia’s Ministry of National Development Planning.

The project’s first component is strategic national-level program support aimed at strengthening the national institutional and financial framework for climate resilience in Zambia. The project’s other components support climate resilience in the districts in western Zambia that comprise the Barotse sub-basin, a large wetlands area along the Zambezi River.

Zambia’s climate is highly variable, with frequent droughts, seasonal and flash floods, extreme temperatures, and dry spells. Floods and droughts have increased in frequency over the last three decades. Zambia’s poor population, including the vast majority of people in the Barotse sub-basin, experiences a high degree of vulnerability to climate change impacts largely due to their reliance on climate-sensitive livelihood sectors, including agriculture.

Zambia’s policies and programs to deal directly with climate change impacts have evolved since initial steps were taken in 2007. In 2009 Zambia’s Ministry of Finance and Development Planning requested that Zambia become a pilot country under PPCR, which was approved, leading to the availability of funding and other support from PPCR. The Government recognized the need for national-level multi-sectoral coordination, and it set up a national climate change secretariat to coordinate ongoing and future programs, plans, policies, and projects on climate change.

This case study focuses on the delivery challenges the PPCR project has confronted. during its implementation process, and describes how national, provincial, district, ward and community-level actors have worked together to resolve them, as illustrated in Table 1.

The first delivery challenge was a lack of consensus at the highest levels in Zambia on the best national multi-sectoral structure to provide leadership and coordination of climate action. This lack of consensus impeded national program coordination required to address PPCR project implementation challenges sufficiently and quickly. While a new National Policy on Climate Change emerged in 2016—which addresses the questions of national coordination—the key solution that helped to focus the project and achieve significant progress during the period of uncertainty around national institutional structures was the presence and continuity of a strong national champion for climate change and for the project.

The PPCR project also promotes the mainstreaming of climate risk into district-level development planning. The second delivery challenge that the project faced was a lack of clear and consistent direction from thenational Government on which district planning process should be used. The problem endured for some time as various approaches were sought to integrate climate change into district planning. A resolution emerged when national guidance clarified that all provinces and districts must align their efforts with the 7th National Development Plan (2017–2021), which requires all districts to mainstream climate change and make plans to reduce climate change risks.

Within its 14 pilot districts, the project aims to develop community adaptation plans with vulnerable communities in 25 wards. These plans are to guide project interventions aimed at reducing vulnerabilities and risks and increase community capacities. The third delivery challenge concerned a recurring human resources problem, specifically, how to deal with high staff turnover and low capacity of staff, mostly at the district level. In order to ease this challenge, the project used a range of approaches. Capacity building became a continuous process. The project hired Participatory Adaptation Trainees to build a pool of adaptation specialists and hired local non-governmental organizations (NGOs) as Climate Resilience and Adaptation Facilitators (CRAFs) to strengthen community adaptation planning processes and support project implementation. The project also developed specialized tools to specifically enable gender sensitive participatory climate risk assessments in the target communities.

The project uses a detailed, multi-level system for appraising and approving sub-projects that emerge from the community adaptation planning processes. The fourth delivery challenge was the cumbersome and lengthy system, which resulted in long delays in
Strengthening Climate Resilience in Zambia

The project’s coordination unit in Lusaka intervened frequently to address this challenge and to push for solutions. It convened both formal and informal mechanisms and applied clearly initiated leverage, in some cases, to ensure that decisions were taken, payments to communities were made, and plans were put into action at the local level. From the first sub-projects in 2014 until the time this case study was prepared, 889 community-level sub-projects, 20 ward-level sub-projects, and 16 district-level sub-projects have been developed and are in various stages of review and implementation. Each of the 25 wards had an average of 35 community and ward projects, an accomplishment that has required a considerable amount of active and adaptive management.

The fifth delivery challenge concerned local communities effectively implementing their approved sub-projects, especially those related to economic development and livelihoods. As wards are the closest level of government to local communities, the Zambia PPCR project has sought to bring provincial and district-level staff into direct contact with wards. This interaction and collaboration have strengthened the wards. District staff also has learned from the communities some better ways to carry out their roles and responsibilities. The project also has extended contracts for well-performing CRAFs to provide implementation support.

Throughout the project significant lessons have been learned for the science of delivery, including focusing on benefits to local communities, the importance of leadership, being adaptive when implementing solutions, and using multi-sector and multi-stakeholder approaches.

### Table 1 Delivery Challenges and Solutions of the Strengthening Climate Resilience in the Barotse Sub-basin Project

<table>
<thead>
<tr>
<th>Delivery challenge</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lack of consensus at the highest levels in Zambia on the best national multi-sectoral structure to provide leadership and coordination of climate action</td>
<td>Presence and continuity of a strong national champion for climate change and for the project</td>
</tr>
<tr>
<td>2. Lack of clear and consistent direction from the national Government on which district planning process should be used</td>
<td>National guidance brought clarity, requiring all provinces and districts to align their efforts with the 7th National Development Plan (2017-2021)</td>
</tr>
<tr>
<td>3. High staff turnover and low capacity of staff, mostly at the district level</td>
<td>Continuous capacity building</td>
</tr>
<tr>
<td></td>
<td>Hired Participatory Adaptation Trainees (PATs) to build a pool of adaptation specialists, and engaged local NGOs as Climate Resilience and Adaptation Facilitators (CRAFs) to strengthen community adaptation planning processes and support project implementation</td>
</tr>
<tr>
<td></td>
<td>Developed specialized tools to enable gender sensitive participatory climate risk assessments</td>
</tr>
<tr>
<td>4. System was cumbersome and lengthy, resulting in delayed final approval</td>
<td>More active involvement of the PPCR National Coordinator and the PPCR Project Manager to ensure decisions were taken, payments to communities were made, and plans were put into action at the local level</td>
</tr>
<tr>
<td>5. Local communities’ inability to effectively implement their approved sub-projects, especially those related to economic development and livelihoods.</td>
<td>Provincial and district-level staff put into direct contact with wards and communities</td>
</tr>
<tr>
<td></td>
<td>Extended contracts for well-performing CRAFs</td>
</tr>
</tbody>
</table>

**Introduction**

This case study examines the experience of the Strengthening Climate Resilience in the Barotse Sub-basin Project from its approval in September 2013 to finalization of preparatory studies in October 2014 to its near-completion in 2018.¹ This project aims to

---

¹ The project was originally planned to close on December 31, 2019, but has been extended to 2022 with additional finance of USD 14.6 million from the World Bank.
strengthen Zambia’s institutional framework for climate resilience and improve the adaptive capacity of vulnerable communities in the Barotse sub-basin of the Zambezi floodplain.

The project receives support from the Climate Investment Funds’ Pilot Program for Climate Resilience (PPCR) and is implemented by the World Bank and executed by the Government of Zambia’s Ministry of National Development Planning. The project is a second phase, building on a previous Phase I technical assistance project that supported Zambia in formulating a Strategic Program for Climate Resilience (SPCR) under PPCR and beginning the process to mainstream climate change into development plans and budgets and strengthen the national institutional framework for climate resilience.

The project has two main focuses. The first is strategic national-level program support designed to strengthen the national institutional and financial framework for climate resilience in Zambia. It does this by providing institutional support to the national climate change programs and by strengthening climate information. The second focus is geographic in nature, centered on the Barotse sub-basin in western Zambia. The project seeks to improve the adaptive capacity of vulnerable rural communities in this area, through facilitation and technical support for mainstreaming climate change into local-level development plans and community decision-making and through direct sub-project grants to communities, wards, and districts, including women-headed and highly vulnerable households. The project also seeks to increase the flow velocity of water in targeted canals in the Barotse sub-basin through clearing and dredging of the historic canals.

This case study focuses on how the Strengthening Climate Resilience in the Barotse Sub-basin Project (hereafter referred to as the Zambia PPCR project) has been implemented and how it has confronted various delivery challenges—that is, various non-technical barriers to implementation—during the implementation process. It draws on project documents as well as interviews with relevant stakeholders. See Annexes C and D for a complete list of people interviewed, site visits, and reference materials.

**Context**

Zambia’s climate is highly variable, with frequent droughts, seasonal and flash floods, extreme temperatures, and dry spells. Floods and droughts have increased in frequency over the last three decades, with expectations for these trends to intensify in the future. These changes in climate pose serious challenges to Zambia’s efforts to combat poverty, reduce food insecurity, and sustainably manage natural resources. A study on the economics of climate change in Zambia found that climate change is expected to reduce GDP growth by about USD 5 billion in the next decade if no action is taken (equivalent to a loss of 0.9 percent to 1.5 percent in GDP growth).

The poor are especially vulnerable to climate change impacts because of their reliance on climate-sensitive sectors, including agriculture. The rural population in the Barotse sub-basin of the Zambezi River, in the Western Province, is among Zambia’s poorest and most vulnerable. The Barotse is Zambia’s second largest wetland, and a flood plain of 550,000 hectares (ha) inhabited by more than 1.1 million people. The area is primarily dominated

---

2 World Bank, 2013.
3 Ministry of Lands, Natural Resources and Environmental Protection, 2016.
by the livelihoods and culture of the Lozi people, who developed intricate systems of traditional resource management with the oversight of their King (Litunga) and the Barotse Royal Establishment (BRE). These include a complex system of traditional earth-lined canals for transport, drainage, irrigation, fisheries, and cultural ceremonies. To address these climate change and development challenges, the Government of Zambia’s Vision 2030 strategy and Sixth National Development Plan have signaled a renewed focus on development planning and poverty reduction. The Government has also taken a series of climate-oriented actions. Based on its National Adaptation Programme of Action (2007), the Government developed its National Climate Change Response Strategy (2010), which set a basis for Zambia’s Climate Change Programme, with objectives, priorities for adaptation and mitigation, and proposed institutional structure. Its strategic objective called for climate change to be mainstreamed in the most economically important and vulnerable sectors of the economy by 2015.5 Another significant action was the submission in 2009 by the government of Zambia through the Ministry of Finance and Development Planning requesting for Zambia to become a PPCR pilot country. The approval of this request set in motion the process that led to the eventual preparation and approval of the PPCR project examined in this case study (see Box 1 for project sites and Annex A for a timeline of this project and related actions). A parallel project funded by PPCR and implemented by the African Development Bank focused on similar interventions in the Kafue sub-basin.

Recognizing the need for national-level coordination, and with support from the Phase I PPCR project, the Secretary to the Cabinet established an Interim National Climate Change Secretariat (INCCS) under the Ministry of Finance in October 2013. The role of the INCCS was to coordinate “ongoing and future programmes, plans, policies and projects on climate change, including adaptation, low carbon development, and climate-related disaster risk management.”6 The Ministry of Finance also signed an agreement with the World Bank to maintain this central planning, coordinating, and enabling structure for climate change in Zambia throughout the second phase of PPCR project implementation.

Tracing the Implementation Process

This case study traces the implementation of the PPCR project at the national and local levels, identifies key delivery challenges, and describes how national, provincial, district, ward and community-level actors worked together to implement the project and resolve many of the challenges that arose. The delivery challenges were primarily around: 1) lack of consensus on national multi-sectoral institutional arrangements, 2) lack of clear direction on the process for integrating climate risk into district plans, 3) high turnover and low capacity of district staff, 4) cumbersome and lengthy approval system for sub-projects, and 5) limited community capacity to implement livelihood initiatives.

National Multi-Sectoral Institutional Arrangements for Climate Change Coordination

With the INCCS already in place in 2013, the PPCR project was poised to provide support to this Secretariat from the very start. Establishing the INCCS in the Ministry of Finance and National Development represented a real opportunity to harmonize and integrate the national development and climate change agendas. These were previously separated, which undermined the effectiveness of past institutional arrangements. Yet, the INCCS was funded largely by PPCR, which raised questions of sustainability and identification with a single donor-funded program.7

As a new and interim body, the INCCS faced the first delivery challenge in terms of a lack of consensus at the highest levels in Zambia on the best national structure to provide leadership and coordination of climate action, which impeded long-term national program coordination. The INCCS had been set up with the expectation that it would become permanent within six months, but instead, as the Government moved towards preparing its National Policy on Climate Change, a contentious debate continued at the national level on which government agency should lead on the coordination, planning, and facilitation of climate change projects.

These national-level discussions about the legitimacy of the INCCS’s office and its role seriously distracted

---

4 World Bank, 2013.
the Secretariat—and, by extension, the National Project Coordination Unit (NPCU) for the PPCR project, which was housed in the INCCS—from addressing project implementation challenges sufficiently and quickly. The uncertainty around national multi-sectoral institutional arrangements also affected the effectiveness of the INCCS. It was moved from the Ministry of Finance and Development Planning (MoFDP) into the newly formed Ministry of National Development Planning (MoNDP) in 2015. This caused delays that affected the replenishment of the Special Account that was funding community sub-projects in the Barotse sub-basin. In October 2015, the Mid-Term Review for the PPCR project flagged a substantial risk around the prolonged interim status of the INCCS and the possibility that parallel institutional arrangements could emerge from the new National Policy on Climate Change that was under development.

The continuity of a strong national champion in the Government helped address this delivery challenge of uncertain national institutional structures. A single person served as head of the INCCS and the PPCR-NPCU from 2007 to 2017, and he managed to provide some stability and forward momentum during the periods of uncertainty at the national level, according to provincial officials and World Bank project staff. Despite the distraction of the national debate, this individual’s leadership helped to focus the project and achieve significant progress on implementing the project components in the Barotse sub-basin from 2016 to 2018.

Ultimately, the INCCS was not formally ratified, and it was officially dissolved with the launch of the new 2016 National Policy on Climate Change. The new policy maintained a structure to provide policy guidance and direction under the MoNDP and shifted national responsibility for the coordination of climate change programs to the Ministry of Lands, Natural Resources, and Environmental Protection. At the time of writing this case study, the new structure under the MoNDP—the Climate Change Coordination Unit—was not yet established. The MoNDP was working with the PPCR-NPCU to provisionally carry out the role of the CCCU. As part of the PPCR project support to the national climate change program, it provides funding to MoNDP’s climate change coordination structure and capacity. While the MoNDP’s CCCU role should be separate from that of the NPCU, there is considerable overlap in this interim period, pending the establishment of the new Unit. The NPCU is largely dedicated to coordinating PPCR project implementation in Zambia. Due to the importance of the PPCR projects for Zambia, the capacity of the NPCU and the depth of its experience, the NPCU is widely consulted on—and provides tangible support for the development of new climate resilience initiatives in the country.

Mainstreaming Climate Change into District Planning Processes

In parallel to the support for the national institutional framework for climate change, the PPCR project began in 2014 to promote the mainstreaming of climate risk into district-level development planning. The second delivery challenge was a lack of clear and consistent direction from the national Government on which district planning process should be used. Initially, the project sought to mainstream climate risk into integrated district plans (IDPs) promoted by the Ministry of Local Government in some districts across Zambia. The IDPs were seen initially as an innovation and improvement for the previous district development plans. However, according to district planners interviewed, the IDP process proved to be expensive, complex, and time-intensive.

In 2015, the Mid-Term Review for the project recognized that the Government of Zambia was putting increasing focus on strategic plans and decentralization and proposed integrating IDPs with strategic plans to align the PPCR-supported interventions with the Government’s new focus. This proposal did not constitute a key follow-up action of the MTR, and until early 2018, there was a gap in the provision of direction to district planners. It was not clear which model or approach should be used to integrate climate change.

Recent national guidance has made the situation clearer: all provinces and districts must align their efforts with the 7th National Development Plan (NDP) (2017–2021), which recommended an approach aimed at

---

8 According to interviews with the World Bank project team and NPCU.
9 World Bank, 2015.
addressing strategic cross-cutting issues. Consequently, all provincial and district development plans across the country will be required to mainstream climate change and make plans to reduce climate change risks. The PPCR project, as part of the national climate change support, has now supported mainstreaming the District Development Plans for Kaoma and Nalolo Districts (these plans, like the IDPs, were in draft form), and the districts finalized the documents for submission to the provincial office.

**Staff Turnover and Capacity in the Districts for Participatory Adaptation**

From the outset, the PPCR project identified vulnerable communities in 25 wards located within 14 districts of the Barotse sub-basin (13 in Western Province, 1 in Southern Province) as key project stakeholders. The project instituted community engagement processes to understand the communities’ unique vulnerabilities, risks, and capacities related to climate variability and climate change—and to develop community adaptation plans that prioritize interventions that could be turned into sub-project proposals. See Annex B for a mapping of stakeholders engaged by the project at various levels of government.

The PPCR project successfully kick-started its community engagement process in the early days of the project (2014) by launching a “100 Day Challenge” to connect district staff more closely with communities so they could help identify potential resilience-building projects as early as possible. During the campaign a total of 34 projects were identified from seven districts, including canal clearing, small bridges, and livestock projects. The endorsement of community participation by the BRE, the traditional King, and other traditional leaders or induna, as well as regular invitations, consultation and participation, and the appointment of a representative of the BRE to the Provincial Planning Sub-Committee and to Planning Sub-Committees in the districts, was crucial to getting wider community support and engagement.

The third delivery challenge throughout the project was the recurring high turnover and low capacity of staff, mostly at the district level. District Administration Officers (DAOs) identified the challenge of turnover of District Planning Officers (DPOs), who serve as secretariat to the sub-projects and are also involved in the participatory adaptation processes. High rates of staff turnover meant it was difficult to get staff teams trained in participatory climate change adaptation and in place long enough to see initiatives through. There was little continuity on district technical teams.

Turnover further undermined training efforts to get district staff teams up to capacity. District staff had difficulty understanding new climate change adaptation concepts. They also struggled to fit adaptation and resilience into their existing roles and responsibilities and to work together to solve multi-sector problems. District officers did not fully use the participatory planning methods provided in the Participatory Adaptation Implementation Manuals (PAIM), either because it required considerable time or the officers were not sufficiently familiar with the methodology, often lacking the required facilitation skills. District staff saw the methodologies as ambitious and at odds with the more-familiar top-down delivery model of national government programs. Many district staff members lacked the capacity to carry out gender-sensitive, participatory climate risk assessment as described in the PAIM. District staff also had limited to no experience helping to develop and deliver community-driven projects that required ongoing community (local stakeholder) engagement. In some cases, district staff did not know the communities sufficiently and found the work logistically difficult due to remote and harsh conditions.

The PPCR NPCU used a range of approaches to address systematically this delivery challenge of staff turnover and capacity development. More training was done; capacity building became a continuous process, and project coordinators pursued opportunities for continuity at the district level. Some team approaches were set aside in favor of more efficient approaches where technical staff worked separately and independently as technical specialists in their particular sector. Another solution was the development of more detailed gender-sensitive vulnerability assessment tools, which were adopted informally by the PPCR project and will be formally included in the PAIMs for use in future projects.

The PPCR project also created the position of Participatory Adaptation Trainees (PATs) in 2015 and hired one for each district to provide continuity and build an in-country pool of adaptation specialists. Each

---

14 Participatory Adaptation Implementation Manuals, Vol. 1 Participatory Adaptation Planning, Vol. 2 Implementation of Participatory Adaptation Sub Grants, and Vol 3 Procedures for Participatory Adaptation, Economic Management Department; Ministry of Finance, nd.
PAT was required to be a university graduate and hiring preference went to candidates with roots in Western Province and who spoke the local language. They worked exclusively on PPCR project activities.

Another solution to this delivery challenge was hiring 10 local NGOs as CRAFs to facilitate the community adaptation project development processes. Although there were some performance issues with certain CRAFs, the more recently hired CRAFs have performed much better, according to the DAOs interviewed. They have been able to ensure community contributions and also community ownership of projects. Well-performing CRAFs also have provided continuity when districts experienced a high level of staff turnover, and their inherent interest in the work has proved to be an added benefit. For example, the NGO that has assisted handicraft projects is also engaged in craft sales across Zambia and internationally. NGOs that thought they were getting an operational grant from the PPCR generally did not perform as well. One DAO noted that it was important that the NGOs/CRAFs clearly understood they had to deliver good technical sub-project proposals and had to maintain relations with the communities over a long period of time.

The fourth delivery challenge identified that this cumbersome and lengthy approval system resulted in delays in final approval of sub-projects. Also, members of the District Planning Sub-committees, chaired by DAOs, did not have a clear understanding of how to respond to and support community-driven sub-projects being developed, appraised, and considered locally for approval. Many had to learn how to carry out community-driven project development, procurement and contracting, document control, financial oversight, payments, and speedy retirement of accounts. Several DAOs interviewed indicated that the system also frustrated district staff who were neither used to working with a community-responsive project system nor with the associated level of accountability to the demands of beneficiary communities—key project stakeholders. The Provincial Project Implementation Implementation Unit (PPIU) staff indicated district staff seemed more familiar with implementing initiatives via a top-down delivery mode.

The PPCR-NPCU in Lusaka intervened frequently to attempt to solve this delivery challenge. Expediting the decision process required the application of some pressure: convening both formal and informal mechanisms and applying clearly initiated leverage, in some cases, to ensure decisions were taken, payments to communities were made, and plans were put into action at the local level. The PPCR-NPCU National Coordinator and the PPCR Project Manager were both actively involved in moving implementation forward, troubleshooting, and finding short-term as well as longer-term solutions.

The earliest 36 sub-projects were approved, funded, and moving into the implementation phase by 2014. Most sub-projects were developed and approved from 2016 to 2018. The PPCR NPCU reported in 2018 that 889 community-level sub-projects are developed and in various stages of review and implementation, plus 20 ward-level sub-projects and 16 district-level sub-projects, for a total exceeding 900 sub-projects. Each of the 25 wards in the 14 districts had an average of 35 community and ward projects (with one ward-level project per ward)—an accomplishment that has required a considerable amount of active and adaptive management.

15 Some of these CRAFs were released after a year as the District Planning Sub-committees found their performance to be lacking in terms of the quality of project proposals facilitated by these initial CRAFs. The result was a slow take off of sub-project development and appraisal. District staff tried to fill in during 2016, though, despite their technical skills, they generally found it overwhelming to carry the workload associated with the PPCR project. In some Districts, technical staff continued to carry out facilitation efforts during 2017; in other Districts, eight out of the original 10 new CRAFs were hired during late 2017.
16 Author interview with District Administrative Officers in Western Province, Zambia, May 2018.
17 Noted during the field interviews, see Annex C for more information.
18 Author interview with District Administrative Officer in Western Province, Zambia, May 2018.
19 Author interview with District Administrative Officers in Western Province, Zambia, May 2018.
20 Author interview with Provincial Project Implementation Unit in Western Province, Zambia May 2018.
21 Up to 3 ward-level projects are anticipated for each of the 25 Wards. There were only 20 of 25 ward-level projects implemented by the time of writing the case study.
Community Implementation of Sub-Projects

For each PPCR sub-project approved, the benefitting community is required to self-organize project committees with leaders (Chair, Treasurer, Secretary), open bank accounts, make purchases as per their proposal once they received financial support, report on expenditures, and work with district-hired CRAFs. The communities also put a project management committee and a maintenance committee in place.22 The community also must cooperate with district staff assigned to overseeing and monitoring the funded activities. For an example of a community’s experience, see Box 2 on the Nakonga Mushroom Project.

The fifth delivery challenge was the ineffective implementation of the approved sub-projects by local communities, especially sub-projects related to economic development and livelihoods, due to undeveloped local systems to support community economic development and lack of project implementation experience. Problems emerged as communities often lacked marketing options, especially sustainable markets, and marketing skills for products they started to produce to earn an alternative income. Supply of some raw materials and supplies was also a challenge, as was stable energy supply for some communities with new energy requirements. Training in some key areas, like project management and effective sub-project operations, was lacking. In some cases, insufficient funds were requested. Process problems also emerged, such as how to ensure a community’s idea for a resilience project was authentic; how to ensure facilitation skills had been effective in gaining community consensus; and how to correctly estimate time frames for project stages. Community contributions to projects were a new and unfamiliar concept that proved unaffordable for some of the most marginalized people and households. There was a very limited history of using banks and reporting on government funds. Logistics were also a challenge as certain communities were scattered, remote, or moved seasonally between low and high ground depending on the rains and floods.

To address this delivery challenge, the Zambia PPCR project sought to bring provincial and district-level staff into direct contact with wards and communities.

---

22 Each participating community is required to set up both a project management committee and a maintenance committee. Each committee should have 10 members including 6 office bearers and 4 other members, with a minimum of 50% female members. The project management committee facilitates the process from project identification through implementation, whereas the maintenance committee ensures sustainability and maintenance of the project after implementation is completed.

---

Box 2 The Experience of the Nakonga Mushroom Project

The Nakonga Mushroom Project in Sefula, Mongu District, was approved in 2017 after more than a year of planning and appraisal. PPCR contributed Kwacha 83,000 (about US$7,000) for the purchase of mushroom spores (seeds), a refrigerator, a solar panel, and the construction of a production building furnished with shelves for growing mushrooms. They are grown in a medium of sterilized (cooked) rice straw and/or elephant grass, which are both locally available. Members of the community group elected a chairperson, a treasurer, and a secretary, and have hired a project manager to be paid by project revenues. The group worked closely with the NGO Mumwa, which was hired by Mongu District Council as a CRAF. Working together, the group members and the CRAF are facing the challenges of growing mushrooms, a new initiative for them all, but specifically chosen as it does not rely on rainfall unlike traditional agricultural activities.

The 21-day cycle of mushroom production is followed by harvesting and selling of the mushrooms for a good price. Sales have so far been good; the local school has bought a considerable portion for their student-feeding program. The group will also explore how to add value to their product through preservation and packaging. The group knows that for production to be sustainable, it has to work with the CRAF to establish more reliable markets for their mushrooms, including links to nutrition-oriented initiatives throughout Mongu District. They are also aware that they need to reinvest in their project to ensure strong production systems, good management, proper marketing, and a production building that meets temperature requirements year-round. It will take time for the project to provide a reliable alternative source of income to the 120 community beneficiaries, including 67 women and 53 men, but expectations are high. Many projects have been initiated in the community in the past, and the group is determined not to make past mistakes. Understanding climate change impacts has increased their commitment and determination to develop a sustainable alternative livelihood base in farming.

The process has strengthened wards, the closest level of government to communities. District staff has had to learn from the communities to carry out their roles and responsibilities. The project also extended contracts for well-performing CRAFs to go beyond the completion of sub-project proposals to provide implementation support.

Lessons Learned from the Case Study for the Science of Delivery

Zambia’s experience with the PPCR project offers a number of lessons for other projects tackling national institutional structures to coordinate climate change and participatory adaptation planning and implementation at local scales.

Focus on benefits to local communities. Building resilience at the local level means putting communities and their needs at the top of the priority list. The participatory and local needs-driven approach was new for district officers involved in the PPCR project and required significant time for sensitization and training. Leadership by national government entities, down through provincial and district bodies, can reinforce participatory processes and engage traditional and local ward authorities, community representatives, and the local communities themselves, giving their view and ideas legitimacy and acceptability.

Importance of leadership. Leadership and champions were important at all levels of the PPCR project, from the National Coordinator of the NPCU, to the DAOs, to the CRAFs, and the communities themselves. In this project, key individuals did vital work to motivate others, seek solutions, and drive forward the agenda for climate resilience and strengthened adaptive capacity.

Being adaptive when implementing solutions. The Zambia PPCR project was proactive in recognizing challenges, finding solutions, and adapting them as needed. One example is the engagement of effective NGOs as CRAFs. These NGOs had ongoing projects and commitments in the area, with women in leadership roles, and were willing to work on the basis of deliverables or to contribute some of their own resources. When some of the originally hired CRAFs were found ineffective, they were replaced. This was an adaptive measure taken by the project that helped improve implementation both in terms of time and quality of work done. For example, recognizing that district staff members were struggling to implement the participatory adaptation planning methods provided in the project manuals, the PPCR project adapted by developing more detailed gender-sensitive vulnerability assessment tools that CRAFs and district officers could use. These revised tools also can be used for future projects.

Multi-sector and multi-stakeholder approach. The PPCR project’s approach to strengthening climate resilience at the local level required effective engagement of a range of actors, including district-level technical experts in a range of relevant sectors, communities, wards, provincial staff, and CRAFs. Such multi-sector and multi-stakeholder coordination is essential to link local adaptation planning and projects to ongoing government activities or strategies across multiple levels.
## Annex A: Timeline for the Zambia PPCR Project and Related Actions

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>Zambia submits its First National Communication to the UNFCCC</td>
</tr>
<tr>
<td>2006</td>
<td>Zambia releases its Vision 2030 – to achieve middle income status</td>
</tr>
<tr>
<td>2007</td>
<td>Zambia completes its National Adaptation Plan of Action (NAPA)</td>
</tr>
<tr>
<td>2008</td>
<td>Climate Investment Funds, including PPCR, set up by donors and MDBs</td>
</tr>
<tr>
<td>2009</td>
<td>Zambia submits request to become a PPCR pilot country</td>
</tr>
<tr>
<td>2010</td>
<td>Zambia releases its National Climate Change Response Strategy</td>
</tr>
<tr>
<td>2010</td>
<td>Start of preparation of Zambia’s SPCR(PPCR Phase I)</td>
</tr>
<tr>
<td>2010</td>
<td>Zambia’s SPCR, including three proposed investment projects is endorsed by the PPCR Sub-committee</td>
</tr>
<tr>
<td>2011</td>
<td>The PPCR Sub-committee approves the Project Preparation Grant (PPG) for Investment Project One: Climate Resilience in Zambia and the Barotse Sub-basin</td>
</tr>
<tr>
<td>2011–2013</td>
<td>Stakeholders (national, provincial, district, local, and Barotse Royal Establishment traditional leadership) engaged in design and planning of the climate resilience project in the Barotse sub-basin</td>
</tr>
<tr>
<td>2011</td>
<td>National Elections held in Zambia</td>
</tr>
<tr>
<td>2013</td>
<td>Zambia establishes its Interim National Climate Change Secretariat (NCCS) under the Ministry of Finance under an agreement with the World Bank</td>
</tr>
<tr>
<td>2013</td>
<td>Signing ceremony and launch of the Strengthening Climate Resilience in Barotse Sub-basin Project</td>
</tr>
<tr>
<td>2013</td>
<td>District planners are trained in Western Zambia Province in anticipation of project implementation</td>
</tr>
<tr>
<td>2014</td>
<td>Completion of Phase I (including Project Preparation Grant-PPG) of the Strengthening Climate Resilience in Barotse Sub-basin Project</td>
</tr>
<tr>
<td>2014</td>
<td>Strengthening Climate Resilience in Barotse Sub-basin Project implementation commences</td>
</tr>
<tr>
<td>2014</td>
<td>“100 Day Challenge” is launched in Western Province in seven districts to kick-start development of community resilience projects; communities are mobilized to clear small canals in the historic canal system</td>
</tr>
<tr>
<td>2014</td>
<td>Environment and Social Impact Assessment (ESIA) is completed on the planned rehabilitation of the traditional canal system in the Barotse floodplain</td>
</tr>
<tr>
<td>2014</td>
<td>Participatory Adaptation Implementation Manuals (PAIM, Vol 1, 2 &amp;3) are prepared by Ministry of Finance (undated)</td>
</tr>
<tr>
<td>2014</td>
<td>Zambia releases Second National Communication to UNFCCC</td>
</tr>
<tr>
<td>2014–2016</td>
<td>Severe drought hits southern Africa, including Zambia and its Barotse sub-basin, affecting food production and food security</td>
</tr>
<tr>
<td>2015</td>
<td>Tools for gender sensitive, participatory climate risk assessment, including vulnerability and capacity assessment, are developed and adopted by the PPCR project, replacing tools provided in the Participatory Adaptation Implementation Manuals-PAIM</td>
</tr>
<tr>
<td>2016</td>
<td>National Elections are held in Zambia</td>
</tr>
<tr>
<td>2015</td>
<td>World Bank initiates a Mid-term Review of the PPCR Project</td>
</tr>
<tr>
<td>2015</td>
<td>Interim National Climate Change Secretariat (NCCS) relocates under the Ministry of National Development Planning (MoNDP)</td>
</tr>
<tr>
<td>2016</td>
<td>Completion of the 34 km Mongu-Malabo road across the Barotse floodplain</td>
</tr>
<tr>
<td>2016–2018</td>
<td>Above average harvests in Zambia with severe flooding in 2017–18 in Upper Zambezi valley and Barotse sub-basin</td>
</tr>
</tbody>
</table>

(continued on next page)
## Annex A: Timeline for the Zambia PPCR Project and Related Actions (continued)

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>DMMU engineers provide proposals in response to the wash-out of 14 river crossings; PPCR project supports proposal using its emergency response fund for the first time</td>
</tr>
<tr>
<td>2016</td>
<td>Zambia officially dissolves the Interim National Climate Change Secretariat (NCCS); the Zambia PPCR NPCU remains in the Ministry of National Development Planning (MoNDP). Functionally, the NCCS remains in place in the MoNDP – see: <a href="http://znccs.org.zm/">http://znccs.org.zm/</a></td>
</tr>
<tr>
<td>2017</td>
<td>Zambia approves National Policy on Climate Change (dated 2016); Discussions on the policy are held during 2015–2016</td>
</tr>
<tr>
<td>2017</td>
<td>Zambia releases 7th National Development Plan (2017–2021) with a strong focus on decentralization</td>
</tr>
<tr>
<td>2018</td>
<td>PPCR reports 889 community-level sub-projects developed and in various stages of review and implementation, plus 20 ward-level sub-projects and 16 district-level sub-projects, for a total exceeding 900 sub-projects, starting from 34 sub-projects in 2014</td>
</tr>
<tr>
<td>2018</td>
<td>World Bank approves concessional loan to Zambia as Additional Finance (AF) for the PPCR project, extending its end date from 2019 to 2022</td>
</tr>
</tbody>
</table>
## Annex B: Map of Project Stakeholders

<table>
<thead>
<tr>
<th>Key Stakeholder</th>
<th>Primary Stakeholders</th>
<th>Secondary Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Community leaders</td>
<td>1. Local NGO facilitators</td>
<td>1. Local suppliers</td>
</tr>
<tr>
<td>2. Community members in groups</td>
<td></td>
<td>2. Local buyers</td>
</tr>
<tr>
<td>3. Ward leaders</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>District Level</strong></td>
<td>1. District Planning Sub-committee</td>
<td>1. District Commissioners</td>
</tr>
<tr>
<td>2. District Administrative Officer (DAO), Chair</td>
<td>2. Town Councilors (elected)</td>
<td></td>
</tr>
<tr>
<td>3. District Planners</td>
<td>3. Canal dredging companies</td>
<td></td>
</tr>
<tr>
<td>4. District sectoral staff from national line ministries (e.g., Agriculture, Water)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Provincial and National Level</strong></td>
<td>1. PPCR Provincial Project Implementing Unit</td>
<td>1. Zambia Meteorological Department (ZMD)</td>
</tr>
<tr>
<td>2. Provincial Planner</td>
<td>2. Disaster Management and Mitigation Unit (DMMU)</td>
<td></td>
</tr>
<tr>
<td>3. PPCR National Project Coordination Unit</td>
<td>3. Ministry of Transportation/Department of Inland Waterways</td>
<td></td>
</tr>
</tbody>
</table>
Annex C: List of Stakeholders Interviewed for this Case Study

The following people were interviewed during the consultant’s one week visit to Zambia, May 28 to June 1, 2018; two interviews were conducted after June 1.

1. Iretomiwa Olatunji (Mr.), Project Task Team Leader, World Bank Zambia Office, Lusaka
2. Chitembo Chunga (Mrs.), PPCR NPCU, Ministry of National Development Planning (MoNDP), Lusaka
3. Mwamba Mutale (Mr.), Participatory Adaptation Specialist, PPCR National Project Implementation Unit-NPCU, MoNDP, Lusaka
4. Chama Nambeya Zimba (Mrs.), Information and Communications Officer, PPCR Unit, MoNDP, Lusaka
5. Yvonne Mulenga (Ms.), M&E Specialist, PPCR NPCU, MoNDP, Lusaka
6. Bernard Chomba (Mr.), Deputy Permanent Secretary, Provincial Administration, Western Province, Mongu
7. Susiku Kamona (Mr.), District Commissioner, District Administration, Mongu
8. Shila Songolo (Ms.), Town Clerk, Mongu Town Council, Mongu
9. Abraham Moobola (Mr.), Director of Planning, Mongu District, Mongu
10. Fredrick Inambao Lubasi (Mr.), District Administration Officer (DAO), Mongu District, Mongu
11. George W. Sikuleka (Mr.), Manager, PPCR Provincial Project Implementation Unit (PPIU), Mongu.
12. Group meeting in Mongu with 6 people representing 3 NGOs hired by the project as Community Resilience and Adaptation Facilitators (CRAFs):
   - Kaumba Mwananyambe and Matilda Libi from New Apostolic Church Relief Organization - NACRO
   - Kekelwa Mundia and Nawa Sinjambi from Mumwa Crafts Association - MUMWA
   - Brian Nasilele and Magret Inaka from People’s Participation Services - PPS
13. Kopi Kamona (Ms.), Participatory Adaptation Trainee (PAT), PPCU Project – assigned to Senanga District, Senanga
14. Kennedy Liale Mubanga (Mr.), District Commissioner, Kaoma District, Kaoma
15. Chongo Chimfwembe Nkhuwa (Ms.), District Planning Officer (AG), Kaoma District/Kaoma Town Council, member of District Planning sub-Committee, Kaoma
16. Siachibuye Mwanangombe (Mr.), District Administration Officer (DAO), Kaoma District, Kaoma
17. Nathan Kapeshi (Mr.), Deputy Town Council Secretary, Kaoma Town Council, Kaoma
18. Jean Mukumwa (Ms.), Monitoring and Evaluation Officer, PPCR Unit, MoNDP, Lusaka
19. Carol Mwape Zulu (Ms.), Environment and Social Inclusion Manager, PPCR Unit, MoNDP, Lusaka

Community Project 1 – site visit, in Sefalu – Fiber Crafts Project – 5 groups involved (MUMWA-CRAF).
   (FGD participants included: Kahlilu Muzaza, Lungowe Mufaya, Lubinda Blessings, Mwakamui Sikute, Kwibisa Sililo, Mainga Florence, Munukayumbwa Mulala, Lutangu Ernest, and Inyambo Waenyae)

Community Project 2 – site visit, in Sefalu – Mushroom Project – 1 group (MUMWA-CRAF). (FGD participants included: Simandi Sinowe, In’utu Walubita, Akamandisa Mampi, and Limbali Beatrice)

Community Project 3 – site visit – Sipo Gardening Group project, in Mwanambuyu Ward (Ifatu Community) met with/interviewed 4 of 22 members (18 women, 4 men) (No CRAF involved)

Community Project 4 – site visit – Mandiange Piggery in same community – met with/interviewed Nangomba Liseli (Mr), Caretaker – 1 of 17 members (10 women, 7 men) (No CRAF involved)

Community Project 5 – site visit – Canal Clearing & Maintenance in Nande 1

Community Project 6 – site visit – Rice Farming in Nande 1 – met with/interviewed one farmer – Kufekisa Mubiana (no CRAF involved)

District Project 1 – site visit – Fish Hatchery and Pen Aquaculture – in Kaoma, met with Malikana Liswaniso (Mr), Aquaculture-Fisheries Officer, Kaoma District, member of District Planning Sub-Committee
Annex D: Bibliography

**World Bank**


**Government of Zambia**


Ministry of National Development Planning. (nd). Project Brief for Incoming Provincial Minister, Western Province, on Strengthening Climate Resilience in the Barotse Sub-Basin project, PPCR (Phase 2).

**Project Implementation and Other Documents**


The Climate Investment Funds (CIF) accelerates climate action by empowering transformations in clean technology, energy access, climate resilience, and sustainable forests in developing and middle income countries. The CIF’s large-scale, low-cost, long-term financing lowers the risk and cost of climate financing. It tests new business models, builds track records in unproven markets, and boosts investor confidence to unlock additional sources of finance.

© 2018 CIF  The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of CIF, its governing bodies, or the governments they represent. CIF does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of CIF concerning the legal status of any territory or the endorsement or acceptance of such boundaries.