

PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: PIDA809

Project Name	Zambia Strengthening Climate Resilience (PPCR Phase II) (P127254)
Region	AFRICA
Country	Zambia
Sector(s)	General agriculture, fishing and forestry sector (10%), General transportation sector (30%), General information and communications sector (10%), General public administration sector (20%), Flood protection (30%)
Lending Instrument	Specific Investment Loan
Project ID	P127254
Borrower(s)	Government of Republic of Zambia
Implementing Agency	Ministry of Finance
Environmental Category	B-Partial Assessment
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I. Project Context

Country Context

Zambia is a large and diverse landlocked country of 752,600 km² located in southern sub-Saharan Africa. The current population of 13 million is predominantly rural (61%) and expected to double by 2030.

Zambia's economy is heavily dependent on natural resources, particularly mining and increasingly forestry. Copper and cobalt account for 80% of the exports. With favorable copper prices and robust macro-economic conditions, Zambia GDP grew by 5.7% a year during 2000-2010, and by 6.8% in 2011, attaining a GNI per capita of US\$1,160 in 2011.

Despite this rapid growth, overall poverty remains high (60.5% in 2010), particularly in rural areas (74%). By contrast, poverty in urban areas declined to 35%, further broadening urban-rural inequities. Up to 80% of Zambia's poor (and 90% of the extreme poor) now live in rural areas. Agriculture and other primary sectors employs more than 65% of the total population, but remains largely rainfed and under-developed. Given its economic reliance on a narrow resource basis, Zambia is particularly vulnerable to climate and economic shocks.

II. Sectoral and institutional 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 past three decades, costing the nation an estimated 0.4% in annual economic growth. These trends are expected to intensify in the future: projected temperatures are expected to increase by 3-5 ° C by 2100, with average precipitation declining during the early rainy season (October to December) and intensifying thereafter. In the absence of adaptation, rainfall variability alone could keep an additional 300,000 people below the poverty line over the next decade, and reduce annual GDP growth by 0.9%.

The poor are particularly vulnerable to climate change impacts due to their heavy reliance on climate sensitive sectors. Zambia includes two major river catchments, the Zambezi and the Congo. The rural population along the Zambezi basin (particularly along the southern and western zones), is amongst the poorest and most vulnerable in Zambia, due to recurrent floods and droughts and socio-economic isolation. Particularly vulnerable are the elderly, female-headed households and single or divorced male-headed households. Their food and income sources are heavily reliant on subsistence crops, sales of livestock and natural resources, and casual labor (mostly paid for in food). This makes them vulnerable to climate-induced crop failure, both during droughts as well as floods, when excessive and unpredictable rainfall leads to water logging. Frost and heat stress are also being increasingly reported, as areas of the Zambezi floodplain become drier. As climate patterns become more erratic, water and energy resources, infrastructure and housing, and animal and human health are also becoming increasingly affected. Traditional systems of early warning, so prevalent in the Zambezi floodplains, are proving to be no longer sufficient to manage these trends.

To address these challenges, a panel of national experts under the Ministry of Finance (MoF) helped the Government mainstream climate change into Zambia's Sixth National Development Plan (2011-2015). Zambia also developed a National Climate Change Response Strategy, based on the 2007 National Adaptation Programme of Action (NAPA), which provides the institutional basis for its National Climate Change and Low Carbon Development Program.

The number of institutions directly involved in climate change activities in Zambia is steadily growing. At the Government's level, climate change activities have been led by three key Ministries (Ministry of Finance; Ministry of Lands, Natural Resources and Environment Protection; and the Disaster Management and Mitigation Unit under the Office of the Vice President). Over the last two years, however, a growing number of Line Ministries, donors, civil society organizations and private sector organizations have been supporting Zambia in building a climate resilient economy. In total, some 25 organizations are now directly involved.

Recognizing the need to ensure high-level coordination, the Government of Zambia agreed to establish a National Climate Change Secretariat under MoF, with staff seconded from various sectoral ministries. The Secretariat is responsible for coordinating all climate change and disaster risk management initiatives in Zambia, leaving implementation to line Ministries. In accordance with decentralization trends, climate resilience and disaster risk management are also increasingly being promoted at both provincial and council (district) levels.

The Pilot Program for Climate Resilience (PPCR) is an integral part of Zambia's effort to respond to climate change. The PPCR is a multi-donor Trust Fund, one of the three programs under the Strategic Climate Fund of the Climate Investment Funds (CIFs). Phase 1 of the PPCR (2010-2013) is currently supporting the National Climate Change Secretariat in mainstreaming, capacity building and information sharing at the national level. Together with a Project Preparation Grant, it is also assisting

the Government in preparing for Phase II, following the design outlined in the Strategic Program for Climate Resilience (SPCR) which was endorsed by the PPCR sub-committee in June 2011. The three PPCR Phase II projects included in the SPCR and administered by IBRD, AfDB and IFC are highly complementary, and together with other program partners, are assisting the Government to gradually move from capacity building to implementation of climate resilience priorities.

The Zambian PPCR has been designed to be both strategic and transformational. Strategic because it supports the backbone of Zambia's National Climate Change Program, thus leveraging a much larger financing pool (see Annex 8). By elevating the Secretariat to a level where it has convening power, the PPCR is also assisting Zambia to make climate change an intrinsic part of economic development. At the same time, it adopts a participatory, learning-by-doing approach to Zambia's most vulnerable area - the Zambezi River Basin - allowing national institutional capacity to be informed by lessons from the field. Finally, it recognizes that effective adaptation requires behavioral change, through better climate information and awareness.

The Zambian PPCR is also transformational. It integrates climate risk management into regional planning, thus seeking to change the long-term resilience of vulnerable populations, exposed assets and natural systems to climate related stresses. It introduces new approaches and technologies, including innovations generated by local champions (who will be directly supported by the project). The approach adopted by pilot districts follows the Government's decentralization and social protection agenda, allowing for replication and scaling up. Finally, the design recognizes that promoting climate-resilient livelihoods amongst the most vulnerable gives them the best option to adapt to both present conditions as well as future changes.

Within the Zambezi area, the Project focuses on one of its most vulnerable sub-basins (Barotse). A designated Ramsar site and Zambia's second largest wetland, the Barotse floodplain is currently proposed as a World Heritage Site. This vast area of 550,000 ha and some 1.1 million people is critical for the livelihoods and culture of the Lozi people, who developed intricate systems of traditional resource management under the oversight of their King (Litunga) and the Barotse Royal Establishment (BRE). Having learned to live with floods for centuries, the Lozi rely on a complex system of traditional earth lined canals for transport, drainage, irrigation, fisheries, and cultural ceremonies. At the same time, the Barotse floodplain remains one of the poorest areas of Zambia: in Mongu, Senanga and Kaoma districts, for example, about 60 percent of a sampled population lived on less than 10 ZMW a month (US\$0.06/day) and/or suffered from 5 months of chronic food insecurity

In recent times, livelihoods have been disrupted by unpredictable floods, droughts, and intense rainfall, as well as changing socio-economic patterns. Parts of the traditional canals built in the late 1880s have become silted, affecting agriculture and fisheries production. Addressing these challenges effectively is the focus of the proposed project. Project preparation has been endorsed by BRE and the authorities of Western Province, and involved close partnerships with local experts, including Zambian Red Cross Society, the National Heritage Conservation Commission, Concern International, WorldFish, Oxfam, the Zambia Climate Change Network, and youth champions.

III. Project Development Objectives

The development objective of the project would be to strengthen Zambia's institutional framework for climate resilience and improve the adaptive capacity of vulnerable communities in the Barotse sub-basin.

Progress towards reaching this objective would be measured through the following Project

Development Objective (PDO) level indicators:

- 25% real increase in budgetary allocation supporting climate resilience in vulnerable sectors
- At least 70% of direct beneficiaries under targeted districts, wards and communities assessed to have used information and planning tools to respond to climate change and variability
- Average flow velocity of target canals at 80% of optimal (limiting flow standard of 0.6 m/s for sandy clay soils)
- Number of direct project beneficiary households (of which women-headed and very vulnerable households)

1. The number of direct project beneficiaries under Participatory Adaptation is estimated at 130,000 (about 25,800 households). This comprises 12 percent of the total population of the Barotse sub-basin (1.1 million), and 73 percent of the population of 24 targeted wards (sub-districts) and 8 target districts in the sub-basin. At the community level, the project would target the estimated 32 percent of the population that consists of women-headed households, as well as male-headed households considered to be very or extremely vulnerable (earning less than US\$0.06/day in cash income and/or suffering from more than 5 months of food insecurity a year). Through strengthened management of canals, the project would also help generate an estimated 3,250 person-days of labor-intensive works, and directly benefit the rural population estimated to live in wards adjacent to the canals (about 41,700 people).). In this way, the project will also be responding to the current Government aspiration to create jobs in rural areas where poverty levels remain persistently high.

IV. Project Description

Component Name

The project (US\$36 million) would be supporting three inter-related components:

1. Strategic National Program Support (US\$9.6 million grant)
2. Support to Participatory Adaptation (US\$5.6 million grant)
3. Pilot Participatory Adaptation (US\$15.8 million grant and US\$5.0 million credit)

Component 1 would be national in scope. Components 2 and 3 would focus on the Barotse sub-basin of the Zambezi – the pilot area for Project activities.

Component 1: Strategic National Program Support (*US\$9.6 million grant*). This component aims to strengthen the national institutional and financial framework for climate resilience, thus providing the umbrella for long-term transformational change in Zambia. The strengthened framework and public awareness will in turn contribute to a more effective mainstreaming of climate resilience in vulnerable economic sectors, and allow lessons learned from the field to be progressively scaled-up. It includes two sub-components:

- (a) *Sub-component 1.1: Institutional Support to National Climate Change Program (US\$5.8 million grant)* comprising the following activities:
- (i) *Mainstreaming Climate Resilience* into key national and sectoral policies and programs, through use of screening guidelines adapted to the Zambian context;
 - (ii) *Institutional strengthening*, through post-graduate and short-term training for climate change champions, knowledge sharing, and analysis and dissemination of lessons learned;
 - (iii) A study on *Management of External Resources and Climate Risk Financing*, to enhance Zambia's capacity to access and manage climate funds directly, and support the establishment of viable climate risk financing instruments (such as contingency funds, multi-donor climate funds, and possibly insurance) ; and
 - (iv) *Incremental support to the National Climate Change Secretariat*, including technical assistance, fiduciary support, programmatic monitoring and evaluation, and incremental operating costs.
- (b) *Sub-component 1.2: Strengthened Climate Information (US\$3.8 million grant)*, providing more reliable, accessible and timely early warning and climate information to users. The project would support:
- (i) A *Social marketing awareness campaign* to promote the importance of addressing climate change risks from national to local level;
 - (ii) *Strengthened early warning system* through the application of rapid communication systems between line agencies and communities in the pilot sub-basins, and establishment of a pilot *open data platform* to facilitate the sharing of climate risk data amongst decision makers.

Component 2: Support to Participatory Adaptation (US\$5.6 million grant). This component would strengthen the adaptive capacity of vulnerable rural communities in the Barotse sub-basin, through:

- (i) *Facilitation and strengthening of community decision-making*, through the services of experienced non-governmental organizations (NGOs), who would assist target communities in understanding and articulating climate risks, use participatory approaches to prioritizing adaptation options, preparing sub-grant proposals and implementing and monitoring the sub-grants; this would also include facilitation of community-based canal management.
- (ii) *Specialized technical assistance and training* to Western Province and district councils, including (a) a climate risk and assessment study for the Barotse floodplain which would consider planning for its optimal and long-term management; (b) technical assistance to provincial and council-level planners to incorporate climate resilience into spatial plans and regional budgets; (c) provision of experts on both structural (infrastructure) and non-structural (soft) adaptation options; (d) communication equipment and services to facilitate access (by the beneficiaries) to best practice adaptation knowledge and centers of expertise; and (e) technical assistance and

workshop support to Western Province in improving the policy for, and recurrent financing of traditional canals.

- (iii) *Incremental project management support* to Western Province and target councils, including in financial management, safeguards screening, monitoring and evaluation, equipment, vehicles and incremental operating costs to oversee field operations.

Component 3: Pilot Participatory Adaptation (*estimated costs US\$15.8 million grant and US\$5.0 million credit*). This component would fund actual participatory adaptation investments in the Barotse sub-basin. It would include two sub-components, the first focusing on investments prioritized through climate resilient planning, and the second on optimizing the climate resilience function of traditional floodplain canals. Both would be implemented progressively, incorporate lessons learned after each annual flood and/or droughts:

- (a) *Sub-component 3.1: Community Adaptation Sub-grants* (*US\$15.8 million grant*), would fund priority adaptation sub-projects identified through the process of climate resilient planning supported by Component 2. It would be piloted in approximately 8 districts¹ and 24 wards of the Barotse sub-basin. The sub-grants would be available at the (i) district; (ii) ward; (iii) community/group; and (iv) individual innovators (champions') level, and would be disbursed directly to beneficiaries. Beneficiary proposals would have to demonstrate clear adaptation co-benefits and meet the eligibility and capacity criteria specified in the Operational Manual (see also Annex 2). The sub-projects would be largely demand-driven, but also benefit from external expertise to ensure transformational change. At the community/group level, the interventions would specifically target women-headed households, as well as households classified as very or extremely vulnerable (see para. 18). The project would further support (v) an Adaptation Contingency Fund to progressively reward the best performing beneficiaries, and fund additional sub-projects upon early warning of a disaster.
- (b) *Sub-component 3.2. Rehabilitation and Strengthened Management of Traditional Canals* (*US\$5.0 million credit*). This sub-component would focus on rehabilitation and strengthened management works of about 5 priority traditional canals on the floodplain, to optimize their use in climate resilience (particularly in the management of floods and droughts). The project would fund both mechanized as well as labor-intensive (cash-for-works) activities. Self-reliance arrangements would be promoted amongst water user groups for tertiary/feeder canals, although the project could consider sub-grants to these beneficiary groups to fund tools and other required materials. The design of the works would be done in close collaboration with traditional and local authorities to retain their traditional structure as much as possible, while optimizing their use in managing climate related stresses. Prior agreement on the sustainable operation of the canals (including the roles of the Government, traditional authorities and water users) would be a pre-condition to the financing of the works. This sub-component would be financed through a Strategic Climate Fund credit, since the economic returns are substantial, given considerable baseline development benefits.

¹Kazungula (Southern Province), and Kalabo, Kaoma, Lukulu, Mongu, Senanga, Sesheke and Shangambo (Western Province).

V. Financing *(in USD Million)*

For Loans/Credits/Others	Amount
Borrower	0.00
Strategic Climate Fund Credit	5.00
Strategic Climate Fund Grant	31.00
Total	36.00

VI. Implementation

The multi-sectoral National Climate Change Secretariat, under the Ministry of Finance (MoF) will take overall responsibility for project execution, and oversee and coordinate project implementation. The Secretariat – already operational - was established by a committee of Permanent Secretaries in March 2012, and endorsed by directive of the Secretary to the Cabinet on 16 October 2012. The Secretariat has the mandate to coordinate all climate change activities across sectors and projects in Zambia. It is also responsible for facilitating stakeholder consensus and development of Zambia's Climate Resilient and Low Emissions Development Program, and facilitate Zambia's role at international negotiations (namely in UNFCCC, and Green Climate Fund). The Secretariat has already been coordinating Phase I of the PPCR. It is likely that under the long-term arrangements currently under discussion, the Secretariat will be managed by a multi-stakeholder Board (the National Climate Change and Development Council) with representation from Government, civil society and private sector. The Secretariat is being staffed by 8 experts, seconded by various stakeholder Ministries, who are in the process of being appointed and transferred. This core team would be complemented by contracted staff in the areas of procurement, financial management, internal audits, communications, monitoring and evaluation, and administration and logistics, most of whom are already mobilized for Phase 1. The Secretariat would report to a Committee of Permanent Secretaries, chaired by the Secretary to the Treasury, and be assisted by a multi-stakeholder Technical Committee which includes representatives from Cabinet Office, Office of Vice President, Ministry of Finance, other relevant line Ministries, civil society and private sector.

As part of its core mandate, the Secretariat would be directly responsible for Component 1.1. Institutional Support to National Climate Change Program. It would also be responsible for the procurement of the social marketing campaign (Component 1.2), and major studies and services under Component 2. The Secretariat will also be responsible for overall project reporting.

The Disaster Management and Mitigation Unit (DMMU) will be responsible for implementation of the early warning and open data platform activities under Component 1.2, Strengthened Climate Information, in accordance with its mandate. In so doing, it will rely on its inter-sectoral committees at both national and regional levels, which include active participation by civil society such as the Zambia Climate Change Network and locally-based partners. DMMU will operate based on agreed annual work plans with the Secretariat, against which regular advances would be made and accounted (see Financial Management).

A small sub-project implementation unit would be established in Mongu (Western Province) to oversee the planning, provide specialized technical support, and carry out fiduciary, safeguards and monitoring oversight of Component 3 Pilot Participatory Adaptation. The unit would report directly to the Chief Planner (at the Provincial level) and to the National Coordinator at the Secretariat level. The unit's technical experts would be expected to actively assist the Provincial Development Committee, the Barotse Royal Establishment and the targeted District Councils to mainstream climate resilience into

provincial and district-level planning. The procedures for the Participatory Adaptation component would follow a specific Operational Manual (expected to be finalized by March 2013), and are based on proven procedures under the former Zambian Social Investment Fund.

As part of Component 2.1 Facilitation and strengthening of community decision-making, the Secretariat would contract experienced NGOs that have on-going, relevant programs in the target districts. These NGOs, working in close collaboration with local chiefs (Indunas) would facilitate ward and community-level planning, as well as the management of traditional canals. They would also assist target beneficiaries to prepare and submit simple sub-project proposals in accordance with the agreed eligibility criteria, and thereafter assist them in implementation. At the ward level, the project would benefit directly existing Area Development Committees, whilst at the community level the project would target established Village Area Groups, farmers groups, women’s groups and individual champions.

The sub-projects under Component 3.1 would be first screened by the districts for compliance with the standards, and then reviewed and approved by a Provincial Committee consisting of provincial-level agencies, BRE, and civil society representatives. The Secretariat could be represented at the first meetings of the Provincial Committee to ensure compliance with the eligibility criteria. Once approved, simple lump-sum agreements would be signed directly with the beneficiaries, and funds disbursed directly to their bank accounts in several tranches, according to the progress of the agreed sub-projects.

The canal rehabilitation works would be coordinated through the Chief Planners’ office at the provincial level, through an agreed annual work plan with the Secretariat. Traditional BRE leaders (Indunas) and a specialized NGO would assist with community organization and manual labor, whereas more specialized works and mechanized dredging would be organized by the Provincial Harbor Master and provincial technical staff, with logistical and policy support provided by Maritime Department. Traditional leader’s involvement in both canal rehabilitation and Participatory Adaptation sub-grants would be critical to project’s success. The project will promote collaborative arrangements between BRE, Government authorities and the collaborating NGOs to ensure smooth implementation

VII. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	X	
Natural Habitats OP/BP 4.04	X	
Forests OP/BP 4.36		X
Pest Management OP 4.09	X	
Physical Cultural Resources OP/BP 4.11	X	
Indigenous Peoples OP/BP 4.10		X
Involuntary Resettlement OP/BP 4.12	X	
Safety of Dams OP/BP 4.37		X
Projects on International Waterways OP/BP 7.50	X	
Projects in Disputed Areas OP/BP 7.60		X

VIII. Contact point

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