REPUBLIC OF ZAMBIA

Zambia Water Investment Programme

2022 - 2030

Supporting the attainment of Vision 2030 towards prosperous middle-income status by 2030

JULY 2022 • MINISTRY OF WATER DEVELOPMENT AND SANITATION

AIP CONTINENTAL AFRICA WATER INVESTMENT PROGRAMME

Global Water Partnership Africa

Foreword by the President of the Republic of Zambia

I am pleased to endorse the launch of the Zambia Water Investment Programme (ZIP) 2022-2030, whose aim is to ensure national water security and the sustainable management and utilisation of Zambia's water resources for socio-economic development.

The programme marks a game changer in Zambia's narrative on water in the sense that it positions water as a key enabler of socio-economic development through deliberated efforts aimed at job creation and economic empowerment through water investments. This is critical if Zambia is to successfully attain the aspirations outlined in the National Development Plan (NDP).

I am further delighted to note that the ZIP not only focuses on water security investments following the Water-Energy-Food (WEF) nexus approach but also seeks to address water governance issues and build institutional capacity for addressing water security challenges and mobilising an ambitious level of resources for its implementation. Thus, cross-sectoral water resources planning will have to be promoted to the fullest extent in a collective and collaborative manner. This will ensure successful implementation of the programme and attainment of its key objectives.

It is worth noting that the ZIP 2022-2030 includes measures to do with water security, climate resilience and gender transformation. In addition, it also outlines measures to do with Sustainable Development Goal (SDG) number six and the WEF nexus, as well as transboundary water cooperation. This approach is considered to be modern and progressive for any nation that seeks to prosper in the twenty-first century. I therefore applaud the Ministry of Water Development and Sanitation (MWDS) for taking a modern approach towards the integrated development and management of our nation's water resources.

I therefore pledge the full commitment of the Government of the Republic of Zambia in ensuring that the goals and objectives of this programme are realised. This is because I see this programme as one of the vehicles through which to achieve economic growth and create jobs and investment opportunities for the people of Zambia. Furthermore, this is also a clarion call for all of us to put our concerted efforts together for the common good.

May the Lord God Almighty richly bless us all in this undertaking.

H.E. HAKAINDE HICHILEMA
President of the Republic of Zambia

Preface

The United Party for National Development administration is very determined to ensure that every Zambian citizen has at least basic access to adequate water and sanitation by 2030. In addition, the United Party for National Development government will also ensure that water resources contribute effectively towards poverty alleviation, improvement of livelihoods and economic empowerment of the masses. The aim will be to leave no one behind. This resolve can be seen from the creation of the Ministry of Water Development and Sanitation (MWDS), whose sole focus is to advance and ensure the attainment of national water security for all the citizens of Zambia. This is underscored by the increased allocations for water development and sanitation in the national budget and enhanced programming in the National Development Plans (NDPs).

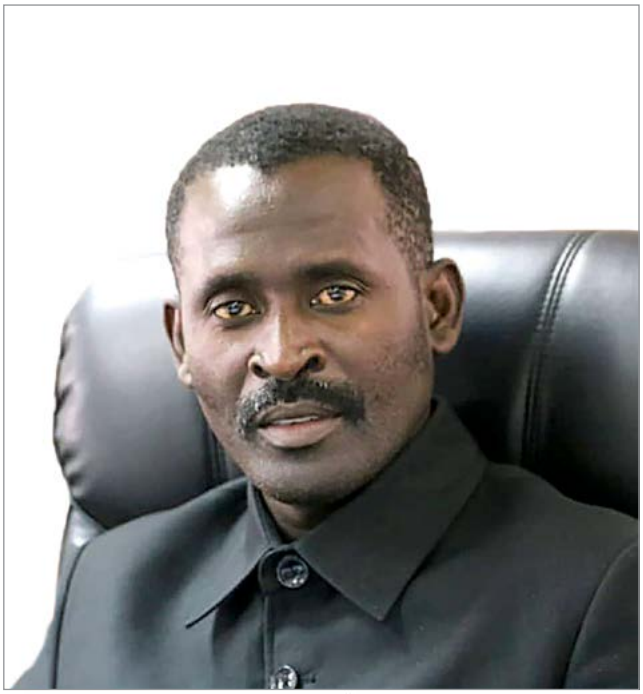
The MWDS formulated the Zambia Water Investment Programme (ZIP) as a vehicle for the implementation of the Eighth National Development Plan (8NDP) and successive NDPs until 2030. The strategic focus will be on water security, climate resilience and gender transformation; Sustainable Development Goal (SDG) number six and Water-Energy-Food (WEF) nexus investments; and transboundary water cooperation and investments. This approach will ensure that Zambia derives the maximum benefits from its water resources for national socio-economic development.

The successful implementation of this programme will require all stakeholders and key partners to come together and pull in one direction as per the goals and objectives articulated in this programme document. Government cannot do this alone but requires collaboration and support from cooperating partners, civil society and the general populace at large. Therefore, let us all join hands to ensure the successful implementation of the ZIP.

HON. MIKE E. MPOSHA
Minister of Water Development and Sanitation: Zambia

Acknowledgements

The formulation of the Zambia Water Investment Programme (ZIP) 2022-2030 would not have been possible without the support of various stakeholders. The input, feedback and reviews from the various key players are appreciated. Specifically, the role of the Global Water Partnership and the Zambia Water Forum and Exhibition for their support in formulating and launching the programme is recognised and appreciated. Last but not the least, the members of staff in the Ministry of Water Development and Sanitation (MWDS), statutory institutions and the water utility companies are commended for their tireless efforts in ensuring the successful development of the ZIP.



ENG. JOE KALUSA
Permanent Secretary: Ministry of Water Development and Sanitation

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Glossary

CLIMATE CHANGE ADAPTATION	The taking of actions aimed at minimising the negative impacts of climate change.
CLIMATE CHANGE MITIGATION	Efforts aimed at reducing or preventing the emission of greenhouse gases such as carbon dioxide and methane, which are primarily responsible for increasing global average temperatures beyond pre-industrial levels.
CLIMATE RESILIENCE	The ability to forecast, prepare for and respond to climatic hazards.
ENVIRONMENTAL RESILIENCE	The capacity of the environment to resist damage and recover quickly from stresses caused by economic activities and other factors such as climate change.
MULTI-STAKEHOLDER PLATFORM	A voluntary or statutory decision-making body composed of different stakeholders who are organised around common resource management issues and depend on one another for solving the issues and formulating action strategies for solving the common problems.
PUBLIC-PRIVATE PARTNERSHIP	Long-term arrangement between two or more public- and private-sector entities typically involving private capital financing government projects and services upfront, and the drawing of profits from taxpayers or users over the duration of the public-private partnership arrangement.
SANITATION	Treatment and disposal of human excreta and sewage.
TRANSBOUNDARY WATER INVESTMENTS	Undertaking of measures aimed at deriving social and economic benefits from water resources that are shared by two or more countries.
WATER DEVELOPMENT	The process of developing water resources in order to ensure water availability for socio-economic productive use.
WATER HAZARD	Potential harmful effects on society and the environment associated with water.
WATER QUALITY	The condition of water in terms of chemical, physical and biological characteristics with regard to its applicability for various uses.
WATER RESOURCE	Natural resources of water with potential for multipurpose socio-economic utilisation.
WATER RESOURCES MANAGEMENT	The integrated process of planning and managing water resources in terms of water quantity and quality across all water uses.
WATER SECURITY	The capacity to ensure the availability of adequate quantities of water of sufficient quality and the ability to utilise the available water resources for multiple productive uses.
WATER SUPPLY	Provision of water that is safe to drink primarily to households and communities.

List of Abbreviations and Acronyms

8NDP	Eighth National Development Plan
AIP	Continental Africa Water Investment Programme
CAG	Cluster Advisory Group
DDCC	District Development Coordinating Committee
GDP	Gross Domestic Product
IFA	Investment Focus Area
IWRM	Integrated Water Resources Management
MOFNP	Ministry of Finance and National Planning
MWDS	Ministry of Water Development and Sanitation
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
NDCC	National Development Coordinating Committees
NDP	National Development Plan
PDCC	Provincial Development Coordinating Committee
PIDA	Programme for Infrastructure Development in Africa
PPP	Public-private Partnership
SADC	Southern African Development Community
SDA	Strategic Development Area
SDG	Sustainable Development Goal
SME	Small to Medium-sized Enterprise
WASH	Water, Sanitation and Hygiene
WEF	Water-Energy-Food
ZIP	Zambia Water Investment Programme

Executive Summary

The goal of the Zambia Water Investment Programme (ZIP) is to transform and improve the investment outlook for water security and sustainable sanitation in Zambia in line with the national aspirations for a prosperous, peaceful, inclusive and equitable country by 2030. Thus, the goal is for a water-secure Zambia by 2030. The main objective of the ZIP is to enhance job creation through gender-sensitive investments in water security, industrialisation and climate-resilient development. The programme is structured around three investment focus areas (IFAs): water investments to support economic transformation; resilience building through water investment; and water and sanitation governance and institutional strengthening. The coordination and management approach will be anchored in existing national development coordination arrangements under the Eighth National Development Plan (8NDP) and the existing coordination arrangements for dealing with climate change. However, the Ministry of Water Development and Sanitation (MWDS) will shoulder the primary responsibility of the ZIP. The ZIP is also a programme that falls within the Continental Africa Water Investment Programme (AIP) that was adopted by the African heads of state and government in February 2021 during the 34th Ordinary Session of the Assembly of the African Union. The main expected result from the pan-African AIP is the leveraging of Sustainable Development Goal (SDG) investments worth about US$30 billion annually by 2030 and the resultant creation of five million jobs over the same period. The key results that are expected from the formulation and implementation of the ZIP are the leveraging of about US$5.75 billion for water security investments and the creation of about 200,000 formal jobs in Zambia by 2030.

The resource requirement for the successful implementation of the ZIP is estimated at about US$5.75 billion between 2022 and 2030. This level of resources will be mobilised through a diversity of financing arrangements including grants, concessional financing, equity and other innovative financing mechanisms. Key to this will be the effective preparation of bankable project documents.

1. Introduction

1.1 Background

The Zambia Water Investment Programme (ZIP) 2022–2030 was developed to support the attainment of Zambia Vision 2030 - a prosperous middle-income country by 2030. Thus, the ZIP will enhance the implementation of the National Development Plans (NDPs), the current one being the Eighth National Development Plan (8NDP), as the primary means of achieving Vision 2030. The primary goal for the ZIP is to enable the mobilisation of water security investments aimed at advancing economic transformation and job creation, enhancing human and social development, and ensuring resilience building with regard to climate and the environment. This is anchored in the Vision 2030, through which the people of Zambia aspire to live in a strong and dynamic middle-income industrial nation that provides opportunities for all without leaving anyone behind. Key aspirations in this regard include opportunities for improving the wellbeing of all, and socio-economic justice anchored in gender and social inclusion. Furthermore, work towards attaining Vision 2030 will be premised on the principles of democracy, respect for human rights, good traditional and family values, a positive attitude towards work, peaceful coexistence and public-private partnerships (PPPs). A key outcome in this sense is therefore that the Zambian economy

should be competitive, self-sustaining, dynamic and resilient to shocks. Other outcomes include a resilient and sustainable natural environment and stable sociocultural systems that effectively support human capital development.

The ZIP borrows inspiration from, and is a part of, the pan-African Continental Africa Water Investment Programme (AIP), but at country level. The key results that are expected from the formulation and implementation of the ZIP are the leveraging of about US$5.75 billion for water security and sanitation investments and the creation of about 200,000 formal jobs in Zambia by 2030. The expected impacts will comprise the following:

a. At least US$5.75 billion will be mobilised and invested in Sustainable Development Goals (SDGs) water investments, climate-resilient and gender-transformative water investments, and transboundary water investments.

b. At least two million Zambian citizens will benefit from economic opportunities generated through the investments mentioned above.

c. At least 200,000 formal direct jobs will be created through the water investments mentioned above, with a special focus on the youth, women and other marginalised groups.

d. At least 800,000 indirect jobs will be created for vulnerable and poor youth, women and other marginalised groups.

e. Bankable water infrastructure and related projects worth at least US$6 billion will be prepared and financing will be mobilised or leveraged.

1.2 Development of the Zambia Water Investment Programme

The process for developing the ZIP started in 2021 under the guidance and coordination of the Ministry of Water Development and Sanitation (MWDS). A technical team composed of various government institutions and partners was formed to draft the programme. The draft programme was then reviewed by various stakeholders in 2021 and part of 2022. The programme was then reviewed by the senior management team of the Ministry and presented for approval by the Cabinet before it was submitted to the Office of the President for final endorsement.

The ZIP is aligned with the four strategic development areas (SDAs) of the 8NDP (2022-2026). The four SDAs include:

a. economic transformation and job creation;

b. human and social development;

c. environmental sustainability (including climate resilience); and

d. good governance environment.

The ZIP is about making sure that the SDAs of the 8NDP mentioned above are successfully achieved through ensuring water security. This is mainly through recognising the critical importance of water as an enabler to sustainable socio-economic development in Zambia. Accordingly, the ZIP is structured around the following three investment focus areas (IFAs):

a. water investment for economic transformation;

b. resilience building through water investment; and

c. water governance and institutional strengthening.

The first IFA is expected to support the drive for economic diversification and job creation. This will be achieved through investments aimed at addressing the specific water needs of each of the economic drivers and water-dependent economic enablers. The second IFA is about making sure that water investments in Zambia are climate-resilient and inclusive. This will be achieved through implementing interventions on climate change adaptation, gender equality and social inclusion. The third IFA is about strengthening the enabling environment for water investment in the country. This will be achieved through interventions in capacity development and in governance systems, including participatory arrangements.

2. Situation Analysis

2.1 Country Overview

Zambia is a landlocked country of southern Africa and is located between geographic coordinates: 8°20′and 18°S and 22°00′and 33°45′E. The nation shares its borders with eight neighbouring countries, namely the Democratic Republic of Congo to the north, Tanzania to the north-east, Malawi to the east, Mozambique and Zimbabwe to the south-east, Namibia and Botswana to the south and Angola to the west. The country spans a territorial area of 752,927 km2 and lies on the Central Africa high plateau, with an average altitude of 1,200 m above mean sea level. Rift valley formations in the eastern and southern parts of the country define distinctive escarpment systems and valley troughs, the most famous of which is the Muchinga Escarpment. From the human and social development point of view, the country's population grew on average by 2.8 percent between 2006 and 2020. Thus, in 2010 the population was about 13.1 million and in 2020 it was about 17.9 million. The rapid growth in population is attributed to high fertility rates and reducing mortality over the years. Nevertheless, incidences of poverty are very high, with rural poverty standing at 76.6 percent and urban poverty standing at 54.5 percent as at 2015. This trend is expected to continue as the large youth population enters reproductive age, which will put even more pressure on

the demand for jobs, healthcare and other social services.[1]

Real gross domestic product (GDP) growth over the period 2006 to 2021 averaged 5.2 percent. During the period 2017 to 2021 this declined to an average of 1.4 percent, with a recession of 2.8 percent recorded in 2020. This was an unfavourable outcome in terms of national economic outturn, given that the Vision 2030 target was to attain and sustain annual economic growth rates of between 6 and 10 percent. Therefore, in order to keep the trajectory of attaining Vision 2030, significantly high growth rates will have to be sustained in successive NDPs. This will not be an easy task because with the national debt standing at 119 percent of GDP as at 2021, public expenditure for development investments will be severely constrained. Recourse to alternative financing approaches such as private-sector financing will therefore become key.

Regarding the governance environment, the focus going forward will be on decentralisation by devolution in line with the Constitution of the Republic of Zambia, subordinate legislation and the revised decentralisation of policy of 2013. Furthermore, the focus will also be on addressing corruption, which worsened from 38/100 in 2013 to 33/100 in 2020, according to the Corruption Perceptions Index of Transparency International.[2] Key measures in this regard will include strengthening integrity committees and enhancing electronic financial systems. The COVID-19 pandemic pushed into contraction an economy that was already weakened by recent persistent droughts, falling copper prices and unsustainable fiscal policies. Overall, the economy is estimated to have contracted by 1.2 percent in 2020 - the first recession for Zambia since 1998. Inflation remained in double digits throughout 2020, averaging 15.7 percent, and reached a high of 22.2 percent in February 2021[3], due to a prolonged fallout from COVID-19, increased fiscal and domestic liquidity challenges and the length of time for Zambia to embark on key macroeconomic and structural reforms. Rainfall variability also remains a key structural risk to Zambia's sustainable growth, affecting key sectors like agriculture and electricity, and highlights the need to incorporate climate-smart solutions in Zambia's long-term growth strategy.[4]

Furthermore, significant progress was made towards increasing access to water and sanitation between 2007 and 2018, but this fell short of attaining universal access to improved water sources and sanitation facilities. Access to improved water sources increased from 41.1 percent in 2007 to 72.3 percent in 2018, whereas access to improved sanitation also increased, from 35.5 percent in 2007 to 54.4 percent in 2018.

2.2 Context of the Water Sector in Zambia

The total renewable surface water resources potential for Zambia is estimated at about 144 km³/annum. This comprises 86.6 km³ of surface water resources and 57.4 km³ of groundwater resources. On the other hand, the water resources utilisation is estimated at 77.77 km³/annum. This represents a water resources utilisation rate of 54 percent of renewable water resources. Figures 2 to 5 below indicate the surface and groundwater resources potential, as well as the average country water resources utilisation.

FIGURE 1: PERFORMANCE OF THE ZAMBIAN ECONOMY BETWEEN 2006 AND 2021

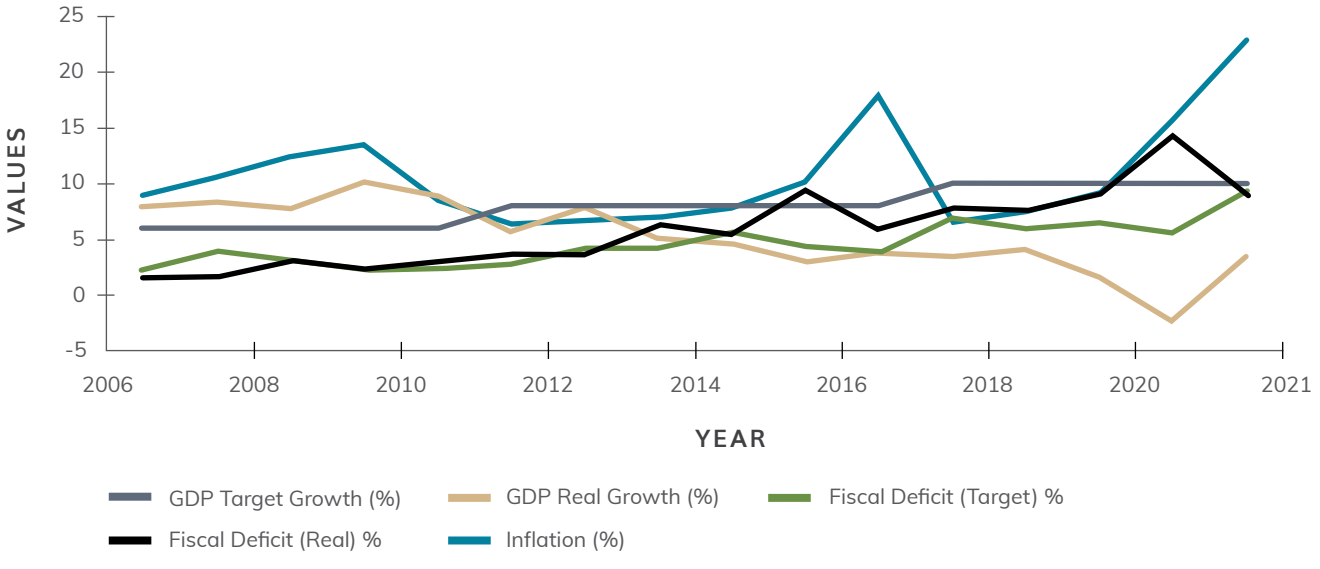


FIGURE 2: SURFACE WATER RESOURCES POTENTIAL (KM³ / ANNUM) BY CATCHMENT AREA

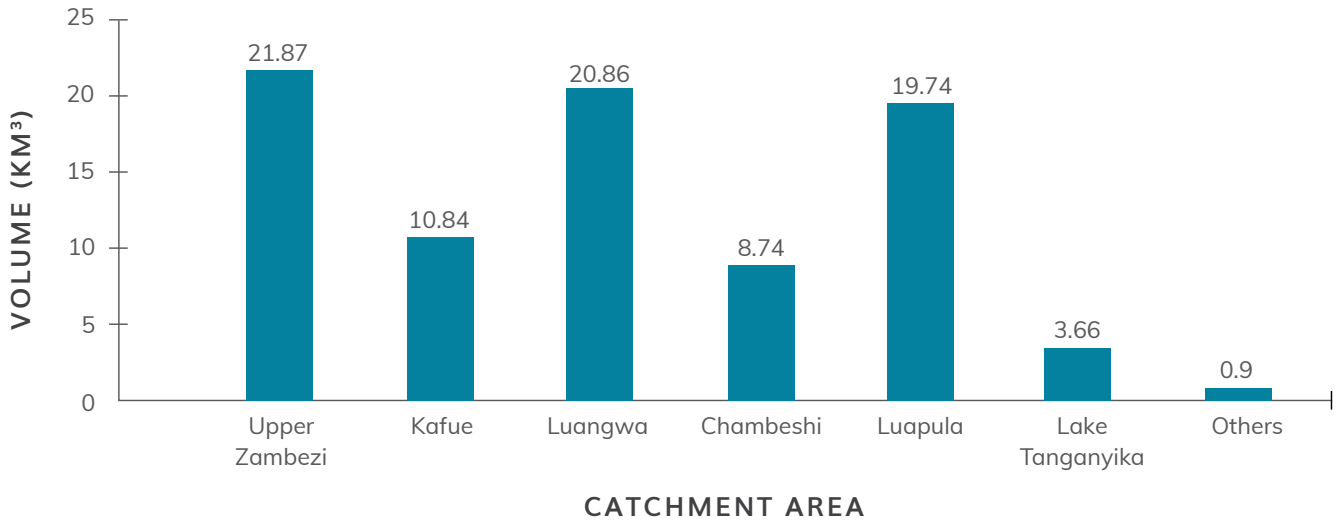
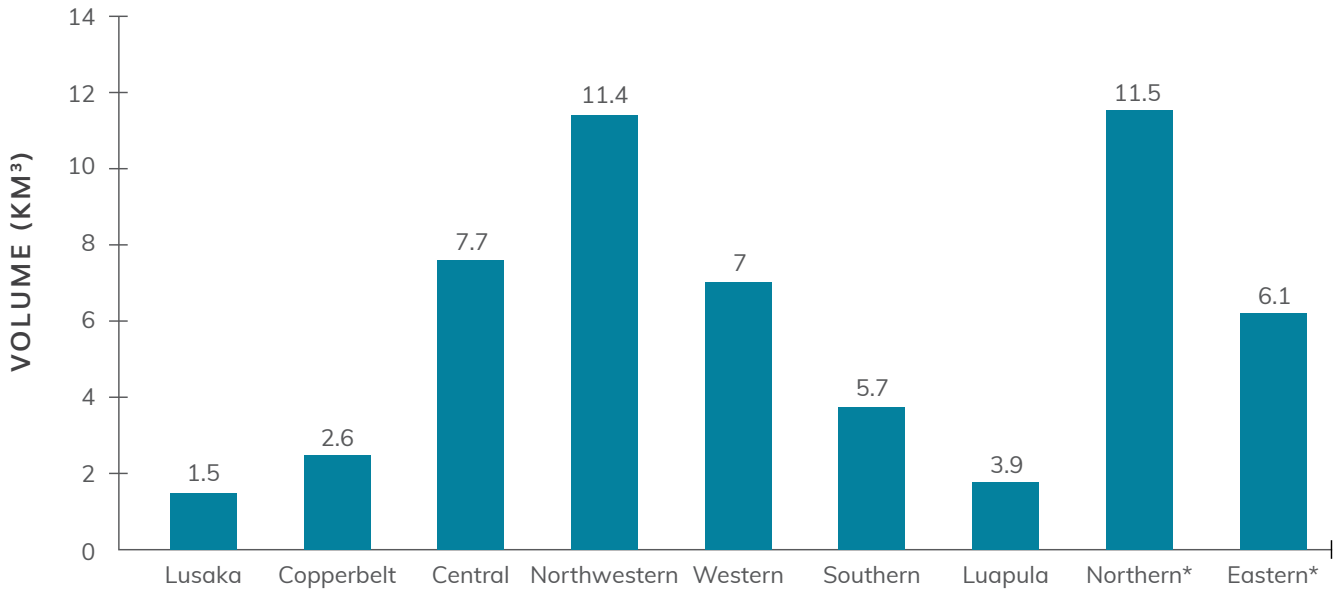
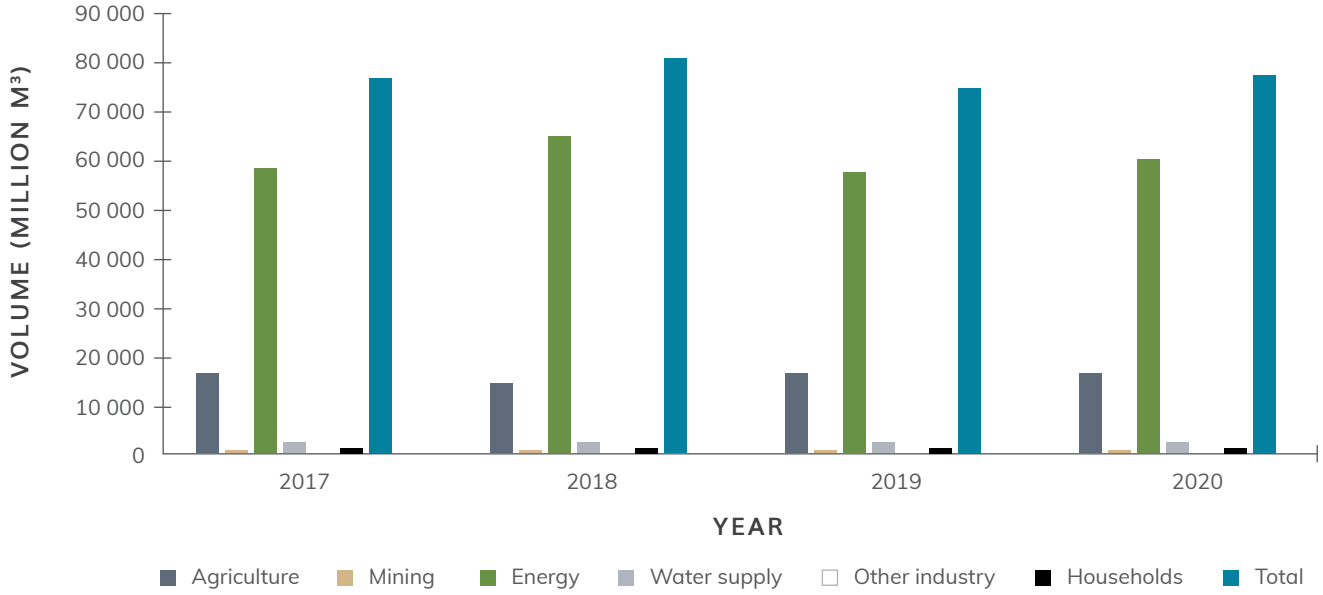


FIGURE 3: GROUNDWATER RESOURCES POTENTIAL (KM³ / ANNUM) BY PROVINCE



*Part of the territory now belongs to the 10th Province of Zambia, Muchinga

FIGURE 4: WATER RESOURCES UTILISATION FOR THE PERIOD 2017–2020 (LINEAR SCALE)



Furthermore, maps showing the water resources potential of the country are provided in Figures 5 and 6.

FIGURE 5: THE SIX CATCHMENT AREAS OF ZAMBIA

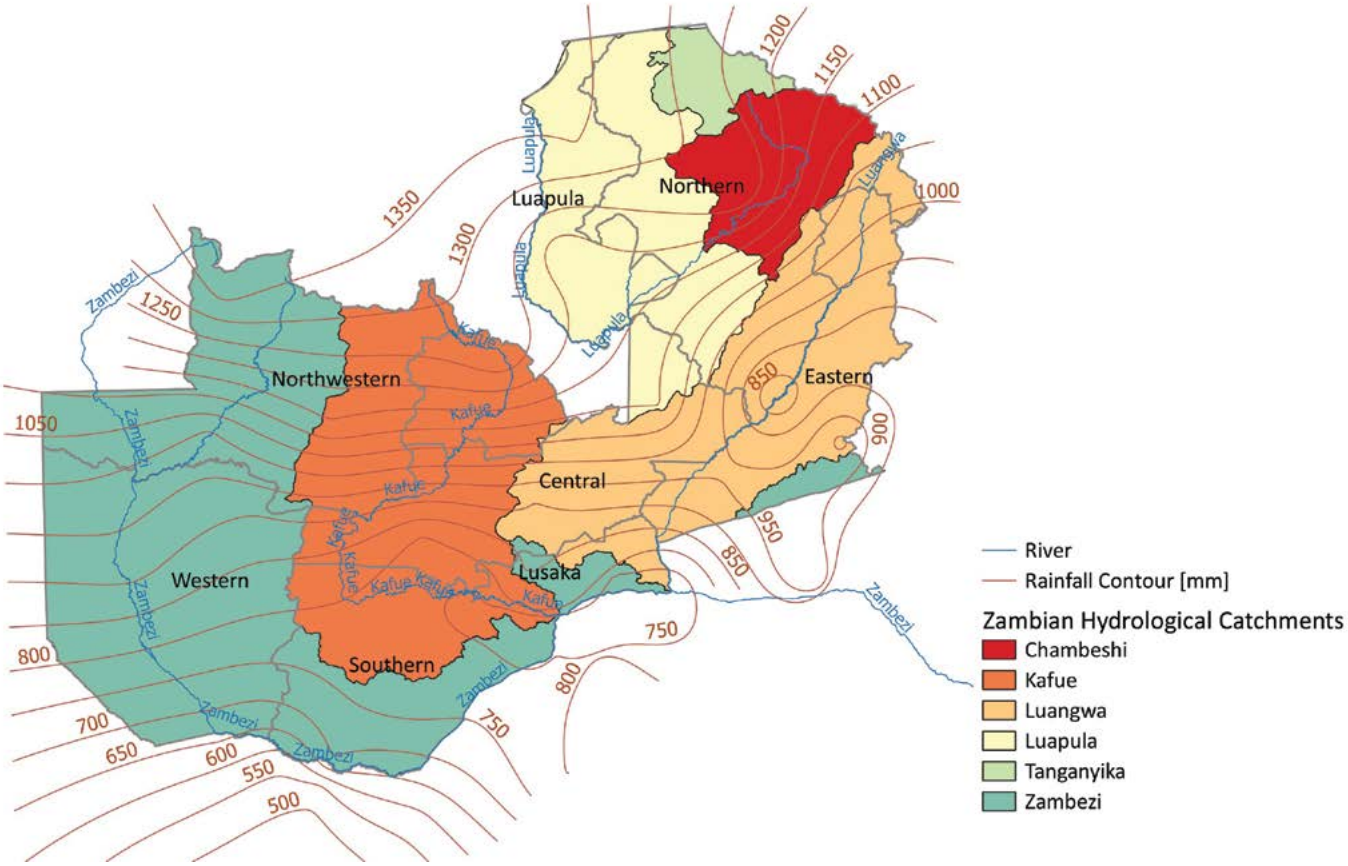
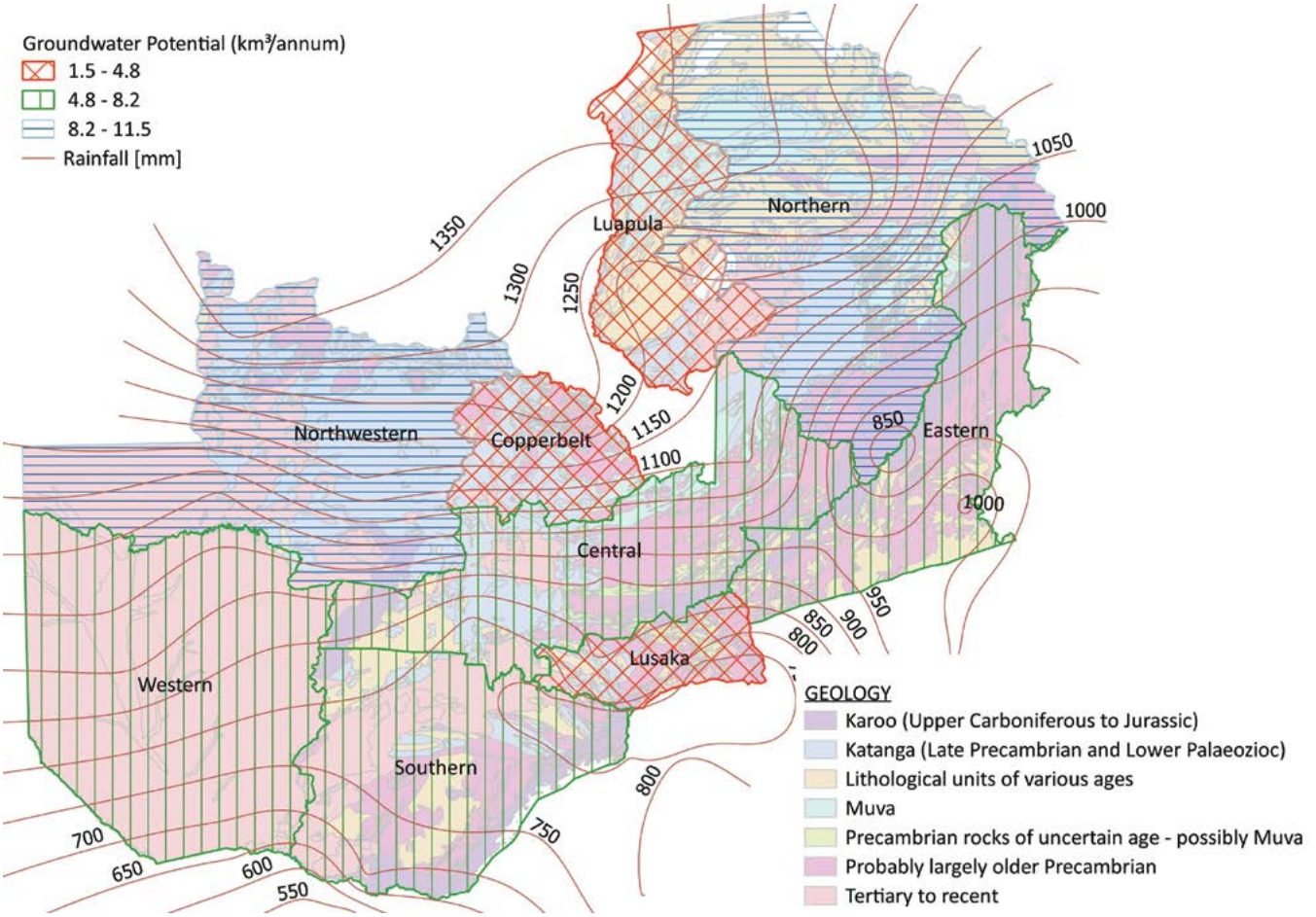


FIGURE 6: SCHEMATIC OF GROUNDWATER RESOURCES POTENTIAL FOR ZAMBIA



2.3 Development Context of Water Development and Sanitation

The development context for the ZIP is the Vision 2030 and the intermediary NDPs. The current NDP is the 8NDP, whose implementation period is 2022–2026. The next NDP, which will be formulated in 2027, will carry forward the developmental objectives aimed at attaining Vision 2030.

The 8NDP was formulated on the basis of one key SDA and three supporting SDAs. The key SDA is economic transformation and job creation, whereas the supporting SDAs are human and social development, environmental sustainability and good governance environment.

Progress was made towards increasing access to water and sanitation between 2007 and 2018, but this fell short of attaining universal access to improved water sources and sanitation facilities. Access to improved water sources increased from 41.1 percent in 2007 to 72.3 percent in 2018, and access to improved sanitation also increased - from 35.5 percent in 2007 to 54.4 percent in 2018.

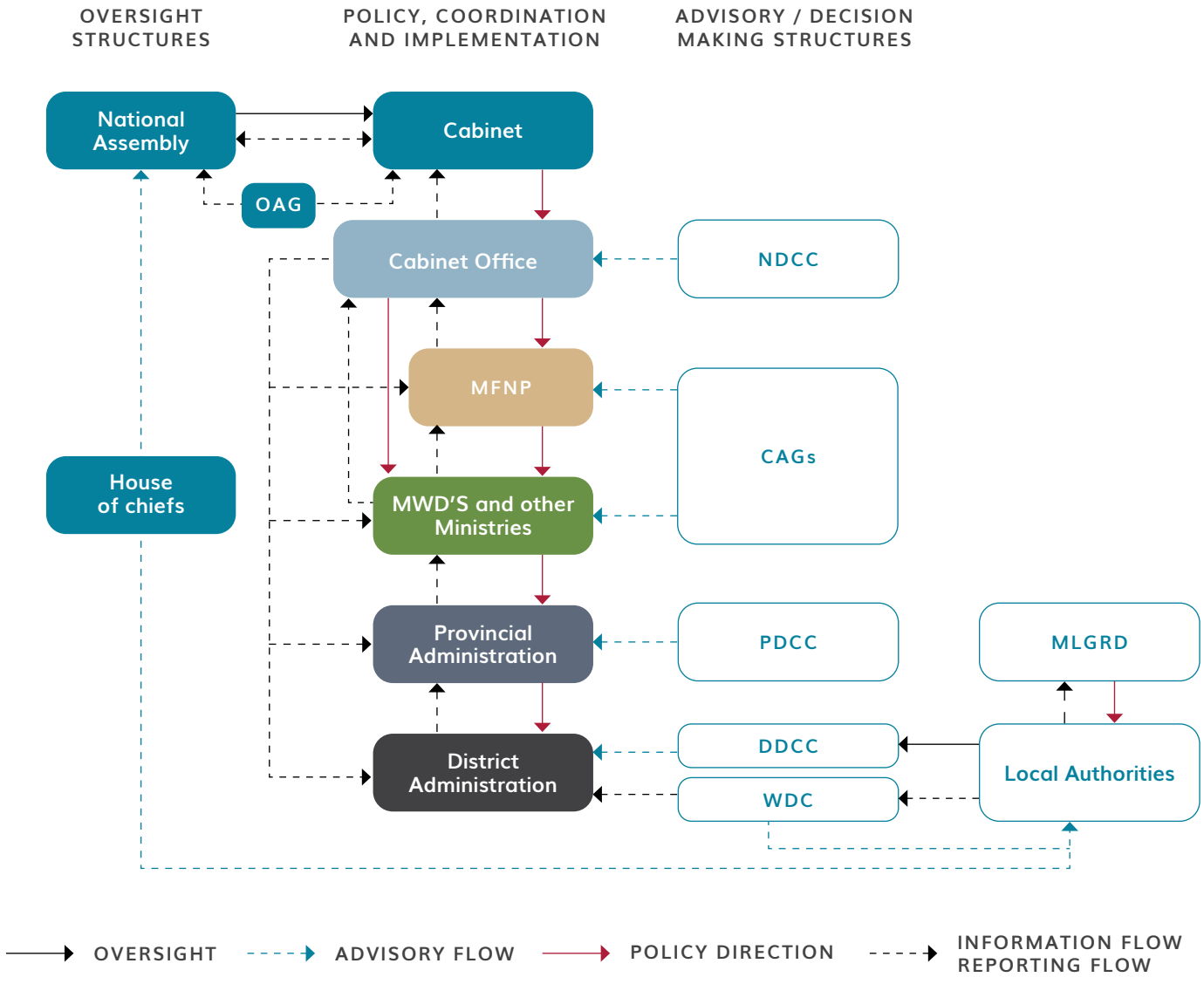
2.4 Institutional Arrangements

Coordination of the ZIP will be applied within the context of the NDP coordination arrangements. This comprises three structures, namely oversight structures; policy, coordination and implementation structures; and advisory/decision-making structures. The oversight structures comprise the National Assembly, the Office of the Auditor General and the House of Chiefs. The policy, coordination and implementation structures, on the other hand, comprise Cabinet Office at the apex, Government Ministries and Institutions, and Provincial and District Administration. Within the context of coordinating the 8NDP, the Ministry of Finance and National Planning (MOFNP), in collaboration with Cabinet Office, will play a key role in terms of effecting the coordination arrangements and financing the plan. In addition, within the context of the ZIP, the MWDS will play a key role in leading the implementation and execution of the ZIP.

The final structures of the coordination arrangements are those that are responsible for advisory functions and decision-making. These comprise the National Development Coordinating Committees (NDCCs), the Cluster Advisory Groups (CAGs), the Provincial Development Coordinating Committees (PDCCs), the District Development Coordinating

Committees (DDCCs) and the local authorities. A schematic of the development coordinating arrangements is shown below in Figure 7.

FIGURE 7: SCHEMATIC OF INSTITUTIONAL ARRANGEMENTS FOR DEVELOPMENT COORDINATION



CAGs	Cluster Advisory Groups	NDCC	National Development Coordinating Committee
DDCC	District Development Coordinating Committee	OAG	Office of the Auditor General
MFNP	Ministry of Finance and National Planning	PDCC	Provincial Development Coordinating Committee
MLGRD	Ministry of Local Government and Rural Development	WDC	Ward Development Committee
MWDS	Ministry of Water Development and Sanitation		

2.5 Role of Water in Attaining Vision 2030 and the 8th National Development Plan

2.5.1 Zambia Vision 2030

Zambia aspires to become "a prosperous middle-income nation by 2030". By 2030, Zambians look forward to living in a strong, dynamic, competitive and self-sustaining middle-income industrial nation that is resilient to external shocks and provides opportunities for improving the well-being of all. The Vision coincides with the 2030 Agenda for Sustainable Development, which aims to end poverty, fight inequality and injustice, and tackle climate change through the pursuance of the SDGs. By 2030, the country should have made substantial progress towards the attainment of these global goals.

Water is critical for achieving Vision 2030. It is a critical enabler for sustainable socio-economic development. Ensuring water security for economic growth, environmental sustainability and social equity is critical for achieving Vision 2030.[5]

2.5.2 The Eighth National Development Plan

The 8NDP provides an avenue for catalysing the nation's response to addressing the developmental challenges over the 2022-2026 period in the quest to attain the Vision 2030, SDGs and other regional and international commitments. The 8NDP has four SDAs, namely:

- economic transformation and job creation;
- human and social development;
- environmental sustainability (including climate resilience); and
- good governance environment.

Water is the critical factor for the successful implementation of the 8NDP, as water is needed for economic growth; for building resilience of the economy, the people and social systems; and for social inclusion and sustainability. Water is the overall enabler for sustainable socio-economic development in Zambia.

The role of water in the attainment of Vision 2030 and implementation of the 8NDP was well recognised, and a number of programmes were included in the 8NDP under the different SDAs. Some of them are mentioned below:

SDA 1: Economic diversification and job creation. Strategy No. 8, "Enhancing Management and Productive Use of Water Resources", has six programmes: (i) Transboundary Water Cooperation and Benefit Sharing, (ii) Water Harvesting, (iii) Groundwater Resources Development, (iv) Water Resources Management, (v) Inter- and Intra-Basin Water Transfers and (vi) Aquifer and Water Source Protection.

SDA 2: Human and social development. Strategy No. 1, "Improving Access to Clean and Safe Water Supply", and Strategy No. 2, "Improving Sanitation Services", have six programmes. The programmes under Strategy No. 1 are Infrastructure Development and Water Quality Monitoring, and under Strategy No. 2 the programmes comprise Infrastructure Development, Solid Waste Management, Sanitation and Hygiene Promotion, and Investment Promotion.

SDA 3: Environmental sustainability. A number of programmes around climate change mitigation and adaptation; sustainable environment and natural resources management. Under Development Objective (DO) 1 of SDA 3, the key strategies are: strengthen climate change adaptation; enhance disaster risk reduction and response; promote integrated environment management; and enhance natural resources management.

3. Zambia Water Investment Programme

The ZIP is structured around three IFAs and nine components, as illustrated below in Figure 8.

FIGURE 8: INVESTMENT FOCUS AREAS AND COMPONENTS OF THE ZIP

IFA 1: Water Investments to Support Economic Transformation

Component 1: Water investments for productive use and economic growth

Component 2: Enhance water resources management

IFA 2: Enhancing Resilience through Water

Component 3: Sustainable water supply and sanitation for community resilience

Component 4: Building climate resilience

Component 5: Enhancing environmental sustainability

Component 6: Gender equality and social inclusion

IFA 3: Water and Sanitation Governance and Institutional Strengthening

Component 7: Human and institutional capacity building

Component 8: Financing water investments and resources mobilisation

Component 9: Strengthening Public-Private Partnerships and International Cooperation in Water Investments

3.1 Investment Focus Area 1: Water Investments to Support Economic Transformation

Zambia aspires to be a prosperous middle-income country by 2030. Economic transformation and job creation has been identified as the primary means though which the aspirations of the Vision 2030 can be attained. This will entail diversifying the economy from the traditional dominant sectors of wholesale and retail trade, mining and quarrying, and construction, which among them accounted for about 50 percent of GDP, to other sectors with potential for driving significant economic growth. These include agriculture, tourism and manufacturing. Thus, collectively, the economic drivers that will be the engine of economic growth for the Zambian economy in the pursuit of prosperous middle-income-country status by 2030 will be agriculture, manufacturing, mining and tourism. The aforementioned economic drivers are in turn dependent on the economic enablers, which comprise energy, transport and logistics, technology, water, infrastructure and skills. In addition, some of the economic enablers are also dependent on water such as energy, transport and logistics, and infrastructure. In this regard, investments in water are crucial if Zambia is to succeed in its economic diversification and job creation agenda.

Water Investments to Support Economic Transformation (IFA 1) will support the drive for economic diversification and job creation in two principal ways. The first will be through investments aimed at addressing the specific water needs of each of the economic drivers and water-dependent economic enablers mentioned above. The second will be through direct investments in water that are aimed at enhancing the utilisation of water resources for multiple productive purposes. These key objectives for IFA 1 will be achieved through the following components:

Component 1:

Water investments for productive use and economic growth; and

Component 2:

Enhance water resources management.

In order to support the attainment and maintenance of economic growth in terms of GDP of between 6 and 10 percent that is necessary for the attainment of Vision 2030, this component will prioritise water investments in the energy and food sectors though the Water-Energy-Food (WEF) nexus approach. Key interventions in this regard will include irrigation development, fish farming and aquaculture development, and energy development.

Furthermore, the component will also marshal key investments in the other economic drivers and water-dependent economic enablers as follows:

1. Tourism development. Here the priority will be on the development of climate-resilient water infrastructure aimed at the promotion of tourism.
2. Water investments for mining development aimed at supporting dewatering requirements for small-scale artisanal mining and water supply for mineral beneficiation and value addition.
3. Water investments for transport and logistics. This will comprise investments in water for navigation purposes and inland waterway development and maintenance.

Table 1: Overview of Component 1
Water Investments for Productive Use and Economic Growth

OBJECTIVES:	The main objective of this component is to enable economic diversification and job creation through water investments in the economic sectors identified as economic drivers such as agriculture, manufacturing, mining and tourism. Furthermore, similar investments in water-dependent economic enablers such as energy as well as transport and logistics will also be prioritised.

Investment priorities and Expected Outputs: The investment priorities required to enable economic diversification and job creation through water investments are outlined below.

Investment priorities	Intervention	Expected Outputs
1. Water investment for energy and food security	Enhance irrigated agriculture systems	• 70,000 hectares of arable land for small-scale farmers brought under irrigation countrywide • 200,000 hectares of land for emergent and large-scale farmers brought under irrigation countrywide • 83 weirs for multipurpose use rehabilitated • 27 weirs for multipurpose use constructed • 18 dams for multipurpose use constructed • 52 dams for multipurpose use rehabilitated • Long-term irrigation master plan formulated
	Develop and strengthen fisheries and aquaculture systems	• Fish production from aquaculture increased from 30,258 metric tons/annum to 225,000 metric tons/annum countrywide • Fish production from capture fisheries increased from 85,000 metric tons/annum to 120,000 MT/annum
	Develop climate-resilient energy	• 13 climate-resilient hydropower plants above 20 megawatts capacity developed • 10 climate-resilient hydropower plants below 20 megawatts capacity developed • Total generation capacity from hydropower increased from 2,714 megawatts to 3,747 megawatts
2. Water investments for tourism development	Water infrastructure for tourism development	• Water resources developed to support: - new private tourism investments - seven in the northern circuit and ten in the southern circuit; - five self-sustaining national parks; and - ten heritage sites around the country. • Develop ten water parks for tourism and education (one per province) • Water investments to provide for an overall increase in annual tourist arrivals from 2.6 percent to 50 percent of pre-COVID numbers by 2030
3. Water investments for mining development	Develop and implement strategies for sustainable dewatering and tailing disposal targeted at small-scale artisan mining	• Capacity building in mine dewatering for 50 percent of licensed small-scale and artisanal miners active in mining minerals countrywide • Support enforcement of identified strategies
	Water supply for mineral beneficiation and value addition	• Investments in water for mineral beneficiation in the processing of gemstones, industrial minerals, base metals and precious minerals by 50 percent of licensed small-scale and artisanal miners countrywide
4. Water investments for transport and logistics	Water for navigation	• Dredging of 7,500 km of canals per annum in Western and Luapula provinces
	Inland waterways development and maintenance	• Development of five modern harbours in key strategic locations

3.1.2 Component 2: Enhance Water Resources Management

As a means of ensuring adequate and reliable availability of water resources for economic diversification and job creation, this component will focus on direct water resource investments through transboundary water cooperation and benefit sharing, water harvesting, groundwater resources development and inter- and intra-basin water transfer schemes. Key interventions in this regard will include the development of cooperative arrangements for the economic utilisation of shared water resources such as aquifers and river sections; the de-risking and provision of water use facilities for economic and productive use of water resources; the establishment and maintenance of supply chains and value chains associated with water-dependent economic activities; and the development of water transfer schemes from regions of abundant water resources to productive areas experiencing water scarcity. The inter-basin transfers will improve availability in the water-scarce but economically productive regions of the country in light of climate change.

Table 2: Overview of Component 2: Enhance Water Resources Management

OBJECTIVES:	The key objective of this component is to ensure sustainable water resources management in order to ensure adequate availability of water resources in Zambia.	
Investment priorities and Expected Outputs: The investment priorities required to enable economic diversification and job creation through water investments are outlined below.		
Investment priorities	**Intervention**	**Expected Outputs**
1. Transboundary water cooperation and benefit sharing	International water cooperation and transboundary water resources management	• Establishment of operational arrangements for international water cooperation and the governance and management of shared water resources in relation to the Congo River Basin and the UN Water Convention • Strengthening of national participation, capacity and support with regard to the governance and management of shared water resources in the Zambezi River Basin
		• Domestication of the Zambezi Strategic Plan and alignment of national development interventions with international initiatives on water security investments at the global, pan-African and Southern African Development Community (SADC)/Common Market for Eastern and Southern Africa levels, including the Congo River Basin, Lake Tanganyika and Lake Mweru
		• Formulation of transboundary water investments around shared aquifers and river segments for multipurpose economic activities in agriculture, tourism, mining, manufacturing, transport and logistics, and energy
		• Enhancing national capacity to mobilise resources for water security investments through engagements with UN Water, the African Ministers' Council on Water, SADC and others • Establishment of the Luapula River Authority to provide for cooperation between Zambia and the DRC with regard to joint investments in agriculture, energy, transport, manufacturing, tourism and mining in respect of the portion of the Luapula River and the associated catchment area that is shared between Zambia and the DRC
2. Water resources planning	National programme on water resources development and management	• A holistic and long-term national plan for water resources development and management for Zambia • Review the Integrated Water Resources Management (IWRM) Water Efficiency Implementation Plan
	Strengthening water information systems to support decision-making	• Enhanced groundwater and surface water monitoring systems

3. Water transfers for economic production	Inter- and intra-basin water transfer schemes	• Feasibility studies (including environmental and social assessments, financial assessments and technical studies) on the proposed transfer scheme developed. Focus will be on the Congo-Zambezi water transfer schemes
		• Water transfer schemes from water surplus areas (northern parts of the country) to areas experiencing water scarcity owing to climate change (southern parts of the country) established and operationalised
4. Groundwater development	Countrywide development of wellfields for multipurpose economic/productive utilisation of water resources	• Studies to identify groundwater resources with significant economic potential or ecological importance • Studies to map and characterise identified groundwater resources. Development of wellfields for the economic utilisation of groundwater resources • Priority action plan for the protection of groundwater resources of ecological importance developed and implemented.

3.2 Investment Focus Area 2: Enhancing Resilience Through Water

In order to safeguard the investments in water targeted at economic diversification and job creation, and to ensure a more sustainable and inclusive development pathway, the requirement for resilience against water-related hazards and climatic shocks cannot be overemphasised. Equally important is the sustainable utilisation of natural resources and preservation of vital water-related ecosystems and ecosystem services. Furthermore, economic development that leaves no one behind also entails deliberate effort being made to enhance livelihoods and eliminate poverty by, among other measures, ensuring access to adequate and safe water supply and sanitation services. Thus, IFA 2 aims to ensure that the economic water investments that will be undertaken also advance human and social development without leaving anyone behind. In addition, IFA 2 aims to ensure environmental sustainability and that communities, investments and water infrastructure are resilient to the negative impacts of climate change. The primary objectives of IFA 2 will be attained through four components, as follows:

Descriptions of each of the four components are outlined below.

3.2.1 Component 3: Sustainable Water Supply and Sanitation for Community Resilience

Component 3: Sustainable water supply and sanitation for community resilience;

Component 4: Building climate resilience;

Component 5: Enhancing environmental sustainability; and

Component 6: Gender equality and social inclusion.

Resilience

This component aims at addressing the water supply and sanitation needs of the country in line with SDG number six targets 6.1 (Drinking Water) and 6.2 (Sanitation). Thus, the key objectives of this component are to achieve equitable and inclusive access to safe and affordable drinking water for all citizens by 2030 without leaving anyone behind; and to achieve access to adequate and equitable sanitation and hygiene for all citizens in a gender-equal and socially inclusive manner. In addition, this component also aims at ending the practice of open defection in the country. This is in line with the national objective of increasing access to safe water from 58 percent (2018 baseline) to 67 percent by 2026 for rural areas; and from 91.8 percent (2018 baseline) to 98 percent by 2026 for urban areas. Furthermore, this also fits in well with the country's aim of increasing the proportion of households with access to improved sanitation from 37.2 percent (2018 baseline) to 55 percent by 2026 for rural areas and from 77.7 percent (2018 baseline) to 90 percent by 2026 for urban areas.

Table 3: Overview of Component 3: Sustainable Water Supply and Sanitation for Community Resilience

OBJECTIVES:	The objective of this component is to ensure universal access to clean and safe water supply and sanitation services for all.

Investment priorities and Expected Outputs: The investment priorities required to enable economic diversification and job creation through water investments are outlined below.

Investment priorities	Intervention	Expected Outputs
1. Urban water supply and sanitation	Strengthening of water quality systems in urban areas	• 20 additional water quality assurance facilities established countrywide • Increase in the percentage of commercial water utility companies meeting national and international drinking water standards from 36 to 100
	Improvement of water supply services in urban areas through rehabilitation and construction of climate-resilient water supply infrastructure	• Baseline on urban water supply service coverage established • Improved water supply services for five border towns • Improved water supply infrastructure availability for 11 water utilities countrywide • Increase in the percentage of urban population with access to basic drinking water service[6] • Increase in the percentage of the urban population with access to safely managed drinking water service[7]
	Improvement of sanitation services and hygiene promotion in urban areas through the rehabilitation and construction of climate-resilient sanitation infrastructure	• Baseline on urban sanitation and hygiene service coverage established • Improved sanitation and hygiene services for five border towns • Improved sanitation infrastructure availability for 11 water utilities countrywide. • Increase in the percentage of urban population with access to basic sanitation service[8] • Increase in the percentage of the urban population with access to safely managed sanitation service[9] • Reduce percentage of people practising open defecation
	Promote efficiency in the provision of water supply and sanitation services	• Reduce non-revenue water to less than 25 percent • Reduce sewerage flooding from 13 percent to 0.5 percent
	Development and improvement of sanitation services in rural areas through the construction and rehabilitation of climate-smart sanitation infrastructure	• Baseline on sanitation coverage in rural areas established • Improved availability of sanitation infrastructure in rural areas of 116 districts • Increase the percentage of the rural population with access to basic sanitation services • Increase the percentage of the rural population with access to safely managed sanitation services • Increase the percentage of health facilities with basic sanitation services • Increase the percentage of schools with access to basic sanitation • Reduce the percentage of people practising open defecation in rural areas
2. Rural water supply and sanitation	Development and improvement of water supply in rural areas through construction and rehabilitation of climate-smart water supply infrastructure	• Baseline on water supply coverage in rural areas established • Improved availability of water supply infrastructure in rural areas of 116 districts • Increase the percentage of the rural population with access to basic drinking water source • Increase the percentage of the rural population with access to safely managed drinking water source
	Improvement of hygiene practices in households and communities in rural areas	• Baseline on hygiene service coverage in rural areas established • Increase in the percentage of the population having a hand-washing facility with soap and water • Increase in the percentage of health facilities with access to basic drinking water source • Increase in the percentage of schools with access to basic drinking water source
	Promote efficiency in the provision of water supply and sanitation services in rural areas	• Community-led total sanitation adopted and practised in villages

3.2.2 Component 4: Building Climate Resilience

Zambia is party to the Paris Climate Accords (the Paris Agreement), which make provision for climate change mitigation, adaptation and finance. The agreement established an international mechanism to help countries cope with the negative impacts of climate change and to mobilise the financing necessary for effective climate action. Thus, all state parties to the Paris Agreement are required to decide, plan for and regularly report on voluntary commitments aimed at contributing to the global fight against anthropogenically induced climate change. This is done through the Nationally Determined Contributions (NDCs) to climate change. In 2016, Zambia submitted its first NDCs to the United Nations Framework Convention on Climate Change and has updated them twice since then, with the current update having been done in 2021. Among the measures of climate action that Zambia has committed itself to in the NDCs are adaptation measures that relate to water security. These include protection and conservation of water-catchment areas; water technologies for efficient water use; and improvement of water storage and water transfer schemes aimed at addressing climate-induced water scarcity.

Furthermore, within the context of the Paris Agreement, developed countries committed to mobilising US$100 billion annually in climate finance until 2025 in order to support climate change adaptation and mitigation efforts by developing countries. The primary mechanisms of financing are international financing mechanisms such as the Green Climate Fund and other public and private funds. Thus, Zambia needs a structured approach in order to make use of the opportunities that are available under the Paris Agreement to fulfil and implement its obligations as stated in the NDCs. The objective of this component is therefore to support the implementation of Zambia's NDCs that are related to water security as well as other measures aimed at addressing the climate resilience elements of water security.

Table 4: Overview of Component 4: Building Climate Resilience

OBJECTIVES:	The objective of this component is therefore to support the implementation of Zambia's NDCs that are related to water security as well as other measures aimed at addressing the climate resilience elements of water security.	
Investment priorities and Expected Outputs: The investment priorities required to enable economic diversification and job creation through water investments are outlined below.		
Investment priorities	**Intervention**	**Expected Outputs**
1. Augmenting water resources	Water technologies for saving, recycling, irrigation and sustainable management for household, agriculture and industrial purposes	• Water deficit/availability assessments in agro-ecological regions I and II • Water technologies based on the assessment results adopted and promoted
	Improve water storage through artificial recharge	• Water storage systems for climate resilience established countrywide
2. Long-term adaptation planning for water	Formulation of a long-term National Adaptation Plan (NAP) for water	• Lon- term NAP for water formulated • Resources mobilised and partnerships established for long-term implementation of the water NAP
3. Climate change mitigation	Promotion of carbon-neutral sanitation	• Guidelines and standards for reducing greenhouse gas emissions from sewage treatment and on-site sanitation facilities formulated • Technologies for carbon-neutral sanitation identified and promoted
4. Climate-proofing for water infrastructure	National programme for climate-proofing of water and sanitation infrastructure	• Standards and guidelines for climate-proofing water infrastructure • 50 percent of water and sanitation infrastructure climate-proofed by 2030
5. Water-related hazards	Risk reduction and preparedness	• Climate information services • Early-warning systems • Disaster preparedness

3.2.3 Component 5: Enhancing Environmental Sustainability

It is important that socio-economic development does not result in the depletion or degradation of the water environment and ecosystems associated with it. This calls for the responsible utilisation of natural resources, in this case water, in a manner that does not compromise the ability of future generations to meet their needs. The aim of this component is to ensure that the environment remains resilient even as the economic transformation agenda for the country is pursued. This will be achieved through climate change mitigation measures that can be addressed through water, integrated environmental management and natural resources management focused on water.

Table 5: Overview of Component 5: Environmental Sustainability

OBJECTIVES:	The aim of this component is to ensure water investments for the environmental integrity and resilience of ecosystems.	
Investment priorities and Expected Outputs: The investment priorities required to enable economic diversification and job creation through water investments are outlined below.		
Investment priorities	**Intervention**	**Expected Outputs**
1. Promoting nature-based solutions	Preservation and conservation of wetlands and related ecosystems	• Baselines on the status of wetlands countrywide established • Conservation and sustainable utilisation of wetlands promoted. Payment schemes for ecosystem services established
	Protection and conservation of water catchment areas	• Protection of catchment forests promoted in the Zambezi, Kafue and Luangwa watersheds • Development and implementation of management plans for the Zambezi, Kafue and Luangwa watersheds • Rainwater harvesting in the Zambezi, Kafue and Luangwa watersheds promoted • Reforestation and afforestation of water catchment areas for dams countrywide
2. Strengthening water information systems for the environmental and economic accounting of water	Natural capital accounting for water	• International recommendations on water statistics domesticated • National and subnational water statistics based on the readily available and accessible data and information • Annual national and subnational water accounts following the System of Environmental-Economic Accounting for Water (SEEA-Water), published annually • Water accounting and water indicators mainstreamed and institutionalised
3. Integrated catchment management	Water pollution prevention and control	• Reduction in pollution of surface and groundwater resources from anthropogenic causes • Monitoring and tracking of the water quality status of water resources
	Sustainable land, forest and water management	• Partnerships with utilities and authorities established for sustainable land, forest and water management • Land, forest and water resources sustainably utilised, conserved and preserved for future generations
	Strengthening community participation in sustainable land, forest and water management	• Catchment and sub-catchment councils operationalised • Water user associations at catchment and sub-catchment level operationalised
	Catchment management water resources planning and policy formulation	• Decision support systems for water resources planning and policy formulation established • Catchment and sub-catchment management plans formulated and updated periodically • Establishment and maintenance of hydrological cycle observation stations

3.2.4 Component 6: Gender Equality and Social Inclusion

The core elements of the ZIP are economic growth, environmental sustainability and social inclusion. This component addresses aspects of gender equality and social inclusion in relation to water security investments. The focus of this component is therefore on addressing gender equality; youth and child development and empowerment through water investments; and ensuring that the water, sanitation and hygiene needs of people living with disabilities are adequately addressed when investing in water security and sanitation.

Table 6: Overview of Component 6: Gender Equality and Social Inclusion

OBJECTIVES:	The objective of this component is to address aspects of gender equality and social inclusion within the context of water security investments. This entails addressing the special and specific needs regarding water and sanitation for women, men, girls, boys, youths, children and people living with disabilities.

Investment priorities and Expected Outputs: The investment priorities required to enable economic diversification and job creation through water investments are outlined below.

Investment priorities	Intervention	Expected Outputs
1. Gender equality in water security and climate resilience building	Strengthen capacity for gender equality in water and climate	• Understanding and appreciation of gender equality issues in water security, and climate resilience building increase • At least 100 government staff trained on how to integrate gender issues into water-related initiatives
	• Establish tools/guidelines for conducting gender analysis • Train staff on gender inequality issues relating to water security and climate resilience • Conduct gender analysis on investments for water security and climate resilience building	• At least 100 staff trained on how to conduct gender analysis • Gender analysis conducted on investments and initiatives, and key gender inequalities and gaps identified
	• Develop gender action plan • Implement gender action plans	• Action plans for addressing gender inequalities developed • Action plans implemented
2. Youth development and empowerment through water security and sanitation investments	Business and career pathways and vocational options for youths related to water security	• Life skills development and resilience building for the youths • Youth entrepreneurship and vocational skills training • Advanced water education for youths • Business linkages for youth-led water-related enterprises
3. Child development through water and sanitation	Ensuring child-sensitive and child-inclusive policy, planning and interventions in water security and sanitation investments	• Enabling environment for water, sanitation and related interventions that promote child safety, health, education and development • Promotion of children's voices in dialogues on water security, sanitation environment and climate change • Enhanced curriculum for children with regard to water security, sanitation, hygiene, environment and climate change
4. Social inclusion programmes for people living with disabilities related to water and sanitation	Water security for people living with disabilities	• Formulation of standards and regulations to ensure easy access to water and sanitation services by people living with disabilities • Strategy for mainstreaming provisions for people living with disabilities regarding water and sanitation measures • Multi-stakeholder platforms established for addressing water security and climate-resilient issues affecting people living with disabilities

3.3 Investment Focus Area 3: Water and Sanitation Governance and Institutional Strengthening

Good water governance is a central feature of water security alongside peace and political stability, water cooperation and financing. This is because if any meaningful outcomes arising out of measures to attain water security are to be realised, there need to be adequate legal and institutional frameworks in place that are operationalised through competent institutions. The reason for this is that water scarcity can be exacerbated by challenges associated with the capacity of water sector institutions to perform as expected, thereby leading to the so-called institutional water scarcity. A key constraint in this regard is financing. According to the Zambia Country Survey Instrument for SDG National Reporting on Status of IWRM Implementation 2020, financing for IWRM was ranked at 40 on a scale of 100. Other water governance-related indicators on implementation of IWRM in Zambia fared better. The enabling environment had a score of 67/100, institutions and participation scored 75/100 and management instruments scored 49/100. This gave the country an overall score of 58/100 in terms of overall implementation of IWRM. Thus, it is clear that greater efforts have to be applied to ensure better financing for water security interventions and also to improve the management instruments as the key entry points for improved water governance and stronger water sector institutions. This IFA therefore focuses on mobilising financing for water security investments, particularly from nontraditional sources of financing for water and sanitation such as from the private sector and other financing arrangements. Furthermore, this IFA also aims at strengthening water sector institutions through human and institutional capacity building and strengthening PPPs for water investments.

3.3.1 Component 7: Institutional and Human Capacity Building

Adequate human and institutional capacity are critical for ensuring ownership and sustainability of the interventions under the ZIP and any other similar initiatives on water security and sanitation. However, it is not clear whether Zambia has the full complement of human capital in terms of skills, specialised competencies and the critical mass for the same. Therefore, strong measures to address the human capital gap with regard to water resources development and management, water supply and sanitation, and transboundary water cooperation are among the primary objectives of this component. The other objectives include strengthening the existing policy, legal, institutional and management frameworks and tools for water and sanitation governance, and promoting water education and research. These objectives are critical for strong institutions and effective water governance, which is necessary to address aspects of water security that hinge on economic water scarcity and institutional water scarcity.

Table 7: Overview of Component 7: Institutional and Human Capacity Building

OBJECTIVES:	The primary goal of this component is to address the human capital gap with regard to water resources development and management, water supply and sanitation, and transboundary water cooperation. The other objectives include strengthening the existing policy, legal, institutional and management frameworks and tools for water and sanitation governance, and promoting water education and research.

Investment priorities and Expected Outputs: The investment priorities required to enable economic diversification and job creation through water investments are outlined below.

Investment priorities	Intervention	Expected Outputs
1. Human capacity building for water resources development and management, and water supply and sanitation	Formulate and implement a capacity and competence development programme for water security	• Strengthening partnerships between the water sector and learning institutions • A national competence framework for water professionals at various levels established • Professional competence training programmes in line with the national competence framework for water professionals developed • Professional competence training programmes for water professionals established at various public and private institutions

		• Forward and backward linkages established between the industry and training institutions in order to enhance employability of water professionals and the efficiency of the water industry and related industries • At least 75 percent increase in the number of women and men with professional competencies in water and sanitation at various levels (craft, diploma, degree, master's and Ph.D.) • Human capital account of water professionals published periodically
2. Capacity building for water sector institutions	Strengthening of existing policy, legal and institutional frameworks	• Undertake reforms in the water and sanitation sector • Revised and more efficient institutional arrangements for water supply and sanitation implemented • Revised and more efficient institutional arrangements for water resources development and management implemented • Water policy analysis think tank institute established and operationalised • Multi-stakeholder platforms for water governance, water investments and IWRM strengthened • Water sector coordination mechanisms strengthened
3. Support to water education and research	Formulate and implement a water research and development programme	• National Water Education and Research Institute established and operationalised • Mechanisms for sustainable financing of water education and research instituted • Policy measures on water education formulated • National strategy on water education and research formulated • National innovation hub for water and sanitation established and operationalised

3.3.2 Component 8: Water Investment Scorecard, Financing and Resource Mobilisation

This component aims to track water investment using the AIP-PIDA Water Investment Scorecard and developing response strategies with partners. This component will also focus on mobilizing financing for water security and sanitation investments. Furthermore, this component will also foster the development of a resource mobilization strategy for the investments to be undertaken under the ZIP. Support for project preparation and proposal development in order to come up with bankable documents for project financing and implementation will also be facilitated. Currently, the resource envelope in Zambia is constrained and limited investments can be made from public funding. Thus, in order to complement the traditional sources for the attainment of Vision 2030, the 8NDP will promote resource mobilization from non-traditional sources such as public private partnerships, local capital markets, crowd investments, and venture capital to mention but a few.

Table 8: Overview of Component 8: Water Investment Scorecard, Financing and Resource Mobilization

OBJECTIVES:	This component aims at tracking water investments and mobilising financing for water security and sanitation investments.

Investment priorities and Expected Outputs: The investment priorities required to enable economic diversification and job creation through water investments are outlined below.

Investment priorities	Intervention	Expected Outputs
1. Mobilising water investments and finance for water security and sanitation investments	Develop and implement a water investment scorecard Develop a resource mobilisation strategy for implementing the ZIP	• Zambia water investment scorecard with the following elements: - Enabling environment for water investments - Water investments and financing mobilisation - Investment performance and sustainability • Resource mobilisation strategy formulated
	Project preparation and proposal development	• A pipeline of bankable projects formulated for short-, medium- and long-term interventions • Feasibility studies for water infrastructure projects • Bankable project proposals for water investments

3.3.3 Component 9: Strengthening Public-Private Partnerships and International Cooperation in Water Investments

The aspirations for SDG6 and other water-related targets are high. International high-level collaboration and public-partnerships are required to mobilise water investment at scale and accelerate action in support of SDG6 and other water-related targets. Achieving the water-related SDGs and implementing the priorities of the Zambia Water Investment Programme require concerted efforts by all stakeholders. Water matters at the local, regional, basin, and international level.

As water is shared with many countries, protecting and preserving it is a shared responsibility that requires international cooperation. Most water-related challenges can be addressed at the basin or national level. Further international water stewardship is needed to support transboundary water management, climate change mitigation and adaptation efforts. Inadequate investments in water contribute to people's displacement, loss of food security, ecosystem loss and degradation, and virtual water trade, which cannot be addressed at the national level alone.

International partnerships with UN agencies, international organizations, development finance institutions, private sector and others is essential. PPPs as a means of advancing water investments have the potential of enhancing access to innovative blended finance, bridging the investment gaps necessary to attain adequate national water security and achieve economic transformation and job creation in line with Vision 2030. However, for this to be achieved, there is need to strengthen the enabling environment for PPPs and promote international cooperation, collaborative approaches, access to blended finance, and small to medium enterprises (SMEs) approach to water development and sanitation investments. This will need to be anchored on substantial capacity building efforts for both public sector institutions and private sector actors (companies, societies, cooperatives and individuals) to be able to effectively and efficiently participate in water and sanitation PPP investments. Thus, the focus of this component will be on the enabling environment for viable public private partnerships on economic and multipurpose water and sanitation investments; promotion of international cooperation in investment mobilization, the SME approach to economic multipurpose water and sanitation investments; and Capacity building for private sector led water investments.

Table 9: Overview of Component 9: Strengthening Public-Private Partnerships and International Cooperation in Water Investments

OBJECTIVES:	The objective of this component is to strengthen the enabling environment for PPPs and to promote international cooperation, collaborative approaches, access to blended finance, and the small to medium enterprises (SMEs) and cooperative approach to water development and sanitation investments.
Investment priorities and Expected Outputs: The investment priorities required to enable economic diversification and job creation through water investments are outlined below.	

Investment priorities	Intervention	Expected Outputs
1. Enabling environment for viable PPPs on economic and multipurpose water and sanitation investments	Identification of opportunities for economic multipurpose water and sanitation investments	• Ten opportunities for multipurpose economic water and sanitation investments identified and documented (at least one per province)
	Prepare feasibility studies for economic multipurpose water development investments	• Ten feasibility studies for multipurpose economic water and sanitation investments formulated (one investment plan per province)
	Sensitise and create awareness regarding investment plans for economic multipurpose water resource development investments	• Sensitisation and promotional campaigns for multipurpose economic water and sanitation investments undertaken countrywide
	Identify risks and barriers regarding economic multipurpose water resource development investments	• Risk management and barrier mitigation plan for enhancing private-sector participation in water and sanitation investments
2. Promote the cooperative and SME approach to economic multipurpose water and sanitation investments	Strategy for the promotion of the cooperative approach and SME approach to economic multipurpose water and sanitation investments	• National strategy on enabling the undertaking of economic multipurpose water and sanitation investments by cooperatives and SMEs formulated • At least 50 percent of private-sector economic multipurpose water and sanitation investments undertaken by cooperatives and SMEs

	Piloting of the cooperative and SME approach to economic multipurpose water and sanitation investments	• At least 10 pilot multipurpose economic water and sanitation investments by cooperatives and SMEs formulated and implemented (one per province)
	Scaling up of the cooperative approach to economic multipurpose water and sanitation investments	• National scaling-up strategy for the undertaking of economic multipurpose water and sanitation investments by cooperatives and SMEs formulated • Undertaking of economic multipurpose water and sanitation investments by cooperatives and SMEs mainstreamed
3. Capacity building for private-sector-led water investments	Strengthen international public-private partnership mechanisms for mobilisation of water investments, driving international cooperation to close water investment gap towards 2030 SDG 6 and other water-related SDGs.	• International public-private water Investment partnership established as a mechanism for mobilization of water investments • Champions and international water investment envoys mobilised to drive regional and international cooperation, high level multi-stakeholder public private partnerships engagement • Establish an annual or biannual international water investment summit as a platform for blended finance investments on water security and sanitation and related priorities
	Capacity development strategy and plan for private-sector participation in water and sanitation investments	• Capacity needs assessment for effective private-sector participation in PPPs for economic multipurpose water and sanitation investments undertaken • Capacity building plan for private-sector and public institutions to effectively undertake PPPs on economic multipurpose water investments formulated and implemented • 30 percent in terms of monetary values of all economic multipurpose water and sanitation investments undertaken by the private sector • 30 percent of all water and sanitation investments formulated by public institutions should be through PPP arrangements

Financing and Implementation Strategy

4.1 Financing

4.1.1 Investment Areas

The 61 interventions under the ZIP are centred on economic diversification and job creation, resilience building through water, and strengthening water governance by strengthening institutions and human capacity. These interventions are depicted in Figure 9.

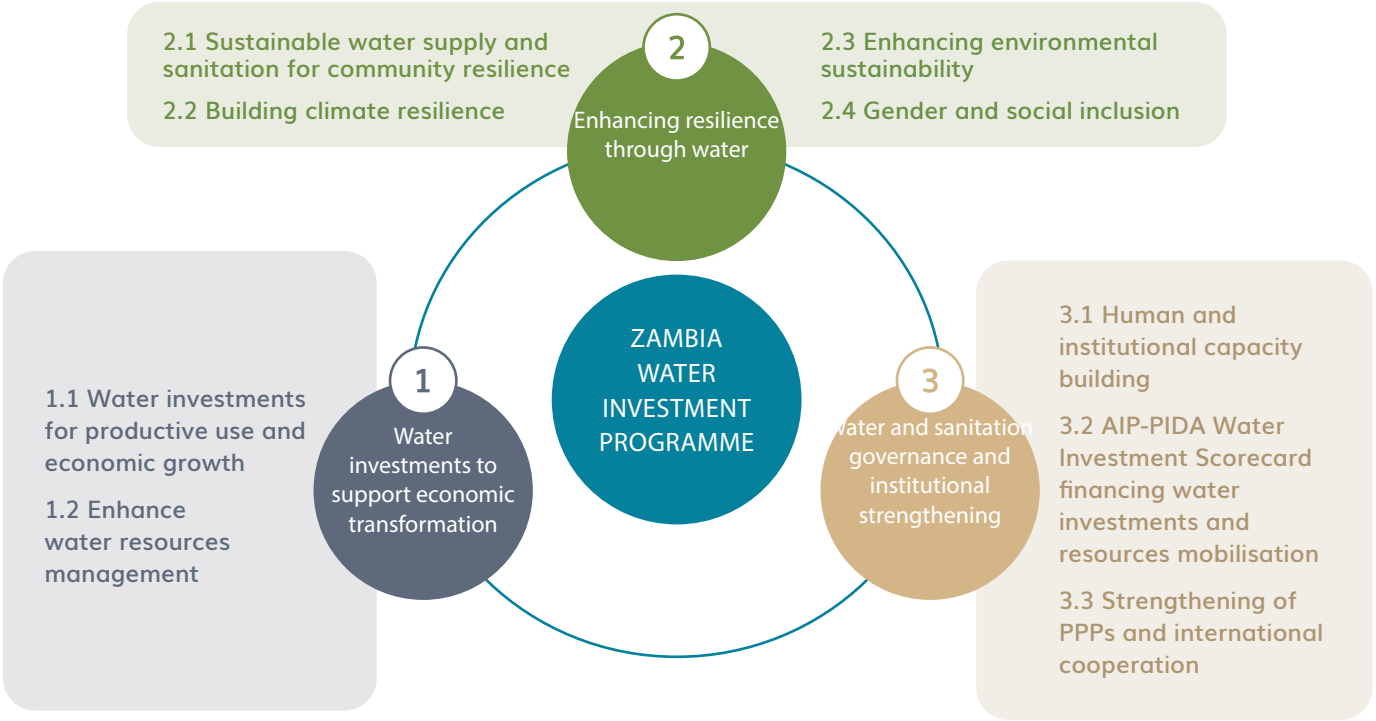


Figure 9: Overview of the Zambia Water Investment Programme

4.1.2 Financial Resource Requirements

The financial resource requirements for successful implementation of the ZIP are estimated at about US$5.75 billion over eight years, i.e. from 2022 to 2030.

The summary of the budget is indicated below in Table 10.

Table 10: Financial Resource Requirements for the Zambia Water Investment Programme

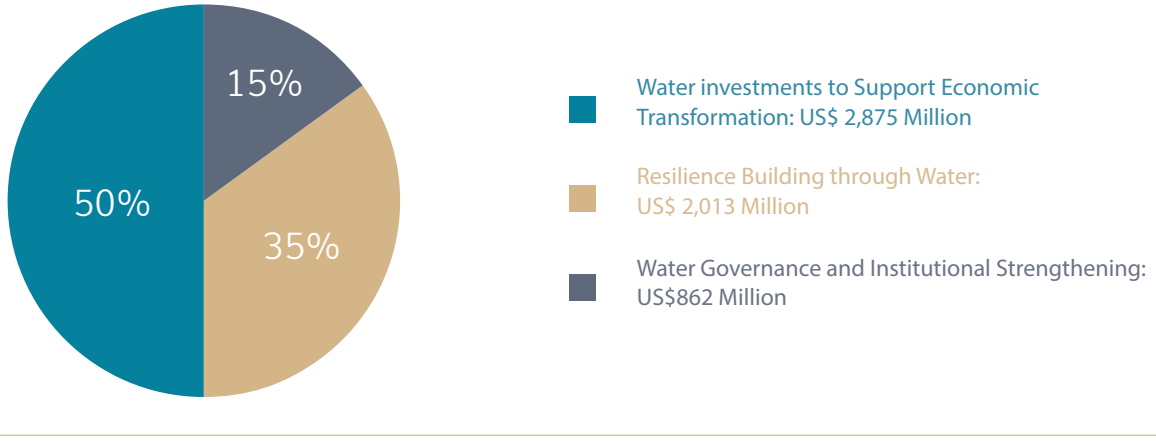
(A) Investment Focus Area	(B) Components	(C) Priority Interventions Area and Action	Budget Estimate (US$ Million)
1. Water investments to support economic transformation	1.1 Water investments for productive use and economic growth	1.1.1 Enhance irrigated agriculture systems	2,875
		1.1.2 Develop and strengthen fisheries and aquaculture systems	
		1.1.3 Develop climate-resilient energy	
		1.1.4 Water infrastructure for tourism development	
		1.1.5 Support for dewatering for small-scale artisan mining	
		1.1.6 Develop and implement strategies for sustainable dewatering and tailing disposal targeted at small-scale artisan mining	
		1.1.7 Water supply for mineral beneficiation and value addition	
		1.1.8 Water for navigation	
		1.1.9 Inland waterways development and maintenance	
	1.2 Enhance sustainable water resources management	1.2.1 International water cooperation and transboundary water resources management	
		1.2.2 National programme on water resources development and management	
		1.2.3 Strengthening water information systems to support decision-making	
		1.2.4 Inter- and intra-basin water transfer schemes	

(A) Investment Focus Area	(B) Components	(C) Priority Interventions Area and Action	Budget Estimate (US$ Million)
		1.2.5 Countrywide development of wellfields for multipurpose economic/productive utilisation of water resources	
2. Resilience building through water	2.1 Water supply and sanitation	2.1.1 Strengthening of water quality systems in urban areas	2,013
		2.1.2 Improvement of cross border water supply and sanitation	
		2.1.3 Improvement of water supply services in urban areas through rehabilitation and construction of climate-resilient water supply infrastructure	
		2.1.4 Improvement of sanitation services and hygiene promotion in urban areas through rehabilitation and construction of climate-resilient sanitation infrastructure	
		2.1.5 Improvement of sanitation services in rural areas through construction and rehabilitation of climate-smart sanitation infrastructure	
		2.1.6 Improvement of water supply in rural areas through construction and rehabilitation of climate-smart water supply infrastructure	
		2.1.7 Improvement of hygiene practices in households and communities in rural areas	
		2.1.8 Improvement of hygiene practices in households and communities in rural areas	
		2.1.9 Promote efficiency in the provision of water supply and sanitation services in rural areas	
	2.2 Building climate resilience	2.2.1 Water technologies for saving, recycling, irrigation and sustainable management for household, agriculture and industrial purposes	
		2.2.2 Improve water storage through artificial recharge	
		2.2.3 Formulation of a long-term NAP on water	
		2.2.4 Promotion of carbon-neutral sanitation	
		2.2.5 National programme for climate-proofing water and sanitation infrastructure	
		2.2.6 Risk reduction and preparedness	
	2.3 Enhancing environmental sustainability	2.3.1 Preservation and conservation of wetlands and related ecosystems	
		2.3.2 Protection and conservation of water catchment areas	
		2.3.3 Natural capital accounting for water	
		2.3.4 Water pollution prevention and control	
		2.3.5 Sustainable land, forest and water management	
		2.3.6 Strengthening community participation in sustainable land, forest and water management	
		2.3.7 Catchment management water resources planning and policy formulation	
	2.4 Gender and social inclusion	2.4.1 Strengthen capacity for gender equality in water and climate	
		2.4.2 Establish tools/guidelines for conducting gender analysis, train staff on gender inequality issues relating to water security and climate resilience, and conduct gender analyses on investments for water security and climate resilience building.	
		2.4.3 Develop and implement gender action plans	
		2.4.4 Business and career pathways and vocational options for youths related to water security	
		2.4.5 Ensuring child-sensitive and inclusive policy, planning and interventions in water security and sanitation investments	
		2.4.6 Water security for people living with disabilities	

3. Water governance and institutional strengthening	3.1 Institutional and human capacity building	3.1.1 Formulate and implement a capacity and competence development programme for water security	862
		3.1.2 Strengthening of existing policy, legal and institutional frameworks	
		3.1.3 Formulate and implement a water research and development programme	
	3.2 Financing water investments and resource mobilisation	3.2.1 Develop and implement a water investment scorecard	
		3.2.2 Develop a resource mobilisation strategy for implementing the ZIP	
		3.2.3 Project preparation and proposal development	
	3.3 Strengthening PPPs and International Cooperation in Water Investments	3.3.1 Identification of opportunities for economic multipurpose water and sanitation investments	
		3.3.2 Prepare investment plans and pipeline of projects for economic multipurpose water development investments both at national and provincial level	
		3.3.3 Sensitise and create awareness regarding investment plans for economic multipurpose water resource development investments	
		3.3.4 Identify risks and barriers regarding economic multipurpose water resource development investments	
		3.3.5 Strategy for promotion of the cooperative approach and SME approach to economic multipurpose water and sanitation investments	
		3.3.6 Piloting of the cooperative and SME approach to economic multipurpose water and sanitation investments	
		3.3.7 Scaling up of the cooperative approach to economic multipurpose water and sanitation investments	
		3.3.8 Establishment of international public private water investment partnerships	
		3.3.9 Mobilization of international water investment champions and envoys	
		3.3.10 Establishment of an annual or biannual international water investment summit	
		3.3.11 Capacity development strategy and plan for private-sector participation in water and sanitation investments	
		TOTAL BUDGET ESTIMATE: US$5,750 Million	

As can be seen in Figure 10: Financial Resource Requirements for the Zambia Water Investment Programme by Percentage below, "water investments to support economic transformation" will require 50 percent of the US$5.75 billion (i.e. US$2.875 billion), whereas "resilience building through water" will require 35 percent of the resources to be mobilised, i.e. US$2.013 billion. The resource requirements for "water governance and institutional strengthening" are the lowest at US$862 million.

Figure 10: Financial Resource Requirements for the Zambia Water Investment Programme by Percentage



4.2 Financing Strategy

The financing requirements for the ZIP will be addressed under Component 8 (Financing Water Investments and Resources Mobilisation) under IFA 3. The key interventions as already mentioned before will include development and implementation of a water investment scorecard; formulation of a resource mobilisation strategy; and project proposal development and project preparation. Other resource mobilisation undertakings will include:

a. Convening a water investment summit. The main purposes of the water investment conference is to pitch Zambia's investment needs regarding water and sanitation to key stakeholders and partners. The summit will also serve the purpose of demonstrating Zambia's commitment to closing the investment gap on water security and sanitation. Thus, the key outcome expected to be achieved from the conference is the mobilisation of convenors around the common goal of mobilising water investments;

b. Development of a water Investment Scorecard. The Zambia Water Investment Scorecard will enhance mutual accountability for results in the mobilisation of water investments by focusing on the use of the Scorecard accountability and peer review mechanisms at national, provincial, sub-national, and community levels. The Water Investment Scorecard will be rolled out across the country to mobilise and sustain mutual accountability, leadership commitment from relevant stakeholders at all levels, and support the government to track progress, set benchmarks, identify bottlenecks, and take action to meet the investment needs for water projects in the ZIP, and measure progress towards achievement of SDG 6 on water and sanitation. The Scorecard will accompany the implementation of ZIP water projects being implemented during 2022-2030 and become part of the modus operandi of the water and sanitation sector delivery model. The scorecard will focus on three key pillars critical for accelerating water investments (i) Strengthening the Enabling Environment for Water Investments (ii) Mobilising Water investments and financing from public, private, and donor (ODA) investments and (iii)Enhancing Investment performance and sustainability.

c. Development of a pipeline of bankable projects. A system of formulating projects from concept stage up to technical and financial closure will be promoted in order to ensure that a pool of viable project proposals is available at any given time. This will maximise the possibilities of attracting the much-needed resources for project implementation. In addition, this will also enhance the implementation of planned measures within reasonable timeframes;

d. International public-private partnerships Partnerships with various stakeholders and interest groups are very important for the successful implementation of the ZIP. The public partnerships and networks that will be strengthened for the purposes of the ZIP include those with the private sector, academia, civil society, multilateral and bilateral cooperating partners, financing institutions and intergovernmental organisations. Thus, the primary purpose of public-private partnerships and networks is resource mobilisation, knowledge management, technical assistance and sharing of experiences;

e. Capacity and competence development for public and private institutions and water professionals. Without adequate human and institutional capacity and competencies at the local level, implementation of the ZIP will be very challenging and expensive. The requirement for adequately competent human capital and effective institutions for proper implementation of the ZIP is for both the public and private sectors. Thus, deliberate efforts will be made to ensure that the necessary capacity and competencies are developed in local experts and institutions through, among other things, partnering with competent

international experts and institutions and strengthening water education and research; and

f. Establishment of Water Development Fund. The two principal pieces of legislation that govern the Zambian water sector make provision for the establishment of a blended water fund. This is important if financial flows to the water sector are to be improved and water and sanitation investments sustained. Thus, efforts will be made to champion the establishment of a water fund that is aligned to international best practices of water financing and structured in a manner that can effectively address the local financing needs in terms of water security and sanitation.

The Blended Water Fund will leverage ODA and grant finance to derisk priority water investments using a variety of innovative financial instruments and sources. These include sovereign wealth funds, guarantees, low concessional commercial finance, institutional investors and private equity investors, foundations, value-based impact investment, and climate finance.

4.3 Sources of funding for the Zambia Investment Programme

Instead of the traditional social sector financing of water and sanitation that is largely reliant on the national treasury and donor funding, and given the current constrained fiscal space at local and international level, the Zambia Water Investment Programme will be financed through an innovative blended finance approach. This approach will leverage public finance, ODA and grant finance to de-risk priority water and sanitation investments so that the private sector can invest their resources in water. The largest source of funding is expected to be from the private sector through blended finance using Public-Private Partnerships (PPPs) delivery model.

Currently, the private sector invests very little in water and sanitation due to various risks and a weak regulatory framework. The ZIP will develop and roll out a mutual accountability instrument to enhance transparency and accountability in water financing: the AIP-PIDA Water Investment Scorecard, which will assist to (i) strengthen the enabling environment for water investments (ii) track bottlenecks, financial flows from domestic, ODA, private sector (iii) enhance efficiency in water finance and investments.

We will operationalise the Water Development Trust Fund[10] in the 2001 National Water Resources Act, Part XV, Article 155 to operate as a Blended Finance Facility to mobilise finance from the private sector using PPP models at scale.

In partnership with community leaders, the Water Development Trust Fund (WDTF) will leverage domestic finance from the Constituent Development Fund (CDF) to enhance efficiency in delivery of prioritised water projects from CDF resources, promote local empowerment and sustainability through establishment of revolving community managed water funds for operation and maintenance of water and sanitation infrastructure at constituency, ward, and local level. At the continental and global level, the WDTF will also leverage international climate finance – the International Blended Finance Facility for Water Investments in Africa that aims to mobilise US$30 billion annually by 2030 towards SDG 6 on water and sanitation.

The WDTF will also leverage finance from the recently announced G7[11] pledge to invest US$600 billion into infrastructure for developing countries. In July 2022, the Group of Seven leaders pledged to raise US$600 billion in private and public funds over five years to finance needed infrastructure in developing countries. We will also tap into the US$170 Billion[12] announced by the European Commission at the EU-Africa Summit in Brussels.

Climate finance will be a key source. We will work with the Ministry of Green Economy, Development Bank of Zambia (DBZ), local commercial Banks and Ministry of Finance to operationalise and access climate finance at scale from the Green Climate Fund, Global Environmental Facility, Adaptation Fund, develop Green, municipal Bonds, and others.

Creating an investment-ready pipeline will be essential. We will develop bankable water security and sanitation projects and de-risk priority water investments using grant finance combined with a variety of innovative financial instruments such as guarantees, currency hedging, cost reflective tariffs for water utilities, to lower the barriers and remove the constraints that make private sector investment unattractive and use PPPs to distribute risks fairly among key players.

In collaboration with domestic and international development partners (including over 25 partners[13] of the Continental Africa Water Investment Programme) and building on the Zambia Public-Private Dialogue Forum launched earlier this year, we will establish an international public-private water investment partnership as a mechanism for positioning Zambia as the go-to-investment destination for water security, sustainable sanitation and mobilisation of water investments from the private sector including sovereign wealth funds, pension funds, investment guarantees, private commercial banks, institutional investors, foundations, impact investors and other sources.

While efforts will be made to increase domestic water sector financing for planning purposes, the expected contribution from national treasury between 2022 to 2030 is US$ 1.08

billion. This is based on the Government of Zambia allocation in the yellow book for 2021 and 2022 estimated[14] at USD 135 million/year. Over eight years, this is estimated at USD 1.08 billion. Overall, the funding for the Zambia water investment programme that will be pursued can be grouped into the following main sources:

4.4 Implementation Arrangements

The anchor institution for implementation of the ZIP will be the MWDS. This will be within the context of the coordination arrangements of the NDP coordination mechanism. Therefore, other government ministries and institutions will be required to lead and anchor specific aspects of the programme as necessary.

Source of finance	Instrument/ financing source	Amount (USD) Billion	% Of total
a. Regular allocation from the national treasury	Grants	1.08	18.8%
b. Official Development Assistance (ODA)	Grants, Low concessional finance	0.86	15.0%
c. Private Sector (PPPs)	PPPs, private equity, sovereign wealth funds, investment guarantees, Green Bonds international and domestic pension funds	1.73	30.0%
d. International Financing Initiatives and climate finance	Euro-Africa Infrastructure Fund, G 7 infrastructure fund, International Climate Finance, and others	2.08	36.2%

Table 11: Implementation Arrangements for the Zambia Water Investment Programme

Investment Focus Area	Components	Lead Institution	Collaborating Institutions
Water investments to support economic transformation	Water investments for economic growth	MWDS	Ministry of Agriculture, Ministry of Fisheries and Livestock, Ministry of Energy, MOFNP, Ministry of Tourism, Ministry of Small and Medium Enterprise Development, Ministry of Commerce, Trade and Industry, Ministry of Transport and Logistics (Maritime Department), Ministry of Foreign Affairs and International Cooperation, and Ministry of Mines and Minerals Development, Zambia Development Agency
	Enhancing the management and productive use of water	MWDS	
Resilience building through water	Water supply and sanitation	MWDS	Ministry of Community Development and Social Services, Ministry of Health, Ministry of Local Government and Rural Development, National Water Supply and Sanitation Council, water utility companies, local authorities and constituency offices
	Climate resilience	MWDS	Ministry of Green Economy and Environment, Ministry of Community Development and Social Services, Ministry of Local Government and Rural Development, Ministry of Lands and Natural Resources, Meteorological Department, Disaster Management and Mitigation Unit, Water Resources Management Authority, Zambia Environmental Management Agency, provincial and district administrations
	Environmental resilience	MWDS	
	Gender and social inclusion	MWDS	Gender Division, Ministry of Community Development and Social Services, Ministry of Labour and Social Security, Ministry of Youth, Sport and Arts, Ministry of Local Government and Rural Development
Water governance and institutional strengthening	Financing water investments and resource mobilisation	MWDS	MOFNP, Ministry of Green Economy and Environment, Ministry of Energy, Ministry of Agriculture, Ministry of Tourism, Ministry of Mines and Minerals Development, Ministry of Commerce, Trade and Industry
	Institutional and human capacity building	MWDS	Ministry of Education, Ministry of Justice, Ministry of Technology and Science, Public Service Management Division, Management Development Division
	Strengthening PPPs	MWDS	MOFNP (PPP Office), Ministry of Small and Medium Enterprise Development, Ministry of Commerce, Trade and Industry, Ministry of Local Government and Rural Development, Ministry of Labour and Social Security

4.5 Monitoring and Reporting System

Monitoring and evaluation of the ZIP will follow the provisions of the Government of Zambia's monitoring and evaluation framework. However, specific projects and subprogrammes may have their own tailored monitoring and evaluation systems as required. Furthermore, the water investment scorecard will form an integral part of the ZIP monitoring and evaluation system. The MWDS will have the primary responsibility for overall implementation, tracking and reporting on the ZIP within the context of the National Development Coordination Framework.

Annex 1: Proposed Location, Activities and Cost Estimates for Water Security Investments

Table 12: Proposed Location, Activities and Cost Estimates for Water Security Investments

Proposed Place	Name of Region	Proposed Activities	Cost (in Million USD)	Remarks
National	Zambia	National Water Resources Master Plan Development Project	2	
National	Zambia	Water Statistical Survey Programme	5	
National	Zambia	Skills and Competence Development Programme for Water Resources Development	5	
National	Zambia	NAP for Water Project	1	
All provinces and districts	Central Province; Copperbelt Province; Eastern Province; Luapula Province; Southern Province; Northern Province; Muchinga Province; Western Province; Lusaka Province and Northwestern Province	Water Resources Infrastructure Development Project	350	
National	Zambia	Capacity Building Programme for Zambia's Effective Participation in Transboundary and International Water Cooperation	5	
All provinces and districts	Central Province; Copperbelt Province; Eastern Province; Luapula Province; Southern Province; Northern Province; Muchinga Province; Western Province; Lusaka Province and Northwestern Province	Programme for Implementation of Water Security-related NDCs to Climate Change	400	
		National Groundwater Resources and Wellfield Development Programme	10	
All provinces and districts	Central Province; Copperbelt Province; Eastern Province; Luapula Province; Southern Province; Northern Province; Muchinga Province; Western Province; Lusaka Province and Northwestern Province	National Passive Rainwater Harvesting Sites Development	20	
Luapula Province; Copperbelt Province; Central Province and Southern Province	Congo River Basin and Zambezi River Basin	Congo - Zambia Bulk Water Transfer Programme	500	
Lufubu, Luapula Province; West Lunga, Northwestern Province; Lukupa, Northern Province; Kapemba, Eastern Province; Solwezi, Northwestern Province; Kafue, Copperbelt Province; Mutundu Copperbelt Province; Lufupa (downstream), Northwestern Province; Lufupa (upstream), Northwestern Province; Kafubu, Copperbelt; Lunsemfwa, Central Province; Kopyonga, Central Province; Muchito, Lusaka Province; Kanakantapa, Lusaka Province; Chongwe, Lusaka Province; Mwapula, Lusaka Province; Lundazi, Eastern Province; Lukusashi, Central Province; Lutembwe, Eastern Province; Luongo, Luapula Province; Lwombe, Northern Province; and Kalomo, Southern Province	Central Province; Copperbelt Province; Eastern Province; Luapula Province; Southern Province; Northern Province; Muchinga Province; Lusaka Province and Northwestern Province	Large dam development programme	2,156	

Proposed Place	Name of Region	Proposed Activities	Cost (in Million USD)

SADC region	Border areas with neighbouring countries: Angola, Botswana, Democratic Republic of Congo, Malawi, Mozambique, Namibia, Tanzania and Zimbabwe	Cross-border water, sanitation and hygiene projects	185	
North Western Water Supply & Sanitation Company; Eastern Water and Sanitation Company; Nkana Water Supply and Sanitation Company; Luapula Water Supply and Sanitation Company; Southern Water and Sanitation Company; Western Water Supply and Sanitation Company; Lusaka Water Supply and Sanitation Company; Mulonga Water Supply and Sanitation Company; Kafubu Water Supply and Sanitation Company; Chambeshi Water Supply and Sanitation Company; Lukanga Water Supply and Sanitation Company	Central Province; Copperbelt Province; Eastern Province; Luapula Province; Southern Province; Northern Province; Muchinga Province; Western Province; Lusaka Province and Northwestern Province	Urban Water Supply and Sanitation Programme	2,111	This programme will deal with water supply and sanitation in both rural and urban areas through the water utility companies
				Total Cost: USD 5,750 Million

Annex 2: AIP-PIDA Water Investment Scorecard Indicators Framework

IMPACT	**Sustainable and inclusive water investment spurring economic growth through job creation, poverty reduction, improved health, and gender equality and social inclusion in Africa**							
OUTCOME	**Sustainable, efficient and inclusive investments increased across water sectors** (increased access to water, sanitation and hygiene [WASH] services, increase in irrigated area per country vs irrigation potential, increase in proportion of potential hydropower capacity developed, increased investments in ecosystem services, improved water system efficiency, adoption of industry and nature-based solutions)							
OUTPUTS	**Water governance and management improved**				**Public, private and donor investments into the water sector increased**			**Efficiency and sustainability of water investments increased**	
INPUTS	**1. Enabling environment for water investments**				**2. Water investments and financing**			**3. Investment performance and sustainability**	
	1.1 Water investment governance and planning	**1.2 Investment climate**		**1.3 Social and environmental inclusion**	**2.1 Government expenditure**	**2.2 Official development assistance**	**2.3 Private-sector investments**	**3.1 Investment performance/ efficiency**	**3.2 Investment sustainability**
		Market risks	**Regulatory Risks**						
	1.1.1 Water governance and institutional coordination	1.2.1 Ease of access to finance	1.2.2 Government payment risk	1.3.1 Gender-transformative water investments	2.1.1 Public budget allocation on water (WASH, agriculture, energy, nature and biodiversity protection) per capita	2.2.1 Official development assistance allocation for water (WASH, agriculture, energy, nature and biodiversity protection) per capita	2.3.1 Domestic private sector investment (WASH, agriculture, energy, nature and biodiversity protection)	3.1.1 Water and sanitation pricing efficiency	3.2.1 Climate-resilient water investments
	1.1.2 Integrated climate-resilient national water investment plan and financing strategy (rural and urban)	1.2.1.2 Interest rate spread	1.2.2.2 Corruption Perceptions Index	1.3.2 Social inclusion (youth, gender, vulnerable and marginalised populations)	2.1.2 Public budget execution rate (WASH, agriculture, energy, nature and biodiversity protection) per capita	2.2.2 Official development assistance disbursement for water (WASH, agriculture, energy, nature and biodiversity protection) per capita	2.3.2 Foreign direct investments on water (WASH, agriculture, energy, nature and biodiversity protection)	3.1.2 Operation and maintenance capacity	3.2.2 disaster management planning, early-warning forecasting and response
	1.1.3 Pipeline of bankable projects	1.2.1.3 Currency risk	1.2.2.3 Legal rights index	1.3.3 Environmental impact assessment	2.1.3 Public budget allocation to transboundary water cooperation		2.3.2 PPPs on water (WASH, agriculture, energy, nature and biodiversity protection)	3.1.3 Cost recovery accounts	3.2.3 Water allocation efficiency and demand management
	1.1.4 Water resources information and data availability	1.2.1.4 Sovereign risk	1.2.2.4 Political instability				2.3.3 Blended financing investments in water, sanitation and environment		
	1.1.5 Water-related international treaties, transboundary agreements and water diplomacy	1.2.1.5 Risk estimate reporting	1.2.2.5 Enforcement of contractual judgment				2.3.4 Philanthropic finance to water sanitation and environment		
	1.1.6 Integration of water in national climate change and development plans (NDCs, NAPs)		1.2.2.6 Accountability and monitoring mechanism						
	1.1.7 Integration of transboundary water investments in NDPs		1.2.2.7 Public health-related risks (including COVID-19, hygiene and sanitation)						
	1.1.8 Capacity of institutions and human resources								

References

[1]World Bank. 2021. Zambia Overview. https://www.worldbank.org/en/country/zambia
[2]https://www.transparency.org/en/cpi/2021/index/zmb

[3,4] ibid

[5]Zambia Vision 2030

[6]Definition: Basic drinking water service: drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing (WHO/UNICEF, Progress on household drinking water, sanitation and hygiene, 2000-2020)

[7]Definition: Safely managed drinking water service: drinking water from an improved source that is accessible on premises, available when needed and free from faecal and priority chemical contamination (WHO/UNICEF, Progress on household drinking water, sanitation and hygiene, 2000-2020)

[8]Definition: Basic sanitation service: use of improved sanitation facilities that are not shared with other households (WHO/UNICEF, Progress on household drinking water, sanitation and hygiene, 2000-2020)

[9]Definition: Safely managed sanitation service: use of improved sanitation facilities that are not shared with other households and where excreta are safely disposed of in situ or removed and treated off-site (WHO/UNICEF, Progress on household drinking water, sanitation and hygiene, 2000-2020)

[10]http://extwprlegs1.fao.org/docs/pdf/zam117433.pdf

[11]https://www.weforum.org/agenda/2022/06/g7-pledges-invest-600-billion-infrastructure-developing-countries

[12]https://www.bloomberg.com/news/articles/2022-02-18/europe-commits-170-billion-to-africa-continent-wants-more

[13]https://aipwater.org/

[14]Using exchange rate of USD 1 to 16 ZMW as of 6 July 2022.

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