Country Report

Government of Eswatini Climate Public Expenditure and Institutional Review (CPEIR)

The Commonwealth

Commonwealth CLIMATE FINANCE ACCESS HUB

NDC PARTNERSHIP

Climate Public Expenditure and Institutional Review (CPEIR)

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SIVINGABA

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All your support and efforts will contribute to building the resilience and the capacity of Eswatini and its people to the impacts of climate change and will help the country to meet its domestic and international climate change obligations, commitments and actions for the benefit of humanity.

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Abbreviations and Acronyms

ACMS	Aid Coordination Management Section
AEZ	Agro-ecological zones
AfDB	African Development Bank
	Climate Action Enhancement Programme
CCFAH	Commonwealth Climate Finance Access Hub
COMESA	Common Market for Eastern and Southern Africa
CPEIR	Climate Public Expenditure and Institutional Review
ENTC	Eswatini National Trust Commission
ESWADE	Eswatini Agriculture Development Agency
EWSC	Eswatini Water Services Corporation
FAO	Food and Agriculture Organization (of the United Nations)
GCF	Green Climate Fund
GDP	gross domestic product
GEF	Global Environmental Facility
GHG	greenhouse gas emissions
IFAD	International Fund for Agricultural Development
IMF	International Monetary Fund
MEPD	Ministry of Economic Planning and Development
MNRE	Ministry of Natural Resources and Energy
MTAD	Ministry of Tinkhundla Administration and Development
MTEA	Ministry of Tourism and Environmental Affairs
NAP	National Adaptation Plan
NCCC	National Climate Change Committee
NCCP	National Climate Change Policy
NCCSAP	National Climate Change Strategy and Action Plan
NDC	Nationally Determined Contributions
NDCP	Nationally Determined Contributions Partnership
NDMA	National Disaster Management Agency
NDP	National Development Plan
NDS	National Development Strategy
OEDC DAC	Organisation for Economic Co-operation and Development's Development Assistance Committee

OFID	OPEC Fund for International Development
PBC	Planning and Budgeting Committee
SACU	Southern Africa Customs Union
TAS	Treasury Accounting System
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank
WHO	World Health Organization
YERF	Youth Enterprise Revolving Fund

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Executive Summary

The Kingdom of Eswatini is considered one of the most climatically vulnerable and exposed countries in the Southern African region. Some of the key climatic challenges include significant variations in precipitation patterns, higher temperatures, and increases in the frequency and intensity of severe weather events such as droughts, floods and cyclones. Consequently, the country has been facing increasing intensity and frequency of climate-induced disasters, in particular the sustained and pressing drought conditions, with direct impacts on rain-fed agriculture and other sectors of the economy.

The country is well aware of its prevailing and future climate challenges and has identified agriculture and food security, water, tourism, and the ecosystem as the key vulnerable sectors. Over time, several key policy developments and institutional strengthening measures, such as, the National Climate Change Policy (2016), the National Development Plan, the National Development Strategy and Nationally Determined Contributions have been developed and implemented through the ministries, departments and divisions. Similarly, establishment of the multistakeholder National Climate Change Committee, National Disaster Management Authority, National Trust Commission and Eswatini Environmental Authority, along with the Ministry of Tourism and Environmental Affairs, are some of the noted institutions responsible for climate action in the country. It is noted that despite these considerable policy and institutional achievements, the country remains increasingly vulnerable and is not yet adequately prepared to face the future challenges. In the ongoing revision of the Nationally Determined Contributions, it is further recognised that focused technical assistance in enhancing the access and flow of climate finance to the country is much needed.

This study, on the Climate Public Expenditure and Institutional Review (CPEIR), is part of this effort to enable the consideration of climate change in the national development planning and budgeting process in a systematic manner.

The study applied the World Bank methodology for undertaking the CPEIR and was based on the data and information provided by the Ministry of Finance. The methodology reviewed the overall climate policy adequacy in the country, and undertook an analysis of the strengths and weaknesses of the institutional set-ups in the light and consideration of current climate change priorities and future challenges. The final part of the methodology and the process was based on an analytical review of climate expenditure and showed how the country had been allocating funds from public finance in dealing with the impacts of climate change. Initial results and recommendations were shared in a virtual validation workshop, in which a large set of participants from government institutions, the private sector and development partners provided inputs and endorsed the conclusions of the study and appreciated the recommendations.

The study showed that Eswatini had limited capacity for tracking and co-ordination of climate finance, budgeting for climate change and critical capacity shortfalls for mobilising climate finance, these stemming from a lack of comprehensive climate finance monitoring, reporting and verification (MRV). Nonetheless, the country had a system to track international funding coming to the country through the Aid Coordination Management Section (ACMS) of the Ministry of Economic Planning and Development (MEPD).

The climate expenditure analysis was based on data and information for the period 2015–20, provided by the Ministry of Finance. Since no additional data strictly on climate change-related public expenditure were provided, the study and analysis were based on data and values provided by the government. The information contained a yearly breakdown of projects and programmes approved through the national budgets.

Based on the review of the data, in general, it could be observed that the government had been allocating a fair amount of public resources to climate-related projects and programmes. The review of yearly data showed increases in the number of projects had remained consistent but budget allocations had steadily increased over the years. Adaptation measures were the predominant focus and priority of the government, with very few projects (and associated budget allocations) for mitigation projects. It was noted that some ministries

were responsible for more than one sector, hence, funds were allocated in all key and vulnerable sectors. Some cross-cutting projects were observed from the project description details; however, in the absence of data on bifurcation of funds between different sectors and also for lack of information in determining the proportional sectoral relevance (benefits), it was difficult to determine the true nature and share of cross-cutting projects. It was also noted that actual climate change expenditures were reported to be less than half (49.13%) of total budget allocations, and the gap between climate change budget allocations and actual expenditures had increased over the period of five years. This showed that the implementing agencies were not able to fully implement the allocated budgets, either due to unavailability of funds or due to inadequate institutional capacity to fully implement the projects and schemes in a timely manner.

The study, in the light of the policy analysis and institutional review, identifies a number of policy gaps, areas for institutional strengthening, and makes recommendations for mapping and tracking climate expenditures. Key recommendations from the study include:

- policy and institutional support for climate change integration in the national planning process, through a broad policy review and reform initiatives;
- strengthen institutional frameworks, specifically focusing on strengthening the co-ordination role and function of the Ministry of Tourism and Environmental Affairs (MTEA);
- support to the functioning and operationalisation of the National Climate Change Committee;
- integration of climate change into the national budgeting process, by introducing a system for functional budget tagging of climate change expenditures;
- develop and implement a climate finance tracking tool to monitor the flow of funds;
- identify and incorporate mitigation and adaptation priorities into the revised NDC, including financial requirements;
- sensitise policy-makers and stakeholders on the importance and rationale for climate change expenditures accounting; and
- develop a strategy for climate change awareness, through a comprehensive media campaign and other means and channels of wider public engagement.

1. Setting the Context

1.1 Introduction and background

The Government of Eswatini has requested support from the Nationally Determined Contributions Partnership (NDCP) Climate Action Enhancement Programme () to undertake the Climate Public Expenditure and Institutional Review (CPEIR), with a view to strengthen its national climate action programme and climate finance management in the country. The Commonwealth Secretariat responded to the request from Eswatini and agreed to provide technical assistance through its Commonwealth Climate Finance Access Hub (CCFAH). The CCFAH supports member countries in building their human and institutional capacities to address climate change and assist in accessing international and regional sources of climate finance, from both the public and private sectors, to meet their priority for adaptation and mitigation needs and realise their sustainable development goals. The services of an experienced independent consultant were acquired by the Commonwealth Secretariat to undertake the CPEIR study for Eswatini.

The goal and objective of the CPEIR within the specific context of Eswatini, as defined and agreed in the Inception Report submitted the government and CCFAH, was to assess the opportunities and constraints for integrating climate change concerns within the national (and subnational, where applicable) budget allocations and expenditure processes and estimate the current level of climate expenditures by the government. The aim of the CPEIR was also to allow relevant national institutions for the consideration of climate change component into the national development planning and budgeting process in a systematic manner and to integrate climate change considerations into the national development decision-making processes. Additionally, the aim was to enable the government to map and manage climate finance for the country, with a view to improve climate governance and climate finance management. Meeting these objectives and goal required undertaking a detailed policy and institutional review focused on how the climate change process was being managed and governed, along with the magnitude of current climate expenditures (for mitigation, adaptation and cross-cutting actions) being incurred. Furthermore, the study encompassed a review and analysis of the climate-related expenditures calculated from the national budgets (macro-economic analysis), expenditure analysis of different ministries and departments, and from the flow of climate finance into the country.

Typically, based on experience, it is understood that data and information on climate change-related expenditures are not recorded and/or kept in a systematic manner in the national budgeting, public expenditure, and finance management and accounting systems. Climate-sensitive budgeting and institutional mechanisms for climate budget tagging are yet to evolve in many developing countries. In the absence of specific climate public expenditure data, the climate expenditure review and analysis are characteristically based on information and data derived from the public sector development-related budgets and financing information, by identifying which expenditures are directly and/or indirectly related to the climate change initiatives and actions (mitigation, adaptation and/or cross-cutting actions). It is also widely acknowledged that, in some cases, there is no clear difference between the development budgets and climate expenditures. This challenge is addressed by identifying the climate change mitigation, adaptation or supporting components within the existing development programmes and activities and their respective budgets, and quantifying the proportion of their respective budgetary values to a reasonable accuracy.

Although the difference between development finance and climate finance is not straightforward and remains a subject of global discourse, with no clear or generally agreed definition yet, the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) Rio Markers for Climate (OECD DAC no date) provided some guidance on this issue. Nevertheless, the CPEIR has, over the years, evolved to become an effective tool to facilitate the verification of how climate change policies and their programmes are implemented through national budgetary processes. Results and outcomes of CPEIR studies are increasingly being used to integrate climate change into expenditure

decision-making and contribute to climate change-responsive fiscal policy, expenditure planning and programming, and to strengthening the climate action agenda.

This policy and institutional review was undertaken through an extensive literature review on government policies, climate action plans, annual vulnerability assessment studies and national development strategy documents.[1] Predominantly, the focus was to review the implementation status of different policies and actions plans and evaluate the challenges where the implementation had not been fully achieved and/or faced challenges. With the aim to further ascertain the results, a comparative analysis of the policy scenario and climate expenditure review was undertaken with the publicly available results and conclusions of CPEIR studies undertaken in Pakistan, Uganda and Cambodia. For the sake of illustration, it may be noted that studies in those countries also pointed out similar challenges. These included, in particular, institutional challenges in fully integrating climate change into national development planning processes, significant climate finance gaps and capacity to access the required and additional financial resources, and constant fiscal constraints to fully budget the countries' climate actions/interventions.

Against this background, the CPEIR exercise in Eswatini aimed to contribute to the climate policy implementation, as well as in strengthening the climate governance, particularly in the context of the NDC and its implementation. Some of the specific contributions of the CPEIR for Eswatini were envisaged to be as follows:

- provide an analytical overview of the policy and institutional review and identify areas for further strengthening for climate actions;
- review the climate expenditure analysis for the last three years and provide an estimate of what percentage of the budget was being spent on climate expenditures;
- set up an initial mechanism for climate budget tracking within the national budgetary processes; and
- provide an overview of financing needs for the country, within the commitments and targets set in the revised NDC.

This report is divided into six main sections (chapters). Chapter 1 sets context by illustrating the climatic challenges being faced by Eswatini within the specific geographic, economic, social and demographic realities of the country. This chapter highlights the intensity and criticality of climate challenges to the country, in view of its economic, fiscal and capacity limitations. Chapter 2 elaborates the process applied for undertaking the study. It illustrates the availability and accessibility of data and information, details of the stakeholder consultation process and also highlights some of the challenges faced during the study. The CPEIR approach and methodology applied, as well as details of the policy and institutional review, are presented in Chapter 3. The analysis includes the policy gaps and areas for institutional strengthening. Chapter 4 presents the detailed climate expenditure review, built on the information and data provided by the government. Chapter 5 reviews the climate finance landscape and flows in the country. Areas for further strengthening and improvements are culminated in the set of recommendations in the final section (Chapter 6) of the report.

1.2 The country context

1.2.1 Geographic settings

The Kingdom of Eswatini is a landlocked and mountainous country situated in the south-eastern part of the African continent, bounded by the Republic of South Africa on the north, west and south and by the Republic of Mozambique to the east. The country covers a land area of 17,364 km^2 and has an elevation range of 600–1,860 metres above sea level (masl). The country has four administrative districts (Hhohho, Manzini, Lubombo and Shiselweni) and is classified into four agro-ecological zones (AEZ), considering elevation, landforms, geology, soils, climate and vegetation: Highveld, Middleveld, Lowveld and Lubombo range.

The country is part of the Southern African region, which is one of the climatically most exposed and vulnerable regions of the world. The region is characterised by significant variations due to its geographic and ongoing economic diversities; however, some of the key challenges being faced by the Southern Africa region include increasing spells of heat extremes, precipitation changes, sea-level rise, and aridity and potential evapotranspiration (Serdeczny et al. 2016). This results in adverse sectoral impacts, as well as severely impacting the livelihoods of large sections of the population. Studies show that the water and agriculture sectors are the most adversely affected, which ultimately translates into impacts on all other associated sectors and areas of the economies and societies in the region.

1.2.2 The climate variabilities

The general climatic characterisation of Eswatini is subtropical, with wet hot summers (about 75% of the annual rainfall occurs in the period from October to March) and cold dry winters (April to September). The physiographic zones show clearly different climatic conditions, ranging from sub-humid and temperate in the Highveld to semi-arid and warm in the Lowveld. Eswatini lies at the transition of major climatic zones, being influenced by air masses from different origins: the equatorial convergence zone (summer rains); subtropical eastern continental moist maritime (onshore flow, with occasional cyclones); dry continental tropical; and marine west Mediterranean (winter rains, with rare snow) (World Bank no date a).

Mean annual rainfall ranges from about 1,500mm in the northern Highveld to 500mm in the southern Lowveld. Precipitation varies considerably from year to year, which either leads to periods of flash flooding or droughts. Drought is one of the concurrent climate-induced challenges, with serious economic and social implications.

The climate variability of Eswatini clearly demonstrates the increasing exposure of the country to extreme weather conditions; for example, more frequent and intense extreme weather events, including an El Niño-induced drought in 2015 and 2016 (Eswatini Economic Policy Analysis and Research Center, 2017). Among the climate-induced disasters and events, drought has been a more pressing and recurrent challenge, with long-term negative impacts on rain-fed agriculture, the environment and the economy. Consequently, in the same period, crop-production levels and crop diversity sharply declined. Maize production dropped by 67 per cent between the 2014/2015 and 2015/2016 planting seasons, especially in the Lowveld. Declines in crop production are undoubtedly major setbacks to subsistence and commercial farmers, as well as to a national economy in which agriculture ranks second only to manufacturing (AfroBarometer no date). The national Vulnerability Assessment Report 2016 (Swaziland Vulnerability Assessment Committee 2016) reported that in view of the magnitude of the impact of the drought on the population, the Government of Eswatini declared it a national emergency. The government has made efforts to address the growing humanitarian

Box 1.1 Eswatini economic outlook

Eswatini is facing an unprecedented economic crisis. Preliminary estimates suggest a contraction of 0.4 per cent in our GDP for 2018 and the economic outlook remains subdued.

Foreign direct investment has been on average negative for a number of years. Arrears have accumulated and we continue to draw down on our reserves. The economy has stagnated and we are failing to attract investment as the gap between the rich and poor continues to grow. For too long now, this economic reality has not been addressed – and now is the time to do so. Regional economic weakness, international trade tensions and the lingering impact of the global financial crisis have all contributed to our present crisis, but so too have the structural inefficiencies and deficiencies in our own economic policy and governance. A key component of our crisis is government's growing wage bill – in the last ten years, our wage bill has grown by 125 per cent.

In contrast, volatile SACU receipts have made government's fiscal position untenable; in the medium term, SACU receipts are expected to decline due to South Africa's worsening economic position.

Budget Speech 2019, The Minister for Finance, Government of Eswatini.

needs in collaboration with partners, co-ordinated by the National Disaster Management Agency. The National Drought Emergency Mitigation and Adaptation Plan (NERMAP) 2016–2022 estimated that from March 2016, a minimum of 300,000 people (about one third of the population), would need food assistance. The government has committed substantial amounts of resources for the emergency and has requested technical and financial assistance from the international community to support the emergency response plan.

The geographical characteristics, combined with the climatic variabilities, are understood to produce adverse climatic impacts, triggering severe and critical economic and social exposures and threats.

1.2.3 The socioeconomic context

In a total population of 1.268 million, most citizens of Eswatini are ethnically Swazi and comprise some other minority groups. A trend of decelerating population growth over the decades resulted into an average growth of just 0.7 per cent a year from 2007 to 2017, driven primarily by falling fertility rates. The effects of a high rate of HIV/AIDS also caused rising mortality rates during the periods when the epidemic was high. According to the UN Population Fund (UNFPA 2017), fertility rates are expected to continue to fall to 2.1 children per woman by 2050, although the impact of this on population growth will be balanced somewhat by falling mortality rates. Given these dynamics, the population is projected to rise to 1.4 million by 2050.

The economy of Eswatini has seen many and persistent challenges over the period and the ongoing COVID-19 impacts have further exacerbated these challenges. Poverty has persisted, despite the country's lower middle-income status. A staggering 58.9 per cent of the Eswatini population lived below the national poverty line in 2017, following a decline from 63 per cent in 2009 and 69.0 per cent in 2001. Challenges to poverty reduction include weak economic growth, due to the impact of COVID-19, adverse weather patterns, high prevalence of HIV/AIDS, high unemployment and high inequality; the per adult equivalent consumption Gini index stagnated around 49.0 between 2010 and 2017 (World Bank no date b). Being highly dependent on South Africa, with the Lilangeni pegged to the Rand, also poses serious and sustained challenges. Until 2010, the

Table 1.1 Selected macroeconomic indicators (2018/19)

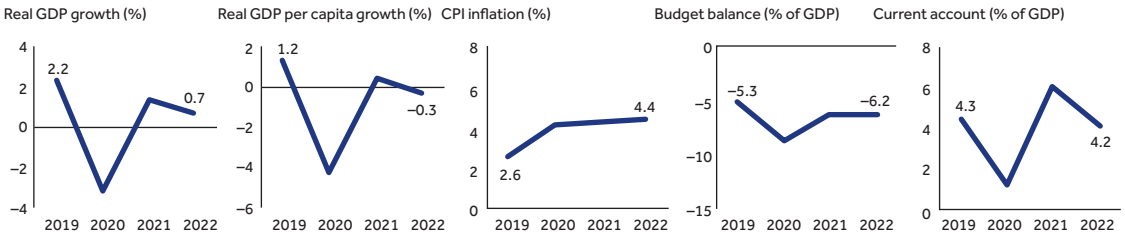
Indicator	Value
Nominal GDP [US dollars]	63.4 billion
Real GDP rate (%) [growth rate]	1.5
Gross national income per capita [US dollars]	2,950
Inflation rate (%)	5.4
Total government expenditure (% of GDP)	34.6
Tax revenue (% of GDP)	27.1
Fiscal deficit (% of GDP)	8.7
Donor funding (% of revenue)	6.1

Source: International Monetary Fund (IMF).

Southern Africa Customs Union (SACU) returns used to account, on average, for 60 per cent of total government annual revenue and have since been reduced to below 60 per cent. The manufacturing sector has diversified since the mid-1980s, but sugar remains an important foreign exchange earner; this is despite substantial downward pressures due to global sugar prices decline. The share of the agricultural sector in the gross domestic product (GDP) decreased from more than 30 per cent at independence in 1968 to 13 per cent in 1989 and to 10 per cent in 2009. However, it is important to note that agriculture is more important for the Eswatini population and national economic development than its contribution to the GDP suggests. Agricultural output forms the raw material base for about one third of value-added goods within the manufacturing sector and contributes substantially to national export earnings. Livestock production is a major agricultural activity, with small farmers owning about 77 per cent of the total cattle population. The number of livestock has been declining in recent years, due to droughts and overgrazing of rangelands resulting in less productivity, and to some extent also because of the population increases and thereby increasing demand for resources.

Per capita income of Eswatini after a stable increase since 2012 now stands at US$3,415, giving it a global ranking of 156; it is therefore categorised as a lower middle-income country (World Bank no date c). Eswatini continues to face several serious socioeconomic challenges akin to a least developed country, also due to inherent climatic variabilities.

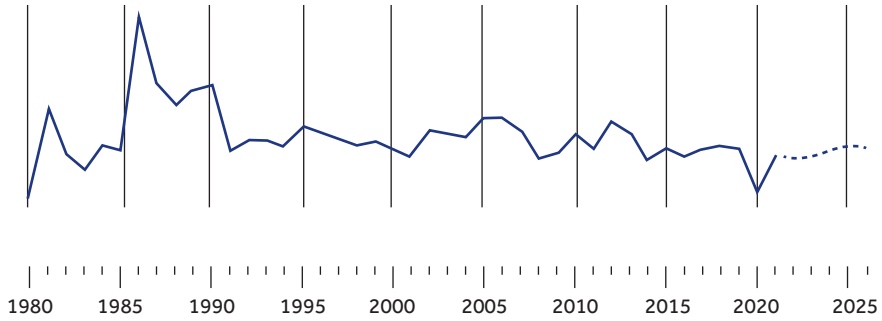
Graph 1.1 GDP growth and other economic indicators



Source: Data are as of December 2020 and are from domestic authorities; figures for 2020 are estimates and figures for 2021 and 2022 are projections by thye African Economic Outlook team.Data on the budget balance correspond to eSwatini's fiscal year, which runs from April 1 to March 31.

Source: African Development Bank (AfDB).

Graph 1.2 Historical GDP growth



Source: IMF.

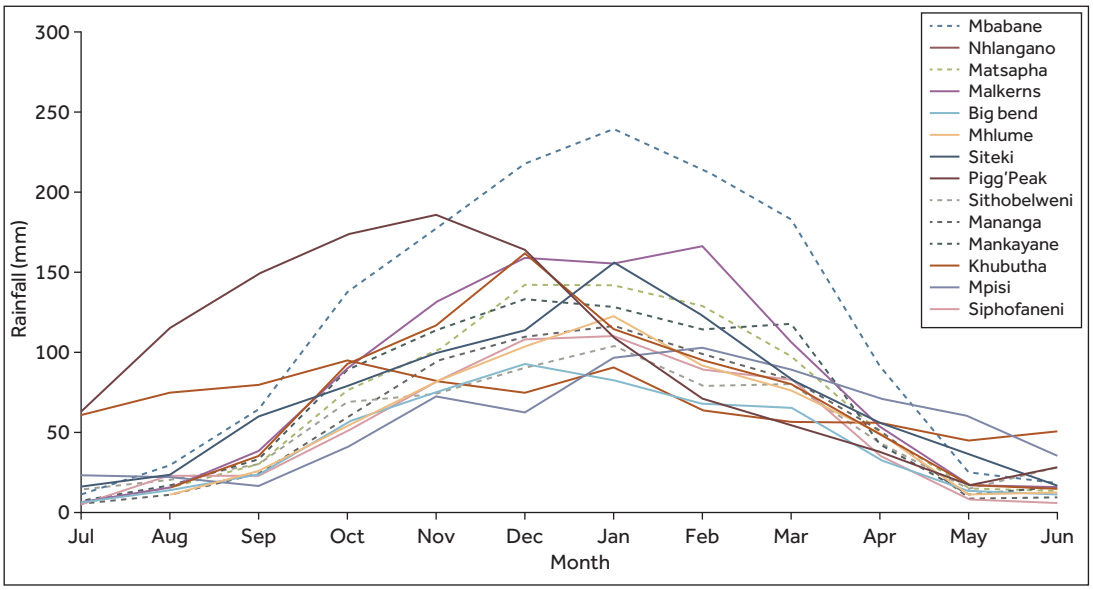
The country, after experiencing the economic recovery and stability over the period 2010–16, has been facing macroeconomic challenges. GDP growth in real terms dropped significantly in 2019 to 2020, whereas GDP growth was estimated to grow at an annual rate of 2.3 per cent for the period 2021–25 (IMF 2021). The estimated growth rate of 2.3 per cent was significantly lower than that required to make real improvements in the poverty ratio of the population. Also given the country's high exposure and vulnerability, and also in lieu to the ongoing pandemic situation, it is expected that economic growth is likely to suffer and will not achieve the anticipated growth rate.

1.3 The climate vulnerability of Eswatini

The country is already suffering from the adverse impacts of the climate change. It will be increasingly vulnerable in the coming years to these impacts, due to global climatic changes and ongoing and future forecasted changes in the Southern African region. Some of the unique climate change impacts and challenges being experienced by Eswatini include significant variations in precipitation patterns, higher temperatures, and increases in frequency and intensity of severe weather events such as droughts, floods and cyclones. The government notes in its Nationally Determined Contributions (NDC) that the climate change will have adverse effects on water, food, fuel, health, education and access to social services. Thus, building the resilience of her populace and the economy is of utmost priority, if Eswatini is to achieve her quest towards sustainable development and poverty eradication (The Kingdom of Swaziland, Ministry of Tourism and Environmental Affairs (2016).

Figure 1.1 shows one parameter of climate change impacts, that is monthly rainfall patterns and changes over the historical period of 1986–2017 in 14 selected rainfall stations. Given the significant impact of changes in the rainfall pattern on the rain-fed agriculture sector, the overall impact on socioeconomic conditions is substantial, as evidenced from this data. The figure shows that the rainfall pattern between all the assessed rainfall stations was similar, with the months of May and June being the dry winter months. The rainfall was received mostly in the Highveld, with little or no rainfall in the Lowveld AEZ. The rainy

Figure 1.1 Mean historical monthly rainfall for Eswatini during the period 1986–2017



Source: Mlenga et al. 2019.

season, which saw a progressive increase in the amount of rainfall received, started in September, with the peak rainfall months in December and January. December and January coincide with the summer crops' main vegetative development and reproductive stages. Prolonged rainfall stress in these months will result in reduced crop yields (Mlenga et al. 2019).

These climate impacts are already adversely affecting the key economic sectors, particularly in terms of livelihood losses for poor and low-income people, yield losses in the agriculture sector, and by damaging the economic growth prospects for the future. In the National Climate Change Policy, it is evidently predicted that yields for staple cereals, especially maize, will fall sharply, with 1–2°C changes in temperature and more erratic rainfall patterns. Consequently, it is predicted that the Highveld will be unsuitable for growing maize by the year 2050, posing serious threats to food security. Similarly, water resource availability is seriously threatened due to several impacts of climate change. Streamflow of rivers in the country is projected to decrease by 40 per cent by 2050. This implies that many smaller rivers or their tributaries may permanently dry up, due to declines in precipitation and increased evaporation rates/temperatures. This is likely to adversely affect irrigated agriculture, domestic and industrial use, and hydropower generation capacity due to reduced river flows. As a significant portion of the population is dependent on subsistence farming for their daily sustenance and livelihoods, the adverse economic and livelihood impacts are set to be severe and sustained.

The country is well aware of its current and future climatic challenges. It has identified key sectors at risk from climate change and has prioritised these in its stated adaptation strategies, by enhancing adaptation and building resilience. Critically threatened and vulnerable sectors include: water, agriculture and food security, energy security, climate risk management, disaster risk management and resilience, forestry, and health. One of the critical and most persistent impacts of climate change in Eswatini is drought conditions spreading to large geographical areas, as well as affecting many segments of the society. It is commonly understood that droughts can happen naturally, but in many cases climate conditions have accelerated their occurrence and intensity. Drought is a natural disaster of significant concern in Eswatini, several predictions by the Intergovernmental Panel on Climate Change (IPCC)indicate that future drought events will be longer, more frequent and more intense in Southern Africa, including in Eswatini (The Kingdom of Eswatini, Ministry of Agriculture 2020). The Eswatini National Drought Plan (August 2020; ibid) noted that between 1980 and 2014, about ten drought events were recorded for varying periods and intensity. The National Drought Plan further noted that drought response was an integral part of the actions that Eswatini needed in her proactive

approach to climate change adaptation and disaster risk reduction, and it needed to appreciate future projects on drought response due to climate change predictions and to prioritise accurate weather forecasting to assist early planning for drought.

Full implementation of Eswatini's climate change adaptation strategies are contingent upon the continued strengthening of the country's technical and institutional capacities, technology enhancement, and financial support received to invest in adaptation programming and strengthening implementation structures. The National Adaptation Plan (NAP) Readiness Proposal (Global Climate Fund 2018) to the Green Climate Fund (GCF) particularly identified the barriers to the adaptation planning the country is facing. These include: i) limited access to knowledge that can inform climate-resilient planning processes; ii) limited financial and technical capacities to implement policies, strategies and plans that integrate climate change; iii) absence of the required financial structures to co-ordinate and fund cross-sectoral planning; and iv) limited institutional structures and technical capacity to initiate a cross-sectoral, integrated and iterative NAP process.

Given the projected impacts of climate change, strengthening of institutional capacities, resilience building, disaster risk reduction and diversification of economic activities are critically important if the country is to reduce its vulnerability, specifically within the agriculture, water and energy sectors, as well as to achieve its broader sustainable development goals. Ongoing implementation of the NDC and a number of sector-specific policy actions, along with capacity building efforts, are expected to contribute in preparing Eswatini for prevailing and future challenges.

Note

1 For review of policy analysis and detailed institutional review, see Chapter 2 of this report.

2. The CPEIR Study Process and Stakeholder Consultation

2.1 Information and data analysis

The analytical perspective and scope of the CPEIR study were based on the relevant publicly available information gathered from government-published policy documents, as well as assessment studies and analysis and information products published by national, regional and international agencies. In addition, climate finance and climate-related public expenditure information and yearly data were shared by the Ministry of Finance, sourced from national budgets and the public finance management system. The study strived to rely on the most credible and up-to-date information and applied standard quality assurance methods and protocols, such as cross-checking the sources of information, as well as cross verifying the accuracy from different sources to the extent possible. In line with the scope of the study and its agreed focus, a broad set of information and data were collected on following three aspects:

1. Assessment of climate change vulnerabilities of Eswatini and sectoral impacts
2. Climate policy and institutional arrangements information
3. Climate public expenditure information and data

To meet the study objectives and deliverables, the information and data were analysed and synthesised in a structured and objective manner, while taking the country-specific realities and access to information limitations into consideration. This approach allowed a review of the policy and institutional aspects, considering emerging climatic threats and demands and inherent capacity and financial constraints in dealing with these threats. Although the data for climate-related public expenditure submitted did not allow us to undertake a comprehensive and comparatively based analysis, it did provide useful insights – enabling us to draw up some results and recommendations. Correspondingly, some specific recommendations relating to establishing climate budget tagging and strengthening the mapping of climate finance are put forward for the consideration of the government.

2.2 Stakeholder consultation process

2.2.1 Establishment of the CPEIR task team

To streamline and facilitate the data and information accessibility, the Ministry of Tourism and Environmental Affairs (MTEA) established a dedicated task team for the CPEIR study. The meetings and work of the task team were supported and efficiently co-ordinated by the NDCP co-ordinator in Eswatini. The task team included representation from following ministries:

- Ministry of Tourism and Environmental Affairs
- Ministry of Finance
- Ministry of Economic Planning and Development
- National Disaster Management Authority

The task team held several virtual meetings and fully endorsed the importance and relevance of the study in the light of climate action and efforts of the country. After having noted the goals and objectives of the study, and agreeing on the proposed approach and methodology, all members of the task team provided necessary support, valuable inputs and feedback and, most importantly, access to some of the data and information. All deliverables (Inception Report, CPEIR Concept Paper, and the Draft and *Final CPEIR Report*) were duly shared with the members of the task team. Their inputs strongly contributed to improving the drafts and finalisation of the *Final CPEIR Report*. The support and assistance from the task team enabled the consultant to complete the study, in compliance with the agreed terms of reference (TOR).

2.2.2 The consultative validation workshop

The consultative validation workshop was held virtually on 5 August 2021. The main purpose of the

virtual validation workshop was to share the results of the CPEIR with key government stakeholders and seek their views, inputs and feedback on the Draft CPEIR Report. The draft report was prepared by taking into consideration the information shared by the Ministry of Tourism and Environmental Affairs, the Ministry of Finance and Economic Development and from publicly available information and data. Meetings and interactions with the Ministry of Tourism and Environmental Affairs provided insights into the climate action programme, as well as priorities of the government.

At the validation workshop, preliminary results of the draft report were shared with the wider set of stakeholders and their inputs and feedback were sought.

Key inputs/main activities in the workshop

1. Presentation on CPEIR report and its findings.
2. Presentations on applying of CPEIR findings in the national budgetary process.
3. Small group sessions on policy and institutional review.
4. Presentations on stakeholder engagement in policy, and examples of effective national stakeholder engagement on policy.
5. Small and large group workshops on stakeholder identification and mapping.
6. Discussion on future national policy response and recommendations.

Validation workshop participants

- Ministry of Foreign Affairs and International Cooperation
- Ministry of Finance
- Ministry of Economic Planning and Development
- Ministry of Health
- Ministry of Agriculture
- Ministry of Natural Resources and Energy
- Ministry of Housing and Urban Development
- Eswatini Environment Authority
- Eswatini National Trust Commission
- Federation of Swaziland Employers and Chamber of Commerce
- Coordinating Assembly for Non-Governmental Institutions
- University of Eswatini
- World Vision
- Ministry of Tourism and Environmental Affairs
- Eswatini Bankers Association
- Association of Municipal Councils
- Eswatini Tourism Authority
- Eswatini Sugar Association

Validation workshop outputs

The validation workshop offered an opportunity to discuss the draft report and key results, outcomes and recommendations of the draft CPEIR report. The participants largely welcomed the report and recognised that the study provided a comprehensive overview of the policy and institutional review and identified clear areas for improvements. It was highlighted that one of the key policy gaps was the existence of a disconnect between climate change and sectoral polices in terms of implementation frameworks. This particular element also showed the need for institutional strengthening through focused and tailored capacity-building measures and activities by involving a wide range of stakeholders.

It was also recognised that the National Development Strategy should acknowledge and incorporate climate change more strongly, through the involvement of all high-level stakeholders. The Climate Change Bill, which was being developed at the time of writing, is expected to augment the recognition of climate change into the national development planning processes. The participants emphasised the need for capacity enhancement across the board. In consideration to the data and information challenges for climate change-related expenditures, it was also recognised that to implement the climate-sensitive budgeting process would require drastic changes in the national budget preparation process, along with the necessary training of national staff.

The discussion and specific inputs from the workshop contributed immensely to the final report for the Government of Eswatini.

3. Climate Public Expenditure, Policy and Institutional Review

3.1 Goals and objectives of the study

The overarching goal and objectives of the study were to facilitate the policy and institutional mechanisms for integrating climate change concerns within the national budget allocations and expenditure processes, and to estimate the current level of climate expenditures incurred from the public finances. To achieve these broad objectives, it was imperative to review the current policy frameworks for climate change and institutional structures, in terms of how climate change priorities were being addressed and incorporated into the national development goals. It was expected that such analysis and review would enable government to map and manage climate finance, with a view to improve the climate governance and climate finance management. Furthermore, review and analysis of the climate-related expenditures calculated from the national budgets (macroeconomic analysis), expenditure analysis of different ministries and departments, and from the flow of climate finance in the country would provide information on the historically based trend of climate expenditures, the division of expenditures into different sectors of the economy, and would allow an evaluation against government priorities towards vulnerable sectors.

Hence, the study will serve as a basis for the government to allocate funds for climate change in the national budget and also identify the financial gaps for different sectors in the coming years.

3.2 CPEIR approach and methodology

The CPEIR methodology, developed from the World Bank (WB) work on public expenditure reviews, provides an approach for institutional analysis and review of aggregate climate change-related spending and allocations in key sectors, such as poverty alleviation, health and education, and the infrastructure sectors, in order to improve allocation and policy delivery on the climate action agenda.

The CPEIR was built on a review of relevant established policy and institutional frameworks and budgetary processes, and climate expenditure allocation processes driven from the public finance management system in the country. The policy and institutional review aimed to demonstrate the overall policy and governance structure necessary to deal with the multifaceted issue of climate change and to understand the gaps and weaknesses. Meanwhile, the climate expenditure review showed what percentage of the national budget and public financing was being allocated

Box 3.1 The CPEIR approach and methodology

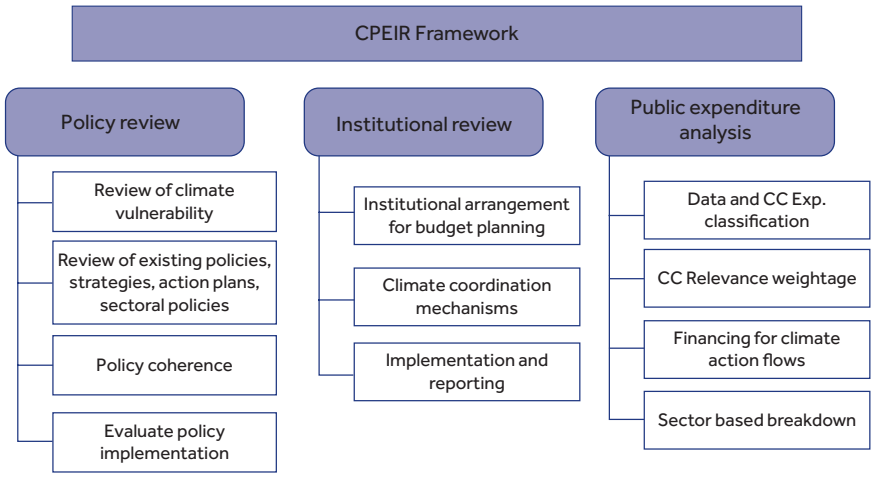
The CPEIR approach and methodology included the policy and institutional review and determined the climate change budget that was aggregated from budget expenditures across all relevant government institutions.

The data were selected from 2016 to 2020, from the publicly available budget and climate finance flows.

The methodology followed a three-phase process of undertaking the analysis of climate policy, a review of the institutional set-up in the country, and determining climate-related expenditures.

Phase I constituted the identification of selected expenditure items having either an adaptation, mitigation or supporting component. Phase II then classified those line items using a typology of themes, and associated tasks, which was specifically designed to cater to the country-specific development needs and demands. Then Phase III assessed the relevance of expenditures as a percentage of the total expenditure attributed to climate change.

Figure 3.1 CPEIR framework



to climate action. Estimations and quantification of the climate expenditures showed the criticality of the prevailing climate change challenges and how the country was coping fiscally with this challenge from its own public resources. Another key purpose of this estimation was to show and identify the proportion of climate change expenditure as part of the overall development and public sector financing budget. The CPEIR aimed to equip policy-makers with an evidence base, an assessment of the allocation of public resources (domestic and international), and the institutional set-up in place to respond to climate change at the country level.

The methodology constituted three main components, as follows:

- **Policy analysis**
- **Institutional review**
- **Climate expenditure review**

All three components of the CPEIR methodology were applied in carrying out this study. Some elements were tailored to the specific context of Eswatini. This chapter illustrates the methodological and conceptual details of the policy analysis, institutional review and climate expenditure analysis, based on the budgetary data and information provided by the Government of Eswatini. It may also be mentioned and clarified that due to limited budgetary data and climate finance information available in the country, the analysis and review of climate expenditure (Phase III) was limited and did not allow for a comprehensive analysis. However, the review of the available data and information provided some useful insights, which would be beneficial for the Government of Eswatini and other stakeholders in devising policy actions and adjusting and appropriately designing the climate action programme in the country.

3.3 The policy analysis

Policies and institutions provide the essential infrastructure for facilitating and implementing climate action in any country. In Eswatini, climate governance has been gradually improving and has been constantly strengthened through policy development refinements, sector-specific regulations, institutional strengthening and by mainstreaming climate change into the national development planning processes through a range of specifically designed policy measures. The overall climate change policy scenario of Eswatini exhibits the presence of the necessary policies and policy implementation arrangements through national institutions, development partners and active engagement of wide range of stakeholders. However, inadequacy of national capacity and the need for technical support and financial assistance are also recognised and emphasised in many policy documents and sectoral studies. For instance, the Nationally Determined Contributions (NDC) states that the full implementation of Eswatini NDC is contingent upon continuous strengthening of the country's technical capacities, technology transfer and development, as well as financial support received (UNFCCC no date).

The cross-sectoral nature and scope of climate change was observed to be covered well in different policy documents. Adversely impacted and threatened sectors, such as, agriculture, water, energy and tourism are particularly focused on in sector-specific policy frameworks, such as the National Disaster Management Act (2006), the Water Act 2003 (IELRC 2003) and the Waste Regulations 2000 (ELAW 2000), to name a few.

While the policies and regulations in dealing with cross-sectoral impacts of climate change have been strengthening over the period, with the increasing severity and frequency of climate-related challenges and persistent disasters, there is need for further robustness of policies and strengthening of institutions. Many of the actions identified in the Intended Nationally Determined Contribution, which was converted to NDC, refers to the strengthening and aligning of policies with emerging needs in the face of climate change challenges hampering the Sustainable Development Goals of the country.

3.4 Eswatini key policy documents

3.4.1 The National Development Strategy

The **National Development Strategy** (NDS; Government of Swaziland, Ministry of Economic Planning and Development no date), formulated in 1997 and reviewed in 2014, is an over-arching framework that provides a platform for the achievement of sustainable development in the country. It seeks to balance the needs of the Swazi people with the country's natural assets and ensures making use of resources in an environmentally sustainable manner. The strategy has a medium- to long-term perspective (1997–2022 [25 years]) with a view to revising and updating it in line with emerging needs of the country. Various national strategies to address climate change (within the context of national development) are outlined as the key focus of the National Development Strategy. One of the key and prominent focuses of the National Development Strategy is mainstreaming climate change into national sustainable development planning processes and strengthening mechanisms for research, awareness raising and institutional strengthening in a focused and proactive manner. It also stipulates to develop the necessary legislative frameworks for dealing with the issue of climate change, facilitates capacity building and implementation of appropriate mitigation and adaptation mechanisms from domestically mobilised resources, along with options for international and regional funding sources.

On the implementation side, the National Development Strategy has been able to make significant contributions and improvements in many key areas and sectors. A UN Development Programme (UNDP) review of implementation of NDS undertaken in 2013 (MEPD 2013) highlighted that the government had developed and initiated a significant number of sectoral, sub-sectoral and thematic policies and strategies (including legislative Acts and Bills, like the constitution) primarily aimed at realising the ultimate aspirations of Vision 2022 and the NDS strategic goals. The review also lists the prevailing challenges in achieving its targets. Some of these challenges include persistent poverty and unequal income distribution, low macro-economic growth, persistent food insecurities and lack of national capacities. Similarly, climate change has been identified as one of the prominent features causing intensification of challenges and the emergence of new issues.

3.4.2 The National Climate Change Policy

The **National Climate Change Policy** (NCCP; Government of the Kingdom of Eswatini, Ministry of Tourism and Environmental Affairs 2016), formulated in 2016, aims to promote an integrated approach within the national context for combating climate change. For this purpose, it is designed to support the priorities outlined in the National Development Plan and provide the enabling framework to guide Eswatini in addressing the short- and long-term challenges posed by climate change. The policy options are specifically aligned with the commitments in country's Nationally Determined Contributions (NDC) and the actions prescribed to meet them. It further aims to provide an enabling environment for communities and investors to take advantage of the opportunities presented by climate change, to invest in activities that work to eliminate poverty and build climate-resilience for the future survival, as well as development, of the country.

The policy analyses the emerging climate change threats to all key sectors, offers policy options and proposes the need to enhance adaptation in the vulnerable sectors through programmatic and focused interventions. These include integrated

Box 3.2 Key elements of the National Climate Change Policy (2016)

- Promotes an integrated approach for climate action, building on the national policy and strategy and institutional frameworks. The stated goal of the policy is ***'developing a sustainable, climate resilient and inclusive low-carbon green growth society'***.
- Adaptation and resilience-building goals and objectives, focused and structured on key and threatened sectors of the economy (food security, water, energy, tourism, forestry etc).
- Implementation frameworks, taking into consideration the ongoing policy goals and institutional structures, aim to enhance the effectiveness of the policy.
- Aligned with the broad policy goals and objectives regarding climatic challenges, it covers both mitigation and adaptation measures, with larger focus on adaptation and resilience building.
- Appropriately identifies needs for capacity building, education, awareness and public involvement.
- Need and role of international co-operation and climate finance is fully endorsed and emphasised for the successful implementation of the policy

water resource management, climate smart agriculture, and development of early warning and risk management services. Although the policy aims to harness the mitigation potential in the country and reduce its greenhouse gas (GHG) emissions, the predominant focus of the NCCP is on adaptation measures. The policy notes that the ultimate objective is to reduce vulnerability and enhance the resilience of the communities and the economy to the impacts of climate change and disasters. Achieving enhanced resilience in the face of climate change will require increasing the adaptive capacity of the country, as well as implementing appropriate sectoral policies and investments. The implementation framework of the policy includes the policy and institutional measures already undertaken at the national level and clarifies the roles and responsibilities of different ministries and other government institutions towards the implementation of the policy.

3.4.3 The National Development Plan (NDP) (2019/20–2021/22)

The NDP was subsequently developed with the aim of accelerating inclusive economic growth and sustainable development in the country, as outlined in the National Development Strategy. The NDS identified four thematic areas as critical for the attainment of the Vision 2022; namely: (i) good governance; (ii) a vibrant and diverse economy; (iii) environmental sustainability; and (iv)) human capital and social development.[1] The overarching approach and strategy of the NDP is to build on the existing policy structures and successes in the economic and social sectors, but it also recognises the future and emerging challenges. It is noted that unless the government mitigates and invest against climate change risks and guarantees environmental sustainability, current investments will not be viable. The government's aspiration is to build resilience against climate change by developing appropriate intervention programmes.

The government is responsible for the three-year-rolling development plan, which is operationalised through each annual budget and implemented in various sectors through the respective ministries. The plan proposes various climate-related actions to address this national priority. Actions to raise awareness regarding environmental and climate change issues, notably in the education system, are also included, as are actions related to the development of climate smart and cost-effective agriculture technologies.

3.4.4 Nationally Determined Contributions (NDC)

The NDC of Eswatini was prepared through a national consultative process and submitted in 2015 (UNFCCC no date). It supports the achievement of Eswatini's developmental objectives of sustainable development, poverty eradication and enhanced adaptive capacity in line with the NDS, the NCCP, and broad climate change goals, objectives and priorities. The NDC covers both adaptation and mitigation measures and lists specific actions against each sector that will be undertaken as part of the NDC implementation.

Under adaptation, the biodiversity and ecosystem, water, agriculture, and health sectors are identified as the key focus areas for adaptation action. They are also identified as the foundation of adaptation action for Eswatini NDC implementation. All these sectors are closely aligned with the NDS, NCCP and NDP. One of the key activities is the development of a National Adaptation Plan (by 2020) along with the aim to determine the level of climate risk the country is facing, reduce vulnerability by developing the adaptive capacity in a sector-specific manner, and also facilitate integration of adaptation in a coherent manner into the national development planning process through existing policy mechanisms. A cross-sectoral policy analysis clearly demonstrates that these four sectors have been justifiably and sufficiently covered and included all the policy goals and objectives, with a view to create policy, institutional and financial safeguards to build resilience in these sectors.

On the mitigation side, although it is recognised that Eswatini is not a high contributor to global GHG emissions, the country nonetheless stated its commitment to reduce GHG emissions conditionally through several mitigation measures. In this context, the energy and transport sectors are identified as key potential sectors. In the energy sector, the country has committed to double the energy mix by 2030, relative to 2010 levels, through the introduction of on- and off-grid small-scale decentralised renewable energy projects. Similarly, in the transport sector, the country aims to introduce commercial use of ethanol in petrol by 2030, which is likely to have a significant impact on transport sector emissions. In addition, the need to establish a robust GHG inventory, mechanism to establish the emissions baseline, and the need for a monitoring, reporting and verification system are also emphasised in the NDC.

The country is currently going through the process of NDC revision under the NDCP programme, supported by several international and regional development partners, including the Commonwealth Secretariat through its Climate Finance Access Programme. The revised NDC was expected to be submitted in the second half of 2021. The scope of revision of the NDC includes further enhancing the scope of adaptation and mitigation measures and facilitating its implementation framework. It is stated that the first NDC had no implementation plan, costing or monitoring tool, which presented a challenge.[2]

The ongoing revision is likely to address these challenges and include practical implementation measures, along with costings for both mitigation and adaptation measures.

The Ministry of Tourism and Environmental Affairs (MTEA) and the Ministry of Economic Planning and Development (MEPD) are spearheading the revision of the NDC.

3.4.5 National Climate Change Strategy and Action Plan

In 2012 the Government of Eswatini, with support from UNDP and the Common Market for Eastern and Southern Africa (COMESA), commenced the process of developing the National Climate Change Strategy and Action Plan (NCCSAP) for the period 2014 to 2019. The main objective of the NCCSAP was to provide for a systematic approach to deal with the adverse effects of climate change in a manner that contributed to the achievement of sustainable development, the eradication of poverty and the enhancement of adaptive capacity for the country and its people.

During the development of the NCCSAP, which was developed through a highly participatory process, the need to formulate a National Climate Change Policy to provide the overarching policy framework on climate change was identified and developed in 2016.

3.5 Sector analysis

As emphasised in earlier sections of this report, climate change is adversely affecting all key sectors of Eswatini's economy, and it is also established that these impacts are likely to intensify in future. The National Climate Change Policy 2016 noted that some of the climate change impacts being experienced included significant variations in precipitation patterns, higher temperatures, and the increasing frequency and intensity of severe weather events such as droughts, floods and cyclones. These changes negatively impact, inter alia, agricultural yields, biodiversity, forest harvests and availability of clean water (The Kingdom of Swaziland, Ministry of Tourism and Environmental Affairs 2016). This section presents the key sectors of the economy and analyses how these sectors are likely to be impacted due to climate change. Given the strong interlinkages of these sectors with rural livelihoods and their climate sensitivities, the primary focus of the sector analysis is evaluating the socioeconomic impacts on rural populations.

3.5.1 Agriculture and food security

The agricultural sector is undoubtedly the critical mainstay of local livelihoods, contributing approximately 9.5 per cent of the country's GDP, with nearly 70 per cent of rural population dependent on subsistence agriculture practices (UNFCCC no date). The sector is highly vulnerable and particularly sensitive to the impacts of climate change. Increasing heat and water stresses, and extreme weather events such as droughts, cyclones, floods and extreme heat and cold, as well as climate-associated pests and diseases, have all been negatively impacting agriculture production. The *Eswatini Annual Vulnerability Assessment and Analysis Report 2016* noted that 'The effects of the El Nino were evident throughout the country as agricultural activities were hindered'. Area planted declined significantly, as a 65 per cent drop was observed compared to the previous season (2014/15). This had a significant impact on the overall crop production, especially maize as the stable food for the country (Swaziland Vulnerability Assessment Committee 2016).

It is predicted that yields for all staple cereals, especially maize, will fall sharply with 1–2°C changes in temperature and more erratic rainfall patterns. Consequently, it is predicted that the Highveld will be unsuitable for growing maize by the year 2050, which will have far-reaching implications for a large proportion of the rural population. Similarly, sorghum, beans and potatoes will be affected. The forecasted reduction in maize, sorghum, beans and potato yields indicates a likely negative impact on the country's food security and national food balance sheet, which is already facing difficulties. It was reported in the *Vulnerability Assessment and Analysis Report 2016* that the overall country's requirement for cereals (maize, wheat and rice) was 245,430MT, while the domestic availability was 48,520MT. This translated into a domestic shortfall of 196,910 MT, with the shortfall supposing to be met through imports – which were estimated at 291,000MT. Commercial imports stood at 191,000MT and food aid was estimated at 100,000MT (ibid).

Similarly, livestock production has not been spared and is being affected by climate change. In particular, persistent drought conditions have had severe impacts on cattle and these are likely to worsen in the coming years. Cattle deaths between May 2015 and May 2016 were 67,120 heads, which accounted for 11 per cent of the total cattle population, compared to the annual cattle mortality average of 5.9 per cent. Heat can directly reduce animal activity, feeding, growth and productivity, and it can also impede reproductive activity. Increased water deficit stress can diminish forage and feed productivity, thus reducing animal growth, and milk and eggs production. Climatic conditions can change vector and disease transmission and incidence, the effects of which may be exacerbated by direct heat stress. Extreme weather events and inundation attributable to climate change may reduce forage and feed production areas and increase mortality. The urgency, therefore, is to build resilience in the agriculture sector to cushion the country from the vulnerabilities of the climate change.

Building resilience in the agriculture sector poses enormous challenges in the face of climate change. It requires reducing vulnerability, by minimising the impacts of climate change and raising adaptive capacity. For the agriculture sector to meet the food and income needs of current and future generations in the face of climate change, actions need to be taken and strategies implemented, both autonomously by individual farmers, and collectively by government, community groups and institutions.

3.5.2 Water resources

The impacts of climate change on water resources are well-documented for many countries. Eswatini has already been classified as a water-scarce country, where water supply comes from rainfall, surface water resources (rivers, dams, reservoirs) and groundwater. A variety of rivers traverse through Eswatini including the Mlumati, Komati, Lusutfu, Ngwavuma and Mbuluzi Rivers, with an estimated 4.5km^3/year of surface water, half of which originates in South Africa (The Kingdom of Eswatini, Ministry of Agriculture 2000). Increasing impacts of climate change are likely to alter the river-flow patterns, with the consequence of diminishing the water availability and use of water resources. The stream-flow of rivers in the country is projected to decrease by 40 per cent by 2050. This implies that many smaller rivers or their tributaries may permanently dry up due to a decline in precipitation. This is likely to adversely affect irrigated agriculture, domestic and industrial use, and hydropower generation capacity due to reduced river flows. Consequently, such areas as the Lowveld Region will be adversely affected, as they lack the capacity to cope with change in runoff

regimes and where the risk of loss of perennial water is high. These challenges will be aggravated by periods of prolonged droughts and floods.

Given that annual crops depend on water supply in growing seasons, seasonal changes in hydrological variables under climate change are of particular importance for the agricultural usage of water. Changes in precipitation patterns would necessitate changes in crop varieties, planting dates and cropping patterns, placing new requirements on farmers and agricultural research and development, as well as on extension services. With increasing demand for water, areas under water stress are projected to increase – affecting hundreds and thousands of the rural poor. This will pose a challenge to the country's attainment of sustainable growth.

The country, therefore, faces the challenge of how best to manage its water resources to ensure future water demand can be met, as water stress or shortage and a decline in agricultural production will pose a serious threat to the country's food security and to lives and livelihoods, especially of the rural poor. Consequently, improvements in water infrastructure and management, especially watershed management, can potentially mitigate the adverse effects of climate change.

3.5.3 Biodiversity and ecosystems

Biodiversity is an important resource for the Swazi people and the livelihoods of a large portion of the population depend on vast grassland areas and Lebombo Bushveld. Some of the uses and dependence on biodiversity include consumptive (food, fibre, fuel, shelter, medicine, etc.) and non-consumptive (ecosystem services and the economically important tourism industry). Studies show that different vegetation types will likely lose more than half of their current bioclimate area. This has significant implications on biodiversity and people's livelihoods, with most of the country's current vegetation types and species experiencing notable declines (Swaziland Government, Ministry of Tourism and Environmental Affairs 2021). Given their dependence on natural resources, most of the rural poor will be highly vulnerable to these biodiversity and ecosystem losses.

The impact of climate change on humans will also be compounded by climate change-induced alterations of the ecosystems, thus affecting the delivery of the ecosystems goods and services necessary to human life support systems. Commercial forests are also likely to be impacted. Furthermore, with the shift in rainfall patterns and increased temperatures, areas where commercial forestry was traditionally undertaken may no longer be suitable. In effect, new areas will have to be identified to advance commercial forestry.

Increased wildfires, resulting from heat stress and prolonged droughts, will accelerate biodiversity and forest loss. Forest and savannah fires contribute to climate change, both by causing loss of vegetation and soils that serve as carbon stocks and by releasing carbon (and other greenhouse gases) to the atmosphere by burning. As global warming increases, these fires are likely to get more intense and extensive and may result in significant ecosystem changes. These in turn would affect biodiversity through species loss or changes in species composition, particularly with the spread of invasive species.

3.5.4 Health

Most Swazi people live in rural areas, and most are vulnerable to the risk of climate change, as their marginal income provides little or no access to safety nets to protect against the threats posed by changing conditions. Some of the possible direct threats that climate change could pose to human health include morbidity and mortality due to thermal stress (that is, caused by heat stress and cold stress); vector-borne infectious diseases (for example, malaria); and diarrhoea and malnutrition. According to the World Health Organization (WHO), outbreaks of human diseases such as malaria, dengue, diarrhoea, cholera, typhoid and other vector-borne diseases coincide with the occurrence of extreme climate events such as droughts and floods.

Indirectly, climate change could cause injury and, in the worst case, deaths, as a result of landslides, flash floods and cyclones (strong winds). Respiratory diseases brought about by worsening air quality and ill health due to social dislocation and migration could be attributed indirectly to climate change. Those at greatest risk include the young, elderly and medically frail.

3.5.5 Tourism

Tourism accounts for 2.8 per cent of Eswatini's GDP and has the potential to grow. The country's tourism is largely based on wildlife and the

traditions and culture of the Swazi people. High levels of floral and faunal species diversity exist in various protected areas in the country. Recurrent droughts and flash floods are likely to affect these resources significantly. Wildlife in protected areas is surrounded by a plethora of human activities. Fragmentation and concentration of wildlife in the Lowveld and Highveld make them highly vulnerable, because the habitats will not respond quick enough to changed climate. As a result, wildlife will not be able to migrate to more suitable climatic conditions because of limited corridors between protected areas.

3.5.6 Energy

Most of Eswatini's energy is derived from fossil fuels, biomass and hydropower. The fossil fuel sources include crude oil, coal and natural gas. Biomass, especially wood fuel, constitutes a larger percentage of the total final consumption. Biomass is still the main fuel for cooking and heating in rural households and is also the primary source of electricity self-generation in the sugar, pulp and sawmill industries. Regarding hydropower, it is anticipated that Eswatini will experience a reduction in stream-flows and hence available water for hydropower generation. Changes in the frequency and severity of storms in Eswatini have and will continue to cause serious damage to electricity infrastructure and this results in disruptions to energy supply.

3.6 Strengths and weaknesses of climate change policy landscape

Over the period, a robust climate policy landscape has evolved in addressing the emerging climatic challenges evidenced from the development of the National Development Plan, the National Climate Change Policy, the National Climate Strategy and Action Plan and NDC and its ongoing revision. Similarly, efforts for integrating climate change into different sectors of the economy, through sectoral policies and regulations, indicate the evolution towards a holistic and integrated approach for building resilience. Another prominent feature of the overall policy development in the country is the strong involvement of all stakeholders (government and non-government), as well as endorsement from the high political and administrative levels. Many of the key policy developments (such as NCCP) have been issued by the Public Policy Coordination Unit, the Office of the Prime Minister. This consultative approach and high-level ownership have certainly facilitated the mainstreaming of climate change into the national development planning process, as is evident from the many policy and strategic documents.

In terms of areas for further strengthening, it was observed that some of the sectoral policies are inadequate in terms of in-depth integration and embeddedness of climate change considerations, particularly as part of long-term action plans. For example, the Eswatini Environment Action Plan (SEAP) and Urban Development Plans recognise the impacts of climate change; however, they fall short of integrating it as part of policy action. Another prominent area for improvement in the policy arena is to ensure a holistic and integrated approach, with climate change considerations in the implementation frameworks of different policies.

3.7 Institutional analysis

The Government of Eswatini fully recognises that climate change, and its variability, is severely impacting its population and national development objectives. The adverse impacts are likely to be intensified in the coming years and decades. The National Development Plan (2019/20–2021/22) duly notes that the government's aspiration is to build resilience against climate change by developing appropriate intervention programmes.

Since becoming a member of the United Nations Framework Convention on Climate Change (UNFCCC) in 1996 and signing the Kyoto Protocol in 2006, Eswatini has made significant progress in institutionalising climate action and planning and strengthening the governance structure in the country. The Ministry of Tourism and Environmental Affairs (MTEA) has the overall mandate to manage and co-ordinate the national climate action programme. This ministry also serves as the National Designated Authority for the Green Climate Fund (GCF), with the responsibility to approve readiness proposals and climate change mitigation and adaptation projects, and to interact with climate finance institutions. In recognition of the cross-cutting nature of the issue of climate change, demanding the active engagement and involvement of all the key ministries, the MTEA assumes the responsibilities as the central co-ordinating entity for facilitating action on climate change in a consultative and facilitative manner.

In 2010, the MTEA facilitated the establishment of the multistakeholder National Climate Change Committee (NCCC), which was endorsed by the cabinet in 2012. Members of the NCCC include representatives from the following ministries/ stakeholder groups.

- Ministry of Foreign Affairs and International Cooperation
- Ministry of Finance
- Ministry of Economic Planning and Development
- Ministry of Health
- Ministry of Agriculture
- Ministry of Natural Resources and Energy
- Ministry of Housing and Urban Development
- Eswatini Environment Authority
- Eswatini National Trust Commission
- Federation of Swaziland Employers and Chamber of Commerce
- Coordinating Assembly for Non-Governmental Institutions
- University of Eswatini
- World Vision
- Ministry of Tourism and Environmental Affairs
- Eswatini Bankers Association
- Association of Municipal Councils
- Eswatini Tourism Authority
- Eswatini Sugar Association

The primary role of the NCCC is to ensure effective co-ordination of climate change challenges across all economic sectors. The NCCC drives and oversees the climate change agenda and aims to promote education and public awareness campaigns on climate change. It also aims to guide the establishment of a technical board comprising representatives. Wide representation of the government ministries, civil society and the private sector in the NCCC makes it an effective national-level climate action committee. However, NCCC has not evolved to become a functional body – due to number of prevailing challenges.

Other bodies related to environmental management include the Ministry of Natural Resources and Energy, sectoral ministries such as those responsible for water and agriculture, Eswatini National Trust Commission (ENTC), Eswatini Environment Authority (EEA) and the National Disaster Management Authority (NDMA). Town councils, municipalities, universities, research centres, river basin authorities, development partners and non-governmental organisations (NGO), all have a part to play in mainstreaming climate change into their work and developing appropriate strategies (Pullanikkatil 2016).

Over the period, a number of key policy and legislative instruments developed by the Government of Eswatini further augmented the policy and institutional infrastructure in the country. A brief overview of some of these policy and legal instruments is presented in Table 3.1.

As indicated above, the institutional set-up in the country has been evolving in line and consistent with the understanding and requirements to deal with the emerging threats of climate change. Given the cross-cutting nature of climate change issues, several ministries and other national institutions have been assigned lead roles in different sectors and thematic areas.

Table 3.2 provides an overview of some of the different ministries responsible for different climate change-related issues.

3.8 Challenges in institutionalising climate change

At the national level, several barriers have prevented Eswatini from adequately building its technical and institutional capacity to adequately address climate change. Inadequate institutional and human capacity in the face of evolving international regulations and requirements, combined with increasing levels of climate-induced disasters and threats domestically, have maintained a constant pressure on the government to strengthen its national institutional capacity. Capacity constraints and limitations in dealing with the issue of climate change exist at all levels of government institutions and other implementing agencies. Combined with access to adequate resources, these constraints have hampered the implementation of several climate policy goals and objectives for the country. Eswatini has been heavily dependent on external technical support and financial assistance, based on project-based funding and emergency relief

Table 3.1 Key legal and policy instruments

Regulation/Act	Year	Details
The National Trust Commission Act	1972	The main feature of this measure is to ensure the protection of both cultural and natural heritage in Eswatini for future generations.
The Game Act (Amended)	1991	The Act includes laws dealing with the preservation of game, and to provide for the preservation of all types of wildlife.
The Waste Regulations	2000	The regulations apply to the management of solid waste and liquid waste disposed on and off land. They specify provisions for collection, storage and waste management facilities in line with the overall environmental policy of the country.
The Flora Protection Act	2001	This is an Act to protect the indigenous flora of Eswatini, aiming at protection and preservation of biodiversity and the ecosystem of the country, as part of the objective of natural asset management.
The Water Act and National Water Policy	2003/2018	This Act makes provision for the management and conservation of water resources, including groundwater, in Eswatini, for the granting of water rights, for the establishment of institutions, water user associations and irrigation districts, the control of pollution, and various other matters relating to water. The National Water Policy sets out the vision, intention and strategy of the Kingdom of Eswatini on the development and management of water resources.
Ozone Depleting Substances Regulations	2003	These regulations are to: (a) regulate the production, trade and use of controlled substances and products; (b) provide a system of data collection that will facilitate compliance with relevant reporting requirements under the Montreal Protocol; (c) promote the use of ozone-friendly substances, products, equipment and technology; and (d) ensure the elimination of substances and products that deplete the ozone layer.
The Water Pollution Control Regulations	2010	These regulations apply with respect to (protection of) water quality in Eswatini. Every water authority must exercise its powers in such a manner as to ensure, as far as is reasonably possible by the exercise of those powers, that at all times the water quality of each water body under its jurisdiction meets the water quality objectives.

Table 3.2 List of key climate change issues and responsible ministries

Key environmental and climate change issues	Responsible ministry
Overall climate change co-ordination, mitigation and adaptation policy development and implementation	Ministry of Tourism and Environmental Affairs (MTEA)
Environmental matters, air quality and pollution control	Ministry of Tourism and Environmental Affairs (MTEA)
Agriculture, food security, droughts and desertification	Ministry of Agriculture
Water security, energy and natural resources	Ministry of Natural Resources and Energy
Disaster risk reduction and disaster management	Deputy Prime Minister's Office
Industrial development and trade	Ministry of Commerce, Industry and Trade
Emergency and healthcare services	Ministry of Health
Provision of development financing at the grassroots level	Ministry of Finance

support from donors, because of climate-triggered disasters. While these support measures have indeed supported the country in dealing with emergencies, they have not entirely dealt with capacity building. This is particularly the case when it comes to adaptation and resilience building goals, which demand a pivotal role be played by national institutions and local stakeholders. GCF Readiness Proposal 'Building capacity to advance the National Adaptation Plan process in Eswatini' (Green Climate Fund 2018b) is targeted at addressing such capacity gaps and institutional weaknesses, by improving the co-ordination mechanisms for the National Adaptation Plan (NAP), aligning sectoral policies with adaptation requirements and strengthening stakeholder capacity.

Another challenge for government is improving co-ordination among the different ministries, government departments and other stakeholders. For instance, climate change adaptation remains the responsibility of the MTEA, which was assigned the central co-ordinating role. However, given the cross-cutting nature of adaptation measures, a co-ordination and leading role for other associated government departments and ministries is critically important for the design, preparation and implementation of different projects and programmes. This identifies the need for strengthening the capacity of the MTEA, along with active engagement by of other line ministries and departments.

It has also been identified that the National Climate Change Committee (NCCC), tasked with developing and co-ordinating programmes and projects for addressing climate change in line with the country's development priorities, has not been particularly effective – due to number of underlying challenges. The National Climate Change Policy, in discussing the institutional arrangements in the country, justifiably identifies a number of key areas for strengthening and improvements. Some of these areas are as follows (Government of the Kingdom of Eswatini, Ministry of Tourism and Environmental Affairs 2016):

- strengthen the internal capacity of the Ministry of Tourism and Environmental Affairs to address its existing and new tasks under the National Climate Change Policy;
- establish a National Climate Change Secretariat as a semi-autonomous institution under the Ministry of Tourism and Environmental Affairs;
- enhance the institutional and technical capacity of the National Climate Change Secretariat to serve effectively its roles as designated UNFCCC focal point and the secretariat of the Designated National Authority (DNA), among other functions;
- strengthen the existing NCCC, with a view to enhancing its performance and inclusive representation, including by relevant ministries and departments, local communities, gender and vulnerable groups and the private sector; and
- establish a National Climate Change Research Group to function as advisory organ to the ministry and the NCCC, on the basis of the progressing scientific knowledge on climate change and its impact on the country.

Notes

1 https://www.cabrisbo.org/uploads/bia/Swaziland_2019_Planning_External_NationalPlan_NatGov_COMESASADC_English_1.pdf

2 Public presentation by the Director of Meteorology at the Ministry of Tourism and Environmental Affairs (MTEA), Duduzile Nhlengethwa-Masina.

4. Climate Public Expenditure Review

4.1 Introduction

This chapter reviews and analyses the degree of overlap between climate change-relevant public expenditure, based on the methodology explained in the previous chapter, and the data and information received from the Government of Eswatini and gathered from public sources. Typical application of the methodology follows a three phased approach:

- **first**, identification of selected expenditure items having either an adaptation, mitigation or supporting components given the national climate action priorities;
- **second**, classifying the line items using a typology of themes and associated tasks, which are specifically designed to cater to country-specific development needs and demands; and
- **third,** assessing the relevance of these expenditures as a percentage of the total expenditure attributed to climate change.

As is the case of many developing countries, the biggest challenge to conducting the climate public expenditure review is the availability of data and information related to climate change expenditures. In many countries, clear and specific bifurcation of climate change expenditure in national budgets is not recorded and/or accounted for. Public expenditures in national budgets are arranged through established budget lines within the budget document and allocated to different ministries and institutions in line with their budget proposals and portfolios. Climate change being a cross-cutting matter, many development-related projects and programmes may have mitigation and/or adaptation elements, but the extraction of climate change-related expenditures remains a challenge.

In the case of Eswatini, this assignment faced similar challenges. Accessing development financing and budgetary data and information for the last five years (2015–20), with allocations for climate change-related information, was a challenge.

However, the Ministry of Finance was able to compile the climate-related public expenditures for the period of 2015–20, taking into the consideration projects and programmes adopted and approved in national budgets. This climate expenditure analysis and review is built on the data and information received from the government.

4.2 Overview of capital budgeting process in Eswatini

Eswatini has limited capacity to track and co-ordinate climate finance, and to budget for climate change, as well as critical capacity shortfalls to mobilise climate finance, stemming from a lack of comprehensive climate finance monitoring, reporting and verification. Currently, the country has a system to track international funding coming to the country through the Aid Coordination Management Section (ACMS) of the Ministry of Economic Planning and Development (MEPD). The *External Assistance Report* is published annually by the ACMS, while the monitoring and reporting considers 11 sectors: agriculture, health, education and training, water and sanitation, infrastructure, governance, social protection, capacity building, information technologies, fuel and energy, and the environment. Climate change is considered a sub-sector within environment.

In terms of accounting and budgeting, the Government of Eswatini is currently using a Treasury Accounting System (TAS), and the Invoice Tracking System (ITS), which is compliant with TAS. The ITS provides valuable information that enables the preparation of commitment plans that are better captured in the budget preparation process, the centralised approval of commitments, and more comprehensive and effective commitment controls. The Ministry of Finance is currently designing a comprehensive system for budget preparation, accounting and reporting, the Integrated Financial Management Information System (IFMIS). Development of this system is expected to take several years to complete.

The MEPD, through the Macroeconomic Unit, issues the 'Macroeconomic Framework' paper. The Ministry of Finance issues a budget call circular: this is a call for ministries to submit budgets for the medium term. It also outlines resource envelopes, policies and guidelines to adhere to. A timetable line-up for ministries to table their budget requests to the Planning and Budgeting Committee (PBC) is issued thereafter. MEPD issues its own planning circular, which is derived from MOF budget call circular to line ministries, but focusing on the capital aspect. It outlines priorities, guidelines and policies to be adhered to as ministries formulate their capital budget requests. Guidance is also given on the availability/non-availability of a budget for new projects. Priority is often given to ongoing capital projects, based on their performance, and projects that are in alignment with the National Development Plan. Sectoral officers give hands-on guidance to line ministries.

Ministries table their requests to the PBC, which is a committee that comprises ministers from the central agencies (that is, MOF, MEPD and the Ministry of Public Service), senior management and the Technical Working Group (officers from the three central agencies). MEPD then consolidates the capital budget submissions, after PBC sessions have been concluded. Officers consolidate and implement cuts as per the resource envelope, based on priorities as guided by the minister, principal secretary and chief economist.

PBC meets regularly to deliberate on the consolidated budget proposals (recurrent and capital), and to implement further cuts as per the given budget ceilings, considering national development priorities. The preliminary budget is also presented to all cabinet ministers in their annual retreat. The minister of finance tables the budget to parliament and the nation through his/her budget speech. The budget is debated and finally approved by parliament through the Appropriation Bill. The budget is uploaded to the system at the beginning of the new financial year and budget execution commences.

4.3 Climate change expenditure data and information

The Ministry of Finance provided compiled climate change budget allocations and actual expenditures data and information for the period 2015–20.[1] No additional data on climate change-related public expenditure were available, hence the analysis was based on the data and values provided by the government. The information contains the yearly breakdown of projects and programmes approved through the national budgets. It also contains the information on the implementing agency, total budget allocation and actual expenditures incurred. A review of the brief introduction to listed projects gave an idea that the listed projects clearly contained the mitigation and/or adaptation components. It was difficult to discern the cross-cutting projects from the information provided.

4.4 National budget-based climate expenditures

Based on the information and data submitted by the Government of Eswatini, the tables below provide the summarised climate change-related expenditures from the national public expenditures (national budgets) allocated to different ministries, based on their projects and programmes. Since ministries have defined sectors (for example, water, agriculture, public infrastructure), the allocated budget is directly related to the specific sectors of the economy. It may be noted that this allowed a clear bifurcation of sector-specific climate expenditures earmarked and allocated for projects and programmes being implemented. However, it also presented a methodological and data analysis challenge of not being able to quantify the apportioning of expenditures for cross-cutting projects. From the information, it was observed that some projects were cross-cutting in nature and there were also multiple benefits, but lack of data did not allow analysis nor drawing of conclusions in a confident manner.

As a general overview, it can be observed that the government allocated a fair amount of public money to climate-related projects and programmes during the period. Increases in the number of projects remained consistent; however, budget allocations have steadily increased over the years. Adaptation measures have been the predominant focus and priority of the government, with very few projects (and associated budget allocations) focusing on mitigation. Almost all the mitigation projects were related to rural electrification programmes and ethanol blending.

Table 4.1 Climate change-related expenditures

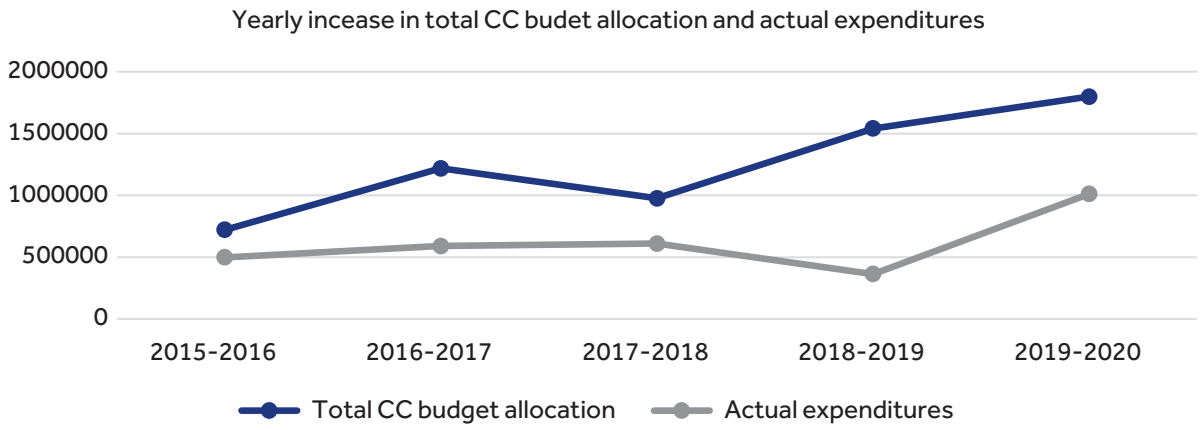
Climate change-related expenditures, financial year 2015–16	
Total number of projects	31
Mitigation-related expenditures	500
Adaptation-related expenditures	720,521
Cross-cutting	
Total budget allocation	720,521
Actual expenditures	498,706*
Climate change-related expenditures, financial year 2016–17	
Total number of projects	36
Mitigation-related expenditures	59,500
Adaptation-related expenditures	1,159,143
Cross-cutting	
Total budget allocation	1,218,643
Actual expenditures	589,513
Climate change-related expenditures, financial year 2017–18	
Total number of projects	31
Mitigation-related expenditures	55,338
Adaptation-related expenditures	920,175
Cross-cutting	
Total budget allocation	975,513
Actual expenditures	609,674
Climate change-related expenditures, financial year 2018–19	
Total number of projects	33
Mitigation-related expenditures	45,658
Adaptation-related expenditures	1,495,639
Cross-cutting	
Total budget allocation	1,541,297
Actual expenditures	364,013
Climate change-related expenditures, financial year 2019–2020	
Total number of projects	20
Mitigation-related expenditures	27,000
Adaptation-related expenditures	1,770,992
Cross-cutting	
Total budget allocation	1,797,992
Actual expenditures	1,010,793

* Note: Presented in Eswatini local currency, lilangeni (E).

4.5 How much Eswatini is spending on climate change

In the period from 2015–20, the Government of Eswatini approved funding for a total of 40 climate change-related projects, extending over the entire period of 2015–2020. Most of these projects have a lifetime of over five years, with very few new projects added each year. Aggregate budget allocations increased in the period from 720,521[2] Swazi lilangeni (E) to E1,797,992. This shows a 149 per cent increase over the period of five years in

Figure 4.1 Yearly budget allocation and actual expenditure (2015–20)



total budget allocations for climate change-related expenditures from public finances. In the same period, the government allocated total funds of E6,253,966 for 156 projects in 11 ministries (implementing agencies). Some ministries are responsible for more than one sector, hence, funds are allocated in all key and vulnerable sectors. Some cross-cutting projects were observed from the project description details; however, in the absence of data on bifurcation of funds between different sectors and also due to inadequate information to determine the proportional sectoral relevance (benefits), it was difficult to determine the true nature and share of cross-cutting projects. For the sake of simplification and practicality, projects were considered in line with the core ministries.

Given the lifecycle of projects spanning over a year, many projects and their approved funding was in fact a continuation of projects approved in the previous years. In this context, the project might not be considered a new project, but new expenditures are approved and incurred on a yearly basis.

Figure 4.2 shows the division of projects on an annual basis across different ministries and divisions (Ministry of Natural Resources and Energy, Ministry of Agriculture, Ministry of Health, Ministry of Housing and Urban Development, Ministry of Economic Planning and Development, Ministry of Public Works and Transport, Ministry of Education and Training, Ministry of Tourism and Environmental Affairs, Fire and Emergency Services). As can be

Figure 4.2 Ministerial distribution of projects (2015–20)

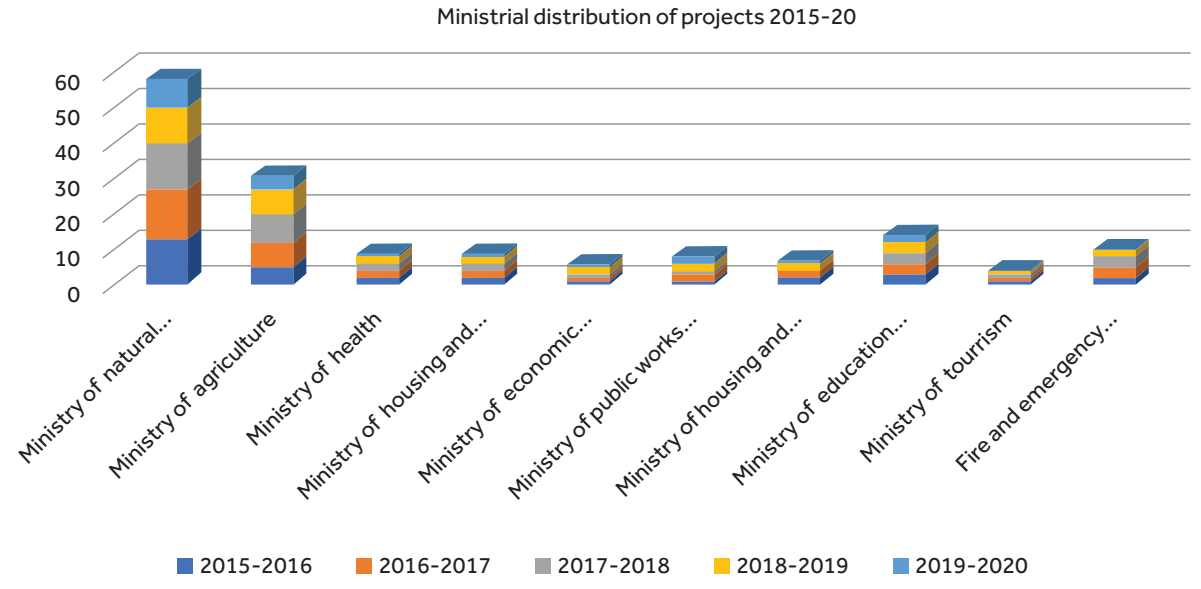
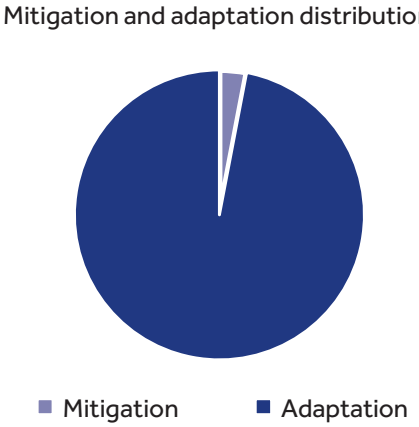


Figure 4.3 Mitigation and adaptation distribution



seen, the Ministry and Natural Resources and Energy and the Ministry of Agriculture received the major share of projects and climate-related budget allocations. While this might be justified since the mandates of both ministries include some of Eswatini's most vulnerable sectors, the low allocation to some other critical sectors (for example Health and Urban Development) was observed. This pattern of climate change-related expenditures highlights the need for an overarching climate change financing framework, which can help streamline budget allocations and ensure a holistic response to climate change challenges in the country in line with emerging threats.

As noted in Figure 4.3, and emphasised in many policies and strategic documents, adaptation has been the main focus of government support regarding the underlying climatic threats. More than 95 per cent of total budget allocations have been in the area of adaptation, whereas mitigation has attracted very low budget allocations and an even lower magnitude of actual expenditures.

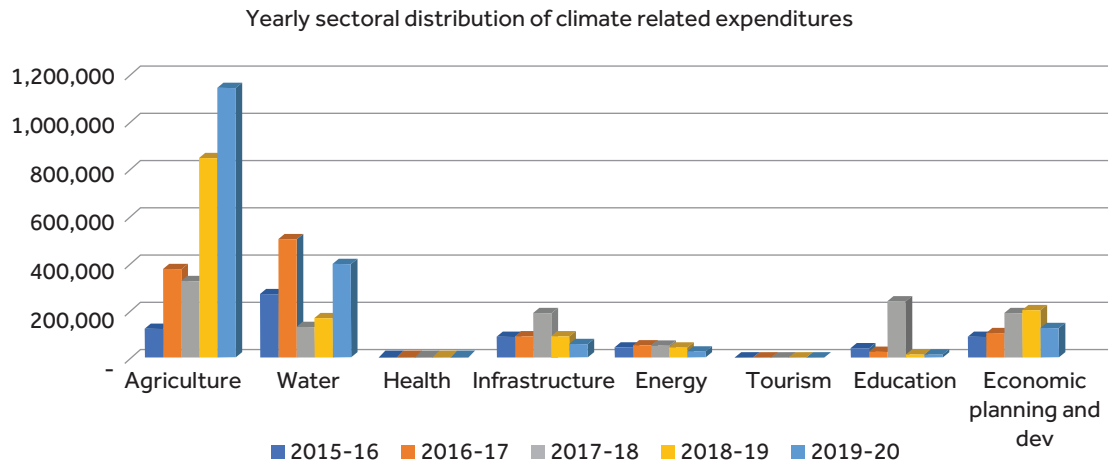
Actual climate change expenditures were reported to be E3,072,699, which was less than half (49.13%) of total budget allocations. As shown in Figure 4.1, the difference between climate change budget allocations and actual expenditures increased over the period of five years, although the actual expenditures lagged behind the total budget allocation for the same period. This shows that the implementing agencies have not been able to fully implement the allocated budgets, either due to unavailability of funds in a timely manner and/or due to inadequate institutional capacity for full and timely implementation of projects and schemes.

The data and information further showed that the distribution of climate-related projects (and consequently the budget allocations) varied across government institutions significantly. The largest number of projects were approved for the Ministry of Natural Resources and Energy. Budget allocations for a total of 58 projects (37% of all projects) were approved, followed by the Ministry of Agriculture with 31 projects (19.8% of all projects). Many of the projects approved in these two ministries were related to the water and sanitation sectors, which are directly involved in adaptation measures for climate change impacts. In terms of absolute numbers, more than 50 per cent of all climate change-related expenditures over the period of five years were distributed between the Ministry of Natural Resources and Energy and Ministry of Agriculture. The remainder was divided between the remaining ministries and divisions and government departments. Yearly distributions of climate change expenditures showed that the agriculture and water sectors were the two

Table 4.2 Climate change-related expenditures for different sectors

Current expenditures	*2015–16*	*2016–17*	*2017–18*	*2018–19*	*2019–20*
Agriculture	129,971	378,496	332,201	862,587	1,136,692
Water	274,950	508,848	137,074	185,200	408,300
Health	8,000	8,000	8,000	4,000	2,500
Infrastructure	90,000	95,850	205,000	93,000	58,500
Energy	47,150	59,500	58,338	47,508	27,000
Tourism	800	3,000	1,500	1,500	0
Education	32,950	28,000	230,000	5,000	5,000
Economic Planning & Dev	80,000	100,000	180,000	192,500	120,000

Figure 4.4 Climate-related expenditures



predominant sectors where the government allocated the highest proportion of public expenditure. This corresponded to the vulnerability assessment and sectoral studies, which clearly showed that agriculture and food security and water were the two key critically vulnerable sectors in the country.

Notes

1 The datasheets are annexed in this report.

2 All monetary figures are shown in Swazi lilangeni (E) and in millions.

5. Climate Finance Flows and Landscape

5.1 Public climate finance donors to Eswatini 2015–2019

Eswatini received approximately US$209 million (M) from international financiers during the implementation of the first Nationally Determined Contribution (NDC) (2015–19). Approximately US$103M was leveraged as co-finance, mainly from domestic sources. The total climate finance mobilised in the 2015–19 period was thus approximately US$312M. This support was mobilised through 30 climate change-related projects. Eight (8) of these projects had been completed, eighteen (18) were ongoing, one (1) had been approved but had not yet started, and three (3) were in the process of being approved at the time this study was conducted.

Regarding amounts mobilised, the main external sources of climate finance for Eswatini in 2015–19 were the European Development Fund (EDF) through the Delegation of the European Union (EU) to Eswatini (US$62M), the World Bank (WB) (US$45M), the Global Environmental Facility (GEF) (US$18M), the African Development Bank (AfDB) (US$16M), the Organization of the Petroleum Exporting Countries (OPEC) Fund for International Development (OFID) (US$14.1M), the International Fund for Agricultural Development (IFAD) (US$10M), the Italian government (US$4M) and the Green Climate Fund (GCF) (US$3.6M). Projects that were awaiting approval at the time of writing were by the GCF (two projects, US$34M) and the GEF (US$0.9M).

In terms of number of projects, the main sources of climate finance for Eswatini in that period were the GEF with seven (7) projects, the GCF with six (6) projects, AfDB and EDF with four (4) projects each, and the Italian government and UNDP with two (2) each. WB, IFAD, the Food and Agriculture Organization (FAO) of the United Nations, COMESA and OFID all had one (1) project each. All the GCF-approved projects were for readiness activities. There were two that were awaiting approval and several still being developed for the GCF at the time of writing.

The external funding for climate action received in Eswatini during the 2015–19 period was used for projects by key government agencies in the sectors affected by climate change. In terms of amounts received, Eswatini Agriculture Development Agency (ESWADE) received (US$48.5M), Eswatini Water Services Corporation (EWSC, US$60M), the Ministry of Natural Resources and Energy (MNRE, US$30.1M), the Ministry of Agriculture (MOA, US$22.7M), the Ministry of Tourism and Environmental Affairs (MTEA, US$6.5M), Eswatini National Trust Commission (ENTC, US$5.4M) and the National Agricultural Marketing Board (NAMBOARD, US$0.6M). MTEA (US$31.7M), MNRE (US$0.9M) and World Vision Eswatini (US$2.4M) all had projects awaiting approval. In terms of projects implemented, MTEA was leading with nine, followed by ESWADE and MNRE (six each); MOA (three); EWSC (two); NAMBOARD and ENTC (one each). Projects that were implemented by the MTEA focused on the creation of an enabling environment for climate change mitigation and adaptation. ESWADE implemented most of the GEF-funded projects, focusing on water, agriculture and livelihoods of people living in rural communities. This institution also implemented the largest projects in terms of funding size.

Adaptation is clearly the priority in the country in terms of both amounts mobilised and number of projects. Adaptation funding in this period in Eswatini was greater than mitigation funding (US$254M versus US$5.5M, respectively). Funding for cross-cutting projects amounted to about US$0.8M, focusing on creation of an enabling environment. Out of the 30 projects, 19 focused on adaptation (in the water, agriculture and biodiversity sectors), 5 on mitigation (energy sector), while 6 were cross-cutting. From the three projects awaiting approval at the time of writing, one focused on mitigation (US$0.9M), one was cross-cutting (US$2.4M) and one was for adaptation (US$37M). The country's climate change priorities based on external funding provided are clearly centred on adaptation, while the development targets of the country also have strong linkages to adaptation.

Another reason could be that mitigation projects, especially those related to energy, are financed by the private sector in Eswatini.

The projects have been implemented throughout the country, with the Lowveld region leading with adaptation projects – as it is the driest region of the country. Eighteen (18) projects were at a national scale. Of these, nine were aimed at creating an enabling environment at the national level, while the other nine had combined actions at both the national and local levels. Most of the projects have been implemented in rural areas, where a majority of the Eswatini population is based, about 75 per cent. However, there are strong ties between rural and urban areas, given that employment in urban areas is the major source of income and livelihoods in the country. Many rural inhabitants rely on agriculture to sustain their livelihoods, and this sector is highly vulnerable to climate change.

The external funding has been mobilised more through grants than through loans. Grant funding amounted to US$125M and loan funding amounted to US$94M. In terms of number of projects, 22 projects received grant funding, 6 projects received loan funding, and 2 projects received a blend of loans and grants.

5.2 Private climate finance in Eswatini 2015–19

Information on private sector climate finance in Eswatini is not well documented. Several private sector entities were engaged in the development of the GCF Country Programme for Eswatini, under the GCF Readiness Support Project. A survey was conducted during the development of this technical assistance process among these entities to find out if they had implemented or were planning to develop climate change-related projects.

The survey showed that most private sector entities in Eswatini were still at the infancy stage in the development of climate change-related projects, especially regarding adaptation projects. There were two privately financed mitigation projects at an advanced stage of development in the country, one (1) by Eswatini Energy Regulatory Agency (ESERA), with Independent Power Producers (IPPs), and one (1) by Wundersight Investment. Both projects were targeting the installation of solar power in Eswatini. The Wundersight Investment project had been approved at the time of writing, but not yet started, while the Solar Procurement by ESERA was still in the approval process. The total funding for the projects was estimated at US$69M. The ESERA procurement financing was yet to be confirmed, but it was expected that IPPs would seek loans and equity funding. Wundersight Investment had received a grant from the Energy and Environment Partnership (EEP), which amounted to 50 per cent of the total project cost. At the time of this research, the company was still in the process of mobilising co-finance for the project in the form of equity and loans.

5.3 Public and private institutions currently hosting funds in Eswatini

There are four existing funds in Eswatini that have been linked to climate change activities. Their experience may prove instructive for future efforts to mobilise climate finance in the country.

5.3.1 National Environment Fund – Eswatini Environment Authority

The Eswatini Environment Fund was established under the Environmental Management Act as a corporate body with perpetual succession. The overall objective of the fund is to promote environmental sustainability at the grassroots level in the Kingdom of Eswatini. Specific objectives are:

- to aggregate funds from different sources to ensure sustainable funding for programmes, projects and activities that provide for and promote the protection, conservation and enhancement of the environment and the sustainable management of natural resources;
- to provide financial support for activities aimed at the enhancement, protection and conservation of the environment and the sustainable management of natural resources and supporting community participation in these activities; and
- to enhance and restore the environment of Eswatini.

Funds are disbursed through a call for proposals from communities with project ideas in the areas of:

- Ecosystem restoration and rehabilitation
- Waste management
- Adaptive research
- Climate change adaptation
- Ecosystem and sustainable land management
- Integrated water resource management (IWRM)
- Sustainable forestry management
- Promotion and protection of biodiversity
- Renewable energy and energy efficiency technology
- Pollution management
- Water storage, conservation
- Green entrepreneurship

5.3.2 Youth Enterprise Revolving Fund – Ministry of Sports, Culture and Youth Affairs

Eswatini Youth Enterprise Revolving Fund (YERF) is a Category A parastatal established by the Government of the Kingdom of Eswatini in 2009. The company was established through Legal Notice No.179 of 2009. It is further regulated under the Public Enterprises (Control and Monitoring) Act of 1989. The parastatal operates under the authority of the Ministry of Sports Culture and Youth Affairs. The main purpose of the fund is to make loans that promote youth employment and alleviate poverty among young people between the ages of 18 and 35 years old.

The YERF has three funding categories and funding thresholds:

- Individuals – US$3,300
- Companies – US$6,600
- Cooperatives – US$9,900

The funding is capitalised through subventions made by the Eswatini government and through loan repayments. Disbursements from the fund are made through an intermediary financial institution. Applicants submit their proposals to the YERF and appraisals of the applications are carried out by the intermediary financial institution responsible for disbursing and monitoring the fund.

5.3.3 Rural Development Fund – Ministry of Tinkhundla Administration and Development

The Rural Development Fund was established through Legal Notice No. 3 of 2015 under the Finance and Management and Audit Act of 1967. The fund is managed by the Micro Projects Unit under the Ministry of Economic Planning and Development on behalf of the Ministry of Tinkhundla Administration and Development (MTAD).

The objective of the fund is to alleviate or eradicate poverty in each of the four administrative regions of Eswatini, through infrastructure development, improved service delivery and viable projects/schemes that will provide jobs and income for rural citizens of the country. The national rural electrification initiative has been a major beneficiary of the Rural Development Fund.

The fund is capitalised through the government budget for the MTAD. Each Inkhundla (singular of Tinkhudla – which are electoral constituencies) in the country can submit applications for development projects in the area. Groups of people or development schemes from different Tinkhundla in the country can submit applications for the fund. The size of the fund varies depending on the government's annual budget: in 2016/17, the allocation was E88 million (US$5M).

The fund is disbursed in a participatory manner, where project beneficiaries are involved in project development and implementation. These beneficiaries further provide co-finance of these projects to ensure their sustainability. As with the other funds described in this section, a major challenge is reliance on government resources for capitalisation; these amounts may increase or decrease depending on fiscal conditions.

5.3.4 Community Development Special Fund – Ministry of Economic Planning and Development, Micro Projects Unit

The Community Development Special Fund (CDSF) was established through Legal Notice No. 9 under the Financial Management Act of 1967. The main

purpose of the fund is to implement and deliver infrastructure projects that will improve access to social services and contribute to improved livelihoods for citizens of the country. The fund is capitalised through the government annual budget and is disbursed through community-driven projects. The fund focuses on social infrastructure projects, including potable water supply and sanitation, suspension bridges, roads, dip tanks, and rural electrification. The fund finances projects that respond to the needs of people living in rural communities.

6 Conclusions and Recommendations

6.1 Summary of conclusions

As illustrated, the purpose of this study was to review the policy and institutional set-up in Eswatini, and also to undertake an climate expenditure review based on the budgetary and climate finance information gathered. The study has highlighted several strengths and successes the government have achieved over the period, in particular, in terms of erecting strategic and policy approaches and aligning its institutional infrastructure with the emerging demands of climate change. It has also revealed several policy gaps and limitations the government has been facing, preventing it from achieving full implementation of its polices and being able to achieve some of its climate priority actions. Consequently, the country continues to deal with the effects of climate change, such as natural disasters, persistent drought conditions, loss in agricultural production, and ecosystem and biodiversity losses. Several studies have pointed out that persistent climatic vulnerability affecting sectors might have indirectly contributed to challenges to meeting the broader sustainable development, inclusive economic growth and resilience building objectives set in National Development Strategy (Vision 2022), the National Climate Change Policy and the (I)NDC.

On the institutional side, this document has intensely highlighted that the cross-cutting nature of climate change and its multifaceted impacts require a comprehensive response from different parts of the government. It has particularly revealed the ways and gaps in which climate change financing and its monitoring takes place, through the broader process of public budgeting and expenditure at the national level. While the budgetary planning process and public sector development financing is robust and well entrenched at different levels and organs of the government, climate change expenditures are not accounted for in a systematic manner. These gaps and weaknesses will be put forward as recommendations for the government to consider, with the aim to strengthen the government's mechanisms to better manage its climate action programme in the country.

This chapter separately defines conclusions for policy and institutional analysis and climate expenditure reviews, followed by a set of recommendations.

6.2 Key policy analysis findings

There has been significant progress and improvements in policy development and support for climate change in Eswatini, such as the National Climate Change Policy (2016), National Development Strategy and Nationally Defined Contributions, just to name few. In addition, broader national policy frameworks are complemented by specific policies and regulations for adversely impacted and threatened sectors, such as agriculture, water, energy and tourism. The National Disaster Management Act (2006), the Water Act (2003) and the Waste Management Regulations (2000) are a few such policy structures.

While the policies and regulations for dealing with the cross-sectoral impacts of climate change have strengthened over the period, with the increasing severity and frequency of climate-related challenges and disasters, there is still a need for further robustness of policies and strengthening of institutions. Several actions identified in the NDC refer to the further strengthening and aligning of policies with these emerging needs and climate change challenges. The government's long-term policy objectives for sustainable development and economic growth (NDS, NDP and NDC) convincingly recognise the needs for integrating climate change considerations at all levels and sectors. However, several prevailing challenges have not allowed for mainstreaming of climate change into national development planning processes. Implementation of policies has also faced challenges, mainly due to inadequate technical and financial capacities. This highlights a prime opportunity to mainstream climate change into policy-making, through a broad policy review and reform initiative, with the aim to ensure integration of climate change concerns across different polices.

6.3 Key institutional review findings

Progress on the country's institutional framework for tacking climate change has significantly evolved over the period. As mentioned above, MTEA has been assigned the central co-ordinating role, with core thematic and sectoral responsibilities resting with line ministries. The National Climate Change Committee, with a broad representation, was established to play a national co-ordination role and to set targets; however, the committee has not been able to function to its full capacity due to number of ongoing challenges.

Inadequate institutional and human capacity in the face of evolving international regulations and requirements, combined with increasing levels of climate-induced disasters and threats domestically, have kept the government under constant pressure to strengthen its national institutional capacity. Capacity constraints and limitations evidently exist within all government institutions, regardless of level, and within other implementing agencies, combined with lack of access to adequate resources. GCF Readiness Proposal 'Building capacity to advance National Adaptation Plan process in Eswatini' is targeted at addressing these capacity gaps and institutional weaknesses, by improving the co-ordination mechanisms for NAP, aligning sectoral policies with adaptation requirements, and strengthening stakeholder capacity.

Further, it is expected that the ongoing revision of the NDC will further recognise these institutional gaps and challenges, and will propose focused and targeted measured to address them in a systematic manner.

6.4 Recommendations for the consideration of government

i **Policy and institutional support for climate change integration into the national planning process:** While climate change is considered in several policy initiatives, climate change as a formal part of the national development planning process is yet to be fully realised. Through a broad policy review and reform initiative, it should be ensured that climate change is considered and integrated in all policies, and also that climate considerations are mandatory requirements for every development-related project approval process.

ii **Strengthen institutional frameworks:** It was concluded that there was considerable room for improving and strengthening the institutional framework in the country. It was also noted that climate change-related institutions continued to evolve, and the roles and responsibilities of different ministries were becoming clearer. Climate change is now being more actively considered; however, challenges persist, in particular due to inadequate co-ordination between ministries. Given the central co-ordinating role assigned to the MTEA, there is an urgent need to enhance its technical and institutional capacity. An assessment of its current capacity, along with its evolving role, could be undertaken to identify capacity gaps and address them through capacity building actions. The capacity building goals of the MTEA should also ensure that the ministry technically supports the line ministries to incorporate climate change into their policy, project and programme portfolios, developing synergies between different programmes and policy actions.

iii **Support in the functioning and operationalisation of the National Committee on Climate Change:** Technical, institutional and financial support must be provided for the functioning of the NCCC. Being the overarching high-level body with a broad representation and mandate for guiding the development and implementation of policies, the entity could be extremely effective.

iv **Integration of climate change into national budgeting process:** This CPEIR exercise has clearly demonstrated that climate change is not being considered in the national budgetary processes, which have not permitted ministries and other institutions to fully account for all the climate change-related budget and expenditure accrued. Sector-based expenditures and programmes are driven by sectoral policies and various ministries. Based on the experience of other countries, it can be envisaged that projects and programmes might have strong climate change relevance, but due to the non-existence of specific climate change tagging and accounting mechanisms, this is not being captured and accounted

for. It is recommended that a system for functional budget tagging of climate change expenditures classification be established and all relevant national staff trained on the use and implementation of this system.

v **Addressing the cashflow situation for climate budget allocations:** The data review showed that actual climate expenditures were less than half of the budgetary allocations over the years. This is recognised as a problem resulting from the cash-flow situation in the country, which has not allowed the government to allocate the approved funds for the projects and programmes. It is believed that, first, funds from different donor agencies and an enhanced flow of climate finance can address this challenge to some extent. Second, through the involvement of the private sector, more finances can be mobilised for climate purposes.

vi **Develop and implement a climate finance tracking tool:**In addition to public climate change expenditures, a significant amount of climate finance flows into the country from regional and international donors. Although the flow of public funds is well documented and to some extent tracked, it is understood that a significant amount of climate finance is also being spent by non-government actors and by the private sector. Such contributions often remain off-budget, but should be tracked, accounted for and acknowledged for a more comprehensive picture of climate finance expenditures. Further, such tracking would help in better utilisation of resources, by focusing on priority challenges.

vii **Identify mitigation and adaptation priorities in the revised NDC, along with financial requirements:** Ongoing revision of the NDC provides a good opportunity to further synthesise the mitigation and adaptation priorities, and also to evaluate the costs for NDC actions, both for mitigation and adaptation actions. This would allow the government to evaluate the need for financial resources, both internally and those to be mobilised from external sources.

viii **Sensitise policy-makers and stakeholders on the importance and rationale for climate change expenditures accounting:** Although a general level of understanding on climate change has improved with government officials and policy-makers, its technical and sectoral details and implications are not widely understood. Given its importance, it is recommended that policy-makers across all government departments should be sensitised on the importance and rational of climate change expenditure accounting and budget tagging.

ix **Develop a strategy for climate change awareness:** A comprehensive media and other means engagement strategy should be developed, to disseminate information on the importance of climate change investments.

x **Regularly update the CPEIR:** Building on this document**,** a regular update (based on the availability of human and financial resources) for the CPEIR is recommended, to enable the country keep abreast of its climate actions. This would help in communications under the UNFCCC's different requirements, to other climate funding institutions and government institutions, and could serve as a vital resource mobilisation tool for climate financing for Eswatini. The updates could range from an annual to four- or five-year reviews, which could coincide and contribute critical inputs for successive NDC, NAP and other similar climate documents/processes, their review cycles and implementation plans.

Annexes

Annex I: Information and data request for CPEIR for Government of Eswatini

	Information/data requirements	Remarks
	Policy and institutional analysis	
1	Established implementation mechanisms and support structure of the National Climate Change Policy – Implementation action plans – Core responsible stakeholders – Review process, if any – Periodic implementation status data/ reports	National Climate Change Policy is the key policy document. A review and analysis of its implementation status will demonstrate the strength of the policy, institutional setup and also overall robustness of the climate action agenda and programme in the country.
2	– Assessment of financing of the Nationally Determined Contributions (NDC) – Analysis of different funding options for the implementation of the NDC	Implementation of NDC of Eswatini is conditional to financial support. It will be important to see if an assessment of financing needs of implementation of NDC has been undertaken.
3	National Adaptation Plan (NAP) implementation action plan and status – Key sectors made most vulnerable by climate change are expected to be the focus of the adaptation measures – Status of implementation of activities under the GCF Adaptation Planning Readiness Grant (approved in 2018)	NAP was adopted through a consultative process and publicly available information shows that sectoral technical teams have been established. A review of data and information on the progress of the implementation of the NAP will show how adaptation planning and implementation has overall strengthened in the country.
4	National Development Strategy 1997–2022 – Review of the implementation – Review of role and scope of climate change in the National Development Strategy	Environmental management and sustainability are one of the key objectives in the document. It will be useful to review the overall implementation status of the National Development Strategy, lessons learned etc.
5	Socioeconomic development plans, sectoral strategies	Not much sector-based information and data have been found publicly. It will be useful to have this information, for undertaking the policy and institutional review.
6	Disaster risk financing options and established arrangements	What are the policy and institutional arrangements for the disaster financing in the country?
7	Capacity assessment documentation for relevant institutions (key climate change-related ministries)	Details of capacity assessment exercise, capacity gaps assessments undertaken for key ministries responsible for climate action
8	Climate governance structure – multistakeholder Steering Committee	Mandate, goals and objectives. Other documents related to the role and functions of the committee.

	Information/data requirements	Remarks
		(*Continued*)
	Climate public expenditure review	
9	Public finance management system documentation	Information on key elements of the public information management systems, with respect to economic governance and financial management in practice in the country.
10	Public development financing budgets, actual expenditures reports, investment reports.	Public budget data and reports over a period of five years (2015–20).
11	Sector-specific public financing data	Data and reports over five years.
12	Expenditures related to climate action (mitigation efforts, adaptation measures and cross-cutting issues, disaster financing etc.)	Data and reports over five years.
13	Tax incentives for climate actions (which is foregone revenue to the government)	Data and reports over five years.
14	Budget data related to development financing	Data and reports over five years.
15	Data on dedicated extra-budgetary climate funds	This might be accessed due to disaster financing.
16	Data on investment sources from State Owned Enterprises (SOEs), public–private partnerships (PPPs) and the private sector	
17	Climate finance flow data for the last five years	

Annex II: Questionnaire – CPEIR

To conduct the CPEIR study in Eswatini, a thorough review of National Development Plans, the Third National Communication to the UNFCCC, Nationally Determined Contributions, the National Climate Change Strategy and Action Plan, and the 2015 National Climate Change Policy need to be conducted.

Eswatini has contributed little to greenhouse gas (GHG) concentrations in the atmosphere. Estimates put Eswatini's 2010 emission inventory at 0.8 MtCO2e (including the Land Use, Land-Use Change and Forestry [LULUCF] sector), meaning that Eswatini's emissions represent less than 0.002 per cent of global emissions. Despite not emitting large quantities of GHGs, Eswatini is facing severe climate change impacts. Variable precipitation patterns, droughts, desertification, higher temperatures and increased storm intensities have already affected the country's key economic sectors. As a developing, lower-middle income country, with 69 per cent of the population living below the poverty line, Eswatini has little capacity to cope with these impacts. Adaptation action within the country is crucial, and this forms the basis of Eswatini's climate change response and NDC.

Question 1: Apart from the Third National Communication and NDCs, what level of engagement does the country have with the international policy discourse within the UNFCCC?

Question 2: How much policy attention does climate change receive within national development planning?

Question 3: Is climate change a policy theme at the local government level too?

Question 4: Does climate change policy also present cross-cutting government programmes (e.g. social protection / livelihoods / agriculture / infrastructure etc.)?

Question 5: Is there a robust monitoring and evaluation system for climate change actions that defines the financial input or output?

Question 6: Is there clarity over the roles and responsibilities for climate change between different government departments within and between ministries?

Question 7: Have new organisations been created to address climate change issues and, if so, how do such structures interact with existing government ministries, departments and agencies?

Question 8: Are the organisational structures compatible with these policy and strategy objectives, as well as their legal mandates? How formalised are these structures?

Question 9: Does institutional collaboration and co-ordination on climate change need to be strengthened? And, if so, how can it be done?

Question 10: What is the level of engagement of the national legislature? What role does parliament play (through specialist committees) in overseeing the government's climate change programmes?

Question 11: What are the characteristics of the national public finance management system, within which spending on climate change-related actions occur?

Question 12: What is the state of the government's overall financial position: is there 'fiscal space' to support the allocation of resources towards climate change actions?

Question 13: What are the trends in public expenditure generally and specifically for climate change actions?

Question 14: Where is climate change-related expenditure happening across government ministries/departments/agencies?

Question 15: What is the level of public expenditure on climate change actions at the local government level?

Question 16: What are the main sources of funding for climate change actions? What role do international sources of climate finance play?

Annex III: Task team established by the Ministry of Tourism and Environmental Affairs to facilitate the CPEIR

Representative	Ministry/institution
Sibongile Dlamini	Ministry of Economic Planning and Development (MEPD)
Sanelisiwe Mamba	Planning Office, MTEA
Eric Seyama	Deputy Prime Minister's Office (DPMO) (NDMA)
Sabelo Shabangu	Ministry of Economic Planning, Aid Section
Khetsiwe Khumalo	Climate Change Coordinator – MTEA
Hilton Dlamini	Ministry of Finance
Russel Dlamini	National Disaster Management Authority
Nokuthula Mdlovu	Ministry of Economic Planning and Development (MEPD)
Sibusiso Lushaba	Ministry of Economic Planning and Development (MEPD)
Victor Mahlalela	DPMO (NDMA)
Deepa Pullanikkatil	NDC Coordinator in Eswatini
Uzoamaka Nwamarah	The Commonwealth Secretariat
Bilal Anwar	The Commonwealth Secretariat
Muhammad Fawad Hayat	Independent Consultant
Samuel S. Ogallah	The Commonwealth Secretariat,Commonwealth National Climate Finance Adviser – Eswatini

Annex IV: Yearly climate change data sheets

2015 to 2016

Climate Change Related Expenditure for FY2018/19

Implementing Ministry	Project code	Funder	Project Name	Project Brief	Total Budget Allocation E'(000)	Actual Expenditure E'(000)
Ministry of Tourism and Environmental Affairs	W361	Government	Augmentation of Met. Observation Stations and Installation of Thunderstorm Detection Equipment	Project entails upgrading of weather station and implementation of Quality Management systems in compliance to ICAO resolution 75	1,500	–
Ministry of Natural Resources and Energy	X485	Government	Nhlangano Water Supply and Sewage	Project was focussed on increasing capacity to supply water to Nhlangano town through constructing a water treatment plant in a nearby area. This project initially catered for a population of 16,500 residents.	20,000	20,000
Ministry of Natural Resources and Energy	W370	A.D.B Loan	Feasibility Study-Mkhondvo and Nondvo Dams	Project was accessing the feasibility for the construction of multipurpose dams, whose main objective was to store water in order to provide potable water to the two growing cities of Mbabane and Manzini. With the ultimate aim to reduce poverty and increase economic growth, the project seeks to improve availability of water resources for the local populations livelihood as well as their productive activities.	32,500	–
Ministry of Natural Resources and Energy	W370	Government	Feasibility Study-Mkhondvo and Nondvo Dams		8,500	8,500

Climate Change Related Expenditure for FY2018/19

Implementing Ministry	Project code	Funder	Project Name	Project Brief	Total Budget Allocation E'(000)	Actual Expenditure E'(000)
Ministry of Natural Resources and Energy	X465	A.D.B Loan	Ezulwini Water Supply and Sewer	The project is designed to augment water supply to Ezulwini Town to meet its water demand and that of surrounding areas up to 2030. The project also has a sanitation component which involves construction of a sewerage network system for the town.	100,000	–
Ministry of Natural Resources and Energy	X465	Government	Ezulwini Water Supply and Sewer		20,000	40,000
Ministry of Natural Resources and Energy	F030	Taiwan/ Government	Rural Electrification	Projects extends electricity grid in rural communities	44,588	44,261
Ministry of Natural Resources and Energy	X501	Government	Rural Water Supply	Project rescussitates rural water supply schemes and aslo developed new water schemes in various communities across the country.	15,000	
Ministry of Natural Resources and Energy	X461	Government	Replacement of Water Testing Equipment and Rehab. Of DWA Laboratory	This project entails replacement of water quality testing equipment and rehabilitation of laboratory	4,200	1,646
Ministry of Natural Resources and Energy	F019	Government	Fuel Marking and Quality Assurance	This project entails establishment of long term monitoring of fuel volumes, revenue and quality assurance and capacity building	1,900	1,082
Ministry of Natural Resources and Energy	F020	Government	Ethanol Blending	Ethanol blending programme at government depots, capacity building and study tours on the biofuels industry	1,070	–

Climate Change Related Expenditure for FY2018/19

Implementing Ministry	Project code	Funder	Project Name	Project Brief	Total Budget Allocation E'(000)	Actual Expenditure E'(000)
Ministry of Agriculture	A323	Government	Komati Basin Project-Downstream Development	The Komati Downstream Development Project (KDDP) is designed to reduce poverty by improving household incomes, food security and access to social and health services for the rural population in the Komati downstream development zone. The KDDP entails the development of 7,400 ha of irrigated crops, mainly sugar cane, maize, vegetables and bananas in the PDA utilizing Swaziland's share of the water from the Maguga dam. Some 2,200 ha should be developed by Government and the beneficiaries while another 4,200 ha will be development under this operation. This is in addition to 1,000 ha that will be developed by other private farmers. The project should provide the required irrigation systems and infrastructure as well as credit funds to enable smallholder farmers to intensify and diversify their agricultural production building on existing market linkages with the private sector. The main components of the project are: (A) Agriculture Development (including provision of irrigation infrastructure), (B) Infrastructure Development, and (C) Project Management.	12,000	12,000

Climate Change Related Expenditure for FY2018/19

Implementing Ministry	Project code	Funder	Project Name	Project Brief	Total Budget Allocation E'(000)	Actual Expenditure E'(000)
Ministry of Agriculture	A324	Government	Lower Usuthu-Downstream Development	Project is an extension of LUSIP I and mainly involved construction of a conveyance system and water canals with the aim of increasing agricultural production and household incomes in the targeted rural area through irrrigation schemes. The project also aims at effective management of biophysical environment to promote conservation and minimize negative impacts of project construction and operation.	35,550	35,000
Ministry of Agriculture	A381	A.D.B Loan	Lower Usuthu II-Downstream Development	Project is an extension of LUSIP I and mainly involved construction of a conveyance system and water canals with the aim of increasing agricultural production and household incomes in the targeted rural area through irrrigation schemes. The project also aims at effective management of biophysical environment to promote conservation and minimize negative impacts of project construction and operation.	714,246	–
Ministry of Agriculture	A381	Government	Lower Usuthu II-Downstream Development		70,000	70,000

Climate Change Related Expenditure for FY2018/19

Implementing Ministry	Project code	Funder	Project Name	Project Brief	Total Budget Allocation E'(000)	Actual Expenditure E'(000)
Ministry of Agriculture	A380	I.F.A.D Loan	Smallholder Market-led Production Project	The development objective of Smallholder Market-Led Project is that smallholder households in the Project Chiefdoms sustainably enhance food and nutrition security and incomes through diversified climate resilient agricultural production and market-linkages. There are 37 beneficiary Chiefdoms in the rain-fed areas of Lubombo, Shiselweni and Manzini Regions. The project has three components: 1. Chiefdom Development Planning- this involves the promotion of chiefdom based development targeting development activities to poor, economically active households. 2. Infrastructure for Soil and Water Conservation - it involves the supporting and enhancement of resilience to climate change in the management of land and related resources, with due attention to gender, wealth and water management initiatves. This will be achieved through installation of water harvesting equipment, and rehabilitation of 18 small earth dams and construction of 2 new earth dams, amongst others. Component 3: Market-led Smallholder Agriculture - this component focuses on enhancing the national capacity to monitor and redefine sustainable land management policies and programmes for achieving convention targets. Component 4: Project Management	32,791	–
Ministry of Agriculture	A380	Government	Smallholder Market–led Production Project		10,000	10,000

Climate Change Related Expenditure for FY2018/19

Implementing Ministry	Project code	Funder	Project Name	Project Brief	Total Budget Allocation E'(000)	Actual Expenditure E'(000)
Ministry of Agriculture	W376	Grant	Water Harvesting, Small and Medium Dams	The project seeks to contribute to the commercialisation of Swazi Nation Land through increased water storage and surface area under irrigation, organised producer and water user groups, business planning, and marketing while promoting environmentally sound practices and infrastructures. In addition, provision will be made for controlled and robust access to water for livestock. The main project purpose is the sustainable enhancement of smallholders' irrigated crops in project areas based on approaches that reduce vulnerability to climate risks, support improved water resource management and promote access to markets. The overall project objective is to contribute to improved food security of subsistence farmers by improving access to land and water, while avoiding deforestation and land degradation areas, by enhancing availability of water throughout the year. The project is to be implemented in all four regions of the country - but priority will be given to the moist middleveld area.	54,452	–
Ministry of Economic Planning and Development	W375	Taiwan	Water and Sanitation Phase 2	Project constitutes providing portable water and construction of pit latrines in several health facility locations in the country	12,500	23,895

Climate Change Related Expenditure for FY2018/19

Implementing Ministry	Project code	Funder	Project Name	Project Brief	Total Budget Allocation E'(000)	Actual Expenditure E'(000)
Ministry of Economic Planning and Development	G609	Government	Micro-projects Infrastructure Development	Fund to develop rural communities through provision of water supply, sanitation, rural electrification schemes, construction of bridges and diptanks and other community development needs	180,000	56,000
Ministry of Housing and Urban Developmnent	X202	Government	Urban Development Project	Construction of Mhobodleni Infrastructure, supervision, payment of compensation and electrification of the greenfield site.	6,000	–
Fire & Emergency Services	P347	Government	Mobile Satelite Fire Stations	Completion of Big-bend and Mankayane fire stations and construction of Lavumisa fire station	3,500	2,564
Fire & Emergency Services	P306	Government	Replacement of Fire fighting Equipment and Specialised Vehicles	Procurement of specialised equipment and fire fighting vehicles for the fire service department	7,000	
Ministry of Housing and Urban Developmnent	X482	Government	Relocation of Solid Waste Disposal Site at Matsapha	Completion of access road	8,000	–
Ministry of Housing and Urban Developmnent	X480	Government	Intergovernmental Capital Development Fund	Financing local government infrastructure	40,000	–
Ministry of Education and Training	E343	Government	Water Supply to Schools	Purchase of water tanks for distribution in schools	2,000	1,993

Climate Change Related Expenditure for FY2018/19

Implementing Ministry	Project code	Funder	Project Name	Project Brief	Total Budget Allocation E'(000)	Actual Expenditure E'(000)
Ministry of Education and Training	E344	Government	Schools Toilets	Payment of builders and construction of VIP and flush toilets in rual and urban schools	2,000	2,000
Ministry of Education and Training	E397	Government	Emergency Response and Rehab of Storm Damaged	Project funds emergency reponse and rehabilitation of storm damaged schools	5,000	5,000
Ministry of Health	H345	Government	Provision of Water in Health Facilities	Project funds provision of water in health facilities	3,000	2,999
Ministry of Health	H339	Government	Water and Sanitation Project II	Project constitutes providing portable water and construction of pit latrines in several health facility locations in the country	1,000	999
Correctional Services	P338	Government	Irrigation Infrastructure for Correctional Farms	Project entails installation of irrigation infrastructure from local rivers and/ construction of a dam for increased agricultural production to enhnance food security for inmates.	3,000	445
Ministry of Public Works and Transport	T363	Government	Rehabilitation and Maintanance of the Feeder Roads Network	Project constructs, upgrades and rehabilitates feeder roads, low level bridges in rural areas.	27,000	25,629
Ministry of Public Works and Transport	T512	Public Private Partnerships	Chemical Soil Stabilizers Programme	Project upgrades gravel roads in rural areas using chemical soil stabilizers	63,000	–
				TOTAL	**1,541,297**	**364,013**

2016 to 2017

Climate Change Related Expenditure for FY2017/18

Implementing Ministry	Project Code	Funder	Project Name	Project Brief	Total Budget Allocation E'000	Actual Expenditure E'000
Ministry of Tourism	W361	Government	Augmentation of Met. Observation Stations and Installation of Thunderstorm Detection Equipment	Project entails upgrading of weather station and implementation of Quality Management systems in compliance to ICAO resolution 75	1,500	–
Ministry of Natural Resources & Energy	X485	Government	Nhlangano Water Supply & Sewerage	Project was focussed on increasing capacity to supply water to Nhlangano town through constructing a water treatment plant in a nearby area. This project initially catered for a population of 16,500 residents.	40,000	40,000
Ministry of Natural Resources & Energy	X486	Government	New Sewer Treatment Plant for Matsapha Industrial Town	Project constructed a sewerage treatment plant for Matsapha Industrial Town to augment water Supply for the town	5,000	5,000
Ministry of Natural Resources & Energy	W370	Government	Feasibility Study- Mkhondvo & Nondvo Dams	Project was accessing the feasibility for the construction of multipurpose dams, whose main objective was to store water in order to provide potable water to the two growing cities of Mbabane and Manzini. With the ultimate aim to reduce poverty and increase economic growth, the project seeks to improve availability of water resources for the local populations livelihood as well as their productive activities.	8,000	–
Ministry of Natural Resources & Energy	W370	AfDB Loan	Feasibility Study- Mkhondvo & Nondvo Dams		10,000	–

Climate Change Related Expenditure for FY2017/18

Implementing Ministry	Project Code	Funder	Project Name	Project Brief	Total Budget Allocation E'000	Actual Expenditure E'000
Ministry of Natural Resources & Energy	X501	Government	Rural Water Supply XIII	Project rescussitates rural water supply schemes and aslo developed new water schemes in various communities across the country.	30,000	30,000
Ministry of Natural Resources & Energy	W465	AfDB Loan	Ezulwini Water Supply & Sewer	The project is designed to augment water supply to Ezulwini Town to meet its water demand and that of surrounding areas up to 2030. The project also has a sanitation component which involves construction of a sewerage network system for the town.	30,000	–
Ministry of Natural Resources & Energy	W465	Government	Ezulwini Water Supply & Sewer		–	–
Ministry of Natural Resources & Energy	A337	European Development Fund Grant	SISOMA	Improve Water Supply Service and sanitation facilities to 20,000 people in three targeted rural areas. The project also provided renewable energy for use by the project.	15,000	–
Ministry of Natural Resources & Energy	A337	Government	SISOMA		9,074	9,074
Ministry of Natural Resources & Energy	F030	Government	Rural Electrification VI	Projects extends electricity grid in rural communities	7,088	7,011
Ministry of Natural Resources & Energy	F030	Taiwan Grant	Rural Electrification VI		46,200	44,014
Ministry of Natural Resources & Energy	F020	Government	Ethanol Blending	Ethanol blending programme at government depots, capacity building and study tours on the biofuels industry	2,050	–
Ministry of Natural Resources & Energy	F017	Government	Energy Efficiency in Public Buildings	The Project involves installation of energy efficient technologies in public institutions.	3,000	–

Climate Change Related Expenditure for FY2017/18

Implementing Ministry	Project Code	Funder	Project Name	Project Brief	Total Budget Allocation E'000	Actual Expenditure E'000
Ministry of Agriculture	A324	Global Environment Fund	Lower Usuthu - Downstream Development (LUSIP I)	Project was aimed at increasing agricultural production and household incomes in the Lower Usuthu Basin through the provision of water for irrigation schemes through the development of water infrastructure amongst others.	–	–
Ministry of Agriculture	A324	Government	Lower Usuthu - Downstream Development (LUSIP I)		50,000	40,000
Ministry of Agriculture	A381	AfDB Loan	Lower Usuthu II Extension - Downstream Dev.	Project is an extension of LUSIP I and mainly involved construction of a conveyance system and water canals with the aim of increasing agricultural production and household incomes in the targeted rural area through irrrigation schemes. The project also aims at effective management of biophysical environment to promote conservation and minimize negative impacts of project construction and operation.	141,575	–
Ministry of Agriculture	A381	Government	Lower Usuthu II Extension - Downstream Dev.		87,000	87,000
Ministry of Agriculture	A360	Government	Purchase of Heavy Plant & Earth Dam Construction Equipment	Project purchased heavy plant equipment for the construction of water harvesting structures, water conveyance systems. Irrigation infrastuture and soil conservation structures	13,564	13,331
Ministry ofAgriculture	A372	Government	Water & Irrigation Development at Sigangeni, Mpuluzi, Gege, Ngcoseni & Nyamane	Project entailed installation of an irrigation infrastucture, construction of fish ponds and soil conservation structures at Mayiwane Dam as well as the construction of medium sized dam and installation of irrigation infrastructure at Malanti community	7,000	6,999

Climate Change Related Expenditure for FY2017/18

Implementing Ministry	Project Code	Funder	Project Name	Project Brief	Total Budget Allocation E'000	Actual Expenditure E'000
Ministry of Agriculture	A380	IFAD Loan	Small-holder Market Led Production	The development objective of Smallholder Market-Led Project is that smallholder households in the Project Chiefdoms sustainably enhance food and nutrition security and incomes through diversified climate resilient agricultural production and market-linkages. There are 37 beneficiary Chiefdoms in the rain-fed areas of Lubombo, Shiselweni and Manzini Regions. The project has three components: 1. Chiefdom Development Planning- this involves the promotion of chiefdom based development targeting development activities to poor, economically active households. 2. Infrastructure for Soil and Water Conservation - it involves the supporting and enhancement of resilience to climate change in the management of land and related resources, with due attention to gender, wealth and water management initiatves. This will be achieved through installation of water harvesting equipment, and rehabilitation of 18 small earth dams and construction of 2 new earth dams, amongst others. Component 3: Market-led Smallholder Agriculture - this component focuses on enhancing the national capacity to monitor and redefine sustainable land management policies and programmes for achieving convention targets. Component 4: Project Management	23,062	
Ministry of Agriculture	A380	Government	Small-holder Market Led Production		10,000	10,000

Climate Change Related Expenditure for FY2017/18

Implementing Ministry	Project Code	Funder	Project Name	Project Brief	Total Budget Allocation E'000	Actual Expenditure E'000
Ministry of Economic Planning &Dev.	G609	Government	Microprojects - Infrastructure Development VI	Fund to develop rural communities through provision of water supply, sanitation, rural electrification schemes, construction of bridges and diptanks and other community development needs	180,000	180,000
Ministry of Housing & Urban Development	X202	Government	Urban Development Project	Project centres on the resettlement of homesteads in peri-urban areas and provision of bulk infrastructure, roads and drainage systems, sanitation infrastucture and other community amenities.	10,000	9,725
Ministry of Housing & Urban Development	X480	Government	Intergovernmental Capital Development Fund	Project funds are for financing infrastructure development in Urban Local Governmnets such as the construction of roads and drainage systems, solid watse management equipment etc	40,000	40,000
Fire & Emergency Services	P347	Government	Satellite Fire Stations	Project entails the construction of Fire Stations across the country to increase national coverage	3,000	2,970
Fire & Emergency Services	P306	Government	Replacement of Firefighting Equipment and Soecialized Vehicles	This involves the purchase of firefighting vehicles and specialized equipment to meet current and future fire services needs.	5,000	4,638
Fire & Emergency Services	P349	Taiwan Grant	Procurement of Three Water Tankers (Bush Tenders Phase II)	Project was for the purchasing of three water tankers to meet current and future fire services needs	8,400	4,784
Ministry of Education &Training	E343	Government	Water Supply to Schools VII	Project entails purchasing of water tanks and accessories for distribution in selected primary & secondary schools to increase access to clean water.	2,000	1,996

Climate Change Related Expenditure for FY2017/18

Implementing Ministry	Project Code	Funder	Project Name	Project Brief	Total Budget Allocation E'000	Actual Expenditure E'000
Ministry of Education &Training	E344	Government	Schools Toilets VII	Project constructs VIP (Ventilated Improved pit latrines) and flushtoilets in selected rural & urban schools across the country.	2,000	2,000
Ministry of Education &Training	E397	Government	Emergency Response and Rehabilitation of Government Schools Phase I	Project funds emergency reponse and rehabilitation of storm damaged schools	23,000	23,000
Ministry of Health	H345	Government	Provision of Water in Health Facilities	Project funds provision of water in health facilities	5,000	4,009
Ministry of Health	H339	Government	Water & Sanitation Project II	Project constitutes providing portable water and construction of pit latrines in several health facility locations in the country	3,000	2,826
Correctional Services	P338	Government	Irrigation Infrastructure for Correctional Farms	Project entails installation of irrigation infrastructure from local rivers and/ construction of a dam for increased agricultural production to enhnance food security for inmates.	5,000	9,711
Ministry of Public Works & Transport	T512	Government	Chemical Soil Stabilizers (Probase)	Project upgrades gravel roads in rural areas using chemical soil stabilizers	100,000	–
Ministry of Public Works & Transport	T363	Government	Rehabilitation & Mantainance of the Feeder Roads Network & Rehabilitation of Armcos and Calverts	Project constructs, upgrades and rehabilitates feeder roads, low level bridges in rural areas.	50,000	31,586
				TOTAL	**975,513**	**609,674**

2017 to 2018

Climate Change Related Expenditure for FY16/17

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry of Tourism	W361	Government	Augmentation of Met. Observation Stations and Installation of Thunderstorm Detection Equipment	Project entails upgrading of weather station and implementation of Quality Management systems in compliance to ICAO resolution 75	3,000	–
Ministry of Natural Resources & Energy	X485	Government	Nhlangano Water Supply & Sewerage	Project focussed on increasing capacity to supply water to Nhlangano town through constructing a water treatment plant in a nearby area. This project initially catered for a population of 16,500 residents.	50,000	50,000
Ministry of Natural Resources & Energy	X486	Government	New Sewer Treatment Plant for Matsapha Industrial Town	Project constructed a sewerage treatment plant for Matsapha Industrial Town to augment water Supply for the town to meet economic development needs	7,000	7,000
Ministry of Natural Resources & Energy	W370	Government	Feasibility Study- Mkhondvo & Nondvo Dams	Project was accessing the feasibility for the construction of multipurpose dams, whose main objective was to store water in order to provide potable water to the two growing cities of Mbabane and Manzini. With the ultimate aim to reduce poverty and increase economic growth, the project seeks to improve availability of water resources for the local populations livelihood as well as their productive activities.	7,200	6,638
Ministry of Natural Resources & Energy	W370	AfDB Loan	Feasibility Study- Mkhondvo & Nondvo Dams		40,500	–
Ministry of Natural Resources & Energy	X501	Government	Rural Water Supply XIII	Project rescussitates rural water supply schemes and aslo developed new water schemes in various communities across the country.	20,000	8,510

Climate Change Related Expenditure for FY16/17

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry of Natural Resources & Energy	W465	AfDB Loan	Ezulwini Water Supply & Sewer	The project is designed to augment water supply to Ezulwini Town to meet its water demand and that of surrounding areas up to 2030. The project also has a sanitation component which involves construction of a sewerage network system for the town.	178,000	–
Ministry of Natural Resources & Energy	W465	Government	Ezulwini Water Supply & Sewer		98,000	98,000
Ministry of Natural Resources & Energy	A337	European Development Fund Grant	SISOMA	Improve Water Supply Service and sanitation facilities to 20,000 people in three targeted rural communities. The project also provided renewable energy for use by the project.	90,000	–
Ministry of Natural Resources & Energy	A337	Government	SISOMA		9,074	9,074
Ministry of Natural Resources & Energy	X498	Government	Procurement of Tools and Equipment for Portable Water Schemes	Project involved the procurement of equipment for portable water schemes to augment water supply in targeted areas.	750	
Ministry of Natural Resources & Energy	F030	Government	Rural Electrification VI	Projects extends electricity grid in rural communities	6,000	6,000
Ministry of Natural Resources & Energy	F030	Taiwan Grant	Rural Electrification VI		48,000	22,300
Ministry of Natural Resources & Energy	F020	Government	Ethanol Blending	Ethanol blending programme at government depots, capacity building and study tours on the biofuels industry	2,500	450
Ministry of Natural Resources & Energy	F017	Government	Energy Efficiency in Public Buildings	The Project involves installation of energy efficient technologies in public institutions.	3,000	1,000

Climate Change Related Expenditure for FY16/17

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry of Agriculture	A324	Global Environment Fund	Lower Usuthu - Downstream Development (LUSIP I)	Project was aimed at increaing agricultural production and household incomes in the Lower Usuthu Basin through the provision of water for irrigation schemes through the development of water infrastructure amongst others.	3,496	–
Ministry of Agriculture	A324	Government	Lower Usuthu - Downstream Development (LUSIP I)		50,000	40,000
Ministry of Agriculture	A381	AfDB Loan	Lower Usuthu II Extension - Downstream Dev.	Project is an extension of LUSIP I and mainly involved construction of a conveyance system and water canals with the aim of increasing agricultural production and household incomes in the targeted rural area through irrrigation schemes. The project also aims at effective management of biophysical environment to promote conservation and minimize negative impacts of project construction and operation.	200,000	–
Ministry of Agriculture	A381	Government	Lower Usuthu II Extension - Downstream Dev.		50,000	50,000
Ministry of Agriculture	A360	Government	Purchase of Heavy Plant & Earth Dam Construction Equipment	Project purchased heavy plant equipment for the construction of water harvesting structures, water conveyance systems. Irrigation infrastuture and soil conservation structures	10,000	–

Climate Change Related Expenditure for FY16/17

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry of Agriculture	A380	IFAD Loan	Small-holder Market Led Production	The development objective of Smallholder Market-Led Project is that smallholder households in the Project Chiefdoms sustainably enhance food and nutrition security and incomes through diversified climate resilient agricultural production and market-linkages. There are 37 beneficiary Chiefdoms in the rain-fed areas of Lubombo, Shiselweni and Manzini Regions. The project has three components: 1. Chiefdom Development Planning- this involves the promotion of chiefdom based development targeting development activities to poor, economically active households. 2. Infrastructure for Soil and Water Conservation - it involves the supporting and enhancement of resilience to climate change in the management of land and related resources, with due attention to gender, wealth and water management initiatves. This will be achieved through installation of water harvesting equipment, and rehabilitation of 18 small earth dams and construction of 2 new earth dams, amongst others. Component 3: Market-led Smallholder Agriculture - this component focuses on enhancing the national capacity to monitor and redefine sustainable land management policies and programmes for achieving convention targets. Component 4: Project Management	40,000	
Ministry of Agriculture	A380	Government	Small-holder Market Led Production		25,000	

Climate Change Related Expenditure for FY16/17

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry ofAgriculture	A372	Government	Water & Irrigation Development at Sigangeni, Mpuluzi, Gege, Ngcoseni & Nyamane	Project entailed installation of an irrigation infrastucture, construction of fish ponds and soil conservation structures at Mayiwane Dam as well as the construction of medium sized dam and installation of irrigation infrastructure at Malanti community	8,000	3,000
Ministry of Economic Planning &Dev.	G609	Government	Microprojects - Infrastructure Development VI	Fund to develop rural communities through provision of water supply, sanitation, rural electrification schemes, construction of bridges and diptanks and other community development needs	100,000	150,000
Ministry of Housing & Urban Development	X202	Government	Urban Development Project	Project centres on the resettlement of homesteads in densely populated peri-urban areas and provision of bulk infrastructure, roads and drainage systems, sanitation infrastucture and other community amenities.	10,000	3,800
Ministry of Housing & Urban Development	X480	Government	Intergovernmental Capital Development Fund	Project funds are for financing infrastructure development in Urban Local Governmnets such as the construction of roads and drainage systems, solid watse management equipment etc	40,000	40,000
Fire & Emergency Services	P347	Government	Satellite Fire Stations	Project entails the construction of Fire Stations across the country to increase national coverage	3,500	3,379
Fire & Emergency Services	P306	Government	Replacement of Firefighting Equipment and Soecialized Vehicles	This involves the purchase of firefighting vehicles and specialized equipment to meet current and future fire services needs.	10,000	9,300
Fire & Emergency Services	P349	Taiwan Grant	Procurement of Three Water Tankers (Bush Tenders Phase II)	Project was for the purchasing of three water tankers to meet current and future fire services needs	17,600	9,633

Climate Change Related Expenditure for FY16/17

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry of Education &Training	E343	Government	Water Supply to Schools VII	Project entails purchasing of water tanks and accessories for distribution in selected primary & secondary schools to increase access to clean water.	2,000	247
Ministry of Education &Training	E344	Government	Schools Toilets VII	Project constructs VIP (Ventilated Improved pit latrines) and flushtoilets in selected rural & urban schools across the country.	3,000	3,000
Ministry of Education &Training	E397	Government	Emergency Response and Rehabilitation of Government Schools Phase I	Project funds emergency reponse and rehabilitation of storm damaged schools	23,000	20,000
Ministry of Health	H345	Government	Provision of Water in Health Facilities	Project funds provision of water in health facilities	5,000	4,985
Ministry of Health	H339	Government	Water & Sanitation Project II	Project constitutes providing portable water and construction of pit latrines in several health facility locations in the country	3,000	2,969
Correctional Services	P338	Government	Irrigation Infrastructure for Correctional Farms	Project entails installation of irrigation infrastructure from local rivers and/ construction of a dam for increased agricultural production to enhance food security for inmates.	6,173	6,173
Ministry of Public Works & Transport	T512	Government	Chemical Soil Stabilizers (Probase)	Project upgrades gravel roads in rural areas using chemical soil stabilizers	5,850	5,849
Ministry of Public Works & Transport	T363	Government	Rehabilitation & Mantainance of the Feeder Roads Network & Rehabilitation of Armcos and Calverts	Project constructs, upgrades and rehabilitates feeder roads, low level bridges in rural areas.	40,000	28,206
				TOTAL	**1,218,643**	**589,513**

2018 to 2019

Climate Change Related Expenditure for FY15/16

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry of Tourism	W361	Government	Augmentation of Met. Observation Stations and Installation of Thunderstorm Detection Equipment	Project entails upgrading of weather station and implementation of Quality Management systems in compliance to ICAO resolution 75	800	800
Ministry of Natural Resources & Energy	X485	Government	Nhlangano Water Supply & Sewerage	Project focussed on increasing capacity to supply water to Nhlangano town through constructing a water treatment plant in a nearby area. This project initially catered for a population of 16,500 residents.	50,000	50,000
Ministry of Natural Resources & Energy	X486	Government	New Sewer Treatment Plant for Matsapha Industrial Town	Project constructed a sewerage treatment plant for Matsapha Industrial Town to augment water Supply for the town to meet economic development needs	15,000	15,000
Ministry of Natural Resources & Energy	W370	Government	Feasibility Study- Mkhondvo & Nondvo Dams	Project was accessing the feasibility for the construction of multipurpose dams, whose main objective was to store water in order to provide potable water to the two growing cities of Mbabane and Manzini. With the ultimate aim to reduce poverty and increase economic growth, the project seeks to improve availability of water resources for the local populations livelihood as well as their productive activities.	–	–
Ministry of Natural Resources & Energy	X501	Government	Rural Water Supply XIII	Project rescussitates rural water supply schemes and also developed new water schemes in various communities across the country.	17,000	15,500

Climate Change Related Expenditure for FY15/16

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry of Natural Resources & Energy	W465	AfDB Loan	Ezulwini Water Supply & Sewer	The project is designed to augment water supply to Ezulwini Town to meet its water demand and that of surrounding areas up to 2030. The project also has a sanitation component which involves construction of a sewerage network system for the town.	101,000	–
Ministry of Natural Resources & Energy	W465	Government	Ezulwini Water Supply & Sewer		45,200	45,200
Ministry of Natural Resources & Energy	A337	European Development Fund Grant	SISOMA	Improve Water Supply Service and sanitation facilities to 20,000 people in three targeted rural communities. The project also provided renewable energy for use by the project.	90,000	–
Ministry of Natural Resources & Energy	X498	Government	Procurement of Tools and Equipment for Portable Water Schemes	Project procured tools and equipments for portable water schemes	750	576
Ministry of Natural Resources & Energy	F030	Government	Rural Electrification VI	Projects extends electricity grid in rural communities.	4,650	4,565
Ministry of Natural Resources & Energy	F030	Taiwan Grant	Rural Electrification VI		33,000	38,763
Ministry of Natural Resources & Energy	F020	Government	Ethanol Blending	Ethanol blending programme at government depots, capacity building and study tours on the biofuels industry	500	142

Climate Change Related Expenditure for FY15/16

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry of Agriculture	A324	Global Environment Fund	Lower Usuthu - Downstream Development (LUSIP I)	Project was aimed at increaing agricultural production and household incomes in the Lower Usuthu Basin through the provision of water for irrigation schemes through the development of water infrastructure amongst others.	3,496	–
Ministry of Agriculture	A324	Government	Lower Usuthu - Downstream Development (LUSIP (I)		40,000	40,000
Ministry of Agriculture	A381	Government	Lower Usuthu II Extension - Downstream Dev.	Project is an extension of LUSIP I and mainly involved construction of a conveyance system and water canals with the aim of increasing agricultural production and household incomes in the targeted rural area through irrrigation schemes. The project also aims at effective management of biophysical environment to promote conservation and minimize negative impacts of project construction and operation.	50,000	50,000
Ministry of Agriculture	A360	Government	Purchase of Heavy Plant & Earth Dam Construction Equipment	Project purchased heavy plant equipment for the construction of water harvesting structures, water conveyance systems. Irrigation infrastuture and soil conservation structures	3,575	3,312

Climate Change Related Expenditure for FY15/16

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry of Agriculture	A380	IFAD Loan	Small-holder Market Led Production	The development objective of Smallholder Market-Led Project is that smallholder households in the Project Chiefdoms sustainably enhance food and nutrition security and incomes through diversified climate resilient agricultural production and market-linkages. There are 37 beneficiary Chiefdoms in the rain-fed areas of Lubombo, Shiselweni and Manzini Regions. The project has three components: 1. Chiefdom Development Planning- this involves the promotion of chiefdom based development targeting development activities to poor, economically active households. 2. Infrastructure for Soil and Water Conservation - it involves the supporting and enhancement of resilience to climate change in the management of land and related resources, with due attention to gender, wealth and water management initiatves. This will be achieved through installation of water harvesting equipment, and rehabilitation of 18 small earth dams and construction of 2 new earth dams, amongst others. Component 3: Market-led Smallholder Agriculture - this component focuses on enhancing the national capacity to monitor and redefine sustainable land management policies and programmes for achieving convention targets. Component 4: Project Management	32,900	4,000

Climate Change Related Expenditure for FY15/16

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry ofAgriculture	A372	Government	Water & Irrigation Development at Sigangeni, Mpuluzi, Gege, Ngcoseni & Nyamane	Project entailed installation of an irrigation infrastucture, construction of fish ponds and soil conservation structures at Mayiwane Dam as well as the construction of medium sized dam and installation of irrigation infrastructure at Malanti community	6,000	35,713
Ministry of Economic Planning &Dev.	G609	Government	Microprojects - Infrastructure Development VI	Fund to develop rural communities through provision of water supply, sanitation, rural electrification schemes, construction of bridges and diptanks and other community development needs	80,000	80,000
Ministry of Housing & Urban Development	X202	Government	Urban Development Project	Project centres on the resettlement of homesteads in densely populated peri-urban areas and provision of bulk infrastructure, roads and drainage systems, sanitation infrastucture and other community amenities.	10,000	-
Ministry of Housing & Urban Development	X480	Government	Intergovernmental Capital Development Fund	Project funds are for financing infrastructure development in Urban Local Governmnets such as the construction of roads and drainage systems, solid watse management equipment etc	40,000	40,000
Fire & Emergency Services	P347	Government	Mobile Satellite Fire Stations	Project entails the construction of Fire Stations across the country to increase national coverage	3,200	2,046

Climate Change Related Expenditure for FY15/16

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Fire & Emergency Services	P306	Government	Replacement of Firefighting Equipment and Specialized Vehicles	This involves the purchase of firefighting vehicles and specialized equipment to meet current and future fire services needs.	10,000	9,997
Ministry of Education &Training	E343	Government	Water Supply to Schools VII	Project entails purchasing of water tanks and accessories for distribution in selected primary & secondary schools to increase access to clean water.	1,000	966
Ministry of Education &Training	E344	Government	Schools Toilets VII	Project constructs VIP (Ventilated Improved pit latrines) and flushtoilets in selected rural & urban schools across the country.	4,000	
Ministry of Education &Training	E397	Government	Emergency Response and Rehabilitation of Government Schools Phase I	Project funds emergency reponse and rehabilitation of storm damaged schools	23,000	23,000
Ministry of Education &Training	E447	Taiwan Grant	Provision of Water to Rural Schools	Project was funded through donor funds and involved the provision of water in selected rural schools	4,950	
Ministry of Health	H345	Government	Provision of Water in Health Facilities	Project funds provision of water in health facilities	5,000	4,009
Ministry of Health	H339	Government	Water & Sanitation Project II	Project constitutes providing portable water and construction of pit latrines in several health facility locations in the country	3,000	2,641

Climate Change Related Expenditure for FY15/16

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Correctional Services	P338	Government	Irrigation Infrastructure for Corretional Farms	Project entails installation of irrigation infrastructure from local rivers and/ construction of a dam for increased agricultural production to enhance food security for inmates.	3,000	76
Ministry of Public Works & Transport	T363	Government	Rehabilitation & Mantainance of the Feeder Roads Network & Rehabilitation of Armcos and Calverts	Project constructs, upgrades and rehabilitates feeder roads, low level bridges in rural areas.	40,000	32,400
				TOTAL	**721,021**	**498,706**

2019 to 2020

Climate Change Related Expenditure for FY15/16

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry of Tourism	W361	Government	Augmentation of Met. Observation Stations and Installation of Thunderstorm Detection Equipment	Project entails upgrading of weather station and implementation of Quality Management systems in compliance to ICAO resolution 75	800	800
Ministry of Natural Resources & Energy	X485	Government	Nhlangano Water Supply & Sewerage	Project focussed on increasing capacity to supply water to Nhlangano town through constructing a water treatment plant in a nearby area. This project initially catered for a population of 16,500 residents.	50,000	50,000
Ministry of Natural Resources & Energy	X486	Government	New Sewer Treatment Plant for Matsapha Industrial Town	Project constructed a sewerage treatment plant for Matsapha Industrial Town to augment water Supply for the town to meet economic development needs	15,000	15,000
Ministry of Natural Resources & Energy	W370	Government	Feasibility Study- Mkhondvo & Nondvo Dams	Project was accessing the feasibility for the construction of multipurpose dams, whose main objective was to store water in order to provide potable water to the two growing cities of Mbabane and Manzini. With the ultimate aim to reduce poverty and increase economic growth, the project seeks to improve availability of water resources for the local populations livelihood as well as their productive activities.	–	–

Climate Change Related Expenditure for FY15/16

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry of Natural Resources & Energy	X501	Government	Rural Water Supply XIII	Project rescussitates rural water supply schemes and also developed new water schemes in various communities across the country.	17,000	15,500
Ministry of Natural Resources & Energy	W465	AfDB Loan	Ezulwini Water Supply & Sewer	The project is designed to augment water supply to Ezulwini Town to meet its water demand and that of surrounding areas up to 2030. The project also has a sanitation component which involves construction of a sewerage network system for the town.	101,000	–
Ministry of Natural Resources & Energy	W465	Government	Ezulwini Water Supply & Sewer		45,200	45,200
Ministry of Natural Resources & Energy	A337	European Development Fund Grant	SISOMA	Improve Water Supply Service and sanitation facilities to 20,000 people in three targeted rural communities. The project also provided renewable energy for use by the project.	90,000	–
Ministry of Natural Resources & Energy	X498	Government	Procurement of Tools and Equipment for Portable Water Schemes	Project procured tools and equipments for portable water schemes	750	576
Ministry of Natural Resources & Energy	F030	Government	Rural Electrification VI	Projects extends electricity grid in rural communities.	4,650	4,565
Ministry of Natural Resources & Energy	F030	Taiwan Grant	Rural Electrification VI		33,000	38,763
Ministry of Natural Resources & Energy	F020	Government	Ethanol Blending	Ethanol blending programme at government depots, capacity building and study tours on the biofuels industry	500	142

Climate Change Related Expenditure for FY15/16

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry of Agriculture	A324	Global Environment Fund	Lower Usuthu - Downstream Development (LUSIP I)	Project was aimed at increaing agricultural production and household incomes in the Lower Usuthu Basin through the provision of water for irrigation schemes through the development of water infrastructure amongst others.	3,496	–
Ministry of Agriculture	A324	Government	Lower Usuthu - Downstream Development (LUSIP (I)		40,000	40,000
Ministry of Agriculture	A381	Government	Lower Usuthu II Extension - Downstream Dev.	Project is an extension of LUSIP I and mainly involved construction of a conveyance system and water canals with the aim of increasing agricultural production and household incomes in the targeted rural area through irrrigation schemes. The project also aims at effective management of biophysical environment to promote conservation and minimize negative impacts of project construction and operation.	50,000	50,000
Ministry of Agriculture	A360	Government	Purchase of Heavy Plant & Earth Dam Construction Equipment	Project purchased heavy plant equipment for the construction of water harvesting structures, water conveyance systems. Irrigation infrastuture and soil conservation structures	3,575	3,312

Climate Change Related Expenditure for FY15/16

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry of Agriculture	A380	IFAD Loan	Small-holder Market Led Production	The development objective of Smallholder Market-Led Project is that smallholder households in the Project Chiefdoms sustainably enhance food and nutrition security and incomes through diversified climate resilient agricultural production and market-linkages. There are 37 beneficiary Chiefdoms in the rain-fed areas of Lubombo, Shiselweni and Manzini Regions. The project has three components: 1. Chiefdom Development Planning- this involves the promotion of chiefdom based development targeting development activities to poor, economically active households. 2. Infrastructure for Soil and Water Conservation - it involves the supporting and enhancement of resilience to climate change in the management of land and related resources, with due attention to gender, wealth and water management initiatves. This will be achieved through installation of water harvesting equipment, and rehabilitation of 18 small earth dams and construction of 2 new earth dams, amongst others. Component 3: Market-led Smallholder Agriculture - this component focuses on enhancing the national capacity to monitor and redefine sustainable land management policies and programmes for achieving convention targets. Component 4: Project Management	32,900	4,000

Climate Change Related Expenditure for FY15/16

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Ministry ofAgriculture	A372	Government	Water & Irrigation Development at Sigangeni, Mpuluzi, Gege, Ngcoseni & Nyamane	Project entailed installation of an irrigation infrastucture, construction of fish ponds and soil conservation structures at Mayiwane Dam as well as the construction of medium sized dam and installation of irrigation infrastructure at Malanti community	6,000	35,713
Ministry of Economic Planning &Dev.	G609	Government	Microprojects - Infrastructure Development VI	Fund to develop rural communities through provision of water supply, sanitation, rural electrification schemes, construction of bridges and diptanks and other community development needs	80,000	80,000
Ministry of Housing & Urban Development	X202	Government	Urban Development Project	Project centres on the resettlement of homesteads in densely populated peri-urban areas and provision of bulk infrastructure, roads and drainage systems, sanitation infrastucture and other community amenities.	10,000	–
Ministry of Housing & Urban Development	X480	Government	Intergovernmental Capital Development Fund	Project funds are for financing infrastructure development in Urban Local Governmnets such as the construction of roads and drainage systems, solid watse management equipment etc	40,000	40,000
Fire & Emergency Services	P347	Government	Mobile Satellite Fire Stations	Project entails the construction of Fire Stations across the country to increase national coverage	3,200	2,046

Climate Change Related Expenditure for FY15/16

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Fire & Emergency Services	P306	Government	Replacement of Firefighting Equipment and Specialized Vehicles	This involves the purchase of firefighting vehicles and specialized equipment to meet current and future fire services needs.	10,000	9,997
Ministry of Education &Training	E343	Government	Water Supply to Schools VII	Project entails purchasing of water tanks and accessories for distribution in selected primary & secondary schools to increase access to clean water.	1,000	966
Ministry of Education &Training	E344	Government	Schools Toilets VII	Project constructs VIP (Ventilated Improved pit latrines) and flushtoilets in selected rural & urban schools across the country.	4,000	
Ministry of Education &Training	E397	Government	Emergency Response and Rehabilitation of Government Schools Phase I	Project funds emergency reponse and rehabilitation of storm damaged schools	23,000	23,000
Ministry of Education &Training	E447	Taiwan Grant	Provision of Water to Rural Schools	Project was funded through donor funds and involved the provision of water in selected rural schools	4,950	
Ministry of Health	H345	Government	Provision of Water in Health Facilities	Project funds provision of water in health facilities	5,000	4,009
Ministry of Health	H339	Government	Water & Sanitation Project II	Project constitutes providing portable water and construction of pit latrines in several health facility locations in the country	3,000	2,641

Climate Change Related Expenditure for FY15/16

Implementing Ministry	Project Code	Funder	Project	Project Brief	Total Budget allocation E'000	Actual Expenditure E'000
Correctional Services	P338	Government	Irrigation Infrastructure for Corretional Farms	Project entails installation of irrigation infrastructure from local rivers and/ construction of a dam for increased agricultural production to enhance food security for inmates.	3,000	76
Ministry of Public Works & Transport	T363	Government	Rehabilitation & Mantainance of the Feeder Roads Network & Rehabilitation of Armcos and Calverts	Project constructs, upgrades and rehabilitates feeder roads, low level bridges in rural areas.	40,000	32,400
				TOTAL	**721,021**	**498,706**

References

African Development Bank (2020), Eswatini Economic Outlook, available at: https://www.afdb.org/en/countries/southern-africa/eswatini

AfroBarometer (no date) 'AD226: eSwatini citizens see more severe weather, but almost half are not aware of climate change', available at: https://afrobarometer.org/publications/ad226-eswatini-citizens-see-more-severe-weather-almost-half-are-not-aware-climate

Climate Change related Expenditure Data Sheets 2015–2020 obtained from Ministry of Finance and MEPD.

Environmental Law Alliance Worldwide (1999), The Water Pollution Control Regulations, 1999, available at: https://www.elaw.org/content/swaziland-water-pollution-control-regulations

Environmental Law Alliance Worldwide (2000), Waste Regulations 2000, available at: https://www.elaw.org/content/swaziland-waste-regulations-2000

Eswatini Economic Policy Analysis and Research Center (2017), available at: https://www.separc.co.sz/wp-content/uploads/2018/04/Drought-Study-Report.pdf

Eswatini Government, Ministry of Natural Resources and Energy (2018), National Water Policy, August, available at: https://www.unicef.org/eswatini/media/921/file/National%20water%20policy-report-2018.pdf.pdf

Green Climate Fund (2018a), 'Readiness Proposal, Adaptation Planning support for Eswatini through UNEP', available at: https://www.greenclimate.fund/document/adaptation-planning-support-eswatini-through-unep

Green Climate Fund (2018b), Readiness Proposal, with the United Nations Environment Programme (UNEP) for the Kingdom of Eswatini, 26 June, available at: https://www.greenclimate.fund/sites/default/files/document/readiness-proposals-eswatini-unep-adaptation-planning.pdf

Government of Swaziland, Ministry of Economic Planning and Development (no date), The National Development Strategy (NDS), available at: http://www.snat.org.sz/New%20Page/The-National-Development-Strategy.pdf

Government of the Kingdom of Eswatini (2014), National Climate Change Strategy and Action Plan

Government of the Kingdom of Eswatini, Ministry of Tourism and Environmental Affairs (2016), National Climate Change Policy, 2016, available at: http://www.gov.sz/images/tourism/2016-CLIMATE-CHANGE-POLICY--BOOKLET-FINAL.pdf

Government of the Kingdom of Eswatini, Ministry of Economic Planning and Development (2019), National Development Plan 2019/20 – 2021/22, available at: http://www.gov.sz/images/CabinetMinisters/NDP-2019-20-to-2021-22-final.pdf

International Environmental Law Research Centre (2003), Swaziland: Water Act, 2003, available at: http://www.ielrc.org/content/e0309.pdf

International Monetary Fund (2021), Kingdom of Eswatini – Country data, April, available at: https://www.imf.org/en/Countries/SWZ#countrydata

The Kingdom of Eswatini, Ministry of Agriculture (2020), Eswatini National Drought Plan – August 2020, available at: https://knowledge.unccd.int/sites/default/files/country_profile_documents/Eswatini%20National%20Drought%20Plan.pdf

The Kingdom of Swaziland, Ministry of Tourism and Environmental Affairs (2016), National Climate Change Policy, 2016, available at: https://info.undp.org/docs/pdc/Documents/SWZ/Swaziland%20Climate%20Change%20Policy%202016%20Final.pdf

Mlenga, DH, AJ Jourdaan and B Mandebvu (2019), 'Monitoring droughts in Eswatini: A spatiotemporal variability analysis using the Standard Precipitation Index', *Journal of Disaster Risk Studies* 11(1), 725, available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6779975/

National Disaster Management Agency (NDMA) (2016), National Drought Emergency Mitigation and Adaptation Plan (NERMAP) 2016–2022, available at: https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/swaziland_national_emergency_response_mitigation_and_adaptation_plannermap1_1-2.pdf

OECD Development Assistance Committee (no date) *OECD DAC Rio Markers for Climate – Handbook*, available at: https://www.oecd.org/dac/environment-development/Revised%20climate%20marker%20handbook_FINAL.pdf

Pullanikkatil, D (2016), *Swaziland Technology Needs Assessment Report 1 – Climate Change Adaptation*, Global Environmental Facility, UNEP, available at: https://tech-action.unepdtu.org/wp-content/uploads/sites/2/2019/03/swaziland-adaptation-tna-report.pdf

Serdeczny, O, S Adams, F Baarsch, D Coumou, A Robinson, W Hare, M Schaeffer, M Perrette, et al. (2016), 'Climate change impacts in Sub-Saharan Africa: from physical changes to their social repercussions', *Regional Environmental Change*, January, available at: https://climateanalytics.org/media/ssa_final_published.pdf

Swaziland: A Framework for National Development Strategy (NDS) Review https://www.undp.org/content/dam/swaziland/docs/thematics/UNDP_SZ_Poverty_NationalDevelopmentStratedgyReview2013.pdf

Swaziland Government, Ministry of Tourism and Environmental Affairs (2021), *Swaziland's Second National Communication to the United Nations Framework Convention on Climate Change*, available at: https://unfccc.int/resource/docs/2012/smsn/igo/swznc2.pdf

Swaziland National Trust Commission (1991), The Game (amendment) Act, 1991, available at: https://www.policinglaw.info/assets/downloads/1991_Game_(amendment)_Act_1.pdf

Swaziland Vulnerability Assessment Committee (2016), Kingdom of Swaziland, Swaziland Annual Vulnerability Assessment and Analysis Report 2016, available at: https://reliefweb.int/sites/reliefweb.int/files/resources/wfp286710.pdf

Ministry of Economic Planning and Development (2013), *Swaziland: A Framework for National Development Strategy (NDS) Review*, available at: file:///Users/janelanigan/Downloads/UNDP_SZ_Poverty_NationalDevelopmentStratedgyReview2013%20(1).pdf

UNDP Asia and the Pacific (2015), *A Methodological Guidebook: Climate Public Expenditure and Institutional Review (CPEIR)*, available at: https://www.asiapacific.undp.org/content/rbap/en/home/library/democratic_governance/cpeir-methodological-guidebook.html

UN Educational, Scientific and Cultural Organization (UNESCO) (2016), Swaziland National Trust Commission Act of 1972 (SNTC Act 1972), available at: https://en.unesco.org/creativity/policy-monitoring-platform/swaziland-national-trust

UN Framework Convention on Climate Change (no date), 'Nationally Determined Contributions of Kingdom of Eswatini', available at: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Eswatini%20First/Eswatini%27s%20INDC.pdf

UN Population Fund (UNFPA, 2017), available at: https://www.unfpa.org/data/SZ

World Bank (2021), Kingdom of Eswatini Country Profile, available at: https://climateknowledgeportal.worldbank.org/country/eswatini/climate-data-historical

World Bank (2021), The World Bank in Eswatini, available at: https://www.worldbank.org/en/country/eswatini/overview

World Bank (no date c), GDP per capita (current US$) – Eswatini, available at: https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=SZ

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