

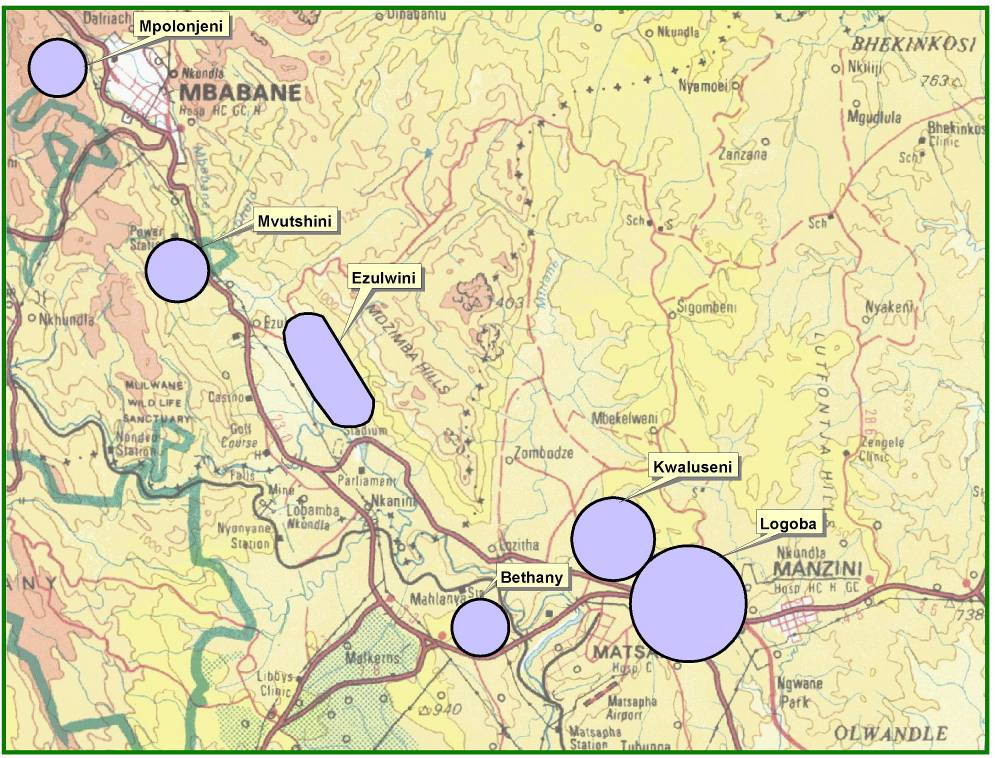
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G o v e r n m e n t o f S w a z i l a n d

m i n i s t r y o f h o u s i n g a n d u r b a n d e v e l o p m e n t

S w a z i I a n d L o c a l

G o v e r n m e n t P r o j e c t





environmental and social management framework

**a u g u s t 3 0 2 0 1 0**

rod de vletter environmental, natural resource and tourism consulting

Cover photos:

Top left: Lufafa Mountain

Top right: Buhleni Buganu (Marula) Festival

Bottom: Lavumisa Town Board Offices

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## LIST OF ACRONYMS

|  |  |
| --- | --- |
| CBO | Community Based Organization |
| CEP | Country Environment Profile |
| CIP | Capital Investment Programme |
| CMP | Comprehensive Mitigation Plan |
| DHHS | Director of Housing & Human Settlements |
| DUG | Director of Urban Government (MHUD) |
| EAARR | Environmental Audit, Assessment & Review Regulations, 2000 |
| ECC | Environmental Compliance Certificate |
| EA | Environmental Assessment |
| EMA | Environmental Management Act, 2002 |
| ESA | Environmental and Social Assessment |
| ESMF | Environmental & Social Management Framework |
| ESMP | Environmental and Social Management Plan |
| GoS  HSE-MP | Government of (the Kingdom of) Swaziland  Health, Safety and Environmental Management Plan |
| HCWM | Health-Care Waste Management |
| HCRW | Health-Care Risk Waste |
| IEE | Initial Environmental Evaluation |
| ISDS  LED  LDP | Initial Safeguards Data Sheet (World Bank)  Local Economic Development  Local Development Plan |
| MDG | Millennium Development Goal |
| MEPD | Ministry of Economic Planning |
| MHUD | Ministry of Housing and Urban Development |
| MOAC | Ministry of Agriculture and Cooperatives |
| MOF | Ministry of Finance |
| MOHSW | Ministry of Health and Social Welfare |
| MNRE | Ministry of Natural Resources and Energy |
| MRDYA | Ministry of Regional Development and Youth Affairs |
| MTAD | Ministry of Tinkhundla Administration and Development |
| NDS | National Development Strategy |
| NERCHA | National Emergency Response Council on HIV and AIDS |
| NGO | Non-governmental Organisation |
| NPDP | National Physical Development Plan |
| PA | Performance Assessment |
| PADCO | Planning and Development Collaborative International |
| PIM | Project Implementation Manual |
| PRSAP | Poverty Reduction Strategy and Action Plan |
| PUI  PST | Peri-Urban Interface  Project Support Team |
| RPF | Resettlement Policy Framework |
| RGAS | RGS Grant Approval Subcommittee |
| SEB | Swaziland Electricity Board |
| SEA | Swaziland Environmental Authority |
| SEAP | Swaziland Environment Action Plan |
| SLGP  SNHB | Swaziland Local Government Project  Swaziland National Housing Board |
| SNL | Swazi Nation Land |
| SOE | State Owned Enterprise |
| SWSC | Swaziland Water Services Corporation |
| TDL  UDP  UGP | Title Deed Land  Urban Development Project (Swaziland)  Urban Government Policy |

# Executive Summary

## Context

The design of Swaziland Local Government Project (SLGP) is based on lessons and outcomes from an ongoing process of urban development, upgrading and decentralization dating back to the 1980s. The project follows on the successful implementation of the Urban Development Project (UDP), and a number of policy initiatives reflecting a progressive and participatory approach to urban and peri-urban development. It also occurs at a time of heightened environmental and social awareness, and greater understanding of the links between the environment, health and socio-economic development. Consequently, the demands and expectations for effective environmental management and social inclusion in projects of this nature are high.

## The Scope of the Document

The Environmental and Social Management Framework (ESMF) has been prepared to ensure that investments under the SLGP are implemented in an environmentally and socially sustainable manner. The ESMF outlines an environmental and social screening process that will be applied at the planning stage of the investments.

The sub-projects anticipated in the SLGP have not yet been determined, and therefore the potential adverse social and environmental impacts are not yet known. This ESMF will help ensure that these impacts are identified and mitigated at the planning stage of the sub-projects, through an environmental and social screening process. The screening process proposed by this ESMF is designed to be consistent with both the Swaziland Environmental procedures and those of the World Bank, defined under OP 4.01 “Environmental Assessment”. The ESMF also provides a process that requires the screening of ALL sub-projects at the actual sites.

## The Project

The SLGP represents an effort by the Government of Swaziland, with the support of the World Bank, to provide a more coordinated approach to local development efforts for delivery of sustainable basic services throughout the country.

### Project development objective and key indicators

The project development objective is to develop institutionally strengthened *Tinkhundla* (the administrative framework of local governments throughout Swaziland, although here referring to local governments on Swazi Nation Land) and urban local governments. It will, in particular, focus on strengthening the capacity of local governments to deliver and maintain core infrastructure investments in urban and urbanizing areas.

### Component 1 - Tinkhundla Infrastructure and Capacity Building Support

Component 1 consists of two sub-components: Component 1(a) provides performance-based funding for small-scale infrastructure within selected *Tinkhundla* local governments; Component 1(b) provides capacity-building support to *Tinkhundla* government structures.

### 

### Component 2 - Urban Infrastructure Grants and Capacity Building Support

This component consists of Component 2(a): a performance-based infrastructure grant to finance capital investments in local roads, and Component 2(b): capacity building support to urban local governments to provide and sustain local services.

### Component 3 - Project Management and Technical Assistance

This component will support the implementation, monitoring, evaluation and audit of the Project, provide formal training and short-term technical assistance to local governments and the Government of Swaziland, and provide technical assistance to the Ministry of Housing and Urban Development and the Ministry of *Tinkhundla* Administration and Development to strengthen their capacity to support and monitor local government performance.

## Legal and Policy Background

Swaziland has an extensive policy framework representing a broad spectrum of sectors. To address the various challenges facing the nation, GOS has prepared its overarching National Development Strategy (NDS), with the operational instrument being the Poverty Reduction Strategy and Action Plan (PRSAP). The objective of the PRSAP is to reduce the incidence of poverty from its present level of 0ver 60% to 30% by 2015, in line with the MDG, and to eliminate it by 2022.

Under the umbrella of the NDS there are numerous sectoral policies at varying stages of approval and non-approval. Some policies awaiting approval (e.g. land) are potentially critical for achieving environmentally and socially sustainable development and the overall objectives of the NDS and PRSAP.

Integration of environmental concerns into the main policies and sectors has been catered for by the NDS and the Swaziland Environment Action Plan (SEAP). Both of these have had a positive influence in the manner in which environmental concerns were integrated into subsequent sector policies.

Strategic Environmental Assessment (SEA) is a legislative instrument under Section 31 of the Environmental Management Act. All plans, programmes, bills and action plans are required to undergo an SEA, though this has yet to happen consistently (EU CEP 2006).

## Project Approach to Identifying and Managing Impacts

The SLGP is divided into three components, two of which finance investments that may have adverse environmental and social impacts. The sub-projects supported by performance-based funding under Component 1 will be small-scale infrastructure projects whose potential environmental and social impacts are likely to be temporary and minor. It is critical that participatory, accountable and transparent structures are in place to ensure that proposed projects are consistent with the needs of the overall community; that ‘elite capture’ of resources is minimized and that the marginalized fully participate. Performance-based funding under Component 2 will support repair and rehabilitation of municipal roads within the boundaries of urban local governments. Because road works will take place on already existing rights-of-way, and where infrastructure has already been built, additional permanent impacts are likely to be minor; however, temporary impacts related to construction activities will need to be assessed and mitigation measures taken.

The ESMF looks at the type of sub-projects likely to arise, examines the potential adverse environmental and social impacts in some detail, and provides a number of practical checklists for potential sub-projects. The longer term impacts of the sub-projects will need to be determined during the period of project implementation, and this aspect is incorporated in the project through periodic assessments of the investments.

# 2 Background

World Bank support to the Government of Swaziland’s local government development program began in the late 1980s and was scaled up in the Urban Development Project (UDP). The UDP supported Swaziland’s two largest cities (Mbabane and Manzini) and the national water utility, the Swaziland Water Services Corporation (SWSC), to improve the delivery and management of critical services and the living conditions of low-income urban households in the main “urbanizing corridor” of Swaziland. In addition to investments in the expansion of the water and sewerage network, road improvements and expansion, and urban upgrading, the UDP supported a number of policy outputs, including the revision of the Rating Act, the introduction of 99-year leases for urban SNL, and the introduction of environmental impact management and the use of comprehensive environmental impact mitigation plans for all major developments.

The Bank’s involvement in the SLGP is informed both by its longstanding engagement in the sector in Swaziland and by its experience elsewhere in capacity development of rural and small-town local authorities. Since the completion of the UDP, the Bank has mobilized various non-lending support activities, primarily through Cities Alliance, for municipal development and strengthening and has remained engaged in municipal management and development issues. The Bank worked in close partnership with MHUD and MTAD to prepare the proposed project, which is in part a follow-on to the UDP and in part a first step in support to emerging local authorities. The Bank’s experience elsewhere in developing and incentivizing local government service provision has played a significant part in the design of the proposed project.

## Swaziland Context

Swaziland’s beautiful landscapes and peaceful atmosphere disguise a country in severe distress. Sluggish economic performance, high levels of poverty, inequality and unemployment, persistent drought, the devastating impact of HIV/AIDS and a breakdown in the health care system are features of present day Swaziland. The deteriorating economy, coupled with drought and fewer job opportunities in South Africa, has also increased the rate of rural-urban migration, putting further strain on resources in the urban and peri-urban areas. Climate change studies suggest that the southern African region will be adversely affected and that temperatures will rise and rainfall decrease. The impacts of these trends also need to be figured into the country’s development scenario.

Swaziland has good market access in the USA through AGOA and in Europe through the Cotonou Agreement, and the African market through COMESA, SADC and SACU agreements. Another important factor in Swaziland’s economy is the strength of the SME sector, with approximately 70,000 SMEs recorded in 2003. The SME sector accounts for about 60% of the workforce. The country has a well-diversified agro-based manufacturing industry, with sugar and wood pulp as the main foreign exchange earners. In recent years, textile production has picked up with some promising developments for the local cotton industry. The country has substantial natural resources and fertile land, which offer a great potential for agriculture led development. The Government of Swaziland considers this to be critical to future economic growth and poverty reduction.

“In Swaziland, HIV/AIDS is creating a chronic emergency that is permanently altering development. This demonstrates a ‘new’ disaster that exceeds emergency thresholds and requires a new style of holistic response”

(NERCHA 2007)

The latest census (2007) reveals a population of 970,000, below the previously projected figure of 1,163,510. Average life expectancy has dropped from approximately 60 years in 1997 to 31.4 years in 2004 (the world’s lowest). In 1997 it was estimated that 214, 428 people were living in urban areas (Times of Swaziland, July 2007).

#### Economic Growth and Poverty

Swaziland is a landlocked country of 17,364 km2 and is bordered by South Africa to the north, west and south, and Mozambique to the east. Swaziland’s population was 1.1 million in 2003, giving a population density of 64 person per km2. The latest census (2007) reveals a population of 970,000, below the projected figure of 1,163,510. The fall in population is likely due to the impact of HIV/AIDS and emigration.

Swaziland is a lower-middle income country with per capita gross national income of US$ 2,400 (2008). Swaziland’s income distribution is highly skewed; its Gini coefficient is .61, and 69 percent of the population lives below the national poverty line. The poor population is virtually synonymous with the 70 percent of Swazis who live on traditionally managed, largely rural Swazi Nation Land (SNL) outside of the country’s 12 urban jurisdictions.

A third of adults are infected with HIV and AIDS, and there are 130,000 orphans and vulnerable children (OVC) in Swaziland – 31.3% of all children. Unemployment is estimated at 29 percent, and a quarter of the population is dependent on food aid. Swaziland’s economy has deteriorated in recent years, particularly among subsistence farmers on SNL, where production dropped 55 percent between 1999 and 2003 due to drought, low investment, and the impact of HIV and AIDS. The ability of the Government of Swaziland (GOS) to address poverty and promote growth has become increasingly constrained in recent years, particularly as revenues from the Southern Africa Customs Union (SACU) have declined.

Swaziland’s economy grew rapidly in the late 1980s, recording an average growth of approximately 9% during the period 1986-1990. This growth declined to an average of 3.4% for the period 1992-97 and then averaging only 2% since 2000. GDP growth in 2006 is estimated at about 2 percent. In a recent report the IMF predicts that the growth rate may fall to as low as 1 percent in the medium term and urges the international community “to act now to avert a calamity in a country where more than 50% of the population is under the age of 15 years.” Some of this decline is attributed to an increase in competition for investment in the region, especially from South Africa and Mozambique.

The medium term outlook appears difficult because of the continued erosion of preferential treatment for Swaziland’s main export industries, poor competitiveness and an expected decline in SACU revenue.

While it is one of the wealthier nations in Africa, it remains one of the poorest in the world, with extensive income inequality. According to the Swaziland Household Income and Expenditure Survey (SHIES) of 2001, the latest data, the richest 20% consumed 56.4% of the national income compared to 4.3% by the poorest 20%. More than two thirds of the population live below the poverty line (69%) and 37% in extreme poverty (i.e. below the food poverty line). The poverty gap and severity of poverty were almost twice as large in rural areas of Swaziland as in urban areas. The survey showed that 34% of the rural labour force was jobless. Overall 47% of households with an employed household head were poor. The World Food Program (WFP) estimates that about 20 percent of the population required food aid during 2006. This figure appears to have worsened in 2007, and figures as high as 400,000 needing food aid have appeared in the local press. “There is a growing trend of severe bitterness as the society becomes more deprived. It is unfortunate that the analysis of the country’s development indicates that the gains from the past development are being eroded. This situation is likely not only to have an impact on the country’s social and political stability, but also the economic development path and the system of governance that is followed.” (Government’s Poverty Reduction Strategy and Action Plan [PRSAP]).

The rapid rate of urban migration in search of employment has led to the mushrooming of sub-standard houses in Swazi Nation Land (SNL) in a very haphazard and unplanned manner. According to the PRSAP, “The mushrooming of shabby structures in the outskirts of the country’s major towns has skipped the control of local authorities and no one seems to have control or authority over the development of these areas.” However, the 2003 “Study on Upgrading in the Peri Urban Areas of Swaziland” indicates that peri urban areas differ from site to site in terms of control by local authorities. What is important to recognize is that the level of control depends on local initiative, and that the lack of support, incentives or overall framework for maintaining and motivating these initiatives is the crucial factor dictating development in these areas.

Key social indicators are now declining. For example, average life expectancy is now 32.5 years, the lowest in the world, and is still declining, which is a reflection of the incidence of HIV/AIDS (IFAD 2006). Recent figures indicate that at least 26% of those who are sexually active are infected with HIV (Demographic Health Survey 2006/7). The number of OVC is expected to increase to 200,000 by 2010 (NERCHA 2007). Boys born between 2000 and 2005 have a 9% probability of surviving to 65; the comparable figure for girls is 12%.

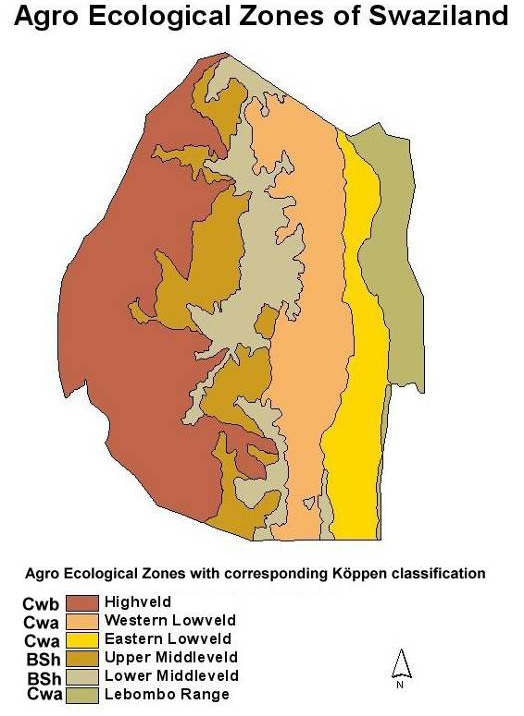
Many structural factors are responsible for the high prevalence of poverty. Among those factors raised by the poor during the Participatory Poverty Assessment of 1997 and the *Tinkhundla* consultations in 2001 were the (i) chronic drought, accompanied by crop failure, the death of domestic animals and lack of drinking water; (ii) lack of adequate agricultural land; (iii) isolation from mainstream income-generation and information sources; (iv) limited options for the diversification of opportunities for income-generation; and (vi) lack of competitive skills acquired through education. These factors trap the poor in poverty and mitigate against recovery. In addition the limited resource base and the lack of competitiveness in the global environment narrow the scope for generating increased incomes (IFAD 2006).

The country has substantial natural resources and fertile land, which offer a great potential for agriculture led development. The Government of Swaziland considers this to be key to future economic growth and poverty reduction.

## Environment, Natural Resources and Biodiversity

The diversity in Swaziland’s landscapes and biodiversity can be attributed to its geographical position at the transition of the South African Plateau (reaching over 1500m) to the Mozambican coastal plains. The western part of the country lies in the escarpment zone, the eastern part in the coastal plains. The Lubombo Range separates the Swaziland coastal plain from the Mozambique coastal plain. The country is classified into six Agro-ecological zones (AEZ) , taking into account elevation, landforms, geology, soils, climate and vegetation: Highveld, Upper Middleveld, Lower Middleveld, Western Lowveld, Eastern Lowveld and Lubombo Range. The diversity of these zones is the source of Swaziland’s rich biodiversity and range of natural habitats.

###### Figure 1: Agro-Ecological Zones of Swaziland



Swaziland has an extraordinary array of landscapes for such a small country: unique and diverse with high aesthetic and cultural values. Its high biodiversity is related to the wide range of Agro-Ecological zones (see Figure 1). The plateaus and valleys of the escarpment and the Lubombo Range offer beautiful scenery and biodiversity. Some valleys are very special landscapes and should be recognized heritage sites. The cultural value of landscapes is also enshrined in the Swazi tradition (EU CEP 2006). The lack of land use planning and zoning for tourism and conservation presents a threat not only to the natural resources and biodiversity of these landscapes, but will also close significant tourism opportunities for Swaziland, as most tourists visit Swaziland for its beautiful scenery (STA 2006).

Swaziland is a well-watered country with five main river systems. The international nature of these systems is worth noting, as most of these rivers have their sources in South Africa and flow into Mozambique. The country falls within the catchments of seven river basins. Details of the river basins are given below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| River Basin | Inflow from South Africa | Runoff in Swaziland | Discharge at border | Country |
| Komati | 727 | 469 | 1196 | SA |
| Lusutfu | 1073 | 1357 | 2430 | Moz |
| Mbuluzi | 0 | 321 | 321 | Moz |
| Mlumati | 74 | 148 | 222 | SA |
| Mnzimnyama | 0 | 86 | 86 | Moz |
| Ngwavuma | 0 | 173 | 173 | SA |
| Pongola | 0 | 86 | 86 | SA |
| TOTALS |  |  |  |  |

Note: flows in Mm³/annum Source: Groundwater Resources of Swaziland – CIDA 1992

A tripartite agreement exists between Swaziland, Mozambique, and South Africa to cover the sustainable use and protection of water resources of two river basins that are shared between the three countries. The seven basins shown above are all sub-catchments of the two rivers in the agreement, and therefore the water resources of the entire country are covered by the agreement.

The definitive publication on Swaziland’s groundwater resources is “Groundwater Resources of Swaziland”, prepared by the Government and the Canadian International Development Agency following an 8-year geological and geophysical survey program involving the drilling and testing of some 400 boreholes, as well as other groundwater sources (springs, seeps, etc.) Pertinent extracts from the report include the following:

“Groundwater flow systems in Swaziland are mostly shallow, and residence times are believed to be relatively short (less than a few decades). The estimated total potential groundwater resource is equivalent to a sustained flow of 20.5 cumecs (cubic meters per second).”

“Because of the relatively discontinuous nature of even the regional fracture zones, there are no significant deep-seated flow systems present in Swaziland. No evidence has been found to suggest that flow systems penetrating several hundred meters below ground and transmitting significant amounts of groundwater exist in Swaziland. Other studies ... have concluded that the flow systems are all of a localized nature.”

Despite the number of rivers and streams that traverse the country, access to water for many rural homesteads is a real problem, much aggravated by drought and further threatened by climate change. Approximately 52% of the population has access to improved sanitation and clean water supply, with the rural areas having about ten percent less.

The main factors affecting the environment, natural resources and biodiversity in Swaziland are the following:

Land conversions and effects of AIDS. An increasing proportion of arable land is no longer used as a result of AIDS and drought. Arable land is also being converted to peri-urban areas and formal urbanization.

Land degradation. Poor land management has caused soil erosion and has accelerated natural erosion. It is estimated that 30% of the country and 55% of all communal grazing land has serious erosion status. Poor range conditions characterize 45% of SNL rangelands. Bush encroachment and alien plant invasion further contribute to this problem.

Water quality. Progressive industrialization has lead to gradual deterioration of water quality.

Climate change. Climate change will negatively impact on ecosystems and land degradation. An overall average reduction in runoff is expected ranging from 2-6% in a normal year and higher for dry years.

###### Box 1: Environmental Trends in Swaziland

The environmental trends have been defined as follows, and considered interactive and impacting on each other (EU CEP 2006):

|  |  |
| --- | --- |
| Loss of natural resources  Changes in natural habitats and ecosystems  Loss of biodiversity  Changes and diminishment of ecosystem services  Decrease of harvesting of natural products  Decrease of affordable energy sources  Contaminated and polluted soil and water bodies  Decrease of production and harvesting  Polluted air  Poor living conditions  Increased environmental hazards | Reduced area of land under protection  Land fragmentation  Conflicts about land  Decreased land productivity  Decrease of water availability and more frequent water shortages  Water pollution and environmental degradation  Reduced domestic water quality and increased health risks  Decreased coping methods to disasters  Increased food insecurity  Impoverished livelihoods  Increased social and environmental vulnerability |

## SLGP project background and potential role in Swaziland’s development

Swaziland only began to address problems of land, servicing and housing in urban areas in the mid 1980s. It was during this time that the Swaziland National Housing Board (SNHB) and the Human Settlement Authority (HSA) were created, together with a number of sector policies and legislation. In response to a growing need to respond in an organized manner to improving the environment for rapidly growing urban areas, the Ministry of Housing and Urban Development was created in 1992. The most significant urban problems at that time were considered to be (i) lack of available land for low-cost development in urban areas and (ii) insecure and un-collateralizable land tenure on Swazi Nation Land (SNL) beyond the urban areas (Lowsby 2007). These challenges had to be overcome to provide adequate land for the growing urban populations. Peri-urban areas were expanding onto SNL at a rapid rate, overwhelming the capacity of the traditional authorities responsible for them to meet the needs of the population in terms of basic services. Therefore the need to bring peri-urban areas on SNL under formal, planned and secure administration was considered (and remains) a serious challenge. The recently approved constitution introduces the concept of an integrated local governance system, which brings hope for improved local planning and development, while a change in the legal framework to allow for the signing of 99-year leases by occupants holds promise for improved security of tenure.

### The Swaziland Urban Development Project (UDP).

Preparation of the World bank-funded UDP began in 1989; it became effective in 1996 and closed in 2005. GOS continued to implement the project after World Bank funds were fully disbursed. The objectives of the project were to:

* Provide a basis for sustainable urban development through emphasizing policy reform and institutional development
* Pilot land reform, particularly development and housing solutions for moderate and low-income urban households
* Address critical infrastructure needs, including water, sanitation, waste disposal and roads.

Lessons learned from the UDP have contributed to the initial design of the SLGP. There are lessons which are particularly significant from the perspective of the ESMF. The outcomes of the project have influenced the manner in which MHUD determines its approach to community participation and planning. Some interesting specific lessons were:

Key lesson from UDP: “Ensure that plans developed are responsive to the needs and concerns of affected communities”

* Plan around existing homesteads and plots to minimize demolition and resettlement – use existing roads, tracks and paths for circulation and access
* Ensure that plans developed are responsive to the needs and concerns of affected communities
* Incorporate the protection of physically and culturally sensitive environmental areas into the planning process

These lessons indicate that the urban planning process is becoming increasingly sensitive to participatory planning and a ‘design with nature’ approach that incorporates existing infrastructure and physically and culturally sensitive areas.

From the perspective of community participation, key lessons learned are the following:

* Sufficient time and input are needed to educate the community at large about all aspects of investments and how they will affect individuals
* Difficult issues must be addressed up front
* The scope, extent and cost of the project has to have genuine community buy-in before implementation starts
* It is essential to maintain the impetus through regular and meaningful communication throughout all stages of the project, even at times of little visible project activity
* There is no typical community –each group’s needs and expectations are different   
   (all lessons taken from Lowsby 2007).

Although the lessons learned above were specifically related to the upgrading of peri-urban areas, the SLGP has built these lessons into its design, incorporating regular community consultation into all planning and decision-making in all the urban local governments and participating Tinkhundla.

### SLGP Potential Role in Swaziland Development

The SLGP comes at a critical time in the political development of Swaziland. This is demonstrated in the new constitution and progressive policies on one hand, and the delays in implementing and approving a number of these key policies on the other. The SLGP represents a vehicle in which important actions and concepts defined in the constitution and the policies of decentralization and urban growth can be supported.

The manner in which communities and local authorities are engaged and brought together into formalized structures and participatory planning processes will determine how sustainable development will take place within participating Tinkhundla and how urban local governments are viewed in terms of meeting the expectations of their citizens.

### Addressing potential adverse environmental and social impacts

Of the Bank’s 10 safeguards, OP 4.01, Environmental Assessment, OP 4.11, Physical Cultural Resources, and OP 4.12, Involuntary Resettlement have been triggered due to the proposed investments and civil works to be supported by the SLGP. A Resettlement Policy Framework has been prepared separately from the ESMF.

Perhaps the most significant environmental and social aspect of this project is that it will potentially accelerate urban development. At the local level the impacts will likely remain relatively low at the level of the sub-projects. Within the cities and towns, improved capacity to prioritize and implement key local roads projects will incorporate analysis of potential environmental impacts and benefits, which will then be incorporated into larger planning tasks.

## Overview of Swaziland’s relevant policies, procedures, legislation, regulatory and administrative frameworks

The unique characteristics of Swazi society and culture add a layer of complexity to the ESMF. This means that before moving into a description of the environmental policy framework, a clear understanding of the deeper socio-economic context, in particular those relating to land, peri urban/urban development and decentralization issues is required. The dynamics of the so-called peri-urban interface (PUI) in Swaziland is strongly determined by socio-cultural characteristics, socio-economic conditions and the government’s policy response (including the new Constitution) to the challenges that they present.

## Context of Policy Development in Housing and Urban Development

An improved policy framework for housing and urban development was catalyzed when GOS looked for support from the donors after a cholera outbreak (and Cyclone Domoina ravaged the country’s infrastructure in 1984). In 1986 a number of donors collaborated to address the problems, resulting in a number of linked fundamental policy and legislative reforms in 1987/88 that together set the future institutional framework for the development of housing in urban areas (Lowsby 2007).

The relevant policies and plans that were developed during this period were: (i) the Draft National Housing Policy; (ii) The Human Settlement Authority Act (1988) and the National Housing Board Act.

These policy developments, together with complementary studies set the stage for Swaziland’s first integrated Urban Development Project. Preparation for this project helped to promote further reforms, resulting in the formation of the new Ministry of Housing and Urban Development. This brought together all instruments involved in urban government and planning (Lowsby 2007).

The key policy issues identified at this time related to (i) the availability of land to meet the long term housing demand generated by a rapidly growing urban population; (ii) lack of bankable/transferable tenure on Swazi Nation Land (SNL) in peri-urban areas and (iii) lack of planning controls and effective administration in peri-urban areas. A framework was needed to bring SNL under municipal control. The crucial question at that time, and which still influences the present, is:

How could this framework be achieved without alienating the traditional authorities who derive their power from allocating that land? (Lowsby 2007)

#### The Constitution of Swaziland Act 2005

The constitution represents a concerted effort to unite the two separate governance institutions. The constitution has evolved over a decade of consultation and debate, and devotes one of its twenty chapters to local government which is set to transform the face of local administration on a scale never attempted before, and within a relatively rapid timeframe.

The constitution introduces the concept of a single countrywide system of local government within a defined period of five years, integrated across the urban / rural divide – administrative areas might be urban, rural or mixed. This development will require a major paradigm shift to succeed. Nonetheless, because the concept is enshrined in the constitution, and therefore has the backing of government and the king, the country is presented with a real opportunity to finally bring it under a unified system of representative and relatively autonomous local administration.

The new constitution also sets out to avoid the pitfalls which occurred the last time such a change was introduced; after independence when town councils were established with extensive mandates but were not provided with the resources to execute them, leading to dissatisfaction on all sides. The new constitution aims to ensure that:

“decentralisation is comprehensively achieved through the development of democratic structures with sufficient resources and controls to deliver services effectively”, and that

“the people at sub-national or local community level progressively take control of their own affairs and govern themselves.”

To achieve this transformation will require immense effort and commitment, considering the potentially conflicting agendas on the two sides of the governance divide. The change will require the most fundamental restructuring of government since independence, as well as new legislation and policies, institutional strengthening, training and capacity building. The SLGP intends to assist the Government of Swaziland in developing and strengthening local government structures, processes and procedures, increasing accountability to the population, and strengthening trust between the central government and local governments.

#### The National Development Strategy (NDS) 1999

The National Development Strategy Vision 2022 is the Government’s official long-term strategy and overall planning framework for the country. The vision is that by 2022 Swaziland will have moved to the top 10 percent of the medium human development group of countries founded on sustainable economic development, social justice and political stability. To achieve this vision, strategies were laid out in seven main areas:

* Sound economic management
* Economic empowerment
* Human resource management
* Agricultural development
* Industrialization
* Research
* Environmental management

Emerging from the NDS are short-term development strategies and inter-sectoral policies and legislative framework, which was officially launched in August 1999. The NDS gives broad strategic objectives that have been proposed for dealing with many of the problems of environmental protection, including the following:

* Fully integrate environmental management and development planning.
* Initiate a collaborative coherent programme approach with all sectoral ministries and departments, each contributing in their area of expertise.
* Establish a national environmental mechanism for ensuring that the environmental priorities of national planning are observed and sought after.
* Coordinate , monitor and control environmental protection measures.
* Involve the public in environmental management.
* Strengthen or develop a comprehensive system of environmental laws and regulations.
* Reinforce the enforcement capability of the Swaziland Environment Authority.
* Design and strengthen economic policy instruments, such as environmental profile, environmental guidelines and procedures, environmental assessment and market-based mechanisms.
* Ensure a gender dimension in environmental management.
* Involve women actively in environmental decision-making at all levels.
* Enforce all environmental laws.
* Promote conservation and management of water and land resources.
* Initiate economic incentives to promote environmental management.
* Strengthen the information base for environmental protection.

The creation of adequate physical infrastructure is viewed as an important entry point by the NDS and it outlines strategic interventions through addressing issues of land use and tenure, affordable and safe shelter, strengthening and creating local institutional mechanisms to facilitate low cost affordable housing, improving efficiency of local authorities to manage the growth of human settlements and improving the quality of service delivery.

#### Poverty Reduction Strategy and Action Plan (PRSAP).

The GOS formulated the PRSAP within the overarching NDS. The PRSAP is one of the key documents for operationalising the NDS and attaining the vision 2022. The overall objective of the PRSAP is to reduce the incidence of poverty from its current level of 69% to 30% by 2015, in line with the MDGs, and eliminate it by 2022. The main pillars of the strategy include rapid acceleration of economic growth based on broad participation; empowering the poor to generate their own income; and, an equitable distribution of the benefits of growth through public spending. The strategy focuses on poverty reduction efforts in areas where the poor live by improving their access to social services, principally education, health and nutrition. The document is described as a “strategic planning document designed to guide the formulation and action for poverty reduction in all key areas of development. It will be the centre of overall planning and budgeting. “The GOS states that “Poverty reduction will ... be central to all sectoral development plans and the medium term expenditure framework.” The PRSAP contains concrete projects and programmes, which are designed to generate income and create employment, combat the HIV/AIDS pandemic and minimize vulnerability, and enhance agricultural production and food security.

A better understanding of the state and dynamics of poverty in Swaziland is derived from two household income and expenditure surveys conducted in 1995 and 2001, a Participatory Assessment carried out in 1997, and consultations with communities at all Tinkhundla undertaken in 2002. The SHIES conducted in 2001 revealed that the prevalence of poverty had increased from 66% in 1995 to 69%. There are large disparities in poverty prevalence among the four regions of the country, between rural and urban areas, and between the different ecological zones of the country: Regionally, the prevalence of poverty in 2001 was greatest in Shiselweni with 76%, followed by Lubombo with 73%, Manzini with 70% and Hhohho with 61%. SHIES 1995 found that poverty prevalence was 71% in rural areas and 45% in urban areas. According to SHIES 2001 the situation has worsened – poverty prevalence in rural areas was 76% in 2001 compared to 50% in urban areas. Income distribution in Swaziland is highly skewed. In 2001 the richest 20% consumed 56.4% of national income, while the poorest 20% consumed only 4.3%. The poverty gap and severity are much higher on SNL than in defined urban areas. Key assets such as land and cattle were found to be unequally distributed, even among smallholder farmers on SNL. Poverty is highest at 77% among those living on subsistence economic activities, basically agriculture.

Poverty and gender are strongly correlated: 63% of female-headed households are poor and lack productive assets, compared to 52% of their male counterparts. The prevalence of poverty was 71% among illiterate people compared to 30% among households headed by persons with primary school education. Many structural factors are responsible for the high prevalence of poverty in the country. Among those raised by the poor during the PPA of 1997 and the Tinkhundla consultations were chronic drought followed by crop failure, death of domestic animals, lack of drinking water, lack of adequate agricultural land, isolation from mainstream markets and information sources, limited options for diversification of opportunities for income generation, and lack of competitive skills acquired through education. For women, tradition accords them a minority status that denies them access to assets and productive resources.

According to SHIES 2001 the situation has worsened, poverty prevalence in rural areas was 76% in 2001 compared to 50% in urban areas

In relation to housing, the PRSAP recommends that the improvement of housing conditions in Swaziland should ‘strongly focus attention on rural areas.’ It states that:

The rapid rate of urban migration ... has led to the mushrooming of sub-standard houses on SNL in a very haphazard and unplanned manner. The mushrooming of shabby structures on the outskirts of the country’s major towns has skipped the control of local authorities and no one seems to have control or authority over the development of these areas. Moreover, due to the financial gains now attached to land in the outskirts of urban areas, farmland is being sold for the construction of houses and the remaining area, if any, cannot be used for any meaningful and gainful farming activity. This situation has led to increased congestion, poor sanitation and a lot of hunger and malnutrition due to limited potential for income generation on the remaining portions of land. Another factor that has contributed to the congestion and unplanned housing development has also been inadequate synchrony in the location of industries, development of human settlements, and provision of social services. New factories have been constructed without due consideration to the social services, infrastructure and welfare of workers.

#### Decentralization.

In 1996 the GOS published an Urban Policy, which put emphasis on decentralization, and spelled out the functions and responsibilities of local government, which include the provision of infrastructure, social and human services and promotion of local economic development. The Decentralization Policy (2005) is seen as naturally evolving from a decentralization initiative launched by King Sobhuza in 1955 through the Tinkhundla system which he stated would “decentralize administrative work thus bringing it within the reach of everybody” and “provide the people ... with a real service and ... lead to decentralization and a delegation of authority from the central body”. Decentralization forms a key element of the new Swaziland Constitution which enshrines decentralization with the following statements:

“Swaziland shall be a democratic country dedicated to the principles which empower and encourage the active participation of all citizens at all levels in their own governance”

“ . . . in the conduct of public affairs the State shall be guided by the principle of decentralization and the devolution of government functions and powers to the people at the appropriate levels where the people can best manage and direct their own affairs.”

(The State should undertake) “ even and balanced development of all regions and in particular improving the conditions of life in the rural areas, and generally, redressing any imbalance in development between the rural and urban areas.”

“The System of government for Swaziland is a democratic, participatory, Tinkhundla-based system which emphasizes devolution of state power from Central Government to Tinkhundla areas and individual merit as basis for election of appointment to public office.”

“Parliament shall within five years of the commencement of this constitution provide for the establishment of a single country-wide system of local government which is based on the Tinkhundla System of Government, hierarchically organized according to the volume or complexity of service rendered and integrated so as to avoid the rural/urban dichotomy.”

The Decentralization Policy has the following objectives:

* To decentralize governance praxis at all levels
* To ensure **“bottom up”** integrated development planning and implementation of basic infrastructure as well as timely and quality service delivery
* To empower local government institutions to manage community development projects, programs and activities
* To ensure improved accountability and transparency in public affairs and the use of public resources

The policy recognizes that in order to achieve the level of participation by stakeholders for successful decentralization will mean: “Not only the **radical reform of the institutions of government and governance, but also, and most importantly at that, the mobilization of civil society ...”**

The systematic, carefully designed and holistically planned community driven projects will be . . . a major factor . . . to empower communities . . .

The scope of the policy is country- and systems-wide and all inclusive, entailing “reform of prevailing relevant institutional frameworks and systems to empower decentralized institutions” to control the development process at the local level. Strong emphasis is put on the importance of community-driven projects as the key for local economic development:

“The systematic and carefully designed and holistically planned community-driven projects, programmes and activities which will make the best use of available and scarce resources, will be seen by all actors as a major factor in the drive to empower communities in elevating their socio-economic and political status.”

“If there is inadequate participation of the citizen-client in decision-making processes at the local level, particularly as concerns local needs and priorities, it results into projects that remain to be ‘white elephants’ “

The Policy defines the decentralization levels, from top to bottom as: (i) regional (4 administrative regions or Hhohho, Manzini, Shiselweni and Lubombo); (ii) Inkhundla level and Urban Government (the Urban Government shall, within its legitimate boundaries, form an Inkhundla); and (iii) Chiefdom level (an Inkhundla will be constituted by any number of chiefdoms that the Boundaries Committee will determine).

Comprehensive institutional arrangements for the decentralization process are defined in detail. A capacity building matrix is also given, which gives emphasis to local government authorities and communities to develop capacity for participatory planning and formulating consolidated local development plans. Development plans at the local level will be approved by the Inkhundla or Chiefs Council. It is envisaged that under the supportive Acts there will be development committees at the regional, Tinkhundla and Chiefdom levels.

###### Figure 2: DECENTRALISED EXECUTIVE STRUCTURE (From Decentralisation Policy 2005)

HIS MAJESTY THE KING AND

NGWENYAMA

PRIME MINISTER

DEPUTY PRIME MINISTER

(Also currently responsible for Regional Admin)

Indvuna Yenkhundla

Regional Administrator (Lubombo

Regional Administrator

(Shiselweni)

Regional Administrator (Manzini)

Indvuna Yenkhundla

Indvuna Yenkhundla

Indvuna Yenkhundla

Regional Administrator (Hhohho)

Mayor

Mayor

Mayor

Mayor

Indvuna YeMcuba

(appointed)

CHIEFS

###### Figure 3: TRADITIONAL LEGISLATIVE GOVERNANCE STRUCTURE (From Decentralisation Policy 2005)

HOUSE OF SENATE

HOUSE OF ASSEMBLY

REGIONAL LEGISLATURE

(COUNCIL OF CHIEFS)

REGIONAL LEGISLATURE

(COUNCIL OF CHIEFS)

REGIONAL LEGISLATURE

(COUNCIL OF CHIEFS)

REGIONAL LEGISLATURE

(COUNCIL OF CHIEFS)

INKHUNDLA

CHIEFS

COUNCIL

INKHUNDLA

CHIEFS

COUNCIL

OFFICE OF THE

CHIEF AND

BANDLANCANE

OFFICE OF THE

CHIEF AND

BANDLANCANE

HIS MAJESTY THE KING INGWENYAMA

#### Administration of Swazi Nation Land.

In 1979, a new parliament was established along traditional lines based on the *Tinkhundla* system, whereby the public vote for electors from an approved list. This created a dual political system and allowed the King to distribute royal power throughout the countryside while maintaining centralized control. Access to land remains centralized and continues to be administered through chiefs, each appointed by the King (Stringer 2004) The majority of Swazis, some 75%, continue to live predominantly rural and traditional lives on Swazi Nation Land (SNL). Close to 75% of the land is held by the King as the Ngwenyama in Trust and an estimated 350 chiefs to administer an estimated 51% of the country under customary law. Thus, the chiefs (acting on the King’s authority) control land allocation within their individual chiefdoms. Women can only acquire customary use of right through a male relative or heir.

The *libandla* is the chief’s inner council in which all communal matters are debated, discussed and resolved by consensus. Communities on SNL will meet when called by their chief to discuss local issues, such as development projects and agreement is always achieved by consensus. These systems are important, and are often replicated by proxy authorities within the urban areas.(Lowsby 2007).

This unique political structure determines the realities of rural, urban and peri-urban governance, resulting in locality-specific dynamics.

###### Box 2: Tinkhundla

Swaziland is divided into 55 Tinkhundla or constituencies. Each tinkhundla is constituted in the form of a local authority and has an elected Member of Parliament as well as an elected chairman and committee and a small secretariat. An inkhundla may cover one or more chiefdoms. The main purpose of the system is to devolve and decentralize power to the regions and sub-regions so as to fast-track development. A Tinkhundla Review Commission appointed by the King 1992 recommended that tinkhundla centres be formally constituted as local authorities with enhanced powers and responsibilities. The National Physical Development Plan 1996-2006 states that:

“With regard to Tinkhundla as structures of local and regional government, the thrust of the Review Commission was to do away with the moribund Regional Councils and to make Tinkhundla effective and representative local authorities, with a role in the rural areas akin to existing Town Councils and Town Boards.”

In the mid 1990s a reformed *Tinkhundla* parliamentary system introduced direct, popular and secret election of members of Parliament and paved the way for the election of town councils. This new dispensation for urban local authorities, however, was not followed by a new confidence in the councils, and ministerial presence in the municipal affairs remained strong. Attempts were made to liberalize local government affairs, resulting in a National Urban Government Policy adopted by Cabinet in 1996.

The Urban Government Act of 1969 still provides the legal foundation for the local government structure. While most countries in the world structure their local government level by dividing the entire national territory into a specific number of local governments, the Urban Government Act only empowers the Ministry for Housing and Development (MHUD) to create and define the boundaries of local authorities only in urban areas (Georgia State University, 2003).

Since Swaziland’s municipalities are created only by delimiting boundaries surrounding urban population centres, urban local governments only cover a small part of the national territory. This is a critical problem because this means that no local government authorities exist to deliver services to peri-urban and rural areas. Although traditional governance structures or national line ministries are technically responsible for providing ‘local’ services in rural areas (and this also means peri-urban areas on SNL), many basic services are either underprovided or simply not provided at all in non-urban areas.(Georgia State University 2003).

The most contentious area in the functions and responsibilities of local authorities in Swaziland is the development, use and ownership of land. While the Local Government Act empowers local authorities to develop, control and manage any land vested in, owned or leased by them, the practical reality is different and/or fraught with numerous problems. Ownership of land lies with either the central government or the Swazi Nation in the case of Swazi Nation Land (SNL) that is held in trust by the King and distributed by chiefs to the people as part of the exercise of their traditional powers and prerogatives. Since local authorities do not own land in the urban areas under their municipal jurisdiction, their ability to develop, control and manage such land is severely circumscribed since they have to get the approval of central government whenever they desire to formulate and implement municipal development programmes and projects. Moreover, since land ownership rights lie elsewhere in Swaziland's complex political and administrative system, no land development programmes and projects can proceed before land has officially been made available to local authorities. The process of soliciting approval and the release of land earmarked for urban or township development is not only complex like the political and administrative system but also characterised by long delays that often paralyse the decision-making process (Dlamini 2000).

## OTHER KEY POLICIES AND PLANS

#### The National Physical Development Plan (NPDP) 1996

The National Physical Development Plan (NPDP) is the Government’s official overall strategic planning framework to guide development and capital infrastructure investment decisions in the country over a ten-year period. The NPDP has a two-fold purpose. The first is to spatially interpret national economic planning and implementation currently driving all major developments in the country and secondly, to strengthen inter-sectoral coordination of the country’s overall development within a spatial framework ensuring a balanced mix of land uses as well as the use of natural resources in an environmentally responsible manner.

#### Draft National Land Policy 1999

The Draft Land Policy of 1999 was designed to improve access to land and secure tenure for all citizens; to encourage the optimal, rational and sustainable use of land; improve productivity, income and living conditions of Swazis especially the poor and to develop an efficient and effective system of land administration. The document addresses nation-wide issues under six headings, namely, Human Rights Issues and Policies, Land Use and Land Management Issues and Policies, Cultural Issues and Policies, Land tenure Issues and Policies, Land Market Issues and Policies and Land Administration Issues and Policies. For each issue addressed within these categories, policies are proposed to resolve the issue.

The document has not yet been approved by Cabinet.

#### Urban Government Policy 1996

The Urban Government Policy (UGP) is the Government’s official document setting out definitions, services and other important management aspects for urban areas. The policy indicates that a strategic planning process will be implemented to guide infrastructure and community development. Dynamic structure plans will involve the active participation of citizens, and accommodate their needs, e.g. through advisory boards on parks and recreation. As such, the policy provides for initiatives with regard to the development of urban forests and other green areas.

Basic Functions and Responsibilities of Local Governments

in Swaziland under the Urban Government Policy

Infrastructure:

Including roads, drainage, footpaths, street lighting, water and sewerage, electricity, and transport planning.

Public Facilities

Including bus terminals, cemeteries, sports facilities, community centres, public toilets, parks and open space, solid waste collection, landfills, septic services, environmental controls and regulations, fire and emergency services.

Economic Development

Including land and residential development, public private partnerships and public information

Social and Human Services

Including recreation facilities, libraries, public health, day care, children and family services

NB Most of the above functions are expected to be carried out in co-operation between different levels and governments, without a clear determination of which level has the major responsibility.

Community participation is an integral part of and is subsumed under the general process of decentralisation. The emphasis of the UGP on citizen involvement in decision-making is testimony to the Government's acceptance of the need to give direct access to government by the people, thus stimulating them to actively participate in the formulation and implementation of national development plans, programmes and projects. Within the purview of these and other factors, the UGP accepts the argument that local governments, by virtue of being closer to the people, have a better understanding of community needs and aspirations, including being well positioned to explain government policies and actions and work cooperatively with communities in carrying out programmes and projects that advance the larger public interest.

A closer examination of the UGP reveals, beyond doubt, that it is potentially the most radical policy ever to be adopted by the central government in Swaziland. The assumption of the UGP is that the functions and responsibilities it defines would be carried out by local authorities in collaboration with other relevant agencies of the central government, including public corporations. Through the UGP, the government made an undertaking to implement far-reaching changes and reforms affecting central/local government relations in the area of decentralisation and its related processes of devolution and deconcentration. Since Swaziland is by nature and in socio-political and administrative terms, a conservative society that has clung to traditional norms and values, the UGP represents a step towards the embrace of modern principles of decentralisation and local governance (Dlamini 2000).

#### Draft Peri Urban Growth Policy 1997

The policy institutes community based process management in peri urban areas, including the establishment of spatial plans based upon recognized principles of sustainable development. The policy has not been adopted to date.

#### Environment Policy

Emerging from the Swaziland Environment Action Plan, the national Environment Plan and the Environment Management Bill 2001 are intended to be the national policy to protect and conserve the environment and to attain sustainable development in Swaziland. It is not certain if and when the Policy will be adopted.

#### Swaziland Environment Action Plan 1997

The Swaziland Environment Action Plan 1997 follows the vision of the NDS, and it is divided into two parts, the actual action plan, and the overall land and environment policy framework. Both the NDS and the SEAP are concerned with sustainable development, with the NDS focusing more on the ‘development’ side and the SEAP more on the sustainable side.

#### Draft National Biodiversity Strategy and Action Plan, 2000

This is still waiting approval. This may be updated after the approval of the Biodiversity Conservation and Management Policy.

#### Draft Biodiversity Conservation and Management Policy, 2007

This policy aims to address the threats and opportunities relating to biodiversity conservation and utilization. The policy introduces the status and framework of biodiversity in line with the internationally accepted concept and approach of biodiversity conservation following definitions and regulations set by the Convention on Biological Diversity signed and ratified by Swaziland. The policy is set around the four key pillars for biodiversity: (1) Conservation of Biodiversity; (2) Sustainable Use of Biodiversity; (3) Access and Benefit Sharing and (4) Capacity to Manage Biodiversity. The draft policy provides a very useful overview of the current issues in relation to the conservation of biodiversity, defines policy objectives and suggests key strategies to be developed and implemented that will address issues of biodiversity and utilization. The policy adopts an ecosystem approach which is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.

## LEGAL FRAMEWORK

Historically, a lack of clear policies and weak institutional capacity and difficulties in obtaining land for development, have exacerbated urbanization problems. Private and public sector developers (like the Swaziland National Housing Board) provide housing but this is limited and available only to the middle and upper income households. A total of 79 legislative instruments related to land issues have been identified. Some of the key pieces of legislation are:

#### Urban Government Act of 1969

This Act provides the basis for the establishment of local authorities in Swaziland as a primary legal instrument defining the parameters under which city councils conduct their affairs. The act outlines the duties and powers of Councils; makes provision for meetings of Councils and Committees, Management Committees and staff; designates towns, land, streets and public places; and the administration and audit of Council accounts.

#### Town Planning Act, 1961

This act makes provision for the preparation and carrying out of town planning schemes in declared urban areas. It establishes the Town Planning Board, its functions, powers and duties. It authorizes the preparation of town planning schemes, the approval of schemes, variation of schemes, enforcement of schemes and compensation for injurious affection.

#### Human Settlements Authority Act, 1988

The act established the Human Settlements Authority and its Objects and functions. It provides policy support to Government and the orderly development of human settlements by allowing for and outlining procedures for the establishment of Human Settlements. It also makes provision for the development human settlement development plans, the revocation or modification of development plans and finance mechanisms for the supply and maintenance of improved shelter and infrastructure.

#### Swaziland Environment Authority Act, 1992

The act provides a broad mandate for environmental management by the Swaziland Environment Authority. Translating from these have been the environment audit, assessment and review regulations, the National Environment Policy, waste management guidelines and a National Environment Action Plan.

#### Environment Management Act 2002

The act is intended to provide and promote the enhancement, protection and conservation of the environment and the sustainable management of natural resources. It also turned the Swaziland Environment Authority (SEA) into a body corporate and established the National Environment Fund. In terms of the Act, the SEA has the power to halt any and all developments that have not been adequately scrutinized for their environmental impact. Any policy, bill, regulation, program or plan requires a Strategic Environment Assessment. The Act provides for public participation, and sets out regulations for the registering of environmental information, requests for environmental information, public review, public hearings, findings of public hearings, public participation in licensing decisions, order and prosecutions initiated by the public, civil actions and other regulations. The Act is the supreme environmental law and the implementation of any non-environmental piece of legislation, e.g. the Roads Act, where it is considered to have a direct or indirect environmental impact falls under the provision of the Environmental Management Act.

#### The Water Act, 2003

This act is intended to harmonize the management of water resources in the country. Its provisions include the establishment of a National Water Authority and of a Water Resources Master Plan. This plan will contain an inventory of the total water resources of Swaziland, and a comprehensive programme of action in which the maximum value can be obtained from this resource to benefit the people of Swaziland. The Act recognizes international water bodies, specifically, the Joint Water Commission (of South Africa and Swaziland), the Komati Basin Water Authority (also with South Africa), and other committees, commissions, and authorities established by South Africa, Swaziland, and Mozambique. It also establishes River Basin Authorities to control the abstraction and use of water within the defined river basins. Under the Act, separate permits are required – initially from the Water Appointment Board and later from the river basin authorities – before a borehole may be drilled, and before water may be abstracted. The permit may limit the amount and/or rate of water abstracted, and may be cancelled if the permit conditions are not complied with.

#### The Flora Protection Act, 2001

This act is designed to protect indigenous flora and prohibits any person from plucking, gathering, cutting, uprooting injuring, breaking or destroying a plant of any species that is listed in the schedule of the Act.

#### The Waste Regulations, 2000

This provides regulations for the management of solid waste and liquid waste disposed on land or water.

With regard to urban management there are a number of Acts affecting urban authorities. The 1961 Town Planning Act established the fairly complex and tortuous arrangement for establishing townships, a process that has to be followed for legalizing all new residential developments within their jurisdictions, including presently unplanned, informal settlements. The Building Act of 1968 establishes standards for construction that are considered by many to be extremely high, inappropriate and unaffordable by most urban dwellers. The Rating Act of 1967 allows strict control of local property rates by central government, which can severely limit the ability of town and city councils to deliver and maintain infrastructure and services. More recently, the two city councils have prepared Strategic Development Plans, which have identified priorities and are assisting efforts to address critical issues such as the informal settlements, servicing, cost recovery and funding for development and operations and maintenance.

## INSTITUTIONAL FRAMEWORK

The broad coverage of the SLGP means that there will be a number of institutions that will need to be engaged in the project. These institutions will be represented on the SLGP Project Steering Committee. From the ESMF perspective, the main institutions are:

### Swaziland Environment Authority

The Swaziland Environment Authority (referred to as the SEA or the Authority) was established by an Act of Parliament in 1996 and is the supreme institution responsible for the environment. It is responsible for environmental policy making, legislation, planning, environmental protection, monitoring and enforcement using provisions of the Environment Management Act.

The SEA is a parastatal institution that exists both within and outside government control. It is responsible for coordinating all national environmental responses. Supporting the Authority are numerous government and non-governmental institutions with different levels of environmental responsibility, such as the Swaziland National Trust Commission (SNTC), Land Use Planning Section (MOAC), Water Resources Branch (MNRE), Environmental Health Unit (MOHSW), NGOs such as Yonge Nawe Environmental Action Group, and agencies such as UNDP.

The SEA identifies principles as contained in the National Environment Policy on environmental protection as a central component of the NDS. Emerging from the Swaziland Environment Action Plan (SEAP) and the Environment Management Bill 2001 these principles are intended to be the National policy to protect and conserve the environment and to attain sustainable development in Swaziland. The SEA scrutinizes the relevant building regulations, whether the location is zoned for the proposed development and identifies which local and national government bodies, Town councils are involved in approving and operating the proposed developments.

The SEA Board is comprised of a chairperson, a secretary (the Director of the SEA), and representatives of eight ministries, four NGOs and four private citizens. At present, the SEA staff all fall under a single department headed by the Director.

Among its key activities, the Authority has the mandate to carry out the following obligations:

* Develop, in conjunction with the other Government authorities, economic measures that will encourage environmentally sound and sustainable activities
* To coordinate activities of all bodies concerned with environmental matters and at the same time act as a channel of communication
* To monitor environmental trends in the country with a view to protecting the environment and improving the environment
* To carry out training skills upgrading and education programmes in order to create national environmental awareness
* To ensure the environmental matters are catered for in national development planning
* To create and maintain environmental safeguards in all developments that impinge, or all likely to impinge, on the environment without necessarily compromising social and economic advancement
* To prepare guidelines for environmental impact assessments for all development projects
* To review all projects that have a present or potential environmental impact

In 2005 the Authority carried out a National Capacity Self-Assessment which assessed the capacity of supporting institutions. The study found that the majority of these institutions lack capacity to undertake their mandates. This was mainly due to limited numbers of qualified personnel.

Despite the limited capacity of the Authority, it has a good reputation as an effective regulatory institution that coordinates the other supporting institutions, providing good advice on environmental matters specific to the needs of these institutions.

One area that has been persistently highlighted as affecting environmental management in the past has been that of good governance.

The ESMF has been formulated with the close participation of the Authority, and the role of the Authority in the implementation of the SLGP and the ESMF is a vital one. It will be responsible for processing all environmental issues related to the approval of the sub-projects (this is spelled out in the Screening Process). While the Authority clearly cannot be viewed as an implementation partner (because of its regulatory role), it has declared its interest in acting as a facilitator and advisor to the project. In particular, it will support the project in (i) integrating Strategic Environmental Assessment approaches into the strategic planning processes at the three levels of project intervention (the RGSs, towns and cities); (ii) the formulation of the Environmental Management Strategy for MHUD and (iii) building capacity to decentralize responsibility relating to Category 1 projects as stated in the EAARR (2002) Part C 7.2. The Authority will participate and support the training workshops at all levels to support these identified activities.

### The Swaziland National Trust Commission

The SNTC is a parastatal organization that was established by the National Trust Commission Act of 1972 and amended in 1973. The mission statement of the SNTC is to “ conserve Swaziland’s natural and cultural heritage through sustainable utilization of natural resources and promotion of environmental awareness through the country.”

While the number of officially protected areas in Swaziland are few and percentage cover small, the SNTC has identified a substantial part of the country that can be classified as Protectionworthy on the basis of its conservation and tourism potential. will need to ensure that all potential affected areas for sub-project development (see Figure 9). The project will need to work with the SNTC to ensure the minimum environmental impact on these areas.

### The Ministry of Housing and Urban Development (MHUD)

The Ministry of Housing and Urban Development is the central agency with overall responsibility of housing and urban development in Swaziland and as such is responsible for national policies and strategies dealing with human settlements, formal and informal. The town and city councils are generally responsible for planning, development control, local environmental health matters, provision of some infrastructure and services, setting bye-laws and administration of local taxation measures (e.g. property rates). The Ministry is currently over-stretched, and has stated that they need additional staff on community development and local government.

### Ministry of Tinkhundla Administration and Development (MTAD)

The Ministry of Tinkhundla Administration and Development (MTAD) is a recently established ministry, evolving in part from the Decentralization Programme that had been housed in the Office of the Deputy Prime Minister. It directly oversees the Tinkhundla and manages several programs to initiate a more decentralized means of infrastructure and service provision. Component 1 of the SLGP has been developed in close coordination with staff of MTAD, and MTAD will be involved in implementation of the SLGP through inclusion of the ministry on the Project Steering Committee and reporting and coordination mechanisms within the Project Support Team.

### MHUD/Project Support Team (PST)

The SLGP Project Steering Committee will oversee the overall implementation of the SLGP; day-to-day management of the project will be the responsibility of the Project Support Team. Specifically, the PST will implement activities for which it is directly responsible, and will coordinate and oversee implementation by other executing agencies, monitoring key targets and indicators; management and coordination of procurement and financial management, and environmental and social safeguards. The PST will include an Environmental and Social Safeguards specialist, who will be responsible for overseeing compliance with the World Bank’s environmental and social safeguards.

# 2 Project Framework

In an effort to provide a more coordinated approach to local development efforts for delivery of sustainable basic services throughout the country, the Government of Swaziland, with support from the World Bank, intends to implement the Swaziland Local Government Project (SLGP).

The project development objective is to develop institutionally strengthened *Tinkhundla* and urban local governments. While the objective and key performance indicators focus on the institutional strengthening of local governments, the higher level goals which achievement of the objective will ultimately serve are improved service delivery and enhanced governance at the local level, including in the rural and peri-urban areas where most of the poor reside, and the development of a fiscal framework that would allow predictable resource transfers to rural and urban local governments. Improved local government performance will positively affect the services received by the poor; it will also – through expanding both the level and efficiency of public sector investment – have positive impacts on the business environment of these areas.

## Component 1- Tinkhundla Infrastructure and Capacity Building Support

Component 1 comprises two inter-dependent sub-components supporting eight *Tinkhundla* located in peri-urban areas or rural growth nodes. The sub-components are: (a) *Tinkhundla* Basic Infrastructure Financing – the provision of annual, performance-based capital funding for small-scale public infrastructure, underpinned by (b) *Tinkhundla* Capacity Building Support – access to on-the-job, just-in-time capacity building support provided by a Mobile Mentoring Team and designed to strengthen *Tinkhundla* capacity and facilitate the achievement of performance requirements.

Sub-component 1(a) – *Tinkhundla* Basic Infrastructure Financing – comprises annual performance-based funding for small-scale infrastructure investments. Potential investments would be limited to those with a public benefit, circumscribed by a negative list of ineligible investments, defined in accordance with *Tinkhundla’s* functional responsibilities. The total annual envelope available for allocation to *Tinkhundla* is proposed at US$600,000. While this represents an average allocation per *Inkhundla* of approximately $75,000 per annum, the actual allocation per *Tinkhundla* will be made on a per-capita basis within the overall budget. The amounts and allocation of funding will be reviewed at Project mid-term to determine whether the amounts are appropriate given planning and implementation capacity and impact. Prioritization and selection of infrastructure sub-projects and preparation of the budget will be the responsibility of the relevant *Tinkhundla*. Implementation of the investments will be contracted to Swaziland’s Microprojects Programme (MP) through an Implementation Agreement with GOS and individual agreements with each *Tinkhundla*. The MP has significant experience in small-scale infrastructure investment in rural and peri-urban SNL. As *Tinkhundla* do not yet have sufficient operating budget or staff to ensure the maintenance of assets, arrangements for the maintenance of investments will following existing MP procedures. All investments funded by the Project will follow World Bank fiduciary and safeguards policies.

Eligible investments under Component 1 would be subject to the following negative list: (i) the purchase of land; (ii) compensation or salary payments (e.g., to *Tinkhundla* councillors, staff, residents or other beneficiaries); (iii) vehicles or equipment; (iv) courses or training; (v) buildings/facilities for *Tinkhundla* operating purposes, as well as any to be leased to private organizations or business; (vi) business or commercial facilities; (vii) investments directly benefiting individuals, corporations, or cooperatives; (viii) investments which involve the use of water from international waterways; or (ix) facilities for security services.

## Component 2: Sustainable Local Government (SLG) Grants

Component 2 comprises two inter-dependent sub-components: (a) Performance-Based Infrastructure Grants; and (b) Urban Local Government (ULG) Capacity Building Support. The two sub-components, operating together, are intended to strengthen the ability of ULGs to provide and sustain the delivery of local services. This component is designed on similar principles of incentive-driven capacity building to those described for *Tinkhundla*. An annual, independent Performance Assessment (PA) will be undertaken of each ULG participating in the project by a team of independent evaluators financed under Component 3. The performance criteria will include Mandatory Minimum Criteria (MMCs) and a set of more comprehensive performance requirements measuring efficiency, transparency and accountability in financial management, planning, safeguards, budgeting, and implementing and sustaining the delivery of local services funded under the project. Failure to meet any one of the MMCs (which include acceptable external audits, an approved annual budget; expenditure levels of the capital budget for the preceding fiscal year representing at least 60 percent of available funds, and compliance with the use of grant funds) will disqualify the ULG from the grant for the forthcoming year. In addition to meeting all of the MMCs, a ULG must achieve its annual performance targets on the PA to be eligible to receive the grant for the forthcoming year. A ULG that is ineligible one year in the program may be eligible the next, subject to meeting the MMCs and minimum score in the relevant PA.

Sub-component 2(a) – Performance-Based Infrastructure Grants – finances annual performance-based conditional capital grants to the 12 ULGs. A total of US$ 11 million will be available under the sub-component, i.e., US$ 2 million each year (and US$ 1 million during the first year), to be allocated across the ULGs on a population-based formula similar to that used by the GOS in allocating the existing government transfers to ULGs for capital investments – the Capital Investment Programme (CIP). Access to the grants will be subject to each local authority’s meeting the MMCs and the annual performance targets in various areas of municipal management (described above). The amount of the annual performance grant available to qualifying ULGs will match that provided by the existing CIP, though subject to different rules.

Use of the grants would be limited to investment in local (municipal) roads and related drainage and pavement infrastructure. This focus is intended to demonstrate the ability of the ULG to effectively and accountably utilize funds to deliver improved service with a visibly high impact. Funds must also be matched from other ULG revenues for a minimum additional 20 percent of the grant amount. The focus on a single, high-priority sector offers ULGs the opportunity to develop the capacity to make efficient investment choices, as well as introduce asset management systems that support the sustainability of the investments. Selection of roads to be financed would be left to the discretion of each ULG. ULGs will execute all expenditures on sub-projects, subject to World Bank fiduciary and safeguards policies.

# 3 Objectives of the ESMF

## The ESMF

The ESMF is a form of Strategic Environmental Assessment (SEA) designed to meet the needs of projects which will lead to small-scale investments that will be designed ‘down-the-line’. The ESMF is consistent with an SEA as it looks at the nature of the physical and socio-economic environment in which the proposed developments will take place, thereby giving an indication of the potential adverse impacts of these developments and providing a framework to address these impacts as they arise.

In relation to the SLGP, the Swaziland Environment Authority has stated its wish that the project help to meet the requirements of Swazi environmental legislation. The manner in which this will be done is spelled out in the proposed Screening Process and the ESMP. In brief, the strategy proposed by the ESMF is to integrate and mainstream strategic planning processes of the various levels of local government. Such an approach is the best means to ensure that the SLGP and associated developments are implemented within an environmentally and socially sound framework in the long term.

## Objectives of the ESMF

Because specific investments under the SLGP have not yet been selected, environmental assessment in the traditional sense cannot be prepared before project appraisal, and safeguard measures to help ensure environmental and social sustainability can only be established during sub-project design.

In these situations, the appropriate safeguard document during World Bank preparation is an Environmental and Social Management Framework (ESMF). An ESMF establishes a unified process for addressing all environmental and social safeguards issues on sub-projects from preparation, through review and approval, to implementation. Effective implementation of the ESMF will ensure that the substantive concerns of all World Bank safeguards policies will be satisfactorily addressed.

Specifically, the ESMF for the SLGP will (i) describe the kinds of sub-projects foreseen by the project for which Initial Environment Evaluation (IEE) or Environmental assessment(EA) will be required; (ii) establish the screening process for the sub-projects to enable the ULGs, *Tinkhundla*, and the Microprojects Programme to identify potential environmental and social impacts of the sub-projects; (iii) describe the appropriate mitigation measures to be incorporated into the sub-project design; and (iv) ensure that mitigation measures are implemented.

The proposed screening process is consistent with the Bank’s safeguard policy OP 4.01 Environmental Assessment and OP 4.11 Physical Cultural Resources. These policies require that all World Bank-financed operations are screened for potential adverse environmental, physical cultural, and social impacts, and that the required environmental and social work be carried out on the basis of the screening results. The screening results may indicate that (i) no additional environmental work would be required; (ii) the application of simple mitigation measures by qualified staff would suffice; or (iii) a separate EA would be required.

The ESMF for the SLGP is intended to be useful during project implementation, and to provide practical guidance and reference material for the planning, review, approval and implementation of sub-projects. The Environmental and Social Management Plan (ESMP), which forms part of this ESMF, outlines the (i) identification of sub-project environmental and social impacts; (ii) preparation and implementation of mitigation measures; and (iii) monitoring of the implementation of the mitigation measures.

## The Bank’s Policy and Recommendations on Disclosure of the ESMF

The ESMF and Resettlement Policy Framework (RPF) are prepared, approved by both the World Bank and the Government, and disclosed prior to World Bank project appraisal in accordance with Bank policies. An earlier version of this ESMF had been prepared, approved, and disclosed in 2008; however, the ESMF was revised, in 2010, due to changes in the SLGP. The implementing agency (MHUD) will issue a disclosure letter, addressed to the World Bank (through the Task Team Leader), indicating that the Government of Swaziland has approved and disclosed the ESMF and RPF in publicly accessible places, and authorized the Bank to disclose these documents at its InfoShop in Washington, D.C.

# 4 Methodology used to prepare the ESMF

The methodology for preparing the ESMF included a review of urban development and decentralization studies at the national, regional and global level in order to better understand the dynamics of urban and peri-urban development. The ESMF also incorporates lessons learned from community development projects, both in Swaziland and the region, which may or may not directly relate to urban development, but help to demonstrate how to achieve success in working with communities and local authorities.

There is a wealth of studies and research which can provide valuable input into this study. In particular, this ESMF has been enriched by excellent studies with relevance to urban development in Swaziland, some of which were directly linked to the UDP. Additionally, a number of World Bank ESMFs have been reviewed to better understand best practice models of this type of study, and the manner in which they respond to issues which may have relevance to the SLGP.

The ESMF has been prepared in consultation with representatives of the Swaziland Environment Authority (SEA); Ministry of Housing and Urban Development; European Union (EU); British High Commission; EU Micro-projects Program; Hlathikhulu Town Board; Lavumisa Town Board; Pigg’s Peak Town Council; Siteki Town Council; Nhlangano Town Council; Manzini City Council; Mbabane City Council; National Emergency Response Council for HIV/AIDS (NERCHA); Swaziland Business Coalition Against HIV/AIDS (BCHA); Rural Water Supply; Swaziland Water Services Corporation (SWSC); Pigg’s Peak Private Clinic; Medical Services, Royal Swazi Sugar Corporation (RSSC); Department of Water Affairs; Decentralization Programme; Ministry of Health and Social Welfare; Chief of the Hhelehhele Chiefdom; Community Health Services (Raleigh Fitkin Memorial Hospital); Community Water Development; UNICEF and the Water, Sanitation, and Hygiene (WASH) Coordination Committee (World Vision, World Food Program, COSPE, Vusumnotfo, SWADE-Lusip, Italian Cooperation, Lutheran Development Services, Church Forum, EC).

Once the sub-projects have been identified, consultations will be carried out with beneficiaries and potentially affected persons in course of the environmental and social screening process described in the ESMF.

Lessons learned from the UDP and elsewhere emphasize the need for meaningful stakeholder partnerships and ownership in the design phase of a project or program dealing with urban development or local government (and governance) issues. This level of participation (extending to community level) therefore needs to take place in a structured process from the initial implementation stage of the project. The SLGP has taken the approach that all sub-projects need to be identified, discussed, and prioritized through a series of community-based meetings led by the relevant local authorities and documented and publicized to the community at large. Part of the annual assessment of the participating local governments, which is what determines the eligibility of the local government for funding each year, is the degree to which such consultations have been held and the results of which are reflected in the capital plans agreed by the relevant councils.

# 5 The Proposed SLGP Screening Process

Screening for the SLGP helps define the critical path for sub-project approval. It establishes a broad range of standards for the approval process, in which environment and social considerations play a crucial and integral part. The ESMF promotes a fully integrated screening and approval process through the formation or reinforcing of appropriate institutions which will facilitate sustainable development at the local level in a holistic manner. The proposed strategy, therefore, is a fully integrated approval process which takes the identification of sub-projects at the local level right through to their submission to the central level.

The screening process presented here is designed to be consistent with the Bank’s safeguard policies as well as Swaziland’s environmental legislation. The rationale behind this ESMF is to provide a screening process for ALL the proposed sub-projects that may arise out of the SLGP, as Swaziland’s legislation does not presently provide this. The screening process will provide for screening at the actual sites, as well as:

* Review and clearance of the screening results
* Institutional responsibilities for implementing and monitoring mitigation measures
* Time horizons
* Related cost estimates

The Screening process will be closely linked to that of the Government of Swaziland’s Resettlement Policy Framework (RPF) which describes the process to be applied in the event of land acquisition and/or loss to economic benefits.

The SLGP includes two components that fund investments that may have adverse environmental and social impacts. Sub-projects under Component 1 will be small-scale infrastructure projects whose potential environmental and social effects are likely to be minor and well understood. At the individual level, these projects are unlikely to have significant adverse environmental impacts and are readily manageable. Sub-projects under Component 2 will be limited to local (municipal) road repair, rehabilitation, and construction. Repair and rehabilitation activities are unlikely to have significant adverse environmental impacts, however, new construction of roads, even though such would take place on existing rights of way, could potentially have more severe or permanent impacts. In addition, all roads activities will need to take into consideration the effect on existing or planned utilities, such as water, sewerage, and electricity networks.

With respect to Component 1, the ESMF looks at the type of sub-projects likely to arise from this component, examines the potential adverse environmental and social impacts in some detail and provides a number of practical checklists for identifying impacts and suggesting mitigation measures. In addition, the SLGP addresses environmental and social impacts through a two-pronged approach. The first prong established a minimum set of standards through the checklists; the second prong consists of the participatory planning, design, and implementation of infrastructure projects both under the project, and in the larger planning activities of the local governments participating in the project.

The project categorization process and identification of mitigation measures will be facilitated by (i) planning and technical experts within the Rural Capacity Building Mobile Team and the Urban capacity Building Mobile Team and within the Microprojects Programme, and (ii) the Environmental and Social Safeguards specialist within the SLGP Project Support Team. Participating Tinkhundla and urban local governments will, with the assistance of their respective mobile team, determine if the sub-project is a Category C, B1, B2 or A.

Note that sub-projects proposed to be funded by the project by the Tinkhundla and the urban local governments do not have to be approved individually by the PST. Rather, the proposed sub-projects will be included in three-year capital investment plans and the annual budgets, which will be reviewed and approved through regular government (MHUD and MTAD) procedures. The sub-project environmental category should be provided at that stage.

More detailed environmental and social impacts should be identified, and mitigation measures identified and incorporated, as part of project design. The Tinkhundla will be assisted in this regard in particular by the Microprojects Programme, with whom they will work closely to design individual subprojects. The urban local governments will be assisted in this regard by the Urban Capacity Building Mobile Team – specifically, the planning and technical specialists who will be providing technical assistance in participatory planning measures and engineering issues.

Category C sub-projects – those with no or exceedingly light impacts – will require no mitigation measures. Sub-projects identified with impacts that can be dealt with through simple mitigation measures will be classified as B1. The identification of the simple mitigation measures and their incorporation into project design and implementation arrangements will be supported by the mobile teams and/or Microprojects Programme where necessary, with the objective being to build the capacity of the local government to identify and incorporate mitigations measures independently.

Sub-projects that have been identified as requiring more than simple mitigation measures will be classified as Category B2 and will be required to prepare and submit an Initial Environmental Evaluation (IEE) and Comprehensive Mitigation Plan (CMP) to the SEA, as per Swaziland’s Environmental Audit, Assessment and Review Regulations (2000). Annex 5 to this ESMF provides an outline for the preparation of an IEE and CMP. The SEA would assess the adequacy of the IEE/CMP and would approve, propose modifications, or propose the preparation of a full Environmental Impact Assessment (EIA), as necessary. Model Terms of Reference for an Environmental Assessment is provided in Annex 4. It is not expected that any of the sub-projects financed under Component 1 would require an IEE/CMP, while more substantial road rehabilitation and new road construction under Component 2 could require an IEE/CMP, or even an EIA.

The PST’s Environmental and Social Safeguards Specialist will review the categorization of proposed sub-projects as part of their regular oversight of the SLGP. On a sample basis, the Specialist will also review mitigation plans – whether they are simple plans prepared as part of sub-project design or are separate CMPs – and provide feedback and comments as necessary to local governments, the mobile teams, and the Microprojects Programme. Where issues of quality and/or relevance are identified, the Specialist will work with the local government, the mobile teams, and the Microprojects Programme to correct existing mitigation plans and to improve the preparation and implementation of future mitigation plans. Such findings and efforts will be documented as part of overall project oversight.

# 6 Description of the potential environmental and social impacts of the proposed project

The SLGP will support investments in peri-urban, urban, and urbanizing areas throughout the country. The project arrives at a critical time in Swaziland’s development as the nation strives to define a decentralized governance system. The SLGP is not just about a set of investments to strengthen local government; it is also about supporting a process of integrated and participatory planning and development. This ESMF takes a comprehensive look at the country context and outlines measures to mitigate potential environmental and social impacts that may arise from the project investments, as well as potential impacts on physical cultural resources. Such impacts are likely to occur within a narrow range, reflecting the nature of the project: small scale impacts on water quality and quantity, soil erosion, pollution, and noise pollution at a very localized level.

## General considerations

The transformation of peri-urban areas is becoming one of the most challenging environmental problems of the 21st century, changing ecosystems, affecting landscapes and natural resources, modifying people’s work and leisure activities and introducing new social structures and institutional relationships (Douglas 2004). The list of issues associated with urban growth is long, and many agencies tend to deal with them one-by-one. However, increasingly the lesson is that to make progress towards a more sustainable world, urban and peri-urban problems need to be tackled in a holistic, integrated manner, taking into account the broader ecosystems surrounding the areas where development is taking place. The problems that are listed in this section are given in a sectoral context, and clearly, these issues need to be addressed by immediate sectoral responses. This ESMF, while listing the numerous potential impacts, stresses that it is important both to view the impacts and to address them within the broader context of community involvement, education and establishment of sustainable long-term means of maintaining the infrastructure improvements. Participatory and integrated planning can maximize investments, for instance, urban engineers and health planners can work together to site services and infrastructure together. This can create dramatic synergies and allow the urban or peri-urban poor to get the best of both worlds.

## Biophysical and socio-economic characteristics of project sites

##### Biophysical

The four recognized ecosystems of Swaziland are (i) montane grasslands; (ii) savanna-woodland mosaic; (iii) forests, and (iv) aquatic. The dominant ecosystem is the savanna-woodland mosaic, covering the central and lower parts of the country and is the most protected (5%). The second largest ecosystem is montane grassland (predominantly in the Highveld) while the other two are considered minor. Just 2% of each of these three ecosystems is being protected.

Approximately 25% of each of the terrestrial ecosystems has been completely lost to some other land use (sugar cane, timber, urban). Large areas of the remaining ecosystems have been severely degraded and are under threat.

Swaziland, despite its small size, has a diverse assemblage of habitats that supports a remarkable degree of biodiversity. Although the information base on Swaziland’s biodiversity is still incomplete, survey work has shown that a significant portion of southern Africa's plant and animal species occurs here. The eastern region of Swaziland, for example, forms part of the Maputaland Centre of Plant Diversity (one of the World’s “hotspots” of floral, as well as faunal, species richness and endemism), while the western region falls within another area of global significance, the Drakensberg Escarpment Endemic Bird Area. The value of Swaziland’s biodiversity has long been recognised by Swazis who make use of it on a daily basis for various reasons including traditional medicine, food, building material, and traditional attire. Traditional systems of conserving biodiversity also exist but have not been documented and are currently being eroded. A broader view of Swaziland’s biophysical characteristics, which form the ecological context for the project sites, is presented here. The project sites can then categorized by habitat type.

##### Vegetation types and habitats

Six major habitats are dominant in Swaziland: (i) montane grassland; (ii) sour bushveld; (iii) lowveld bushveld; (iv) Lebombo bushveld; (v) forest and (vi) aquatic.

The *Grassland ecosystem* occurs in the west of Swaziland, generally at elevations above 900m. It is the second richest for plant species and the second richest for vertebrate species. Fire plays an important role in grasslands and changes in the fire regime can significantly alter the vegetation and affect fauna. Grasslands that are burnt frequently rapidly decline in species richness, and uncontrolled burning is a major problem in this ecosystem. This is further compounded by overgrazing. The hydrology of the grassland ecosystem is greatly affected by the presence of large stands and plantations of exotic trees, and many streams and rivers are smothered by infestations of exotic plants and weeds.

The *Savanna ecosystem* (bushveld) is the most extensive in southern Africa. In Swaziland it incorporates the sour, lowveld and Lebombo bushvelds. Sour bushveld occurs between 400-900m and the vegetation is characterized by tall grassveld with scattered trees. This is the most heavily settled vegetation type and the increase in population pressure is destroying natural vegetation as land is continually cleared for agriculture and rural and urban development. This habitat is also suffering from bush encroachment and invasive species, which affect the quality of grazing. The invasive *Psidium guajava* continues to increase, especially around the hills of Ezulwini, Manzini and Malkerns and the indigenous *Dichrostachys cinera* has transformed the savanna around Mafutseni into thickets and dense bush. These developments which significantly impact on the quality of grazing land, aggravate poverty levels and urban migration.

The lowveld bushveld generally occurs between 200-400m and is split into western and eastern lowveld bushveld. The lowveld bushveld is where most of the larger mammal populations occur including elephant, rhinoceros, giraffe, zebra, wildebeest and various antelope. Birdlife is prolific and a wide variety of birds of prey feed exclusively in this region, such as lappet-faced vulture, bateleur, martial eagle and African hawk eagle. Overgrazing and poor fire management has resulted in bush encroachment over large areas of SNL, and invasive species are also common. As in the sour bushveld, the impact on the quality of grazing has significant socio-economic consequences for rural communities, leading to increased poverty and urban and peri-urban migration.

The Lebombo bushveld lies in the steep escarpment of the Lebombo range that rises from the flat lowveld at around 200m up to 800m. Common species include grey duiker, impala, kudu and nyala and the area has a particularly diverse amphibian, reptile and bird fauna. This range is important for conserving several threatened plants (e.g. some cycads and aloes) that are restricted to the rhyolitic rocks of the Lebombos.

The forest ecosystem is highly restricted and characterized by woody plants with a continuous canopy where evergreen trees dominate. Forests are characterized by high biodiversity of flora. Forests are severely affected by burning, and human impacts on natural forests in Swaziland have been severe. The forest ecosystem contains three types: (i) Afromontane; (ii) riverine and (iii) Lebombo.

The aquatic ecosystem comprises natural and man-made wetlands. Swaziland is generally a well-watered country with a wide variety of aquatic habitats consisting of rivers, streams, marshes and seasonally inundated wetlands such as pans. The aquatic ecosystem supports a rich biodiversity and plays an important role in the functioning of other ecosystems. Alien plant invasion is a particular problem for the aquatic ecosystem. Certain habitats in the aquatic ecosystem in Swaziland are extremely fragile, particularly the high altitude marshes and vlei systems, which are easily degraded by cattle grazing, fire and cultivation. Wetland areas near urban and peri-urban areas are especially under threat.

Aside from its variety of habitats and overall species richness, the great biodiversity value of Swaziland lies in the fact that, from west to east, Swaziland represents one of the largest remaining, mainly contiguous gradients of diverse veldt communities (from montane to coastal plain) in the region. Intact altitudinal gradients such as this represent a high biodiversity value because they provide the opportunity for ecological process such as migrations and seasonal dispersals, genetic flows, and adaptation to long-term phenomena such as climate change. One of Swaziland’s main priorities from a conservation viewpoint will be maintaining the integrity of these ecological processes, especially considering the impacts of climate change.

Climate change is considered to be a real threat to water supplies, human health and biodiversity in Swaziland. The threats arise partly because the projected warming may, over large areas, be accompanied by a drying trend and partly because of the low state of human welfare and weak governance, which increases societal vulnerability to climate change (Draft BCMP, 2007).

Conservation studies in Swaziland have identified protection-worthy areas throughout the country, and these have been well documented and recently updated. These surveys can provide overlays on the potential project sites to indicate the relative values of conservation and environmental systems in these areas. This approach can give an indication of the sensitivity of the various sites.

###### Figure 4: Vegetation Types (from Dobson and Loffler, 2004)

###### 

###### Figure 5: Protected and Protection Worthy Areas (from Roques 2002)



##### **Socio-economic**

Swaziland’s environmental trends have obvious and significant implications for its socio-economic situation. Swaziland is still mainly a rural country, with the majority of the population living on Swazi Nation Land. However, this rural population contributes very little to the national economy. SNL agricultural land, despite best efforts of the government, continues to become less productive, except in areas of intense irrigation. The environmental trends of land degradation (bush encroachment, alien plant invasion, soil erosion) and increasing water shortages from persistent drought will continue to create incentives for rural populations to move to urban and peri-urban areas. The depressed economic situation of the rural areas is a contributing factor behind rapidly growing settlements in both peri-urban areas and rural growth points.

About 60 percent of the urban populations reside in cities like Manzini and Mbabane. Only 40 percent of this population is settled in formal housing, the remaining 60 percent lives in informal settlements. It is the poor, who cannot afford to live in the formal settlements within urban boundaries, who tend to settle in informal settlements on communal land, Swazi Nation Land (SNL), which is allocated under Swazi law and custom. Once allocated, people are not allowed to rent out the land, as it is under the jurisdiction of a local chief, who holds the land in charge for the King. The chief distributes the land with the assistance of a council.

The residents of informal settlements often do not own the houses, but are tenants who pay monthly rent to their landlords. The landlords are responsible for the provision of basic amenities (water supply, sanitation and electricity) but there tends to be considerable variation in the levels of investment in service provision. The provision of electricity appears to be a particular problem, as the landlords are concerned about accumulating large bills that tenants cannot pay. Since settlements are not planned properly and are situated outside the city boundaries, there are no building codes, and regulations are not taken into consideration. Tenants are unwilling to invest their money on structures that they do not own.

The intervention of Swaziland Water Services Corporation (SWSC) has helped to improve the availability of piped water in peri-urban areas. However there are still some homesteads without yard taps for the tenants. In such instances, the landlord may negotiate with a neighbour or a relative to allow his/her tenants to use their water supply. For the tenants who do not have access to yard taps access to water can be very limited.

Landlords who may be willing to provide better facilities for their tenants are likely to be hindered by the present land tenure situation, which makes their present ‘ownership’ of their structures somewhat tenuous.

The definition of peri-urban is provided in the draft Peri-Urban Growth Policy, which gives the following characteristics that can apply in a broad sense to most of the rapidly growing settlements:

* Fast and unplanned growth resulting in, amongst other things, negative environmental health issues and environmental degradation
* Jurisdiction is unclear or duplicated in matters of planning, land tenure and land transfer
* Tenure of residents is not always based on clearly defined and enforceable title
* Planning and building guidelines and regulations, the Rating Act, and provision of urban services are not applied
* Service infrastructure is inadequate to meet basic needs
* Social infrastructure does not meet basic needs
* A significant proportion of residents are in lower income categories
* Unplanned settlements to cater to the growing rental market

It is beyond the scope of this document to describe in detail the socio-economic characteristics of each of the rapidly growing settlements in the participating Tinkhundla under component 1, or of each of the formal cities and towns. The Study in Upgrading in the Peri-Urban Areas of Swaziland, Phase II of 2003 provided an overview of the socio-economic characteristics of multiple rapidly growing settlements on SNL:

* Young population with average age of around 25
* High degree of unemployment and employment in the informal sector
* Significant number of female, widow, or single parent head of households
* Access to health services, though services over-stretched and deteriorating in general
* Most households depend on pit latrines which can be shared between 3-18 households
* Settlements generally lack wastewater and sewage disposal
* Less than 50% have electricity connections, which are considered expensive
* Roads in settlements are earth, poorly maintained and too narrow to allow emergency vehicles
* Households generally practice open dumping of household waste either in a pit within the homestead or in the streets
* Access to water varies widely within the settlements

## Potential Impacts of Component 1 Sub-Projects

It is anticipated that the impacts of the SLGP will be largely positive in project areas. Potential environmental impacts in Tinkhundla due to the construction of roads, water supply and sanitation facilities may incur loss of vegetation, soil and water pollution and soil erosion leading to sedimentation of streams and reservoirs. Establishing more boreholes can be risky in areas with high prevalence of pit-latrines. Social impacts can result from the exploitation of natural resources, reducing availability to local communities, the spreading of disease, especially malaria (from standing water). Poor waste management can lead to increased health risks.

A rough estimate of the quantity of groundwater potentially abstracted as part of Component 1 of the project is as follows:

Potential borehole projects/year: 10

Population served per borehole: 500

Daily per capita consumption using a shared standpipe: 30 liters

Total daily consumption following full implementation of Component 1:

5 x 10 x 500 x 25 = 625,000 l/day = 650 m3/d

This is equivalent to 0.035 percent of the estimated total potential groundwater resource.

The positive impacts of the sub-projects on the lives of people in the local communities can be substantial. The situation with HIV/AIDS is so extreme that easier access to clean water can make an enormous difference in mortality and morbidity. Long distances to clean water supply results in greatly decreased productivity in a substantial part of the labour force (mainly women). Children are often required to fetch water, resulting in precious time being lost that should be spent in learning or recreational activities, developing their social and intellectual skills.

Specific potential environmental and social impacts are provided in the summary on the following page.

## Potential Impacts of Component 2 Sub-Projects

Potential long-term impacts in formal urban areas through the repair and rehabilitation of existing roads and the potential construction of new roads are expected to be positive, in particular, due to the reduction of airborne particulates from traffic, and reductions in standing water through improved drainage related to road improvements. As all road infrastructure supported by the SLGP will be in existing urban areas and on existing rights-of-way, no land acquisition issues are expected, nor any negative long-term impacts on households along the rights-of-way. However, there are likely to be short-term impacts during construction, both to households and businesses (detours and reduction in access, noise, dust, etc.), and to planned and existing infrastructure (water and sewerage lines along the rights of way, electricity distribution, etc.), that need to be taken into consideration during design and implementation of roads improvements.

Specific potential environmental and social impacts are provided in the summary that follows.

## Summary of Potential Environmental and Social Impacts

Although Component 1 comprises a variety of types of small sub-projects, and Component 2 consists primarily of the construction of local roads, the impacts encountered during the various stages of the implementation of both components are largely the same. Therefore, the following list summarizes the various common impacts anticipated during each implementation stage of the sub-projects under components 1 and 2. Additional information regarding these impacts, and their corresponding monitoring and mitigation measures are explored in-depth in chapter 7.

#### Impacts during Planning, Design, and Construction

Disturbance of persons or families

Disruption of infrastructure facilities and services

Loss of farmland, other assets or impact on livelihood

Population influx during implementation/construction (leading to social conflict, theft)

Increased solid waste generation and negative environmental impacts, e.g. air pollution, blockage of drainage structures, littering, etc

Increased deforestation

Water pollution from oils

Increased water pollution from temporary sanitation facilities during construction

Construction activities affecting natural drainage systems

Soil erosion

Poisoning from asbestos waste

Loss of biodiversity and greenery

Adverse impact on scenic quality

Potential impact on cultural heritage site

Increased water-related disease vectors

Increased noise disturbance

Increased levels of dust, air pollution

Work-related accidents

Sub-project lacks full community support

#### Impacts during Operation

Increased generation of wastewater

Increased solid waste generation

Disruption of water flow to downstream users

Depletion of water resources

Work-related accidents

Increased water-related disease vectors

Occupational diseases

Increased incidences of malaria and other water-related diseases

#### Impacts during Decommissioning Activities

Nuisance

Disruption of surface water flow

# 7 Environmental and Social Management Plan (ESMP)

The ESMF recognizes that the environmental and social sustainability of the sub-projects will influence the sustainable development of these areas as a whole. Well-trained, flexible and responsive institutional structures that oversee ESMF implementation at the local level can strengthen the decentralization process by reinforcing local capacity to identify key environmental and social issues. The ESMF also recognizes the special nature of the Tinkhundla: the interaction of rural and urban influences, the resulting complexity and fluidity of social structures, and impacts of increased pressure on natural resources. The institutional structures being developed by the Government of Swaziland and supported by the SLGP reflect these considerations. These institutions form the basis of local governance that can effectively deal with the long-term management of natural resource and environmental hazards, and, proactively, with many of the potential social conflicts that may arise from increased pressures on natural resources.

These structures are also designed to initiate and promote strategic, integrated and participatory local development planning. The preparation of these plans will ensure that the sub-projects occur within a balanced and sustainable development framework.

The main environmental mitigation and management activities during the design and construction phase relate to:

* Institutional development to enable local authorities and communities to identify environmental and social risks associated with proposed sub-projects;
* Participatory identification, prioritization, and planning of infrastructure investments;
* In Tinkhundla, participatory design of local investments and, where appropriate, local participation in implementation;
* Strategic placing of the project to ensure minimal impact;
* Ensuring operations and maintenance arrangements for all infrastructure built under the project;
* Public notification well in advance of developments and potential hazards, and appropriate measures taken to reduce risks to public (including social and health risks)
* Contingency plans in place for high risk potential hazards
* Ensuring appropriate technology/construction equipment for site, and appropriate building practices (e.g. no heavy earthworks during rainy season)
* Identifying and implementing measures to reduce any serious ‘public disturbance’ factors such as noise, dust, disruption of access
* Natural resources management plans in place and natural resources are used sustainably (water, fuelwood)
* Waste management plans formulated and implemented;
* Filling of depressions/excavations to abate mosquito-breeding habitats;
* Landscaping activities to mitigate construction-induced erosion.

The three main environmental management tools are:

* Inclusion of the mitigation measures that are outlined in the table in the contracts for the contractors (see environmental clauses elaborated in Annex 7;
* Inclusion of compliance monitoring and enforcement in contract provisions;
* Active environmental impact identification and management by the *Tinkhundla* and ULGs, assisted by the mobile teams and the PST as appropriate, throughout sub-project design and implementation.

Table 3 below gives an indication of the type of potential impacts, mitigation and monitoring in more detail.

Table 3: Summary of potential impacts, proposed mitigation and monitoring procedures

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1.0 IMPACTS DURING PLANNING, DESIGN, AND CONSTRUCTION | | | | | | | |
|  |  | Environmental Mitigation | | Environmental Monitoring | | | |
|  | Potential environ-  mental/ social impact | Proposed control / mitigation measures and timing | Responsible  Institution | Institution/  Indicators | | | Frequency  Time /cost |
| 1.1 | Disturbance of persons or families | Avoid displacement of people and affecting their livelihoods  Community consultation in the selection of sub-projects  Continuous involvement of the affected communities in the design of sub-projects | Tinkhundla, Microprojects Programme, and urban local governments | Tinkhundla, Microprojects Programme, and urban local governments  Number of households potentially affected by environmental hazards (increased erosion, increased air pollution, decreased security) during construction.  Number of households negatively affected by sub-project operations.  Complaints against construction activities such as increased dust, noise, water contamination, denied access, etc. | | | Ongoing |
| 1.2 | Disruption of infrastructure facilities and services | Avoid displacement of people and affecting their livelihoods  Consideration of existing and planned infrastructure in sub-project selection.  Consultation with service providers during sub-project design to minimize disruptions.  Ongoing consultation with service providers during implementation to manage and communicate disruptions | Tinkhundla, Microprojects Programme, and urban local governments | Tinkhundla, Microprojects Programme, and urban local governments  Number of cultural, heritage, conservation, or tourist areas potentially affected.  Instances of shut-downs of existing infrastructure and services during construction.  Incorporation of existing infrastructure and services into implementation plans | | | Ongoing |
| 1.3 | Loss of farmland, other assets or impact on livelihood | Avoid cultivated areas and fixed assets  Sub-projects are expected to be in urban/ urbanizing areas, with little to no impact on farmland.  Community consultation, including with traditional leaders, re. siting of sub-projects.  In-kind compensation for any land lost as a result of sub-projects. | Tinkhundla, Microprojects Programme | Tinkhundla, Microprojects programme  Amount of land allocated to sub-projects  Amount of land allocated as compensation to affected residents. | | | Sub-project document-ation and Tinkhundla records |
| 1.4 | Population influx during implementation/ construction (which may lead to social conflict, theft) | Use community labor as in-kind contributions to sub-projects.  Recruit local firms as much as possible  Use of appropriate technology that can be sourced locally | Microprojects Programme, urban local governments | Microprojects Programme, urban local governments  Number of criminal activities reported to local police  Use of community labor as in-kind contributions | | | Ongoing review of design and implement-ation arrange-ments  Mid-term review of SLGP infrastructure |
| 1.5 | Increased solid waste generation including environmental impacts such as air pollution from burning garbage; blockage of drainage structures; littering of hazardous waste materials; livestock grubbing in waste sites; children playing in waste sites; poverty-stricken people feeding from waste site | Provide appropriate solid waste disposal facilities before and during construction  Properly designed waste management plan as part of the implementation plan | Microprojects Programme, urban local governments, contractors | Microprojects Programme, Tinkhundla, urban local governments  Complaints against construction activities such as increased dust, noise, water contamination, denied public access, etc.  Effectiveness of construction disposal system (cleanliness of surrounding area, animals grubbing in refuse sites, disposal of hazardous waste, etc.)  Number of accidents directly related to construction activities | | | During construction |
| 1.7 | Increased deforestation | Avoid removal of trees during planning, design, and construction  Afforestate with appropriate tree species  Sensitize communities and workers against deforestation during planning, design and construction  Offer alternative sources of fuel | Tinkhundla, Microprojects Programme, urban local governments, contractors | Tinkhundla, Microprojects Programme, urban local governments, SLGP project support team.  Complaints about increased natural resource exploitation such as wood fuel | | | Ongoing during construction  Ongoing (by contractor)  Ongoing (by Tinkhundla and urban local government)  Twice during |
| 1.8 | Water pollution from oils | Proper and regular maintenance of vehicles  Proper disposal of all associated waste materials according to waste management plan during construction and operation.  Design and construction of bund walls around fuel/oil storage tanks during design and during construction | Microprojects Programme, urban local government, contractors | Microprojects Programme, urban local government, Tinkhundla, SLGP project support team  Complaints against construction activities  Effectiveness of construction disposal system | | | Waste disposed immediately when waste is generated  Supervision on a monthly basis |
|  | Increased water pollution from temporary sanitation facilities during construction | Proper disposal of waste material according to waste management plan | Contractors | Tinkhundla, Microprojects Programme, urban local governments  Complaints against construction activities (water contamination)  Number of sanitation latrines constructed for or available to construction workers. | | | Ongoing supervision |
|  | Construction activities affecting natural drainage systems | Proper disposal of waste material according to waste management plan | Contractors | Tinkhundla, Microprojects Programme, urban local governments  Complaints against construction activities (drainage unobstructed) | | | Ongoing supervision |
| 1.9 | Soil Erosion | Limit movement of vehicles and construction area during construction  Compact loose material during construction  Provide and use approved storm water drainage during design and construction  Cover excavated material with tarpaulin | Contractor | Tinkhundla, Microprojects Programme, urban local governments  Proper site and construction management; adherence to approved design plans  Drainage systems constructed and operating according to design | | | Ongoing  Ongoing  Ongoing |
| 1.10 | Water Siltation | Limit movement of vehicles and construction area during construction  Compact loose material during construction  Provide and maintain storm water drainage during construction  Cover excavated material with tarpaulin | Contractor | Tinkhundla, Microprojects Programme, urban local governments  Proper site and construction management; adherence to approved design plans  Drainage systems constructed according to design  Level of siltation | | | Ongoing  Ongoing |
| 1.11 | Poisoning from asbestos waste (pipes) | Count and record cases of asbestos disposal  Follow appropriate health and safety precautions during construction and maintenance  Disposal of old asbestos pipes as recommended by experts during rehabilitation | Contractor | Tinkhundla, Microprojects Programme, urban local governments  Presence of and adherence to safety regulations  Number of incidences of careless use and disposal of old asbestos material | | | Ongoing  Ongoing |
| 1.12 | Loss of biodiversity and greenery. | Avoid removal of trees and replace where removed during construction  Limit construction area during construction  Re-vegetation with indigenous species during construction | Contractor | Tinkhundla, Microprojects Programme, urban local governments  Number of trees cut  Area of land cleared  Number of indigenous species planted | | | Ongoing  Ongoing  Ongoing |
|  | Adverse impact on scenic quality | Take scenic impacts into account during planning and design and relocate/ redesign as necessary. | Tinkhundla, Microprojects Programme, urban local governments | Tinkhundla, Microprojects Programme, urban local governments, SLGP project support team  Number of cultural, heritage, conservation or tourist areas potentially affected. | | | Ongoing |
|  | Potential impact on cultural heritage site | Take cultural heritage assets into account during planning and design and relocate/ re-design as necessary. | Tinkhundla, Microprojects Programme, urban local governments | Tinkhundla, Microprojects Programme, urban local governments, SLGP project support team  Number of cultural, heritage, conservation or tourist areas potentially affected. | | | Ongoing During project design |
| 1.13 | Increased water-related disease vectors | Install aprons, drains and soakaways during construction | Contractor | Tinkhundla, Microprojects Programme, urban local governments  Drainage systems constructed and operating according to design  Number of drains installed against designed.  Occurrences of drain/culvert blockages | | | Ongoing during sub-project construction |
|  | Increased noise disturbance | Special precautions to be taken during construction  Maintenance of vehicles | Contractor | Tinkhundla, Microprojects Programme, urban local governments  Number of complaints against construction activities (noise) | | | Ongoing during construction |
|  | Increased levels of dust, air pollution | Special precautions to be taken during construction | Contractor | Tinkhundla, Microprojects Programme, urban local governments  Number of complaints against construction activities (dust, air pollution) | | | Ongoing during construction |
| 1.14 | Work-related accidents | Restrict pedestrian movement on sites during construction  Install and maintain road signs during construction  Create prior awareness of causes of accidents caused by construction activities during planning, design, and construction  Provide appropriate protective clothing during construction and operation | Contractor | Tinkhundla, Microprojects Programme, urban local governments  Number of criminal activities reported to local polices.  Number of road signs erected in appropriate places  Percentage of workers wearing protective clothing | | | Ongoing during construction |
| 1.15 | Sub-project lacks full community support | Sub-projects to be integrated into overall capital investment plan during planning and design. | Tinkhundla, Microprojects Programme, urban local governments | Tinkhundla, Microprojects Programme, urban local governments  Participatory capital investment plans identifying priority sub-projects  Participatory sub-project design | | | Annually  During sub-project design |
| 2.0 IMPACTS DURING OPERATION | | | | | | | |
| 2.1 | Increased generation of wastewater | Sensitize communities on water conservation measures during sub-project design  Maintain efficient operation and price water appropriately to avoid water wastage | Tinkhundla, Microprojects Programme,  Rural Water Board/SWSC | | Tinkhundla, Rural Water Board/SWSC  Drainage systems constructed and operating according to design.  Amount of water consumed against production  Wastewater appropriately managed | | Quarterly throughout operation period |
| 2.2 | Increased solid waste generation | Provide appropriate solid waste disposal facilities | Tinkhundla, Microprojects Programme, urban local governments | | Tinkhundla, urban local governments  Solid waste appropriately managed | | Ongoing |
| 2.3 | Disruption of water flow to downstream users | Maintain environmental flow  Control water abstraction levels  Promote water conservation measures | Tinkhundla, Microprojects Programme, Rural Water Board/ SWSC | | Tinkhundla, Rural Water Board/ SWSC  Complaints against water availability to other users  Amount of water abstracted against water consumed  Availability of water flow to downstream users | | Quarterly throughout operation period  Costs:  Operator |
| 2.4 | Depletion of water resources | Limit water abstraction  Promote water conservation | Tinkhundla  Rural Water Board/  SWSC | | Tinkhundla, Rural Water Board/ SWSC  Amount of water consumed against production  Water table maintained | | Quarterly throughout operation period |
| 2.5 | Work-related accidents | Prohibit unauthorised movement on sites  Install and maintain road signs  Provide protective clothing | Tinkhundla, urban local governments | | Tinkhundla, urban local governments  Number of accidents directly related to construction activities  Number of road signs erected in appropriate places  Number of people wearing protective clothing | | Quarterly during construction |
| 2.6 | Increased water-related disease vectors | Conduct health and hygiene education  Ensure drainage | Rural Water Board/SWSC, Environmental Health | | Tinkhundla/ urban local governments  Drainage systems constructed and operating according to design.  Occurrences of stagnant water around boreholds/hand pumps.  Leakages reported. | | Ongoing during operation |
| 2.7 | Occupational diseases | Sensitize workers on safety and health measures  Provide protective clothing and equipment  Provide regular medical check up  Develop and implement an appropriate occupational health and safety policy | Rural Water Board/  SWSC,  Environmental Health | | Tinkhundla/ urban local governments  Number of sensitization meetings conducted  Number of people wearing protective clothing  Number of people with health certification  Operational health and safety policy in place and used | | Every six months during operation |
| 2.8 | Increased incidences of malaria and other water-related diseases | Conduct hygiene education  Ensure proper drainage | Rural Water Board  SWSC  Environmental  Health | | Tinkhundla, urban local governments  Number of sensitisation meetings  Drainage ensured | | Every year during operation |
| 3.0 IMPACTS FROM DECOMMISSIONING ACTIVITIES | | | | | | | |
| 3.1 | Nuisance | Regulate traffic speed and movement. Apply daily water sprays to suppress dust*.* | Contractor | Tinkhundla, urban local authorities  Number of complaints on dust | | Ongoing during construction | |
| 3.2 | Disruption of surface water flow | Maintain clean storm water diversions around large pits and excavations  Backfill all voids where possible and reinstate water courses around the sites | Contractor | Tinkhundla, Microprojects Programme, urban local governments  Drainage systems constructed and operating according to design.  Occurrences of drain/ culvert blockages.  Drainage flow leaving no still water. | | Ongoing during the first rainy season after decommis-sioning | |

The responsible institution for coordinating all activities related to supervision and monitoring are the relevant Tinkhundla and urban local government. The Tinkhundla and the urban local governments will mobilize agencies such as Rural Water Board and NERCHA for awareness raising and monitoring and supervision support where necessary. These activities are part of the Tinkhundla and urban local government overall responsibilities, and are to be covered by their administrative and staffing resources.

## ESMP Monitoring

Environmental monitoring of the SLGP will help provide some of the basic information required for rational management decisions. The objectives of environmental monitoring are:

* To check whether mitigation and enhancement measures as recommended in the ESMF, or developed over the time of project implementation, are being adopted and are effective;
* To identify impacts which were unforeseen or uncertain at the time of SLGP preparation and appropriate corrective measures;

Two standard methodological approaches will be used for monitoring the environmental implications and effects of the SLGP sub-projects:

* Compliance monitoring, which checks whether the actions proposed by the SLGP have been carried out, usually by visual observation and the use of the checklists provided;
* Effects monitoring, which records the consequences of program activities on the biophysical and social environment; as applicable, these effects are repeatedly measured by applying selected indicators.

The Tinkhundla and urban local governments will be assisted in their monitoring of the ESMP by the Rural Capacity Building Mobile Team and the Urban Capacity Building Mobile Team, both of which will work to transfer skills in the identification of environmental impacts and the design and implementation of mitigation measures to local government staff. The Microprojects Programme will incorporate environmental and social impact identification and mitigation into their work in the detailed design of sub-projects, and will work closely with the Tinkhundla as well to transfer skills. Training will be provided early in SLGP implementation to ensure that all parties are familiar with the ESMF and ESMP and have the tools for their full implementation.

During implementation of the sub-projects, the parties will play a part in closely monitoring the execution of works with respect to environmental and social impacts; they will verify compliance on the part of contractors with their obligations, and they will alert MHUD and SEA on any environmental hazards related to ongoing program activities.

Construction supervision will be the responsibility of the Tinkhundla/Microprojects Programme and the urban local government. A consultant may be contracted on behalf of the proponent.

For some Category 2 (World Bank Category B) sub-projects that may require an EA, a consultant may be hired to help prepare the documents as well as oversee the contractor and undertake the monitoring and evaluation.

The nature of the project requires a great deal of flexibility in the management and monitoring process. This means that there will need to be review workshops on an annual basis, to provide inputs into overall project management and to provide an opportunity for refresher courses for Tinkhundla, Microprojects Programme, and urban local government staff.

## Community Participation

The participation of communities in the monitoring and evaluation program is crucial. Communities are the first line of defence with respect to environmental and social impacts, and their communications with local representatives are key to providing feedback to local governments and ensuring full implementation of the ESMF and ESMP. Participation is envisaged in the following ways:

* Communities will be involved in the planning process – i.e., in the identification and prioritization of sub-projects – led by the Tinkhundla. During the design phase of the sub-projects, communities will be actively involved in siting, in establishing operational arrangements, and in technical design, ensuring that sub-projects are affordable and sustainable.
* During the implementation phase of sub-projects under Component 1, directly affected communities/ beneficiaries will contribute to implementation either in cash or in kind. In-kind contributions will generally be in terms of labor, and given that work will take place in their neighbourhoods, it is expected that communities will pay particular attention to ensuring mitigation of environmental impacts. In addition, they will assist in the verification of the compliance requirements of the contractors and they will also alert the appropriate authority about any natural resource or social conflict issues, or environmental hazards arising out of the sub-project
* During the operation phase, the communities will support the Tinkhundla and urban local governments in the overall monitoring activities. Residents will be encouraged to communicate to their representatives complaints regarding upkeep of infrastructure investments or changes in, for example, drainage or solid waste management, and representatives will be encouraged to solicit such feedback.

## Monitoring and Evaluation Indicators

###### Table 4: Suggested Monitoring and Evaluation Indicators

| Proposed Activity | Suggested Indicators | Monitoring Method |
| --- | --- | --- |
| During sub-project design | Number of beneficiaries  Amount of land allocated to sub-projects  Number of households potentially affected by environmental hazards (increased erosion, increased air pollution, decreased security) during construction  Number of households negatively affected by sub-project operations  Number of cultural, heritage, conservation or tourist areas potentially affected | Minutes of sub-project design meetings and decisions  Sub-project applications |
| For General Construction Works/Rehabilitation | Proper site and construction management; adherence to approved design plans  Number of households affected by environmental hazards (increased erosion, increased air pollution, decreased security) during construction  Number of criminal activities reported to local police  Complaints against construction activities such as increased dust, noise, water contamination, denied public access, etc.  Effectiveness of construction disposal system (cleanliness of surrounding area, animals grubbing in refuse sites, disposal of hazardous waste, etc.)  Complaints about increased natural resource exploitation such as wood fuel and water or water supply disruption  Number of borrow pits created and appropriate management post construction  Number of accidents directly related to construction activities  Number of sanitary latrines constructed for or available to construction workers | Minutes of community and council meetings  Weekly supervision of sites  Construction progress reports |
| Indicators specific to the type of sub-project | | |
| Small Water-Systems or Boreholes | Water points developed or rehabilitated  Number of beneficiaries (households)  Water quality (visual/measured)  Drainage systems constructed and operating according to design  Occurrences of stagnant water around boreholes/hand pumps  Leakages reported  Occurrences of water system breakdowns  Decreased use of non-improved water sources | Minutes of sub-project design meetings and decisions  Minutes of community and council meetings  Supervision of sites and reporting of irregularities  Post-construction evaluation |
| Drainage Systems | Number of beneficiaries (households)  Drainage systems constructed and operating according to design  Number of drains installed against designed  Number of complaints against water/waste intrusion  Occurrences of drain/culvert blockages  Drainage flow leaving no still water | Minutes of sub-project design meetings and decisions  Minutes of community and council meetings  Supervision of sites and reporting of irregularities  Post-construction evaluation |
| Road Improvements | Number of beneficiaries (households)  Amount of land allocated to sub-projects  Kilometers graded and/or paved  Number of cultural, heritage, conservation or tourist areas potentially affected  Number of complaints regarding road quality  Number of complaints regarding air quality  Number of accidents involving vehicles  Occurrences of stagnant water and/or blocked drains/culverts | Minutes of sub-project design meetings and decisions  Minutes of community and council meetings  Supervision of sites and reporting of irregularities  Post-construction evaluation |
| Public Space Improvements | Number of beneficiaries  Amount of land allocated to sub-projects  Number of cultural, heritage, conservation or tourist areas potentially affected | Minutes of sub-project design meetings and decisions  Minutes of community and council meetings  Supervision of sites and reporting of irregularities  Post-construction evaluation |

Monitoring is the key element in the ‘adaptive management’ approach espoused throughout the ESMF, incorporating learning by doing and responding appropriately according to incoming information and acquired knowledge. This knowledge may also lead to the revision of the Project Implementation Manual, and to adjustments in the capacity building program as new management requirements are discovered.

Each sub-project will have established a set of potential environmental and social impacts during the screening process, and then defined a simple Mitigation and Monitoring Plan (MMP). This is separate from an Environmental Management Plan which will only result from the sub-project screening process and be applicable to Category 2 projects. The majority of the sub-projects in Component 1 are expected to be Category 1 projects. The MMP will give the Tinkhundla the basis for sub-project supervision.

Environmental monitoring at the local level means (i) checking that these mitigation measures are being followed within the specified time frame and (ii) identifying problems arising and new mitigation measures as required. The monitoring program will focus on practical approaches.

###### Box3: Guiding principles for environmental monitoring:

Pragmatic, in the sense that is oriented towards recognized and expected weaknesses and problems

Strategic, based on a predefined system of data collection processing and interpretation

Transparent and generally accessible

Functional, to reach maximum efficiency and to avoid the creation of useless “data cemeteries”

Sustainable, so that through monitoring an understanding of and learning from project management is enhanced

Complementary to the activities and to other monitoring steps and to other monitoring done by other projects and partners (World Bank/GOPA 2001)

It is important that this environmental monitoring program is incorporated into the overall Monitoring and Evaluation System of the SLGP, and that capacity building for the implementation of the program are integrated into the overall capacity building program of the SLGP.

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# Annexes

## Annex 1

## Overview of the Bank’s ten safeguard policies and applicability to SLGP

|  |  |  |
| --- | --- | --- |
| OP/BP 4.01  Environmental  Assessment | The objective of this policy is to ensure that Bank financed projects are environmentally and socially sound and sustainable, and that decision-making is improved through appropriate analysis of actions and of their likely environmental impacts. This policy is triggered if a project is likely to have potentially adverse environmental and social risks and impacts in its area of influence. OP 4.01 covers impacts on the natural environment (air, water and land); human health and safety; physical cultural resources; and transboundary and global environmental aspects | Depending on the project, and nature of impacts a range of instruments can be used: EA, environmental audit, hazard or risk assessment and environmental management plan (EMP). When a project is likely to have sectoral or regional impacts, sectoral or regional EA is required. The Borrower is responsible for undertaking the EA.  Under SLGP. The Borrower has prepared an Environmental and Social Management Framework (ESMF) which outlines the environmental screening process to be applied to the sub-projects. The purpose of the environmental screening process is to assess the impacts of future sub-project development activities (e.g. small-scale infrastructure) where the exact scope of investment activities and locations are not known at this time. |
| OP/BP 4.04 Natural  Habitats | This policy recognizes that the conservation of natural habitats is essential to safeguard their unique biodiversity and to maintain environmental services and products for human society and for long-term sustainable development. The Bank therefore supports the protection, management, and restoration of natural habitats in its project financing, as well as policy dialogue and economic and sector work. The Bank supports, and expects borrowers to apply, a precautionary approach to natural resource management to ensure opportunities for environmentally sustainable development. Natural habitats are land and water areas where most of the original native plant and animal species are still present. Natural habitats comprise many types of terrestrial, freshwater, coastal, and marine ecosystems. They include areas lightly modified by human activities, but retaining their ecological functions and most native species. | This policy is triggered by any project (including any sub-project under a sector investment or financial intermediary) with the potential to cause significant conversion, loss or degradation of natural habitats whether directly (through construction) or indirectly (through human activities induced by the project).  **Under SLGP.** Sub-projects that may have significant adverse impacts on natural habitats will not be funded under SLGP.  If necessary, the project will carry out separate EAs to determine potential adverse environmental impacts on natural habitats. Any mitigation measures will be consistent with the requirements of OP 4.04. |
| OP 4.36 Forests | The objective of this policy is to assist borrower to harness the potential forests to reduce poverty in a sustainable manner, integrate forests effectively into sustainable economic development and protect the vital local and global environmental services and values of forests. Where forest restoration and plantations are necessary to meet these objectives, the Bank assists borrowers with forest restoration activities that  maintain or enhance biodiversity and ecosystem functionality. The Bank assists borrowers with the establishment of environmentally appropriate, socially beneficial and economically viable forest plantations to help meet growing demands for forest goods and services | This policy is triggered whenever any Bank-financed investment project (i) has the potential to have an impact on the health and quality of forests or the rights and welfare of people and their level of dependence upon or interaction with their forests; or (ii) aims to bring about changes in the management protection and utilization of natural forests or plantations.  **Under SLGP**. Investments that are likely to affect populations and forests as described in OP 4.36 will not be funded. True forests are only found in small patches in the country and are a conservation priority. |
| OP 4.09 Pest  Management | The objective of this policy is to (i) promote the use of biological or environmental control and reduce reliance on synthetic chemical pesticides; and (ii) strengthen the capacity of the country’s regulatory framework and institutions to promote and support safe, effective and environmentally sound pest management. More specifically, the policy aims to (a) Ascertain that pest management activities in Bank-financed operations are based on integrated approaches and seek to reduce reliance on synthetic chemical pesticides (Integrated Pest Management (IPM) in agricultural projects and Integrated Vector Management (IVM) in public health projects. (b) Ensure that health and environmental hazards associated with pest management, especially the use of pesticides are minimized and can be properly managed by the user. (c) As necessary, support policy reform and institutional capacity development to (i) enhance implementation of IPM-based pest management and (ii) regulate and monitor the distribution and use of pesticides. | The policy is triggered if : (i) procurement of pesticides or pesticide application equipment is envisaged (either directly through the project, or indirectly through on-lending, co-financing, or government counterpart funding); (ii) the project may affect pest management in a way that harm could be done, even though the project is not envisaged to procure pesticides. This includes projects that may (i) lead to substantially increased pesticide use and subsequent increase in health and environmental risk; (ii) maintain or expand present pest management practices that are unsustainable, not based on an IPM approach, and/or pose significant health or environmental risks.  **Under SLGP**. Investments leading to an increased use of pesticides will not be funded |
| OP/BP 4.11 Physical  Cultural  Resources | The objective of this policy is to assist countries to avoid or mitigate adverse impacts of development projects on physical cultural resources. For purposes of this policy, “physical cultural resources” are defined as movable or immovable objects, sites, structures, groups of structures, natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Physical cultural resources may be located in urban or rural settings, and may be above ground, underground, or underwater. The cultural interest may be at the local, provincial or national level, or within the international community  . | This policy applies to all projects requiring a Category A or B Environmental Assessment under OP 4.01, project located in, or in the vicinity of, recognized cultural heritage sites, and projects designed to support the management or conservation of physical cultural resources.  **Under SLGP**. In the event of chance finds during construction and/or rehabilitation, MHUD will contact the appropriate Swaziland institutions (e.g. Swaziland National Trust Commission - SNTC) to ensure that these finds are handled according to Swaziland laws. SLGP will not fund any investments that negatively affect physical cultural resources.  Note that the locations of many bushman paintings are still not known publicly, and that the project will make every effort to ensure that potential project sites will get clearance from the SNTC before approval . |
| OP/BP4.10  Indigenous  Peoples | The objective of this policy is to (i) ensure that the development process fosters full respect for the dignity, human rights, and cultural uniqueness of indigenous peoples; (ii) ensure that adverse effects during the development process are avoided, or if not feasible, ensure that these are minimized, mitigated or compensated; and (iii) ensure that indigenous peoples receive culturally appropriate and gender and intergenerationally inclusive social and economic benefits. | The policy is triggered when the project affects the indigenous peoples (with characteristics described in OP 4.10 para 4) in the project area.  **Under SLGP**. According to the definition of Indigenous People in OP 4.10 para 4, this description does not apply to any people in Swaziland. |
| OP 4.12  Involuntary  Resettlement | The objective of this policy is to (i) avoid or minimize involuntary resettlement where feasible, exploring all viable alternative project designs; (ii) assist displaced persons in improving their former living standards, income earning capacity, and production levels, or at least in restoring them; (iii) encourage community participation in planning and implementing resettlement; and (iv) provide assistance to affected people regardless of the legality of land tenure. | This policy covers not only physical relocation, but any loss of land or other assets resulting in: (i) relocation or loss of shelter; (ii) loss of assets or access to assets; (iii) loss of income sources or means of livelihood, whether or not the affected people must move to another location.  This policy also applies to the involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons.  **Under SLGP**. A Resettlement Policy Framework (RPF) has been prepared which will serves as guidance for sub-projects that involve land acquisition or loss of resources. |
| OP/BP 4.37 Safety  of Dams | The objectives of this policy are as follows: For new dams, to ensure that experienced and competent professionals design and supervise construction; the borrower adopts and implements dam safety measures for the dam and associated works. For existing dams, to ensure that any dam that can influence the performance of the project is identified, a dam safety assessment is carried out, and necessary additional dam safety measures and remedial work are implemented. | This policy is triggered when the Bank finances: (i) a project involving construction of a large dam (15 m or higher) or a high hazard dam; and (ii) a project which is dependent on an existing dam. For small dams, generic dam safety measures designed by qualified engineers are usually adequate  **Under SLGP**. No large or small dams are envisaged in any of the project components. |
| OP 7.50 Projects in  International  Waters | The objective of this policy is to ensure that Bank-financed projects affecting international waterways would not affect: (i) relations between the Bank and its borrowers and between states (whether members of the Bank or not); and (ii) the efficient utilization and protection of international waterways.  The policy applies to the following types of projects: (a) Hydroelectric, irrigation, flood control, navigation, drainage, water and sewerage, industrial and similar projects that involve the use or potential pollution of international waterways; and (b) Detailed design and engineering studies of projects under (a) above, include those carried out by the Bank as executing agency or in any other capacity. | This policy is triggered if (a) any river, canal, lake or similar body of water that forms a boundary between, or any river or body of surface water that flows through two or more states, whether Bank members or not; (b) any tributary or other body of surface water that is a component of any waterway described under (a); and (c) any bay, gulf strait, or channel bounded by two or more states, or if within one state recognized as a necessary channel of communication between the open sea and other states, and any river flowing into such waters.  Swaziland forms an important catchment area for rivers leading into South Africa and Mozambique. SLGP sub-projects that might trigger this safeguards are any that take place on the Komati, Mbuluzi, Ngwavuma or Usutu Rivers where water is used to supply the sub-project e.g. agriculture by the shores of one of the international rivers, building a facility that may discharge liquid waste, or any other flood control, drainage, sewerage or industrial micro-project.  **Under SLGP.** Because of the nature of groundwater resources in Swaziland, and because of the nature of potential water-related sub-projects under the SLGP (i.e., small boreholes), it is expected that potential infrastructure investments in water service delivery would result only in the use of water local aquifers and would not have any significant impact on water catchments, aquifers, water quality or extraction. |
| OP 7.60  Projects in  Disputed Areas | The objective of this policy is to ensure that projects in disputed areas are dealt with at the earliest possible stage: (a) so as not to affect relations between the Bank and its member countries; (b) so as not to affect relations between the borrower and neighboring countries; and (c) so as not to prejudice the position of either the Bank or the countries concerned. | This policy is triggered if the proposed project will be in a “disputed area”. Questions to be answered include: Is the borrower involved in any disputes over an area with any of its neighbors. Is the project situated in a disputed area? Could any component financed or likely to be financed as part of the project be situated in a disputed area?  **Under SLGP**. Swaziland has no internationally disputed areas. Internally, sub-projects may be affected by chieftaincy disputes which will require conflict resolution mechanisms, but these potential internal disputes do not trigger this policy. |

## Annex 2

## Environmental and Social Screening Form

The Environmental and Social Screening Form (ESSF) has been designed to assist Tinkhundla, urban local government, and Microproject Programme staff in the environmental and social screening of sub-projects to be funded under the SLGP. The form is designed to place information in the hands of sub-project implementers and reviewers so that impacts and their mitigation measures, if any, can be identified, assessed and mitigated and/or that requirements for further environmental analysis be determined.

The ESSF contains information that will allow reviewers to determine the characterization of the prevailing local bio-physical and social environment with the aim to assess the potential sub-project impacts on it. The ESSF will also identify potential socio-economic impacts that will require mitigation measures and/or resettlement and compensation.

#### **GUIDELINES FOR SCREENING**

The environmental and social screening process should be facilitated by the Rural or Urban Capacity Building Mobile Team, as applicable, or the Environmental and Social Safeguards Specialist of the SLGP Project Support Team. The screening process is considered a vital part of capacity building and awareness raising of local communities. The ESSF should be completed taking into consideration (i) baseline information of the proposed sub-project area and (ii) other proposed infrastructure or other investments in the area.

The ESSF applies to ALL sub-projects at the planning stage. It will recommend the appropriate environmental category consistent with OP 4.01 as well as the Environmental Audit, Assessment and Review Regulations (2000). Thus future sub-projects will be categorised as follows:

Category C

**Based on the results showing in the completed ESSF, the proposed sub-project is unlikely to have any significant adverse environmental impacts, and therefore, implementation can proceed immediately.**

****Category B****

**Based on the results showing in the completed ESSF, the sub-project will be classified as:**

**B1 – the implementation of simple mitigation measures as per Environmental and Social Screening List (Annex 3) to be adapted to the sub-project will suffice, and sub-project implementation can proceed.**

**B2 – prior to implementation of the sub-project, a separate EA report needs to be carried out according to SEA requirements.**

****Category A****

**Sub-projects categorised as Category A cannot be funded under the SLGP. They will either have to be redesigned and resubmitted for review and clearance, or they will have to be abandoned.**

Name of sub-project…………………………………………………….

Type of sub-project/sector……………………………………………………………………

Name of the Inkhundla or Urban Local Government in which the sub-project is to be implemented………………………………………………

Name of Chiefdom, if applicable ……………………………………………

Name of township/neighbourhood, if applicable …………………………………………

Name, job title, and contact details of the person responsible for filling out this ESSF:

Name: ………………………………………………………………………..

Job title:………………………………………………………………………

Telephone numbers:……………………………; ………………………..

E-mail address

Date:

**Signature:**……………………………………………

#### 

#### PART A: BRIEF DESCRIPTION OF THE SUB – PROJECT

Please provide information on the type and scale of the sub-project (area, required land, approximate “footprint”, if relevant).

Provide information about actions needed during the construction/rehabilitation of facilities including support/ancillary structures and activities required to build it, e.g. need to quarry or excavate borrow materials, laying pipes/lines to connect to energy or water source, access road etc.

Describe how the sub-project will operate including support/activities and resources required to operate it e.g. roads, disposal site, water supply, energy requirement, human resources, financial costs, etc.

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#### PART B: BRIEF DESCRIPTION OF THE ENVIRONMENTAL SITUATION AND IDENTIFICATION OF ENVIRONMENTAL AND SOCIAL IMPACTS

Describe the sub- project location, siting, surroundings (include a map, even a sketch map)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Describe the land formation, topography, vegetation in/adjacent to the project area

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Estimate and indicate where vegetation might need to be cleared.

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##### Environmentally sensitive areas or threatened species

Are there any environmentally sensitive areas or threatened species (specify below) that could be adversely affected by the project?

Intact natural forests:

Yes\_\_\_ No\_\_

Riverine forest:

Yes \_\_\_ No\_\_\_

Surface water courses, natural springs:

Yes \_\_\_ No\_\_\_

Wetlands (lakes, rivers, swamp, seasonally inundated areas)

Yes\_\_\_ No \_\_\_

How far is the nearest wetland (lakes, rivers, seasonally inundated areas)?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Km.

Area of high biodiversity:

Yes \_\_ No\_\_\_

Habitats of endangered/ threatened, or rare species for which protection is required under Swaziland national law/local law and/or international agreements.

Yes\_\_\_ No\_\_\_

Others (describe).

Yes\_\_\_ No\_\_\_

##### Rivers and Lakes (Dams) Ecology

Is there a possibility that, due to construction and operation of the sub-project, the river and lake (dam) ecology will be adversely affected? Attention should be paid to water quality and quantity; the nature, productivity and use of aquatic habitats, and variations of these over time.

Yes \_\_ No\_\_\_

Comments:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Site Hydrogeology** (according to available information):

Type of aquifer (continuous, fracture)

Depth of aquifer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Seasonal fluctuations \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Known quality problems \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

##### Surface Water

What is the water course in the surroundings of the site:

Nature of watercourse (e.g. river, stream, spring, lake)

Distance to site \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Downstream/upstream of the site \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Give an assessment of potential water course sensitivity to water point construction and operation

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Note that, for any sub-project proposing the drilling of one or more boreholes, consistent with the Water Act, applicants must ensure that permits are applied for and received from the appropriate authorities.

##### Drainage conditions on-site

Description of present drainage conditions on site (site topography, infiltration capacity of soil):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Risks of water retention (site in a low point): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Feasibility of simple drainage improvements to eliminate water retention problems:

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##### Water Use and Water Users

Describe the water use in the vicinity of the site

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Nature of water point \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Distance \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Downstream/upstream

##### Type of usage

Give an assessment of potential water use sensitivity to water point construction and operation

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Is there potential for conflict between users; if so, how should this conflict be solved?

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##### Protected areas

Does the sub-project area (or components of the sub-project) occur within/adjacent to any protected areas designated by government (national park, national reserve, world heritage site etc.)

Yes \_\_ No \_\_

If no, please indicate the nearest protected area (e.g. Hlane) and distance from site.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

If the project is outside of, but close to, any protected area, is it likely to adversely affect the ecology within the protected area areas (e.g. interference with the migration routes of mammals or birds).

Yes \_\_ No \_\_\_

##### Geology and Soils

Describe the Site Geology (according to available geological map):

Describe the soil as follows:

Type of soil: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

##### Sensitivity to erosion

Extent of existing erosion on site

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Based upon visual inspection or available literature, are there areas of possible geologic or soil instability (prone to: soil erosion, landslide, subsidence, etc)?

Yes \_\_ No \_\_

Based upon visual inspection or available literature, are there areas that have risks of large scale increase in soil salinity?

Yes \_\_\_ No \_\_

Based upon visual inspection or available literature, are there areas prone to floods, poorly drained, low-lying, or in a depression or block run-off water

Yes \_\_\_\_ No \_\_\_

##### Contamination and Pollution Hazards

Is there a possibility that the sub-project will be at risk of contamination and pollution hazards (from latrines, dumpsite, industrial discharges, drilling oils etc)

Yes \_\_\_\_ No \_\_

##### Landscape/aesthetics

Is there a possibility that the project will adversely affect the aesthetic attractiveness of the local landscape?

Yes \_\_\_ No \_\_\_

##### Tourism Facilities

Are there any tourism facilities nearby (within 5 kilometres) or adjacent to the site?

Yes\_\_ No\_\_

If yes, please specify name and type of tourism promoted by facility:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

##### Historical, archaeological or cultural heritage site

Based on available sources, consultation with local authorities, local knowledge and/or observations, could the sub-project alter or affect any historical, archaeological (e.g. rock paintings), cultural heritage traditional (sacred, ritual area) site, cemetery, graves, or require excavation?

Yes \_\_\_ No\_\_

In the event of a chance find, please contact the appropriate authorities: (Swaziland National Trust Commission)

##### Resettlement and/or Land Acquisition

Will involuntary resettlement, land acquisition, relocation of property, or loss, denial or restriction of access to land and other economic resources be caused by project implementation?

Yes \_\_ No \_\_

If “Yes” Involuntary Resettlement OP 4.12 is triggered. Please refer to the Resettlement Policy Framework (RPF) for appropriate mitigation measures to be taken.

##### Loss of income generating capacity

Will the sub-project result in any impacts on income-generating capacity of people within sub-project area? If Yes, please refer to the Resettlement Policy Framework.

Yes\_\_\_ No\_\_\_

##### Loss of Crops, Fruit Trees and Household Infrastructure

Will the project result in the permanent or temporary loss of crops, fruit trees and household infra-structure (such as granaries, outside toilets and kitchens, livestock shed etc)? If yes, please refer to the Resettlement Policy Framework.

Yes \_\_ No\_\_

##### Land use/ownership conflicts

Is the project likely to result in increased potential for conflict in terms of natural resource use/land ownership or between traditional authorities (e.g. is the project taking place in an area disputed between two chiefs?). If yes, please refer to the Resettlement Policy Framework.

Yes\_\_\_ No \_\_

##### 

##### Blocked access and routes or disruption of normal operations in the general area

Will the project interfere or block access, routes etc (for people, livestock and wildlife) or traffic routing and flows? If yes, please refer to the Resettlement Policy Framework.

Yes\_\_\_ No\_\_\_

##### Noise and Dust Pollution during Construction and Operations

Will the operating noise level exceed acceptable noise limits?

Yes \_\_ No \_\_

Will the construction result in emission of significant amounts of dust or hazardous fumes?

Yes \_\_ No \_\_

##### Degradation and/or depletion of resources during construction and operation

Will the operation involve use of considerable amounts of natural resources (construction materials, water spillage, land, energy from biomass etc.) or may lead to their depletion or degradation at points of source?

Yes \_\_ No\_\_

Will the quarries have to be rehabilitated?

Yes \_\_ No\_\_

##### Solid or Liquid Wastes

Will the project generate solid or liquid wastes? (including human excreta/sewage, hospital waste, asbestos)

Yes \_\_ No\_\_

If “Yes”, does the sub-project include a plan for their adequate collection and disposal?

Yes\_\_ No\_\_\_

Are there guidelines for the safe disposal of asbestos?

Yes \_\_ No\_\_

##### Public Health

Will the sub-project contribute to an increase in malaria due to an increase in water supply?

Yes: \_\_ No.\_\_\_

Describe the current situation regarding malaria, assess potential impacts due to the sub-project, and recommend an appropriate mitigation measure

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Describe the current situation regarding HIV/AIDS, assess potential impacts due to the sub-project, and recommend an appropriate mitigation measure:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Are there any other potential public health impacts anticipated?

Yes\_\_\_ No\_\_

##### Occupational health hazards

Will the project require large number of staff and laborers;

Yes\_\_ No\_\_

Will the project require a large/long-term construction camp?

Yes \_\_ No\_\_

Are the project activities prone to hazards, risks and could result in accidents and injuries to workers during construction or operation?

Yes\_\_ No \_\_

Could project activities result in accidents and injuries to third parties during construction or operation?

Yes \_\_ No\_\_

Will the sub-project require frequent maintenance and or repair

Yes \_\_ No\_\_\_

##### Public Consultation

Has public consultation and participation been sought with potentially affected persons during this screening process?

Yes \_\_\_ No\_\_\_

Summarise the consultation results including documentation of meetings in a separate document and attach to this ESSF.

#### PART C: MITIGATION MEASURES

For all “Yes” responses above, describe briefly the measures taken to this effect.

Please refer to Annex 3 for guidance to identification of mitigation measures for identified impacts.

For sub-projects classified as Category C (no adverse environmental or social impacts), no mitigation measures are required. For those projects with identified impacts, the table below needs to be completed.

|  |  |
| --- | --- |
| Identified Impact | Mitigation |
|  |  |
|  |  |
|  |  |
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## **Sub-Project Categorization**

The Rural or Urban Capacity Building Mobile Team, as appropriate, and/or the Environmental and Social Safeguards specialist of the SLGP Project Support Team, will assist the Tinkhundla or urban local government staff to complete the ESSF. The ESSF will be appended to the Capital Investment Plan and the annual budget when submitted to MTAD or MHUD for approval, with copy to the Project Support Team. The Environmental and Social Safeguards specialist, in conjunction with appropriate staff of MTAD or MHUD, will review the ESSFs and approve or make suggestions for amendments, as appropriate. Revised ESSFs should be re-submitted for approval.

All projects recommended for further impact assessment will follow procedures outlined below.

**CATEGORY C**: No significant environmental issue identified, no specific mitigation required; sub-project implementation can proceed. Environmental Guidelines for Construction Contractors shall be appended to construction contract and applied.

**CATEGORY B1**: This sub-project requires only simple mitigation measures which will be reviewed and approved by the Environmental and Social Safeguards Specialist.

**CATEGORY B2**: requires an IEE and CMP in accordance with the requirement set out in the Second Schedule of the Environmental Audit, Assessment and Review Regulations (see Annex 5). The CMP will follow the application of simple mitigation measures as proposed in the Environmental and Social Checklist. (Annex 3). The SEA will review the IEE/CMP. If approved, project implementation will go ahead. If not approved, the SEA will recommend a modified IEE/CMP or an EA. Model terms of reference for an EA are provided in Annex 4.

**CATEGORY A**: This sub-project has been categorized as a category A due to one or more major adverse impacts, and therefore cannot be funded under the SLGP Project. It will be either re-designed or re-submitted to the environmental screening process after re-design, or abandoned

The proposed sub-project has been classified as Category \_\_\_ (C, B1, B2)

Category C: No mitigation measures are required.

Category B1: A table specifying the expected impacts and proposed mitigation measures is required.

Category B2: An IEE and CMP is required; following review of the IEE and CMP, preparation of an EA may be required. See Annexes 4 and 5 for outlines.

Prepared by (name, position, signature):

Date:

Reviewed by (name, position, signature):

Date:

Cleared by (name, position, signature):

Date:

## Annex 3

## Summary of environmental and social impacts and mitigation measures

### Water Supply Services

|  |  |  |
| --- | --- | --- |
| **Description of Sub-project** | **Environmental/social Impact** | **Mitigation Measures** |
| Water supply:  Natural springs  Borehole  Water pipelines | Stagnant pools of wastewater providing conditions for the proliferation of water borne diseases  Contamination of water source by seepage from latrines  Contamination of water source by animal and human wastes.  Erosion of soils along the watercourses supplying the spring causing blockages and/or siltation  Spillage water around borehole providing breeding ground for water borne diseases  Erosion undermining hand pump pad  Contamination of borehole water by spillage water on pump pad  Contamination of borehole water by seepage from latrines  Contamination of borehole water by animal wastes  Hand pumps break through improper use  Wind and solar powered pumps  Secondary, tertiary distribution piping - Leakage from broken pipes creating ponds of water where disease carrying organisms thrive  Negative pressure drawing contaminated water and soil into water supply | Ensure provision of adequate drainage channels away from water source  To avoid water logging of soils lay gravel around the water source.  Ensure latrines are constructed a minimum of 30m (optimally 60m) away from the water source.  Establish an exclusion zone in the immediate vicinity of the water source  Cultivate soil-binding vegetation along the banks of watercourses. Create drainage ditches to manage water runoff from the water source  The site selection for borehole should avoid depressions or low-lying poorly drained areas  Fill any depression in the vicinity of the borehole and construct a drainage channel to lead waste water away from pump pad and into local drainage channels  The area around the hand pump pad should be filled with gravel.  Construct a drainage channel to lead wastewater away from pump  The area around the hand pump pad should be filled with gravel  Install pump base into concrete pad and extend above surface of pad. Do not allow latrines to be constructed within at least 30 meters of the well. 60 meters is preferable.  Construct fence to keep animals away.  Establish a system to support the maintenance costs of the hand pump  Campaigns should be conducted for the community to promote the proper use of the pump  Ensure appropriate disposal of batteries  Ensure funding mechanisms for regular inspection and maintenance of pipes  Ensure that positive pressure is maintained in pipes at all times; on regular basis flush system to remove accumulated silt; provide surface drainage to prevent collection of runoff water along pipeline route. Ensure that sewage collection piping is installed in separate trench from water supply piping with adequate separation, preferable on opposite sides of the street, and where pipes cross, an impermeable barrier is installed between them. |

### Sewage and Sanitation

|  |  |  |
| --- | --- | --- |
| **Description of Sub-project** | **Environmental/social Impact** | **Mitigation Measures** |
| Sewage disposal and treatment | Soak pits and septic tanks:  Soak pits overflowing and contaminating surface water  Seepage from soak pits contaminating wells, boreholes and springs  Septic tanks and disposal fields:  Septic tanks overflowing and contaminating surface water  Disposal field overflowing  Primary sewage treatment works:  Indiscriminate disposal of sludge causing health risks  Sewage treatment lagoons:  Animals accessing lagoons and transmitting diseases to people  Incompletely treated wastewater contaminating surface waters  Wastewater used for irrigation cause contamination of crops grown for human consumption  Sewage piping and drains:  Leakage from broken drains and overflow from blocked pipes forming ponds of wastewater and contaminating surface waters  Cross contamination of water supply from sewage collection piping  Human contact with untreated water in collector dams and from overflow from plugged drains | Ensure that pits are located in soils where seepage can percolate  Ensure location is an adequate distance from wells, boreholes and springs  Through public health education campaigns, raise awareness about the dangers of exposed sewage. Establish and support affordable pump out service.  Establish and enforce guidelines for design and construction of disposal fields  Ensure proper drying and disposal of sludge in a manner that poses no risk to human or animal health.  Install and maintain fencing to keep animals out.  Ensure lagoon outflow meets prescribed quality standards. Ensure that lagoons are designed with retention times sufficient to complete the treatment process.  Control and regulate the use of wastewater for irrigation.  Establish and support adequate leakage repair and clean out capability. Raise public awareness of solid waste disposal via the drainage system.  Separate sewage piping from water supply piping. If contact is unavoidable, ensure placement barriers between pipes.  Cover collector drains and clean on a regular basis. |
| Public latrine construction | Contamination of water supply sources  Blocked and overflowing latrine creates a health risk through increased probability of human and animal contact with human waste  Community do not agree with location of toilets  Lack of water for continuous toilet service  Inadequate routine cleaning and maintenance creates unhygienic conditions, and as a result, people stop using them  Animal vectors such as flies and rodent carry diseases from the latrines  People defecating in open areas  Flying toilets | Locate latrines at least 30 meters but preferably 60 meters from wells, springs and boreholes  Establish a routine maintenance and cleaning service. Conduct hygiene campaign to raise awareness of the health risks of exposed human waste and promote the support and use of municipal or private sector cleaning services  The site selection should be done with the community and agreement of people living and working in the surroundings  Ensure the installation of water reservoirs (at soil level and elevated) with enough capacity  Establish a system to support the employment of a caretaker for routine maintenance and cleaning  Ensure access pathways to decomposing excrement for flies and rodents are blocked, e.g. using screen netting over vents and installing lid on toilet. Ensure latrines are constructed with a suitable superstructure to prevent entry of rodents into vault  Design, promote and conduct public hygiene awareness campaigns focusing on adverse health impacts arising as a consequence of open defecation and promote latrine use.  Conduct hygiene education campaign to raise awareness of health risks of indiscriminate dumping of flying toilets and promote use of latrines. As an interim measure, provide facilities for people to dispose of flying toilets. |

### Small Scale Construction

|  |  |  |
| --- | --- | --- |
| **Description of Sub-project** | **Environmental/social Impact** | **Mitigation Measures** |
| Small-scale facility | Before construction  Loss of livelihoods  Landslides and soil erosion  Destruction of vegetation during excavation; loss of important flora or fauna  Soil erosion, deposition of fine materials (sand, silts, clays) in downstream water courses during construction, particularly in the rainy season  Traffic disruption  Noise disturbance  Dust impacts  Pit formation from sand mine  During construction  Erosion and deterioration of soil  Noise  Pressures on existing water sources  Disruption of communal water supply  Soil and water pollution due to labourers on the construction site and related wastes  Blockage of drainage structures with domestic waste  Interference with cultural life  After construction  Soil and water pollution due to remainder or construction wastes, tools, equipment and temporary infrastructure | See RPF  Terracing, excavation to level, control of water flows. Execute only limited earthworks during rainy season. Include precaution measures in the contract that will specify removal and relocation of top soil  Construction contracts to include provisions for limiting vegetative removal, and re-vegetation of the construction area after completion of the works. Pre-select sites for establishing work camps and devise criteria to be observed in the establishment of camps. Prepare pre-contract documentation of environmental condition of site, including photographs, maps and natural asset inventory  Construction contracts will require re-vegetation as soon as possible; contractors to be limited regarding activities to be carried out in the rainy season; contractors will be required to treat excavated areas below flood water levels as required under the design contract (use of stone gabions and mattresses) before the start of each rainy season  Best engineering practices to be employed to ensure traffic disruptions are kept to a minimum. Install appropriate signage and warnings. Prior notification to residents  Special precautions to be taken where construction takes place near schools or health care centres. Choose appropriate construction equipment for the area. Avoid noisy night time work activities, observe general rest hours for works  Special precautions to be taken where construction takes place near schools or health care centres  Contractors may be required to moisten construction area to minimize dust  Use sand from existing borrow pits; fill back pits; consider possibility of creating new habitats  Apply special caution in excavation of slopes. Provide adequate drains at slopes. Limit clearing of soil-stabilizing vegetation to the minimum necessary. Initiate turfing/grassing (e.g. vetiver grass) in erosion prone soils that are affected by construction works  Special precautions to be taken where construction takes place near schools or health care centres  Workers to use ear protectors  Liaise with local utilities to ensure adequate water supply. Limit use of groundwater for construction works.  Bring in own water where water is scarce  Ensure that water source is not polluted or damaged if using community water source  According to the risk, the contractor must devise a contingency plan to cope with the accidental cutting of water pipes  Proper design and site selection for latrines. Identify sources of illegal discharge of sewage. Ensure proper channels of reporting and enforcement against violators. Ensure adequate waste water disposal. Ensure safe storage of construction materials such as oils and paints. Proper siting, fencing and guarding of materials storage, including against animals. Flood-proof siting. Restrict amount of stored hazardous materials to short-term exigencies only.  Extra vigilance during rainy season. Identify sources of blockage. Ensure proper channels of reporting and enforcement against violators  Observation of cultural and religious events within the vicinity. Close consultation with the local community  Contractors to clear construction site of temporary infrastructures and restore vegetation on the site. Ensure that all erosion control measures are working satisfactorily (e.g. vetiver grass is being watered regularly). |

### Road, bridge and footpath rehabilitation and maintenance

|  |  |  |
| --- | --- | --- |
| **Description of Sub-project** | **Environmental/social Impact** | **Mitigation Measures** |
| Construction and maintenance of footpaths | Footpath blocking drainage channels for water run-off  Ponding on footpaths providing breeding sites for water borne diseases and vector or water borne diseases  Footpaths becoming watercourses during heavy rains and causing erosion  Footpaths used as outdoor latrines | Install bridges or culverts across natural and man-made channels and perform routine maintenance to keep them clear of debris  Design paths to facilitate drainage and if necessary above ground level. Provide routine maintenance to fill depressions with granular material.  Construct drainage ditches along either side of the road and if required, install drainage dams to control water flow velocity. Road surface runoff directed into natural or man-made drainage channels to avoid causing erosion caused by overflow. Plant soil binding vegetation on the uphill sides of ditches to reduce the velocity of water runoff.  Design, promote and conduct public awareness campaigns concerning the health risks associated with open defecation and promote use of latrines |
| Minor road construction and rehabilitation | Roads:  Roadway blocking drainage channels for water runoff  Ponding on roadways providing breeding sites for water borne diseases and vectors of water borne diseases  Erosion caused by inadequate drainage along roadways  Create dust to nearby houses during construction  Increased sediments into streams, ponds and rivers due to erosion from road tops and soils  Possible land acquisition, loss of livelihoods  Culverts and bridges:  Flooding and erosion caused by overflowing and blockage  Bridge deck failure causing accidents and injuries | Install bridges and culverts across natural and man-made drainage channels and perform routine maintenance to them clear of debris etc.  Road profile construction design to ensure rapid drainage off the road surface. May also involve raising the road above ground level.  Construct drainage ditches along either side of the road, and if required, install check drainage dams to control water flow velocity. Road surface runoff directed into natural or man-made drainage channels. Maximize the number of receiving channels to avoid erosion caused by overflow. Plant soil binding vegetation on the uphill sides of ditches to reduce the velocity of water runoff.  Dust control by water or other means  Prevention of erosion by re-vegetation, dry construction and physical stabilization  Refer to RPF  Design dimensions appropriate to typical rainfall patterns. Routine maintenance to ensure that culverts are kept clear of debris.  Regular routine maintenance and ‘bridge fund’ to ensure that repair costs can always be met. |

### Drainage channel construction, rehabilitation and maintenance

|  |  |  |
| --- | --- | --- |
| **Description of Sub-project** | **Environmental/social Impact** | **Mitigation Measures** |
| Surface water drainage channels construction, rehabilitation and maintenance | Changes in water drainage could allow for changes in land use (e.g. agricultural areas in peri-urban areas could be urbanized)  Potential blockage of drainage structures  Destruction of houses or other buildings  Channels cutting roads, footpaths and house entrances  Risk of drowning in the channels  Channels cutting underground services  Increase of flood risk in the discharge area affecting downstream properties and land use  Risk of erosion in the discharge area  Risk of water pollution downstream and ecological impact in areas of special conservation concern (conservation areas, wetlands)  Escalating erosion in the channel  Defecation in the drainage channel  Indiscriminate disposal of solid wastes causing blockage and contamination  Indiscriminate disposal of industrial and commercial liquid wastes causing contamination  Use of drain water for human consumption or bathing causing health problems  Pipes:  Increase of flood risk in the discharge area affecting downstream properties and land use  Risk of erosion in the discharge area  Creation of stagnant pools of water in left borrow pits  Retention basin:  Destruction of houses or other buildings  Risk of drowning in the basin | During the design phase the structure plans and the present land use should be considered  Ensure overflow and culvert opening are adequately sized and allow for easy cleaning. Consider covering drainage structures in the neighbourhood of refuse collection sites. Devise cleaning scheme for keeping the drainage structure clear of debris. Plan for public awareness campaigns  During the design phase an inventory of houses should be executed (photographic records are essential) including the extent of property acquisition of each house and determination of tenancy of each resident (see RPF)  Roads, main footpaths and houses entrances cut by channels should be reinstalled. Bridges should be constructed where necessary (pipes may cause blockages).  Channels with more than 1.0m depth should be avoided. In cases of greater depth, protection for children (of a type that cannot be easily removed or destroyed) should be installed.  During the design phase entities for water, energy and telecommunication supply should be contacted to define proceedings.  During the design phase the discharge area should be carefully selected to avoid downstream impacts, e.g. in settled areas  Avoid discharges in high slope areas. Protect the discharge area with gabions or any similar structure that could be reinforced by the application of vegetation suitable for wet areas  Hygiene education campaigns should conducted to raise awareness of these adverse impacts  Adequate connection between tertiary and secondary drains  Create drain gradients and install check dams to optimize water flow velocity  Classify bank section according to erosion sensitivity. Stabilize channel banks with stones. Plant soil stabilizing vegetation to promote stability and slow water runoff  Design, promote and conduct public hygiene awareness campaign focusing on adverse health impacts compared to the proper use and maintenance of latrines  Design, promote and conduct public hygiene awareness campaign focusing on adverse health impacts arising as a consequence of water contamination. Organize task teams to remove solid waste and promote recycling campaigns and environmental awareness campaigns  Design, promote and conduct public hygiene awareness campaign focusing on adverse health impacts arising as a consequence of water contamination. Lobby for the creation of legislation to impose penalties on frequent polluters (commercial sector) if this legislation does not exist, or if it exists, lobby for better implementation or increase in fines  Design, promote and conduct public hygiene awareness campaign focusing on adverse health impacts arising as a consequence of consuming contaminated water. Ensure provision of alternative appropriate safe water sources  During the design phase the discharge area should be carefully selected to avoid downstream impacts, namely in settled areas  Avoid discharge in high slope areas  Rehabilitation of borrow pit sites  During the design phase an inventory of houses should be executed (photographic records are essential) including the extent of property acquisition of each house and determination of tenancy of each resident    Resettlement and/or compensation considered according to RFP  Protection for children should be installed of a nature that cannot be easily removed or destroyed |

### Waste Management and Disposal

|  |  |  |
| --- | --- | --- |
| **Description of Sub-project** | **Environmental/social Impact** | **Mitigation Measures** |
| Waste disposal and management facilities | Primary collection (waste from domestic source):  Ad hoc littering of public areas create health risk and negative aesthetic impact  Accumulation of water in the containers and discharge of contaminated water  Secondary collection (waste from public areas):  Dumping waste in public areas instead of at secondary waste collection points  Overflowing skips or bunkers  Redistribution of wastes by foraging domestic and other animals and birds  Final disposal:  Rodents and flies using composting areas as breeding grounds, creating a health risk  Market wastes collection point:  Overflowing skips and bunkers  Waste collection vehicles:  Waste falling off vehicle en route to disposal site  Waste disposal site:  Waste scattered by wind  Animals and flies feeding and breeding on garbage and carrying diseases to the human population  Runoff from disposal sites draining into and polluting local watercourses  Leachate from waste polluting groundwater and/or surface water  Rapid accumulation of solid wastes at disposal sites necessitating the creation of new waste disposal sites | Design, promote and conduct public hygiene awareness campaigns focusing on adverse health impacts arising as a consequence of indiscriminate disposal of solid wastes. Implement legislation to impose fines for littering or lobby for stronger fines if necessary  The containers should have a cover  Design, promote and conduct public hygiene awareness campaigns focusing on adverse health impacts arising as a consequence of indiscriminate disposal of solid wastes. Implement legislation to impose fines for littering or lobby for stronger fines if necessary  Ensure that collection receptacles can be closed to prevent access to opportunistically foraging animals  Ensure that collection receptacles can be closed to prevent access to opportunistically foraging animals  Provide extension services for correct composting to minimize the proliferation of vector animals  Prior to project implementation, design a waste management strategy that includes small projects such as composting and recycling  Market wastes may require a more frequent collection schedule. Promote recovery of valuable solid wastes.  Train staff regarding proper loading procedures. Use vehicle with enclosed box or high sides  Cover waste as soon as possible after dumping  Fence the site to keep out large animals (up to size of a goat or dog) and cover waste as soon as possible after dumping. Awareness campaigns required regarding the health hazards associated with (human) foraging at waste disposal sites  Construct drain around the perimeter of the disposal site directing water runoff to a treatment pond. Prevent general runoff from flowing over the disposal site  Select disposal sites underlain by a low permeability substrate (e.g. gravel) and as far away as possible from aquifers and surface water  Promote the recovery of reusable solid waste, in particular, organic wastes. These, on average, constitute up to 80% of solid waste |

### Other urban infrastructure

|  |  |  |
| --- | --- | --- |
| **Description of Civil Works** | **Environmental/social Impact** | **Mitigation Measures** |
| Street lighting | Accidents as a result of exposed electrical components | Support the municipality or community for maintenance of the electrical system. Notify the public about the program and alert against dangers of illegal wiring practices. Prepare an awareness campaign for the individual’s and the community’s responsibilities for security and communal well-being |

### Urban landscape

|  |  |  |
| --- | --- | --- |
| **Urban landscape** | **Environmental/social Impact** | **Mitigation Measures** |
| Landscape features (slopes, wetlands, mountains, forests) | Erosion and land degradation | Determine institutional responsibilities  Establish coordinating unit  Identify causal factors and appropriate control program  Monitor impact of program |

### Conditional Clauses of Particular Application for Environment and Social Welfare for Contractor’s engaging in Small to Medium Scale projects

The following clauses are given to support the supervision of small to medium scale infrastructure projects to ensure that environmental and social standards are adhered to according to the mitigation measures given above. These clauses can be used for the basis of negotiation between the Tinkhundla/Microprojects Programme or urban local government and the contractor, depending on the project specific situation.

|  |  |
| --- | --- |
| Sub Clause Purpose | |
| Environment | |
| Relations with Local Communities and Authorities | Obliges Contractor to liaise frequently with local communities and minimise impact on them |
| Safety, Security and Protection of the Environment | Addition which:  Specifies pollution control measures, particularly to construction of latrines and refuse collection facilities  Provides for emergency response to pollution incidents  Ensures payment of compensation to parties affected by pollution |
| Employer’s Responsibilities | Addition ensuring that the employer takes equal care of the environment if he is working on the Site |
| Protection of Trees and Vegetation | Protects trees and vegetation  Imposes penalties and remedies for damage to and unauthorized felling of trees |
| Water Supply | Obliges Contractor to supply his own water of adequate quality  Protects rights of existing water users and provides remedies if these are affected (e.g. shallow wells) |
| Asphalt Mix plants | Controls siting and dust emissions from hot-mix plants |
| Type and storage of Materials | Obliges contractor to:  utilize only specified construction material, fuels and chemicals  adequately store and provide security measures for materials against natural impacts (storm, floods) and theft  ensure that hazardous materials (fuels, chemicals, paints, acids etc) will be securely stored with restricted access to authorized staff  establishes the Engineer’s (or supervision team/SRC) right to conduct unannounced spot checks and direct, at any time, the additional measures that need to be taken |
| Use of Wood as Fuel | Prohibits use of wood as a fuel for execution of the works |
| Fire Prevention | Obliges Contractor to:  avoid fire damage to vegetation  suppress fires  restore areas of vegetation accidentally burnt dues to his activities |
| Traffic Interference |  |
| Interference with Traffic and Adjoining Properties | Addition obliges Contractor to give adequate advance warning if any road or other access has to be temporarily closed |
| Establishment and Clearance of Facilities |  |
| Rights of Way and Facilities | Addition which requires:  Engineer/SRC/prior approval for siting and design of Contractor’s facilities  Full restoration of land so used |
| Clearance of Contractor’s facilities | Directs the contractor to:  Restore all land affected by his facilities  Specifies measures to be taken such as removal of all debris, ripping to relieve compaction, removal of old latrines, etc.  Reserves Employer’s right to restore land is this has not been done properly |
| Labour |  |
| Employment of Local Personnel, Women and Children | Encourages Contractor to  Employ unskilled labour from the community  Include employment of women  Ban the employment of child labour |
| Fair Wages | Encourages Contractor to:  Pay not less than fair wage  Ensure that all his subcontractors do likewise  Inform all labour as to the official wage rates |
| Housing for Labour (if Necessary) | Establishes, as applicable, minimum conditions for housing for staff and labour – lights , water and sanitation – and ensures proper maintenance of accommodation. |
| Work Accident, Safety and Prevention | Directs the Contractor to:  Prevent accidents to the travelling public and local residents  Have a qualified accident prevention officer on site  Establish and implement safe working practices, including any necessary training to staff and labour |
| Protective Clothing and Footwear | Directs the Contractor to:  Supply all staff with appropriate protective clothing/equipment  Specifies minimum requirements for bituminous paving works, concrete works, lime stabilisation and bridge construction  Establishes the right of client to direct that extra clothing is issued |
| First Aid Services | Establishes minimum standards for first-aid provision on site |
| Health and Pests | Directs Contractor to take all steps necessary to ensure the health of his staff and labour and to prevent illnesses or spread of disease, including:  Warning staff and labour of health risks prevalent in the area  Controlling pests  Following the instructions of competent authorities with respect to disease prevention and control  Establishes the rights of the Engineer or SRC to direct that additional preventative measures be taken |
| Supply of Drinking Water, Sanitation | Contractor to supply drinking water and sanitation on the site as necessary |
| Traditional Events and Cultural Practices | Contractor to have regard and consideration for Traditional Events and Cultural Practices |
| Disorderly Conduct | Contractor to prevent disorderly conduct by the work force. “Disorderly Conduct” to include excessive harvesting of natural resources |
| Labour Regulations, Welfare and Fees | Contractor to comply with labour regulations and laws |
| Labour Relations Officer | Contractor to have a labour relations officer on site, actively promoting the interests and welfare of staff and labour. In the case of small contracts, this does not need to be a dedicated officer, but staff member with specific responsibility |
| Records and Reporting of Labour and Accidents | Contractor to keep detailed records of labour, accidents, etc. Submit to Engineer/SRC as required |
| Extension of Time for Completion | Reminds Contractor of possibility of difficult weather conditions and flooding;  Obliges him to prepare and adjust his work program accordingly |

## 

## Annex 4

## Draft outline for separate EAs

Provide a full description of the nature of the project with respect to the name of the proponent, the postal and physical address, the spatial location of the potential site for the project, the estimated cost of the project, and size of the project site, including water reticulation, waste disposal and access roads.

Provide a site-specific map of the area (Scale 1:50,000) showing the proposed project site and existing establishments in the area and surrounding areas. A site plan for the project should also be provided.

3. Examine the existing conditions of the proposed site identifying and analysing:

* Geological and soil conditions of the area;
* The scope of vegetative resources of the area;
* Existing land uses within the area and within adjacent villages;
* Ecologically important or sensitive habitats and resources e.g. water resources, soil resources, biodiversity elements; and
* Suitability of the site for the proposed development.

4. Describe the major activities to be undertaken for the construction and operation of the project. This should include the size and type of structures, the type of equipment to be used, the method and duration of construction, nature and quantity of wastes to be generated, the facilities for appropriate disposal and management of waste, and number of people to be employed.

5. State the reasons for selecting the proposed site, the consequences of not undertaking the project at the proposed site and any alternative sites considered.

6. Predict the major short and long-term environmental impacts of the project.

Examine both the positive and negative impacts as well as impacts on the biophysical, social, economic and cultural components of the environment. The potential impacts must include those related to:

* project location (e.g. resettlement of people, loss of forest land, loss of agricultural land, impact on flora and fauna);
* construction works (e.g. soil erosion, disposal of construction spoils, drainage and access roads)
* project operation (e.g. solid waste disposal, sewage disposal)

7. Prescribe measures to eliminate, reduce or mitigate the negative effects identified and the measures to enhance the positive effects in 6.

8. Propose an Environmental Management Plan (EMP) in tabular form by which all of the mitigation/enhancement measures prescribed will be carried out, specifying who will be responsible for implementing these measures and the schedule for implementation, cost of implementing the measures and the source of funding. An environmental monitoring plan should also be prepared including the indicators to be used for monitoring the impacts and responsible persons and institutions that will conduct the monitoring.

9. Undertake public consultations to ensure that all interested and affected parties are involved in the EA process and incorporate their views into the EA. Evidence of consultation should be provided in the report.

10. Provide an account of all statutory and regulatory licenses and approvals obtained for the project to ensure that they are in line with sound environmental management practices and are in compliance with all relevant existing legislation. Reference should be made, but not limited to the Environment Management Act and other relevant and other relevant legislation.

### Typical Structure of an EA Report

Executive summary

Introduction

* Scope of the EA
* Team in charge of the EA, with list of consultants involved and task of each
* Summary of requirements applying to the EA:
* General Swaziland legal requirements
* ESMF requirements
* RPF requirements
* Other World Bank requirements if applicable
* Time frame for implementation of the EA

Description of the Proposed Development Sub-Project

* Technical components, including description of the methods used for construction and operation
* Outline of the main alternatives
* Sub-Project decommissioning at the end of the operation period
* Implementation arrangements
* Implementation schedule and cost

EA Methods

* Terms of Reference of the EA, and process through which they were arrived at
* Description of the methods used for the EA, including description of field investigations, mathematical models, social investigations, available literature
* Description of standards and guidelines used
* Statement on the extent of involvement
* Identification of information gaps and uncertainties

Consultation

* Identification of interested parties
* Description of consultation with affected parties (timeframe, methods)
* Main issues arising from consultation and how they were addressed in the ESIA process
* Description of the baseline environmental, socio-economic and health conditions
* Focus of the baseline assessment depending on the nature of the sub-project and on its likely impacts
* Description of the physical environment (climate, topography, geology, hydrogeology, surface water, soils in the sub-project area)
* Flora and fauna – brief description of the baseline situation at the project site, with a specific focus on endangered species if any, and assessment of the general biodiversity situation in the project area
* Description of the human environment:
* Identification of neighbouring communities, description thereof – demography, socio-political organization),
* Land use pattern, land tenure, and related social organization,
* Livelihoods
* Water usages
* Noise
* Health situation
* Project Impacts
* Generally, prediction and assessment of each impact at all stages of the project cycle for each alternative, including, but not limited to;
* Construction phase
* Employment
* Impact on land use
* Impact on flora and fauna, with a specific focus on endangered species if any
* Noise and Vibration
* Dust
* Impact on ground water quality
* Impact on surface water quality (related with erosion at the vicinity of the work site for example)
* Impact on surface water usage
* Impact on ground water usage
* Impact on soils
* Potential uses of the environment that will be affected
* Operation phase
* Potential uses of the environment that will be affected
* Decommissioning phase
* Summary table assessing the significance of each identified impact in terms of magnitude, extension, duration or frequency of occurrence and probability of occurrence

Consultation Process

* Description of the consultation process (who was consulted, how, when)
* Results: main issues raised and how they are addressed in the project design and in the EA in general

Mitigation Measures

* Table showing for each identified impact at each of the main three phases of the project the proposed mitigation measures, with narrative justifying them
* Table showing the residual impacts once the mitigation measures are implemented

Monitoring & Evaluation

* Table showing for each identified impact the monitoring measures that will be taken, with indication of indicators used, frequency of measurement, frequency of reporting and any relevant details on the methods to be used for collecting and treating monitoring data

Environmental and Social Management Plan (ESMP)

* Table showing for each identified impact both the mitigation and the monitoring measures proposed in the EA, with for each the implementation arrangements, including responsibilities for implementation, the timeframe, and the budgetary implications

## Annex 5

## Report Format for an Initial Environmental Evaluation (IEE) and Comprehensive Mitigation Plan (CMP)

|  |  |
| --- | --- |
| Chapter / Section | Contents |
| 1. Introduction | Purpose of the IEE |
| 2. Description of the Project | Location, size, construction or operational activities, schedule for implementation, workforce, any alternatives. |
| 3. Description of the Environment | Brief description of physical, ecological and human aspects of the site and its surroundings. |
| 4. Impact Description and Evaluation | Brief account of the significant impacts likely to occur if no mitigation occurs. If an EA is needed because of the nature and extent of expected impacts then a recommendation to this effect should be made. |
| 5. Impact Management | Description of mitigation measures, monitoring programmes and schedule of implementation (CMP). Technical and institutional requirements for successful implementation. |
| 6. Comprehensive Mitigation Plan | This plan is prepared by using the results obtained from the IEE investigation. It identifies:   * impacts to be prevented or reduced in severity * benefits to be enhanced * mitigation measure, to achieve the above * costs, institutional and training requirements * monitoring programmes to track project related impacts and implementation of mitigation measures * community liaison procedures needed   The plan must contain:   * schedules for implementation/targets * reporting procedures * work programmes * budget * staffing and training requirements |

## Annex 6

## Environmental guidelines for construction contractors

### General: Applicability of These Environmental Guidelines and ESMP

1. These general environmental guidelines apply to any work to be undertaken under the Project. For certain work sites entailing specific environmental and/or social issues, a specific Environmental and Social Impact Assessment, including an Environmental and Social Management Plan (ESMP), will be prepared to address the specific issues in addition to these general environmental guidelines. In addition to these general Environmental Guidelines, the Contractor will comply with any specific ESMP for the works he is responsible for. The Contractor shall be informed by the Client about such an ESMP for certain work sites, and prepare his work strategy and plan to fully take into account relevant provisions of that ESMP. If the Contractor fails to implement the approved ESMP after written instruction by the works supervisor to fulfil his obligation within the requested time, the Client reserves the right to arrange for execution of the missing action by a third party on account of the Contractor.

2. Notwithstanding the Contractor’s obligation under the above clause, the Contractor shall implement all measures necessary to avoid undesirable adverse environmental and social impacts wherever possible, restore work sites to acceptable standards, and abide by any environmental performance requirements specified in an ESMP where such an ESMP applies.

3. These Environmental Guidelines, as well as any specific ESMP, apply to the Contractor. They also apply to any sub-contractors present on Project work sites at the request of the Contractor with permission from the Client.

### General Environmental Protection Measures

4. In general, environmental protection measures to be taken at any work site shall include but not be limited to:

(a) Minimize the effect of dust on the environment resulting from earth mixing sites, vibrating equipment, construction related traffic on temporary or existing access roads, etc. to ensure safety, health and the protection of workers and communities living in the vicinity of work sites and access roads.

(b) Ensure that noise levels emanating from machinery, vehicles and noisy construction activities (e.g. excavation, blasting) comply with Swaziland standards and are generally kept at a minimum for the safety, health and protection of workers within the vicinity of high noise levels and nearby communities.

(c) Ensure that existing water flow regimes in rivers, streams and other natural or irrigation channels are maintained and/or re-established where they are disrupted due to works being carried out.

(d) Prevent any construction-generated substance, including bitumen, oils, lubricants and waste water used or produced during the execution of works, from entering into rivers, streams, irrigation channels and other natural water bodies/reservoirs.

(e) Avoid or minimize the occurrence of standing water in holes, trenches, borrow areas, etc…

(f) Prevent and minimize the impacts of quarrying, earth borrowing, piling and building of temporary construction camps and access roads on the biophysical environment including protected areas and arable lands; local communities and their settlements. Restore/rehabilitate all sites to acceptable standards.

(g) Upon discovery of graves, cemeteries, cultural sites of any kind, including ancient heritage, relics or anything that might or believed to be of archaeological or historical importance during the execution of works, immediately report such findings to the Client so that the SNTC may be expeditiously contacted for fulfilment of the measures aimed at protecting such historical or archaeological resources.

(h) Prohibit construction workers from engaging in the exploitation of natural resources such as hunting, fishing, and collection of forest products or any other activity that might have a negative impact on the social and economic welfare of the local communities. Prohibit explicitly the transport of any game in Contractor’s vehicles.

(i) Prohibit the transport of firearms in Project-related vehicles.

(j) Prohibit the transport of third parties in Project-related vehicles.

(k) Implement soil erosion control measures in order to avoid surface run off and prevent siltation, etc.

(l) Ensure that garbage, sanitation and drinking water facilities are provided in construction workers camps.

(m) Ensure that, in as much as possible, local materials are used to avoid importation of foreign material and long distance transportation.

(n) Ensure public safety, and meet Swaziland traffic safety requirements for the operation of work to avoid accidents.

(o) Ensure that any trench, pit, excavation, hole or other hazardous feature is appropriately demarcated and signposted to prevent third-party intrusion and any safety hazard to third parties.

(p) Comply with Swaziland speed limits, and for any traffic related with construction at Project sites, comply with the following speed limits unless Swaziland speed limits are lower:

* Inhabited areas: 50 km/h
* Open road: 80 km/h.

(q) Ensure that, where unskilled daily-hired workforce is necessary, such workers are hired from neighbouring communities.

(r) Generally comply with any requirements of Swaziland law and regulations.

5. Besides the regular inspection of the sites by the supervisor appointed by the Client for adherence to the Contract conditions and specifications, the Client may appoint an environmental inspector to oversee the compliance with these environmental conditions and any proposed mitigation measures. The SEA may carry out similar inspection duties. In all cases, as directed by the Client’s supervisor, the Contractor shall comply with directives from such inspectors.

##### Drilling

6. The Contractor will make sure that any drilling fluid, drilling mud, mud additives, and any other chemicals used for drilling at any Project construction site complies with Swaziland health and safety requirements. In general, only bio-degradable materials will be used. The Contractor may be required to provide the detailed description of the materials he intends to use for review and approval by the Client. Where chemicals are used, general prescriptions of the World Bank’s safeguard policy OP 4.09 “Pest Management” shall be complied with.

7. Drilling fluids will be recycled or disposed of in compliance with Swaziland regulations in an authorized disposal site. If drilling fluids cannot be disposed of in a practical manner, and if land is available near the drilling site that is free of any usage rights, the Contractor may be authorized to dispose of drilling fluids near the drilling site. In this occurrence, the Contractor will be required to provide to the Client due evidence of their total absence of potential environmental impacts, such as leachate tests certified by an agreed laboratory. In this case, drilling fluids will be dried at site, mixed with earth and spread at site.

8. Any site affected by drilling work will be restored to its initial condition. This applies to drilling pads, access roads, staging areas, etc… Topsoil will be stripped ahead of any earthmoving, stored near the construction site, and replaced in its original location after the recontouring of the area affected by the works.

9. Where successive aquifers are intersected by the drilling works, and upon order by the work supervisor, the Contractor may be required to take measures to isolate aquifers from contamination by each other.

10. The Contractor will take all measures to avoid bacteriological or chemical contamination of the intersected aquifers by the drilling equipment. Similarly, the Contractor will take all measures to avoid bacteriological or chemical contamination of the intersected aquifers from the surface by providing an adequately sealed well-head.

11. When greasing drilling equipment, the Contractor will avoid any soil contamination. In the event of a limited hydrocarbon spill, the Contractor will recover spilled hydrocarbons and contaminated soils in sealed drums and dispose of them in an authorized waste management facility.

12. Unless duly requested by the Contractor and authorized by the supervisor, no servicing of drilling equipment or vehicles is permitted at the drilling site.

##### Pipelines

13. No trench shall be left open for more than 7 days, unless duly authorized by the supervisor upon Contractor’s request. Trenches and other excavation works shall be demarcated and/or signposted to avoid third party intrusion.

14. General conditions related with topsoil stripping, storage and restoration apply.

15. The Contractor will take measures to dispose of water used for pressure tests in a manner that does not affect neighbouring settlements.

##### Waste Management

16. All drums, containers, bags, etc. containing oil/fuel/surfacing materials and other hazardous chemicals shall be stored at construction sites on a sealed and/or bonded area in order to contain potential spillage. All waste containers, litter and any other waste generated during the construction shall be collected and disposed off at designated disposal sites in line with applicable Swaziland government waste management regulations (2000).

17. All drainage and effluent from storage areas, workshops, housing quarters and generally from camp sites shall be captured and treated before being discharged into the drainage system in line with applicable government water pollution control regulations.

18. Used oil from maintenance shall be collected, properly stored in sealed containers, and either disposed of appropriately at designated sites or be re-cycled.

19. Entry of runoff into construction sites, staging areas, camp sites, shall be restricted by constructing diversion channels or holding structures such as berms, drains, dams, etc. to reduce the potential of soil erosion and water pollution.

20. Construction waste shall not be left in stockpiles along the road, but removed and reused or disposed of on a daily basis.

21. Where temporary dump sites for clean excavated material are necessary, they shall be located in areas, approved by the Client’s supervisor, where they will not result in supplemental erosion. Any compensation related with the use of such sites shall be settled prior to their use.

22. Areas for temporary storage of hazardous materials such as contaminated liquid and solid materials shall be approved by the supervisor and appropriate local and/or relevant national or local authorities before the commencement of work. Disposal of such waste shall be in existing, approved sites.

##### Quarries and Borrow Areas

23. The Contractor shall obtain appropriate licenses/permits from relevant authorities to operate quarries or borrow areas. The location of quarries and borrow areas shall be subject to review and approval by relevant local and national authorities.

24. New extraction sites:

a) Shall not be located less than 1km from settlement areas, archaeological areas, cultural sites – including churches and cemeteries, wetlands or any other valued ecosystem component, or on high or steep ground.

b) Shall not be located in water bodies, or adjacent to them, as well as to springs, wells, well fields.

c) Shall not be located in or near forest reserves, natural habitats or national parks, reserves or areas declared as Protectionworthy.

d) Shall be designed and operated in the perspective of an easy and effective rehabilitation. Areas with minimal vegetation cover such as flat and bare ground, or areas covered with grass only or covered with shrubs less than 1.5m in height, are preferred.

e) Shall have clearly demarcated and marked boundaries to minimize vegetation clearing and safety hazards for third parties.

25. Vegetation clearing shall be restricted to the area required for safe operation of construction work. Vegetation clearing shall not be done more than two months in advance of operations.

26. Stockpile areas shall be located in areas where trees or other natural obstacles can act as buffers to prevent dust pollution, and generally at a distance from human settlements. Wind shall be taken into consideration when siting stockpile areas. Perimeter drains shall be built around stockpile areas.

27. The Contractor shall deposit any excess material in accordance with the principles of these guidelines, and any applicable ESMP, in areas approved by local authorities and/or the supervisor.

##### Rehabilitation of Work and Camp Sites

28. Topsoil shall be stripped, removed and stored for subsequent rehabilitation. Soils shall not be stripped when they are wet. Topsoil shall not be stored in large or high heaps. Low mounds of no more than 1 to 2m high are recommended.

29. Generally, rehabilitation of work and camp sites shall follow the following principles:

* To the extent practicable, reinstate natural drainage patterns where they have been altered or impaired.
* Remove toxic materials and dispose of them in designated sites. Backfill excavated areas with soils or overburden that is free of foreign material that could pollute groundwater and soil.
* Ensure reshaped land is formed so as to be stable, adequately drained and suitable for the desired long-term land use, and allow natural regeneration of vegetation. Ensure that natural regeneration is free from alien plants.
* Minimize erosion by wind and water both during and after the process of reinstatement.
* Compacted surfaces shall be deep ripped to relieve compaction unless subsurface conditions dictate otherwise.

##### Management of Water Needed for Construction Purposes

30. The Contractor shall at all costs avoid conflicting with water needs of local communities. To this effect, any temporary water abstraction for construction needs from either ground or surface water shall be submitted to the following community consultation process:

* Identification of water uses that may be affected by the planned water abstraction,
* Consultation with all identified groups of users about the planned water abstraction,
* In the event that a potential conflict is identified, report to the supervising authority.

This consultation process shall be documented by the Contractor (minutes of meeting) for review and eventual authorization of the water withdrawal by the Client’s supervisor.

31. Abstraction of both surface and underground water shall only be done with the consultation of the local community as mentioned and after obtaining a permit from the relevant authority.

32. Abstraction of water from wetlands is prohibited.

33. Temporary damming of streams and rivers is submitted to approval by the supervisor. It shall be done in such a way as to avoid disrupting water supplies to communities downstream, and to maintain the ecological balance of the river system.

34. No construction water containing spoils or site effluent, especially cement and oil, shall be allowed to flow into natural water drainage courses. Similarly, wash water from washing out of equipment shall not be discharged into water courses or road drains. Washing bays shall be sited accordingly. Unless site conditions are not favourable, it will generally be infiltrated through soak pits or similar.

35. Site spoils and temporary stockpiles shall be located away from the drainage system, and surface run off shall be directed away from stockpiles to prevent erosion.

##### Traffic Management and Community Safety

36. Location of temporary access roads shall be done in consultation with the local community and local authority (e.g. chief, town board) and based on the screening results, especially in important or sensitive environments. Temporary access roads shall not traverse wetland areas or other ecologically sensitive areas. The construction of any access roads shall be submitted to a prior consultation process with potentially affected communities that will have to be documented (minutes of meetings) for supervisor’s review and approval.

37. Upon the completion of civil works, all temporary access roads shall be ripped and rehabilitated. Rehabilitation requires the planting of indigenous vegetation and control of alien plant infestation.

38. Measures shall be taken to suppress dust emissions generated by Project traffic.

39. Maximum speed limits for any traffic related with construction at Project sites shall be the following, unless Swaziland speed limits are locally lower:

* Inhabited areas: 50 km/h
* Open road: 80 km/h.

##### Salvaging and Disposal of Obsolete Components Found by Rehabilitation Works

40. Obsolete materials and construction elements such as electro-mechanical equipment, pipes, accessories and demolished structures shall be salvaged and disposed of in a manner approved by the supervisor. The Contractor has to agree with the supervisor which elements are to be surrendered to the Client’s premises, which will be recycled or reused, and which will be disposed of at approved landfill sites.

41. Any asbestos cement material that might be uncovered when performing rehabilitation works will be considered as hazardous material and disposed of in a designated facility.

##### Compensation of Damage to Property

42. Compensation of land acquired permanently for Project purposes will be handled under Client responsibility based on the provisions of the RPF (or relevant legislation). However, in the event that the Contractor, deliberately or accidentally, damages property, he shall repair the property to the owner’s satisfaction and at his own cost. For each repair, the Contractor shall obtain from the owner/user a certificate that the damage has been made good satisfactorily in order to indemnify the Client from subsequent claims.

43. In any case where compensation for inconveniences, damage of crops etc. are claimed by the owner, the Client has to be informed by the Contractor through the supervisor.

##### Contractor’s Health, Safety and Environment Management Plan (HSE-MP)

44. Within 6 weeks of signing the Contract, the Contractor shall prepare a Health, Social and Environmental Management Plan (HSEMP) to ensure the adequate management of the health, safety, environmental and social aspects of the works, including implementation of the requirements of these general conditions and any specific requirements of an ESMP for the works. The Contractor’s HSEMP will serve two main purposes:

45. The Contractor’s HSEMP shall provide at least:

* a description of procedures and methods for complying with these general environmental management conditions, and any specific conditions specified in an ESMP;
* a description of specific mitigation measures that will be implemented in order to minimize adverse impacts;
* a description of all planned monitoring activities and the reporting thereof; and
* the internal organizational, management and reporting mechanisms put in place for such.

46. The Contractor’s HSEMP will be reviewed and approved by the Client before start of the works. This review should demonstrate if the Contractor’s HSEMP covers all of the identified impacts, and has defined appropriate measures to counteract any potential impacts.

##### HSE Reporting

47. The Contractor shall prepare bi-monthly progress reports to the Client on compliance with these general conditions, the sub-project ESMP if any, and his own HSEMP. The Contractor’s reports will include information on:

* HSE management actions/measures taken, including approvals sought from local or national authorities;
* Problems encountered in relation to HSE aspects (incidents, including delays, cost consequences, etc. as a result thereof);
* Non-compliance with contract requirements on the part of the Contractor;
* Changes of assumptions, conditions, measures, designs and actual works in relation to HSE aspects; and
* Observations, concerns raised and/or decisions taken with regard to HSE management during site meetings.

48. The reporting of any significant HSE incidents shall be done as soon as practicable. Such incident reporting shall therefore be done individually. The Contractor should keep his own records on health, safety and welfare of persons, and damage to property. It is advisable to include such records, as well as copies of incident reports, as appendixes to the bi-monthly reports. Details of HSE performance will be reported to the Client.

##### Training of Contractor’s Personnel

49. The Contractor shall provide sufficient training to his own personnel to ensure that they are all aware of the relevant aspects of these general conditions, any project ESMP, and his own HSEMP, and are able to fulfil their expected roles and functions. Specific training will be provided to those employees that have particular responsibilities associated with the implementation of the HSEMP. Training activities will be documented for potential review by the Client.

50. Amongst other issues, training will include an awareness session for all employees on HIV-AIDS addressing the following topics:

* What is HIV/AIDS?
* How is HIV/AIDS contracted?
* HIV/AIDS prevention.

## Annex 7

## List of Persons/Institutions Contacted

|  |  |
| --- | --- |
| Name | Organization |
| Jameson Vilakati | Director, Swaziland Environment Authority |
| Mboni Dlamini | Swaziland Environment Authority |
| Ishmael Ndwandwe | Swaziland Environment Authority |
| Lungile Dlamini | Swaziland Environment Authority |
| Dr. Irma Allen | Chairperson, Swaziland Environment Authority |
| Tito Simelane | Director, Urban Government, MHUD |
| Napoleon Ntezinde | MHUD, PCU |
| Bafana Mchobokazi | MHUD, PCU |
| John Lowsby | MHUD, PCU |
| Ncane Dlamini | Coordinator, EU Microprojects Program |
|  |  |
| Sandile Hlatshwayo | Hlatihikhulu Town Board |
| Nthando Ngwenya | Hlathikhulu Town Assistant |
| Theodora Dlamini | Lavumisa Town Board |
| Vusi Matsebula | Piggs Peak Town Council |
| Mhlonipheni Magongo | Siteki Town Council , |
| Mandla Mdluli | Nhlangano Town Council |
| Goodluck Gule | Town Council Manzini |
| Ellinah Wamukoya | Acting Town Clerk and City Planner, Manzini |
| Derek von Wissell | National Director, NERCHA |
| Khanya Mabuza | Deputy Director, NERCHA |
| Nana Mdluli | PRO, NERCHA |
| Polina Dlamini | Director, Community Water Development |
| Lofana Dlamini | Headmaster, Phophonyane Primary School |
| Chief Mnikwa | Hhelehhele Chiefdom |
| Ntombini Marrengane | World Bank, Pretoria |
| Colleen Butcher | World Bank, Consultant |
| Rowena Martinez | World Bank, Consultant |
| Arthur Belsey | Project Director, LUSIP, Siphonfaneni |
| Melvin Mayisela | Rural Water Supply |
| Cyril Khanya | Rural Water Supply |
| Lenjo Dlamini | Rural Water Supply |
| Kennedy Shongwe | Swaziland Water Services Corporation (SWSC) |
| Caiphas M Dlamini | Technical Services Director SWSC |
| Obed Ngwenya | Director, Water Affairs |
| Rex Brown | Environmental Consultant |
| Cedric Dladla | UNDP |
| Marianne Young | British High Commission |
| Thulani Mkhaliphi | Director, Decentralization Unit |
| Saihou Sanyang | Decentralization Consultant |
| Dr Kerrie Bailey | Good Shepherd Hospital, Siteki |
| Dr David Vost | Pigg’s Peak Private Clinic |
| Dr. Juliet Morgan | Center for Disease Control (CDC), Maputo |
| Dr Bongi Radebe | Director, Medical Services Royal Swazi Sugar Corporation (RSSC) |
| Sandile Ndwandwe | Medical Services, RSSC |
| Livelethu Dlamini | Mbabane City Council |
| Benedict Gamedze | Mbabane City Council |
| Edmund Dlamini | Environmental Health Officer, Ministry of Health |
|  | and Social Welfare |
| Dudu Dube | Environmental Health Officer |
| Patrick Dlamini | Environmental Health Officer |
| Sipho Shongwe | Environmental Health Officer |
| Patrick Okullo | UNICEF |
| Nicole Hahn | UNICEF |
| Khetho Dlamini | UNICEF |
| Makhosazana Hlatshwayo | Coordinator, Business Coalition Against HIV/AIDS (BCHA) |
| Dorah Dlamini | BCHA, Assistant Coordinator |
| Richard Mosimula | COSPE |
| Lisa Zannerini | COSPE |
| Prue Coakley | Community Health Services, Raleigh Fitkin Memorial Hospital (RFM) |
| Leslie Johnston | Technoserve |
| Mauro Almaviva | WFP/Cooperazione Italiana |
| Theo Huitema | World Vision |
| Daniela Isola | European Union |
| Sam Mamba | Vusumnotfo |
| Trevor Tompane | Church Forum |
| Laura Hastings | Lutheran Development Services |
|  |  |

## Annex 8

## Review of Swaziland Environment Authority (SEA) and World Bank Screening Procedures

Environmental assessment requirements are governed by the Environmental Audit, Assessment and Review Regulations of 2000. These regulations apply to all sectors of the biophysical and social environment. Under Part C of the Regulations it makes it compulsory to carry out a screening process for all development projects, programmes or activities likely to affect the human and social environment on account of their size or type.

The ultimate purpose of the screening process is to obtain an Environmental Compliance Certificate (ECC) from the SEA which officially gives the project the green light to proceed (notwithstanding any other permission from other authorities that may be required).

The activities, works and planning activities likely to be subject to EA are listed according to the First Schedule (regulation 6(2)). Three categories of project are defined:

Category 1: Projects under this category are unlikely to cause any significant environmental impact and do not require any additional environmental assessment. The following types of projects are likely to be classified as category 1 projects:

* Residential development not exceeding three houses
* Renovations to existing structures not involving asbestos of other hazardous substances
* Small-scale commercial buildings and structures
* Research activities; prospecting for groundwater using vibrosis and similar techniques
* Small-scale social infrastructure provision (rural health, educational, family planning)
* Technical assistance and institutional strengthening activities
* Small-scale tourism projects

Category 2: Projects under this category are likely to cause environmental impacts, some of which may be significant, unless mitigation actions are taken. Such projects cause impacts which are relatively well-known and easy to predict. Also, the mitigation actions to prevent or reduce the impacts are well-known. Proponents are required to prepare an Initial Environmental Evaluation (IEE) and a Comprehensive Mitigation Plan (CMP) or an Environmental Assessment (EA), depending on the severity of expected impacts. The following types of projects are likely to be classified as category 2 projects:

* Agro-industries (medium scale)
* Electrical transmission lines and rural electrification (medium scale)
* Irrigation and drainage (medium scale)
* Renewable energy production
* Residential development of more than three and less than ten houses
* Hotels, campsites and lodges
* Rural water supply and sanitation
* Watershed management and rehabilitation
* Urban areas rehabilitation (medium scale)
* Small-scale infrastructure (roads, sewerage systems, water pipelines and treatment works)
* Hospitals (medium scale)
* Non-food industries (medium scale) without discharge or toxic substances or storage and use of hazardous substances
* Projects located near environmentally sensitive areas

Category 3: Projects under this category are likely to have significant adverse impacts whose scale, extent and significance cannot be determined without in-depth study. Appropriate mitigation measures can only be identified after such study.

For any proposed project which requires a permit, license, approval or other consent from an authorizing agency or is forwarded to the Ministry of Economic Planning (MEPD) for inclusion in the Development Plan, environmental categorization has to be sought from the SEA. This is dependent upon an environmental screening process of the project which results in the preparation of a project brief which incorporates a brief plan and/or outline proposal for a project and which contains sufficient information to enable the authorising agency to determine to which category the proposed project should be assigned. Based on this report and a site visit, the SEA will confirm the category of the project.

Following the categorization of the project by the SEA, the proponent is required to prepare an Environmental Assessment Report.

### Review of the World Bank Screening Processes

As mentioned earlier, the Bank’s OP 4.01 Environment Assessment requires that ALL projects financed by the Bank are screened for their potential environmental and social impacts to determine the appropriate extent and type of environmental work. The Bank classifies the proposed project into one of four categories, depending on the type, location, sensitivity, and scale of the project and the nature and magnitude of its environmental and social impacts.

Category A

A proposed project is classified as Category A if it is likely to have significant adverse environmental impacts that are sensitive\*, diverse, or unprecedented. These impacts may affect an area broader than the sites of facilities subject to physical works. EA for a Category A project examines the project’s negative and positive environmental impacts, compares them with those of feasible alternatives (including the “without project” situation), and recommends measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve the environmental performance. For Category A projects, the borrower is responsible for preparing a report, normally an EA (or suitably comprehensive regional or sector EA) that includes, as necessary, other instruments such as environmental audits, hazard or risk assessments, and environmental management plans.

\*A potential impact is considered “sensitive” if it may be irreversible (e.g. lead to loss of a major habitat) or raise issues covered by OP 4.10 Indigenous Peoples; OP 4.04 Natural Habitats; OP 4.11 Physical Cultural Resources or OP 4.12 Involuntary Resettlement.

Category B

A proposed project is classified as Category B if its potential adverse environmental impacts on human populations or environmentally important areas – including wetlands, forests, grasslands and other natural habitats – are less adverse than those of Category A projects. These impacts are site-specific; few if any of them are irreversible; and in most cases mitigatory measures can be designed more readily than for Category A projects. The scope of EA for a Category B project may vary from project to project, but it is narrower than that of Category A EA. Like Category A EA, it examines the project’s potential negative and positive environmental impacts and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance. The findings and results of Category B EA are described in project documentation (Project Appraisal Document and Project Information Document).\*\*

\*\*When the screening process determines, or national legislation requires, that any of the environmental issues identified warrant any special attention, the findings and results of Category B EA must be set out in a separate report. Depending on the type of project and the nature and magnitude of the impacts, this report may include, for example, a limited environment impact assessment, and environmental mitigation or management plan, an environmental audit or hazard assessment. For Category B project that are not in environmentally sensitive areas, and that present well understood issues or narrow scope, the Bank may accept alternative approaches for meeting EA requirements; for example, environmentally sound design criteria, siting criteria, or pollution standards for small-scale industrial plant or rural works; construction standards or inspection procedures for housing projects; or environmentally sound operating procedures for road rehabilitation projects.

Category C

A proposed project is classified as Category C if it is likely to have minimal or no adverse environmental impacts. Beyond screening, no further EA action is required for a Category C project.

Category FI

A proposed project is classified as Category FI if it involves investment of Bank funds through a financial intermediary, in sub-projects that result in adverse environmental impacts.

Viewing the above environmental categories in the context of the sub-projects to be funded under the SLGP, it is important to note that Category A sub-projects cannot be funded by the SLGP because the latter has been categorized as a Category B project based on its planned investment activities. Such sub-projects will either have to be redesigned, re-screened, and resubmitted for approval or abandoned.

### Comparison of Swaziland’s and the Bank’s environmental screening process

In comparing the essential attributes of the above screening processes, it should be noted that the Bank requires that all projects be screened, and the requisite environmental assessment work be carried out based on these screening results. To ensure that future small-scale sub-projects are implemented in an environmentally and socially sustainable manner, the SLGP proposes an environmental and social screening process for small-scale sub-projects consistent with OP 4.01 as outlined in the Environmental and Social Management Framework (ESMF). This screening process includes the following steps:

1. Completion of the Environmental and Social Screening Form (ESSF) (Annex 2) by Tinkhundla and MP staff or ULG staff, as relevant, with assistance from the rural Capacity Building Mobile Team or the Urban Capacity Building Mobile Team, and assignment of the appropriate environmental category.
2. Review and clearance of the results of the ESSF by the PST’s Environmental and Social Safeguards Specialist. As the SLGP progresses and implementing agencies become more familiar with the ESSF, the review process will most likely become an ex-post review.
3. Public consultations during the design process, incorporating appropriate mitigation measures. These may include simple measures, or may require the preparation of a separate EA report (Annex 4)
4. Review and clearance of the mitigation plan by the PST’s Environmental and Social Safeguards Specialist. As above, as the SLGP progresses and implementing agencies become more familiar with mitigation measures, the review process will most likely become an ex-post review.
5. Where EA reports are required, review and clearance of the reports by the PST’s Environmental and Social Safeguards Specialist and submission to the SEA for approval.
6. Monitoring and implementation of the mitigation measures

While Swaziland’s EA procedures are generally consistent with the Bank’s there exists a gap regarding the screening of small-scale sub-projects, where the sites and potential adverse localized impacts cannot be identified prior to the appraisal of the SLGP. Therefore the SLGP will use the environmental and social screening process as described in this ESMF to ensure that the investments are implemented in a manner consistent with the requirements of OP 4.01. In cases where there are gaps between the national legislation and the Bank’s policies, the latter will prevail.

For example, Swaziland Category 1 is comparable to World Bank (WB) Category C. A project is classified as WB Category C if it is likely to have minimal or no adverse environmental impacts. The major difference between Swaziland Category 1 and WB Category C is that the Bank’s Category C projects can proceed immediately if this is indicated by the screening results, whereas in the Swaziland Category 1, all projects need consent from an authorizing agency.

To ensure efficient implementation of the sub-projects, the environmental and social screening processes as outlined in this ESMF will be used for sub-project financed by the SLGP. Thus it is anticipated that those sub-projects categorized as C can proceed immediately to implementation, while projects categorized as B would require additional environmental assessment and mitigation depending on the expected level of impacts. These are outlined further under the Proposed Screening Process.

###### Table 1: Comparison of Swaziland and WB Project Categories

|  |  |
| --- | --- |
| SWAZILAND CATEGORY 1 | WORLD BANK CATEGORY C |
| Description  The proposed project requires a permit, license, approval or other consent from an authorizing agency (e.g. Local Authority, Municipality, SEA).  The project is unlikely to have any significant adverse environmental impacts | Description  Based on the screening results, it has been determined that the proposed project is likely to have minimal or no adverse environmental impact, and therefore implementation can proceed immediately |
| Proponent Responsibility  The proponent will forward a project brief which contains sufficient information to enable the authorizing agency to determine to which category the proposed project should be assigned | N/A |
|  |  |
| SWAZILAND CATEGORY 2 | WORLD BANK CATEGORY B |
| Description:  The proposed project is likely to have some significant adverse environmental impacts but the impacts are relatively well-known and easy to predict; and the measures which can be taken to prevent or mitigate these measures are well-known | Description:  The proposed project is likely to have significant adverse environmental impacts, but impacts are site specific and few, if any, irreversible. Impacts are considered to be less than Category A, and mitigation measures generally easier to design and implement than Category A. |
| Proponent Responsibility:  The proponent shall prepare an IEE report and a CMP (see Annex 5) | Proponent Responsibility:  In the context of the SLGP, the proponent will either prepare an EA or implement simple mitigation measures. Draft Terms of Reference for a separate EA report are provided in Annex 4 of the ESMF. |

### Consultation

Both the Bank and SEA require public consultation for projects needing either a full or partial EA. The level of consultation ranges from publishing notices of project intent and invitations to review EA reports, to full public hearings. With the SEA process, the selection of an appropriate public consultation instrument depends on the nature of the project and what the SEA determines as minimum requirements.

Part D of the Environment Audit, Assessment and Review Regulations provides details concerning public consultation, which includes distribution of documents to concerned and affected ministries and other parties, conspicuous display in public places, and dissemination via radio, press, etc. The Authority will specify where the documents are available for inspection and invite public review. The conditions for public hearings are also stated in this section of the regulations.

Any sub-projects that are determined to fall under the World Bank’s Category A are ineligible for funding under the SLGP.

The Bank’s Policy on Disclosure of Information requires that, before a sub-project is approved, the Environmental Management Plan (EMP) prepared as part of the EA be made available for public review at a place accessible to local people, and in a form, manner and language that they can understand. They must also be forwarded to the Bank for disclosure at the Public Information Centre of the country office (a suitable alternative would have to be found for this project as there is no country office – e.g. the UNDP office) and through the World Bank’s InfoShop.

The Bank’s OP 4.01 for Environmental Assessment requires public consultation and information disclosure for all Category B (SEA category 2) projects where appropriate. For Category B projects, the OP 4.01 requires during the EA process for the Borrower to consult with project-affected groups and local NGOs about the project’s environmental and social aspects and take their views into account. Consultation should be initiated as early as possible, and should be an ongoing process throughout the design and implementation of the project. Consultation should also be compliant with all other applicable safeguard policies. In addition to the consultation process, the Bank requires that the project comply with the Public Consultation and Information Disclosure Policy (BP 17.50). The policy requires the Borrower to make accessible, in a timely manner, any relevant material such as the EA study, social assessments, in a form and language understandable to the groups being consulted.

### Mitigation and monitoring

The Bank and SEA require an **environmental management plan** (EMP), or in the SEA terminology, a **comprehensive mitigation plan** (CMP) for projects that will generate discernable environmental impacts and require either a full or partial EA. These plans outline the mitigation, monitoring, and institutional measures to be taken during project implementation and operation to avoid or control adverse environmental impacts, and the actions needed to implement these measures. The requirements stated in the EMP (Bank) and CMP (SEA) are listed in the table below.

###### Table 2: Content requirements for Bank EMPs and SEA CMPs

|  |  |
| --- | --- |
| World Bank (Environmental Management Plan) | SEA (Comprehensive Mitigation Plan) |
| Summary of impacts | Summary of potentially significant impacts |
| Description of impacts and mitigation measures | Description of mitigation and compensation measures |
| Description of monitoring programme | Monitoring requirements |
| Institutional arrangements for implementing the EMP, including capacity building | Institutional assessment |
| Legal considerations | Legal and contractual arrangements |
| Implementation schedule and reporting procedures | Work plan and contract management |
| Cost estimates and sources of funds | Resources and costs |
| Training | Training and capacity building |
|  | Consultation |