GOVERNMENT OF MAURITIUS

NATIONAL DEVELOPMENT STRATEGY

Ministry of Housing and Lands

Government of Mauritius

Ministry of Housing and Lands

National Development Strategy

Development Strategy and Policies

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1 INTRODUCTION

1.1. Introduction

This National Development Strategy (NDS) is part of a comprehensive review and update process of the 2003 National Development Strategy (NDS) for the Government of Mauritius (GoM). The review has been undertaken by the Ministry of Housing and Lands (MHL), which is responsible for land use planning including policy formulation in respect of land development and plan preparation for the island of Mauritius. The Review is also designed to take into account the various land policies and land management practices of the various stakeholders.

The NDS formulates a vision, land development strategy and spatial policies for the Island of Mauritius to 2040 covering economic development, social and community facilities, climate change, urban heritage, transport, energy, agriculture and food security, housing and regeneration, water, drainage and the protection of the environment. The NDS also identifies key infrastructure projects of national importance and embodies the Government`s commitment to achieving the full potential of selected strategic sites in the country up to 2040.

The present Town and Country Planning Act (1954), as subsequently amended and the Planning and Development Act (2004) are being reviewed. It is the intention that the new Planning and Development Bill will need to take into consideration plan-making and monitoring, compensation resulting from planning decisions, planning obligations and development charges. This follows the coming into force of the Business Facilitation (Miscellaneous Provisions) Act 2006 and subsequent amendments which reformed the building and land-use permit (BLUP) process , and which has put new demands on the effective performance of the existing planning instruments. It is intended that the Review of the 2003 NDS, where appropriate, will inform this process.

Once finalised and adopted the new NDS will replace the 2003 National Development Strategy (adopted in 2005) as the principal land-use planning strategy for the island of Mauritius.

1.2 Background

The 2003 National Development Strategy set out the vision for the territorial planning of the Island of Mauritius over a twenty-year horizon to 2020. However, structural changes in the economy of Mauritius combined with environmental and climate change effects since the last update have had and are continuing to have a profound impact on the use of land on the island.

The present spatial policy document is termed "National Development Strategy" (NDS) under the relevant enabling legislation i.e. The Planning and Development Act. In the event of a legislative amendment, any reference in the present document to the NDS shall automatically be deemed to be replaced by the relevant new terminology, if any, arising from the said amendment. Consequently, any reprint of the present document following such legislative amendment should automatically be edited to reflect the new terminology.

In the context of this review the formulation of Vision 2030 to achieve further social and economic uplift has resulted in adjustments to the objectives of the Government of Mauritius and the concomitant land use framework. It is imperative that the main objective of sustainable development which is to facilitate economic growth that respects the island`s limited natural resources be incorporated in the land-use strategy. Sustainable policies on the need to plan for long term development to create a vibrant economy, sound environment, and a culturally diverse and healthy society will also need to be reflected in the spatial strategy.

The main strategies outlined in Vision 2030 strive to tackle four key issues: addressing unemployment, alleviating poverty, reviewing the existing tourism policy and promoting sustainable development.

Among other initiatives the Government's Vision for Growth envisaged expansion of the ocean economy, the transformation of Port Louis into a modern port and the development of smart cities, cyber parks and techno-parks.

The 2030 Vision and related strategies and programmes including the Government Programme have been used to guide the review of the NDS. **Based on the 2030 Vision, Government sectoral strategies and programmes, key issues and challenges that influenced development directions for the new NDS can be summarised as follows:**

- What are the key land use planning interventions required to sustain the country's drive towards high income status, long term economic growth and a healthy, knowledge- driven green society?
- How can the NDS help uplift Mauritius and its capital Port Louis as a regional logistics, financial services and cultural heritage hub?
- How should the NDS provide for inclusive and equitable development that benefits all Mauritian citizens and communities and nurtures innovation in micro, small and medium scale enterprises to generate future jobs?
- What support can the NDS provide to the relevant authorities to mitigate climate change effects, using initiatives that can contribute to making the country disaster-resilient?
- How best to manage conversion of large tracts of land out of sugarcane for housing and other developments following restructuring and diversification in the sugar sector and the knock-on

effects on the social, economic, built and natural environment fabrics of the country to ensure a cohesive housing strategy for land release?

- What are the key technological changes in the industrial and micro, small and medium-sized enterprises (MSME) service sectors that are responding to market disruptors which will increase demand for green buildings and supply chain systems and new storage, warehousing and distribution sites to service high tech knowledge- based uses?
- What should be the role of the NDS in uplifting and balancing the tourism sector with demand for large sites for integrated resort and wellness schemes, almost exclusively of high quality and at present sited on and around the environmentally-sensitive coastline (the lack of serviced land for key projects in clearly defined areas has been identified as a major structural weakness in the current land use planning system)?
- What will be the main effects of consolidation and evolution in the commercial sector, with diversification of the retail offer towards mixed use commercial office, leisure and high tech uses on large sites in peri-urban areas often not well-served by public transport and also being impacted by the rise in internet shopping, home-working and food-delivery systems?
- How will the NDS manage continued growth in the new economic engines of high tech/information communication technology (ICT), with fintech incubators increasing demand for attractive high-end clusters of mixed use services in attractive countryside and coastal settings often outside existing towns and villages?
- What incentives and mechanisms could be identified in the NDS to help stimulate and diversify agriculture and food self-sufficiency and the green economy including eco-tourism across the island while conserving biodiversity and protecting the environment?
- How will massive Government investment in highways and public transport infrastructure systems and facilities mainly but not exclusively in the conurbation, port and airport clusters support national regeneration programmes and enable the country to maintain its economic competitiveness in the region ?
- What are the counterbalancing investments and measures needed to sustain countryside and coastal communities in the longer term in order to achieve Government aims for an inclusive, green and high-income Mauritius going forward together?

1.3 Purpose of the review

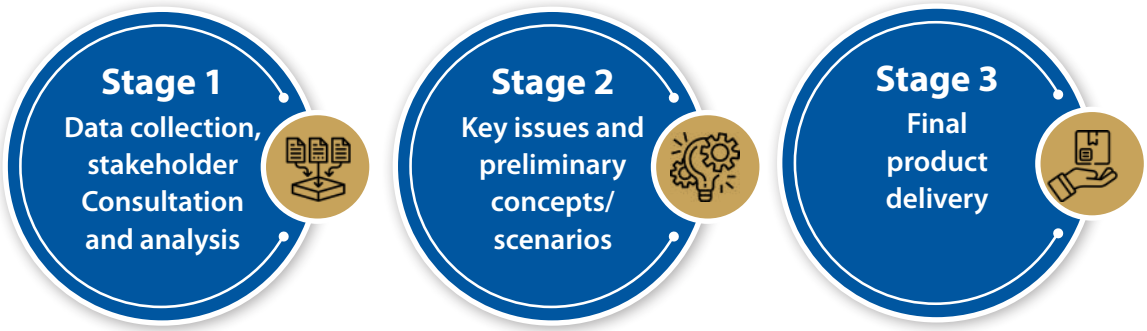
The review of the NDS marks a key point in the evolution of the country. The 2003 National Development Strategy set the strategic land use development framework for the last two decades. Since 2003 significant structural shocks have hit the national economy, tourism markets and the natural and heritage environment in the form of the 2008 developed countries' financial crisis, the 2020-21 and on-going worldwide Covid-19 pandemic, landslides, floods and regional oil spills. Despite these disruptions, the economy of the country has continued to evolve and grow while environmental and climate change challenges have become more urgent.

In addressing these disruptions and challenges the Government, major landowners and developers and community groups have pressed forward with major investment, facility enhancements and conservation initiatives including the delivery of new transport infrastructure, energy and utility systems, land development, waterfront regeneration and integrated resort schemes and heritage and environmental conservation initiatives to help support the country's vision towards an inclusive, high income and green Mauritius forging ahead together.

However, all these issues and challenges have far-reaching consequences on the future use of land in Mauritius. Moreover, some of the policies and land management practices of various stakeholders have not been entirely consistent with the 2003 NDS and need to be reviewed and evaluated.

1.4 Review process and consultation

The project is divided into three stages:



This National Development Strategy provides the following:

The policy framework

Vision and objectives

Spatial strategy

Sector-based strategy and policies.

Stakeholder consultation feedback from the Project Steering Committee, Government ministries/ department and local authority meetings, private-sector meetings and presentations, national workshops and non-governmental organisation (NGO) submissions have been considered in the drafting of this report.

1.5 Content of the National Development Strategy

The strategic framework and policies described in this document focus on the strategic-level aspects of land use development. The spatial strategy is set out and supported by a range of strategic policies, which are to be given overriding importance and priority in this NDS. These are supported by sector specific policies. The NDS provides the broad policy framework, within which local level policies can be developed to control and manage development within each municipality and district through outline planning schemes.

The planning policies are primarily used for consideration of applications for building and land use permits (BLUP) and for the change of use or other development of land. The granting of a development permit by a planning authority does not override obligations under any other legislation relating to the site proposal.

Subsequent sections of the document are structured as follows:

- Section 2 sets out the context and key themes for the NDS
- Section 3 provides the legal and judicial framework for the NDS
- Section 4 sets out the fundamental principles on how to make plans and policies and how to take decisions
- Section 5 details the NDS vision and key development principles
- Section 6 details the concept of clustered and sequential growth: strategic policies on town centres, rural centres and adequacy of housing
- Section 7 relate to the policies to promote economic prosperity: commerce and finance, industries and agriculture
- Section 8 describes policies relating to infrastructure: community health & well being, education, transportation, utilities and communication
- Section 9 details the concept of urbanism: optimising land use, aesthetic design and preserving heritage
- Section 10 contains policies relating to the environment: pollution mitigation, climate change and coastal management

2 CONTEXT AND KEY THEMES FOR THE NDS

2.1 Context

The review and update of the National Development Strategy has been undertaken during a period which, over the past two years, has seen unprecedented health, economic and environmental shocks impact the island of Mauritius. These events have influenced the baseline conditions for plan preparation as the Government has sought to provide a vision for a new normal.

Against these shocks, there are longer-term structural changes in the population and economy that need to be factored in. Longer-term international obligations, such as the 2015 Paris Climate Agreement are in place and remain relevant whilst providing the necessary flexibility to ensure the country's economic resilience. Significant investment has been made in the country's physical capital since 2003, in the form of new and upgraded roads, national and international transportation systems, dams and pipelines, and continuous improvement in the country's infrastructure for the benefit of all is still one of Government's priorities.

2.2. A changing population

2.2.1. Population trends over the past two decades

Over the last two decades, the population of the island of Mauritius has remained broadly stable, increasing only slightly by a total of about 35,444 residents, from 1,186,400 million in 2003[1] to just over 1,221,844 by 2021[2.] This underlying stability masks some notable demographic changes that will impact on the type of facilities and spaces residents require over this plan period. The key demographic changes have been an ageing of the population, with a fall in birth rates and in the death rate. This has led to a rise in life expectancy. Average life expectancy of the Mauritian population in 2019 was 71.2 years for men and 77.8 years for women.

Since 2003, the population in rural districts has increased, with a broadly corresponding decrease in the population in urban areas. The most significant changes have been seen in Port Louis, which has seen the highest fall, and Black River, which has seen the highest rise. The relative changes in population by district are illustrated in Figure 1.

Drilling down into more local census areas it is evident that, whilst there has been a reduction in the population of urban districts, there has been an increase in those village council areas (VCA) located in the peri-urban area. The VCA located in rural districts, such as Pamplemousses and Moka, that are adjacent to urban districts have seen relatively large increases in population as the urban area has expanded into the rural area. This underlines the influence of the conurbation on the island.

1. Statistics Mauritius, Mid-Year Estimate Island of Mauritius (2004) Digest of Demographic Statistics

2. Statistics Mauritius, Mid-Year Estimate Island of Mauritius (2021) Digest of Demographic Statistics

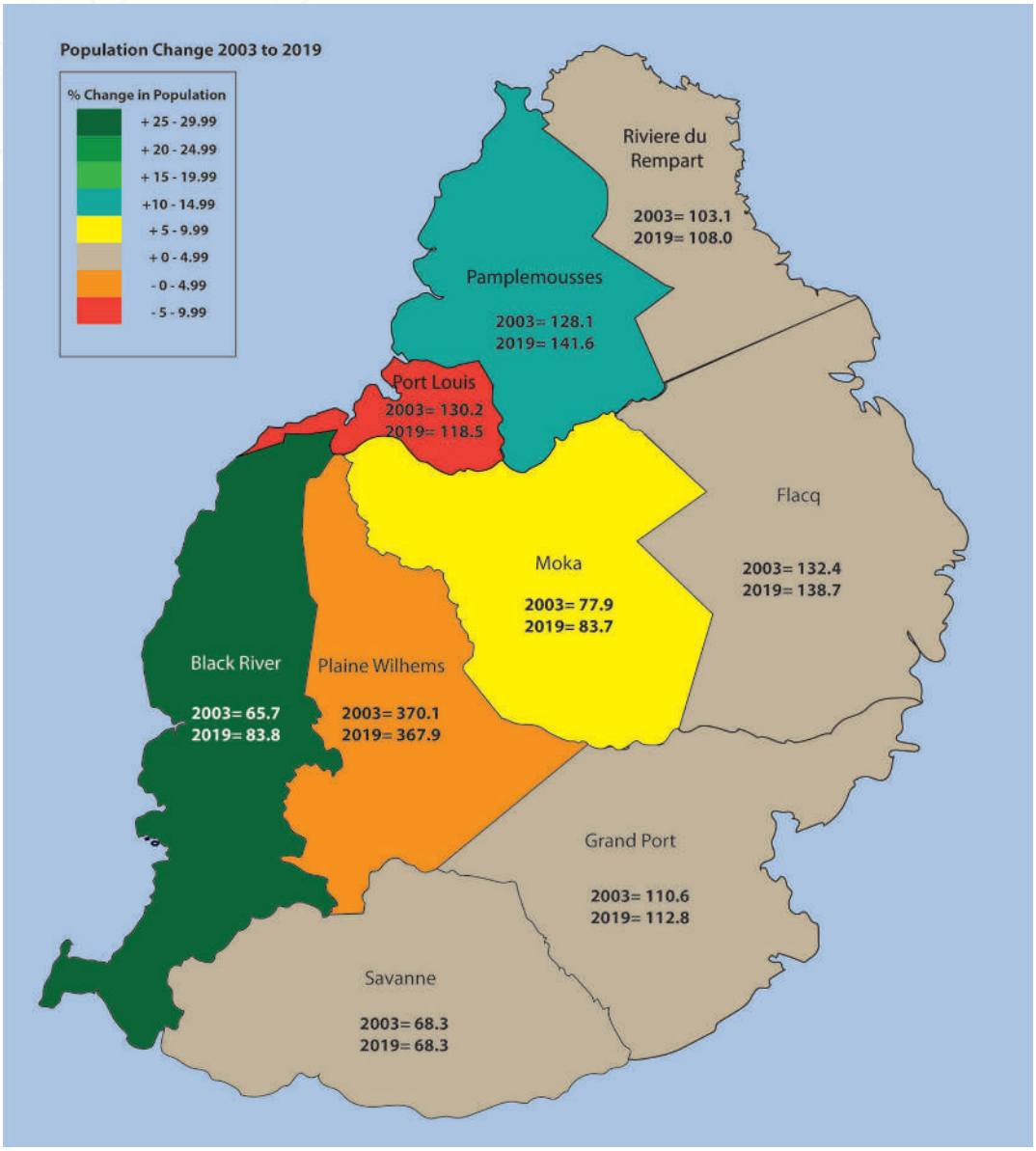


FIGURE 1: POPULATION CHANGE BY DISTRICT 2003-2019 (,000s) (SOURCE: STATISTICS MAURITIUS, 2004[1] DIGEST OF DEMOGRAPHIC STATISTICS AND 2020[2] DIGEST OF DEMOGRAPHIC STATISTICS

There has been a reduction in birth rates in Mauritius over the last two decades resulting in a decline in the number of residents of child age. Over the same period the working age population has remained broadly the same. The reduction in the number of child-aged residents has been balanced out by the increase in residents over the age of 65. In 2011, those residents aged over 65 accounted for 14.3% of the population. By 2019, this had increased to 22.8%.

1. Statistics Mauritius, Table 2 (2004) Mauritius in Figures 2004
1. Statistics Mauritius, Table 1.10 (2021) Yr 20 Digest of Demographic Statistics

2.2.2. Future directions

Total population

The population of Mauritius Island is predicted by Statistics Mauritius to fall slightly over the plan period to just over 1.13 million in 2040. This represents a fall of 7.4%, with most of this decrease occurring during the second half of the plan period.

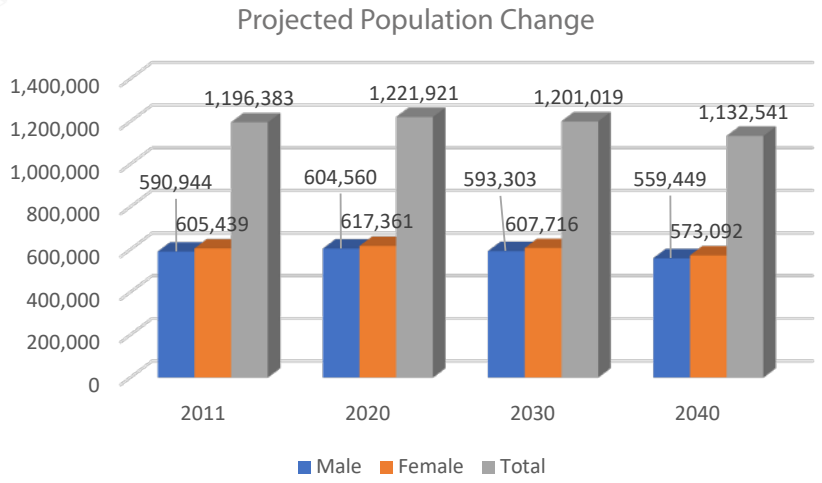


FIGURE 2: PROJECTED POPULATION CHANGE 2011-2040 FOR ISLAND OF MAURITIUS (SOURCE: STATISTICS MAURITIUS 2020 DIGEST OF DEMOGRAPHIC STATISTICS[1])

Ageing population

Government projections imply that seniors, defined here as persons aged 60 and over who comprised 17.5% of the population in 2020, will make up 28.6% of the total population by 2040, an increase of 100,493 between 2020 and 2040. Those 80 years and above see the sharpest rise in numbers, from just under 25,000 in 2020 to 58,466 in 2040. In contrast, student numbers (age groups 5-19) which made up 19.28% of the population in 2020, will fall to 14.76% by 2040, equivalent to a reduction of 68,407 children of school age (refer to Table 1 and Figure 3).

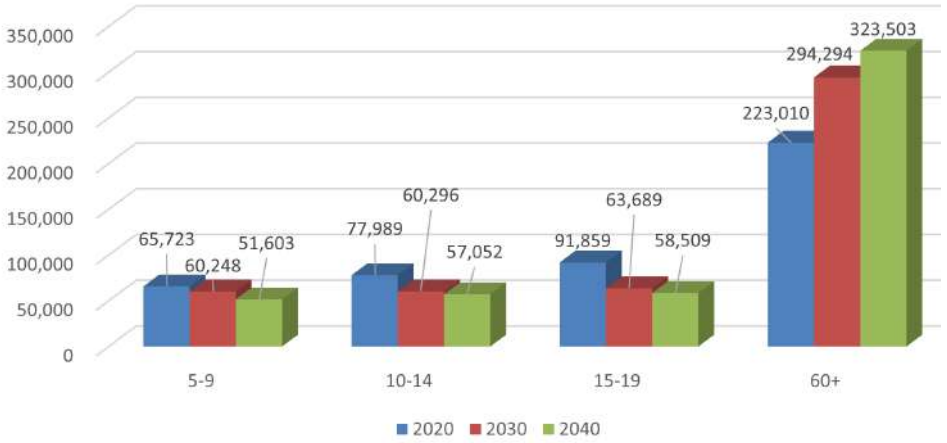


FIGURE 3: PROJECTIONS OF DEMOGRAPHIC CHANGE: STUDENTS AND SENIORS (SOURCE: STATISTICS MAURITIUS 2020 DIGEST OF DEMOGRAPHIC STATISTICS[2])

1. Statistics Mauritius, Tables 1.11 and 8.1(b) (2021) Yr 20 Digest of Demographic Statistics

2. Statistics Mauritius, Table 8.1(b) (2021) Yr 20 Digest of Demographic Statistics

AGE GROUP	2020	2030	2040
05 - 09	65,723	60,248	51,603
10 - 14	77,989	60,296	57,052
15 - 19	91,859	63,689	58,509
Sub total	235,571	184,233	167,164
Seniors	223,010	294,294	323,503
Total Population	1,221,921	1,201,019	1,132,541
Students as (%) of Total	19.28	15.34	14.76
Seniors as (%) of Total	18.25	24.50	28.56

TABLE 1: PROJECTION OF DEMOGRAPHIC CHANGE IN SELECTED AGE GROUPS 2020-2040

(SOURCE: STATISTICS MAURITIUS DIGEST OF DEMOGRAPHIC STATISTICS, 2020[1])

Working Age Population

An ageing population and the fall in birth rates experienced since 2003 will result in a fall in the working-age population[2] of around 15% between 2020 and 2040[3]. This brings Mauritius broadly in line with the current average of OECD countries, which stood at 66% in 2012. The Government has the intention to slow down or reverse this trend as announced in the 2021/2022 Budget with, amongst other things, facilitating foreign residency for skilled workers, investors and students.

Increase in female headed households

Based on Statistics Mauritius' data, Figure 4 also foreshadows some emerging gender issues, including a trend towards an increased number of women in older age groups, a tendency for women to postpone the age at which they get married and an (increasing) number of women-headed households.

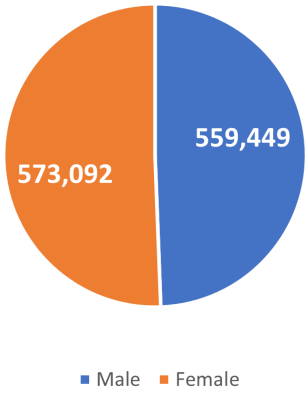


FIGURE 4: PREDICTED DEMOGRAPHIC PROFILE OF MAURITIUS IN 2040

(SOURCE: STATISTICS MAURITIUS[4])

1. Statistics Mauritius, Table 8.1 (b) (2021) Yr 20 Digest of Demographic Statistics
2. Working-age population is defined by the OECD as those aged between 15 and 64
3. Figures quoted for working-age population are from Statistics Mauritius for the whole of Mauritius, including Rodrigues
4. Statistics Mauritius, Table 8.1 (b) (2021) Yr 20 Digest of Demographic Statistics

Demographics: Summary of key trends

- ☑ Population is predicted to peak during this decade before falling over the plan period.
- ☑ There will be a continuation of the trend of an ageing population with a significant increase in the number of older residents and a fall in the number of younger residents.
- ☑ Fall in the working-age population.

2.2.3 Population density across the island

The latest population information by census area is the 2011 Census. In 2011, the island of Mauritius had a population of 1,196,383 in a land area of 1,865 square kilometres. This represents a population density of around 641 persons per sq. km. This puts Mauritius in the top ten most densely populated countries in the world. There are variations in population density across the island. The towns of Beau Bassin/Rose Hill, Quatre Bornes, Curepipe, Port Louis and Vacoas/Phoenix, along with eight other village council areas, make up over half of the population of the island, Mahebourg VCA having the highest population density of 6,775 people per square kilometre. A further 42 VCAs have population densities higher than the average for the island. Information contained at Appendix 1 provides fuller details on the population pattern in the conurbation together with building and land use Permits (BLUPs) delivered within such areas.

The towns/VCA that account for half of the population make up only 11.5% of the land area of the island. This concentration of population is further emphasised by the fact that 90% of the population lives in towns/VCA that cover 50% of the island. This indicates that Mauritius is a highly urbanised country.

Outside of the conurbation and its immediate hinterland (the peri-urban area), there are four VCA that fall within the highest population density VCA. As mentioned above, Mahebourg is the VCA with the highest population density and is located in the south- east of the island just to the north of the airport. With an area of just 0.12% of the island, it accounts for 1.27% of the population.

New Grove VCA is the next most densely populated stand-alone VCA. New Grove is located to the southeast of the main urban areas, mid-way from the southern end of the conurbation at Curepipe to the airport. New Grove forms part of a larger linear settlement located either side of the Phoenix-Mahebourg Road. The settlement has seen smaller settlements merge and now that also contains villages such as Rose Belle, which is located in a VCA with a population density of nearly double the national average.

Ecroignard VCA is located in the rural east of the island to the south of the settlement of Centre de Flacq and has a population density of over 1,600 persons per square kilometre. The other standalone VCA is Triolet VCA. Located in the Pamplemousses District to the north of Port Louis, the Triolet VCA accounts for nearly 2% of the island's population. The settlement is linear in form, located along the A4 road.

2.3 Household change

Despite the anticipated fall in total population between 2020 and 2040, there is projected to be a growing demand for housing across the island. This is primarily driven by the fall in average household size. Projected household growth is estimated to be around 43,000 households between 2020 and 2040, with a demand for around 46,000 new dwellings over the same period. The difference as outlined in Table 2 below is based on the number of vacant units and second homes remaining the same as a proportion of total homes. This does not consider the anticipated shortfall of housing units delivered since 2011 to meet the projected demand in 2020, thought to be in the region of 23,000 dwellings.

	2011	2020	2030	2040
Total population	1,196,383	1,221,921	1,201,019	1,132,541
Average household size[2]	3.47	3.25	2.97	2.70
Total households	336,955	375,975	404,383	419,459
Allowance for multiple household dwellings	(6,000[3])	(6,000)	(6,000)	(6,000)
Units occupied on permanent basis	329,442	369,975	398,383	413,459
Allowance for vacancy 3%		11,099	11,951	12,403
Allowance for second homes 5%		18,498	19,919	20,673
Total housing demand (2011 supply)	347,512	400,584	430,253	446,535

TABLE 2: TOTAL HOUSING DEMAND

(SOURCE: STATISTICS MAURITIUS[1] PLUS CONSULTANTS PROJECTIONS AS PRESENTED IN SECTOR ANALYSIS REPORT AND UPDATED BASED ON LATEST POPULATION PROJECTIONS)

2.4 An evolving and growing economy

Although global economic trends have had and are having far-reaching implications for Mauritius, not least because of the 2008 financial crisis, gross domestic product (GDP) at market prices grew by 3.6% in 2021, after a contraction of 14.6% in 2020. This positive outlook was justified by the fact that growth is becoming more broad-based to address the Government's overriding aim for an inclusive, high-income and green Mauritius. The impact of the Covid-19 pandemic is still being felt, with a fall in GDP in 2020 largely attributed to the impact on the tourism and hospitality sectors.

Going forward, a key component of growth is the drive towards a knowledge-based economy: the service sector (excluding construction) has shown a significant increase in jobs since 2003 (+131,700 or 69% of the 2018 total) (refer to Table 3). To underline the importance of this sector in the economy, total employment increased by just 86,500 to reach a total of 582,000 by 2019 (or 47% of the total population). The construction industry, which was in a lingering recession, was one of the fastest growing sectors of the economy pre Covid-19. For 2019, the construction industry was expected to maintain its regained dynamism, with a GDP growth rate of 8.6%.

The other side of the economic story can be seen in agriculture, which has seen a net loss of around 3,000 jobs since 2003. This includes the much bigger loss of 10,700 jobs from sugarcane production,

1. Statistics Mauritius, Tables 1.8 and 8.3(b) (2021) Yr 20 Digest of Demographic Statistics
2. Average household size based on Statistics Mauritius projections with Consultant extrapolation for years presented
3. 2011 Census average household size information is based on the number of persons per unit and did not record multiple households in a single dwelling estimated to be 6,000 residents in 2011.

which has only partially been offset by increases in other non- sugar agricultural sector employment. In manufacturing, the decline has been much more drastic, with just under 40,000 jobs disappearing, mainly from Export Processing Zone (EPZ)-based textile companies. By 2019, agriculture contributed 7.3% of total employment and manufacturing just 16.5%.

These sectoral transformations have been on-going since before 2003. A key characteristic of the economic change in Mauritius has been the drive to adopt new technologies and enter new market segments though product diversification, process re-engineering and new opportunities. Key new markets include precision engineering, technical textiles, medical devices, agro-processing, aqua-tech and bio-technology. High growth SME and industrial parks, data technology-driven industries, medical hubs, life sciences, wellness and medical tourism, knowledge education, higher education hubs and eco-and heritage tourism are all being promoted through Government strategies.

INDUSTRIAL GROUP	EMPLOYMENT (000)		
	2003	2011	2019
Agriculture, forestry, fishing[1]	46.4	49.3	42.6
(Sugarcane)	(19.7)	(14.7)	(12.1)
Manufacturing	136.2	111.4	96.3
(Textiles/EPZ)	(81.6)	(54.2)	(46.6)
Construction	45.5	52.5	44.0
Services	267.4	346.5	393.7
(Retail & wholesale)[2]	(96.4)	(139.1)	(137.7)
Total	495.5	559.7	582.0
Total population	1,186.3	1,192.3	1,265.7
Activity rate (%)[3]	59.9%	59.3%	59.3%

TABLE 3: EMPLOYMENT BY MAJOR INDUSTRY GROUP 2003-2019

(SOURCE: STATISTICS MAURITIUS DIGEST OF DEMOGRAPHIC STATISTICS FOR YEARS 2003, 2011 & 2019)

The Economy: Summary of key trends

- ☑ Pre-Covid-19 trend of sustained increase in GDP.
- ☑ Decline in agricultural employment with major decline in sugarcane employment.
- ☑ Increase in non-sugar agricultural employment.
- ☑ Decline in manufacturing employment.
- ☑ Major increase in service-sector employment.
- ☑ Continuous drive to modernise the Mauritian economy.

Figure 5 summarises these key pre-pandemic trends since 2003 with strong indicators for the tourism and service sectors and overall economy, corresponding to the decline in primary and secondary sectors as a percentage of the economy.

1. Includes mining & quarrying
2. Includes hotels/accommodation & restaurants/food services
3. Activity rate is for Mauritians only and excludes foreign workers

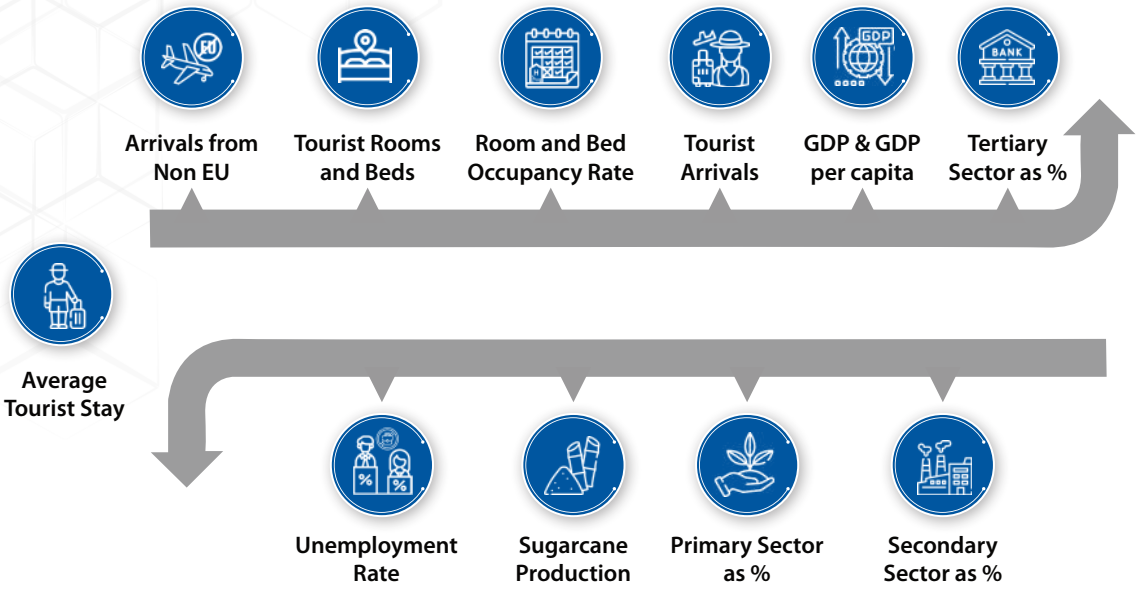


FIGURE 5: KEY PRE-PANDEMIC ECONOMIC TRENDS SINCE 2003

2.5 Addressing issues of poverty and inequality

2.5.1 Government strategy

The Government has several key objectives to address poverty and inequality in Mauritius. Combating poverty and bringing higher levels of growth, equality and shared prosperity to improve the standard of living of the population to achieve an inclusive, high income and green Mauritius remains one of its priorities. Gender, being a cross-cutting socio- economic issue, needs to be considered an important component in formulating relevant policy measures in the new NDS, for example in terms of prioritising access to affordable housing for victims of gender-based violence. As such gender mainstreaming should be undertaken through which various implications for people of different genders of any policy or action by government are considered. Education is also at the core of Government's inclusiveness agenda, with plans for education infrastructure at primary, secondary and tertiary levels to be further upgraded. Also key is the desire to improve healthcare services for all and to promote health and well-being through social, cultural and sporting activities. On housing, the Government announced in the 2020 budget a significant programme for affordable housing, delivering 12,000 new social houses in the short term. Improving affordable access to social housing for the most vulnerable families, women and victims of gender-based violence, should be prioritised.

2.5.2 Demand for new social infrastructure

Due to improvements in the national economy, there has been an uptake in demand for private education facilities. Access to private education is often a key factor for high income households in

making housing choices. It is therefore important that they are located where high-income housing schemes are planned.

The ageing population profile is likely to increase demand for a range of health services and associated social and community facilities. This will include private and specialised healthcare facilities.

Many of these new facilities are likely to require or reflect various site location parameters, including the proximity of quality, safe, local environments and high levels of accessibility, including convenient walkability from housing and apartment clusters to community facilities and commercial complexes.

To help meet demand for safe and accessible social and community facilities, NDS policies should help promote the Government's National Regeneration Programme by securing a holistic approach to urban and rural regeneration schemes, including bus terminal redevelopment. Regeneration schemes should consider opportunities for adaptive re- use of existing or vacated sites and buildings for community facilities and ensure their integration with local MSME workspaces[1]. Provision of affordable homes, including sheltered accommodation[2] and usable public realm for a variety of user groups, including families, single person households and vulnerable communities within a convenient and safe public transport and walkable footpath network, should be emphasised.

2.6 Climate change and a fragile environment

Climate change represents a major threat to sustainable development as its far-reaching impacts disproportionately burden the poorest in society, delay settlement and infrastructure growth, and degrade the most vulnerable environments. There is a need for sound planning to build the island's resilience to the impacts of climate change, incorporating a range of actions involving food security, water security, energy security and environmental security. As Mauritius is a party to the United Nations (UN) Framework Convention on Climate Change (1992), the Kyoto Protocol (1999) and the Paris Agreement (2015), climate concerns and adaptation responses need to be integrated into relevant development strategies and policies to help the country achieve its sustainable development goals (SDGs).

As a small island developing state (SIDS), Mauritius is very exposed to natural disasters and extreme weather events. A comprehensive response mechanism exists but more emphasis should be given to risk reduction as well as disaster response. There is therefore a need to enhance the resilience of the landscape to natural disasters through design-based risk reduction. The updated National Climate Change Adaptation Policy Framework for the Republic of Mauritius (2021) and the Climate Promise Initiative, through which United Nations Development Programme (UNDP) is supporting the review of Mauritius' nationally determined contributions (NDC) and other interventions, namely the Disaster Risk Reduction and Management Strategic Framework, contend that spatial planning and land management play an important role in risk prevention, by limiting development in flood-prone areas, and by encouraging flood-risk sensitive land use and management practices. This means, among other actions, protecting and enhancing natural water systems, with new developments incorporating

1. MSME workspace are typically facilities that enable multiple micro, small and medium sized companies to collocate on a single site or buildings.
2. Sheltered accommodation is housing targeted towards elderly or vulnerable residents with an on-site warden to provide assistance where needed.

sustainable drainage measures that slow down discharge from sites to prevent downstream flooding.

Mauritius is very dependent on fossil fuels for energy generation and imports coal and diesel. These generate CO2 and other greenhouse gases (GHG). To be eligible for Green Climate Fund soft loans and grants, the country's commitment to reduce GHG needs to be ensured. To address the issues faced by Mauritius and for it to meet its international obligations, there is a need to plan positively for renewable energy provision to improve energy self-sufficiency.

Mauritius has an ambitious renewable energy programme and is developing solar, onshore wind, offshore wind and wave energy, though the potential for further hydropower may be limited. Moreover, in line with the Renewable Energy Roadmap 2030, use of marine renewable energy technologies such as offshore wind and wave is part and parcel of Government's vision for a renewable energy mix. Government aims to achieve 60% of renewable energy in the electricity mix by 2030, produce 60% of energy needs from green sources by 2030, with the use of coal being totally phased out before 2030 (Renewable Energy Roadmap 2030 for the Electricity Sector).

Mauritius ratified the United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement on Climate Change on 22 April 2016. This required it to submit a report on Nationally Determined Contributions (NDC) which are measures (mitigation and adaptation) that parties have to undertake (in accordance with their national circumstances and capabilities) towards achieving the objective of the UNFCCC, in particular in terms of GHG emission reductions by limiting global warming to 2°C and pursuing efforts to limit it to 1.5°C.

Mauritius had already drafted its Intended Nationally Determined Contribution (INDC) for 2015-2030 together with Nationally Appropriate Mitigation Action (NAMA) as well as adaptation targets in September 2015.

After extensive consultations with stakeholders Mauritius' Nationally Determined Contributions (NDC) were approved by the Inter-Ministerial Council on Climate Change in September 2021 in preparation for COP26 in the UK in November 2021.

Through the NDC Mauritius aims to abate greenhouse gas emissions by 40% by the year 2030, relative to the business-as-usual scenario. This is an increase from the 30% stated in the INDC and will require financing of US$6.5 billion up to 2030 for technology transfer and capacity building. Of this US$2 billion will go to mitigation and US$4.5 billion will go to adaptation. Achieving the targets is dependent on international technical and financial support. An amount of US$2.3 billion will come from the national government and domestic private sector (35%); and US$4.2 billion (65%) will come from international sources and donor agencies.

Mitigation of GHGs emissions will focus on energy, transport, industry, agriculture, waste, land-use and forestry. Adaptation for climate resilience will focus on water, agriculture, tourism, fisheries, infrastructure, coastal zones, biodiversity and health. Mauritius' actions on adaptation are centred

around the 2021 Updated National Climate Change Adaptation Policy Framework that focuses on the potential of nature-based solutions for adaptation.

To achieve the target set in the NDC by 2030, the country will promote and implement mitigation activities such as: climate smart agriculture including bio-farming; a sustained tree planting programme within the context of the cleaner, greener and safer initiative; smart use of marine resources; expansion in solar, wind and biomass energy production and other renewable energy sources; and sustainable and integrated waste management. The NDC also promotes more inclusive and efficient agricultural systems through integrated pest and disease management. An NDC Registry has been established which comprises a measurement, reporting and verification (MRV) Framework.

Mauritius is fully committed to the implementation of Agenda 2030 and the Sustainable Development Goals (SDG). The NDC is consistent with SDG 13 Climate Action and 17 Partnerships for the Goals.

The Mauritius Climate Change Act was gazetted on 28 November 2020 and entered into force on 22 April 2021. The aim of the Act is to establish a legal framework towards making Mauritius a climate change resilient, and low emission, country. Under the Act, the Department of Climate Change is responsible for coordinating the implementation of relevant commitments to ensure compliance with international climate change agreements.

The Inter-Ministerial Council on Climate Change functions to set national objectives, goals and targets with the aim of making Mauritius a climate resilient and low emission country. The Council can make climate change policies and set priorities for adaptation in agriculture, biodiversity, coastal zones, infrastructure, the port, marine environment, tourism, fisheries, the water sector and any other relevant sector, and for mitigation in energy, transport, industrial processes and product use, agriculture, forestry, land use, waste management and disposal and any other relevant sector.

A Climate Change Committee has also been set-up to enable a multi-stakeholder participation in the preparation of national climate change strategies and action plans for mitigation and adaptation. Members of the Committee represent each of the ministries, professional engineers, civil society and the private sector.

The Committee will report at least every two years to its minister on progress and ensure that Mauritius meets its obligations under UNFCCC, the Kyoto Protocol, the Paris Agreement and any related instrument on climate change.

There are many environmental assets located throughout the island of Mauritius. Sites are under development pressure and environmental stress from a combination of factors including land use development and environmental change. Mauritius is party to international agreements that seek to preserve and increase the percentage of land that is protected under environmental legislation. The protected area network (PAN) in Mauritius is around 4%[1] of the terrestrial land area compared with the Aichi Biodiversity Target (Target 11 of the Strategic Plan for Biodiversity 2010- 2020) of at least 17% of

1. *Ministry of Agro Industry and Food Security (2017) Protected Area Network Expansion Strategy*

terrestrial and inland water areas (and 10% of coastal and marine areas) to be protected by legislation. Continuing and enforcing protection and conservation of the most vulnerable natural environments, cultural heritage sites and scenic landscapes, including environmentally sensitive areas (ESA) protected in legislation, whilst setting out clear and unambiguous conditions for permitting development on other sites, is an important challenge for the relevant authorities. Incrementally increasing the amount of land under afforestation, creating biodiversity zones managed through local community partnerships, ecological re-use of abandoned sugar lands and enhancing national and regional green and blue infrastructure networks, green space and usable open space provision in new developments can all contribute to mitigating climate change effects.

Integrating climate change adaptation into the planning process provides an essential opportunity to make development more climate-resilient. In this respect the Mauritius Resilience Strategy has been formulated with the aim of strengthening climate resilience and reducing climate change vulnerability. It promotes nature-based solutions to mitigate the occurrence of frequent events such as flash floods. It focuses on the mapping of environmentally sensitive areas and their integration in planning development tools, such as outline planning schemes. It favours the ridge-to-reef approach to address climate change adaptation, environmental pollution and disaster risk management in a coherent and holistic way.

2.7. Delivering a modern infrastructure network to support sustainable development

With an ageing population, the demands on the healthcare system for a wide range of affordable and inclusive healthcare facilities (both general hospital services and specialist clinics) are predicted to rise. To address this critical issue, the Ministry of Health and Wellness is geared towards transforming existing health services into modern high-performing quality services, which are patient-centred, accessible, equitable, efficient and innovative. The ministry seeks to provide a conducive environment for health-service delivery.

Quality of lifestyle improvements in healthy living and eating are being supported by Government investment in new and upgraded multi-purpose leisure parks, recreation centres and sports complexes. In the new NDS, the allocation of agri-tech neighbourhoods[1] (agri-hoods) and bio-farming zones near villages and towns can mitigate these demands and contribute to sustaining local communities, jobs and skills.

One of the key aims identified in the Government's 2020/2021 and 2021/2022 budgets are the acceleration of housing programmes for both low and middle-income families, with special focus on the needy and vulnerable within a sustainable living environment. To help achieve this aim, Government will uplift and modernise existing social housing units, including ex- CHA housing states and NHDC apartment blocks, and improve facilities for the elderly such as day-care and recreational centres. Government has set up New Social Living Development Ltd (NSLD) in order to add 12,000 housing units across the island. In addition, and in line with Government's intention to improve the housing

1. Agri-tech neighbourhoods are neighbourhoods where small scale farming is integrated as part of a sustainable lifestyle.

stock on the island, it is proposed that 2,000 lots for residential purposes be put on sale by the State Investment Company and the Rose Belle Sugar Estate Board.

Although solid waste disposal is a major issue in Mauritius, the authorities responsible have drawn up plans to use available land and facilities for vertical and horizontal expansion to address current and short-term demand, while considering land adjacent to the current facility to meet longer-term needs. Local communities have been involved in the process, which has included consultations on the remediation measures and ameliorative actions needed to compensate for diverse environmental effects and social disturbances the operations have created.

Large parts of the island remain without access to the networked sewerage system, despite significant investment. Investment will continue in both the conurbation and rural areas as more households are connected to the system. Investment in the water-supply system will also continue with the construction of new dams and water-treatment plants alongside the installation of mobile treatment plants to serve remote communities.

2.8. Delivering quality of life for all

It is important that Mauritius provides safe, attractive environments for all its residents. This provision extends beyond housing to include access to open spaces, retail, leisure, education and healthcare facilities for a variety of user groups. It also includes the provision of public transport, so that those without access to a car are not disadvantaged because of their location or income level. Accessible public realm can greatly enhance the quality of life of all residents, including families, the elderly and those from other vulnerable groups including those with disabilities. Through the co-location of key social and community facilities, with better, safer streets and improved connected pedestrian networks and facilities, people can make linked trips, so that less time is spent travelling and trips are more convenient and safer for students, seniors, vulnerable groups and the local community in general.

In and around town and village centres, there is a need for re-enforcing the protection and enhancement of public open spaces, especially where the few remaining green spaces, pocket parks and smaller tracts of open land and sites, such as spiritual parks and their settings, are coming under increasing pressure from encroachment.

Sustainable development policies should also target removing or retrofitting substandard buildings and infrastructure and replacing them with modern facilities to enhance the overall quality of life. The introduction of more green buildings, technologies and facilities, which meet the demands of people today and enable a cleaner, greener Mauritius in the future is to be promoted. Greener personal travel and supply-chain logistics systems, together with increased internet shopping and delivery services or greater opportunities for on-line working, will change how everyday tasks are performed. With more choice, the importance of quality and sense of place is increased, enabling places to survive and thrive in the future.

3 THE LAW: LEGAL AND JUDICIAL FRAMEWORK

The genesis of the National Development Strategy (NDS) lies in statute. It is the Planning and Development Act that defines the NDS, and confers legal enforceability on this instrument.

3.1. Legal status under the Planning and Development Act

The Planning and Development Act (2004), as amended, is the framework statute governing land use planning and development in Mauritius.

The aims of this Act[1] are the following:

> *(a) to provide in relation to land development for:*
> *(i) the promotion and co-ordination of the orderly and economic use and development of land;*
> *(ii) the proper management, development and conservation of natural and man-made resources for the purposes of promoting the social and economic welfare of the community and a better environment;*
> *(iii) use of land for public purposes;*
> *(iv) ecologically sustainable development and climate change;*
> *(v) development to take into account climate change;*
> *(b) to provide for the appropriate sharing of responsibility for planning and development between the different levels of government;*
> *(c) to establish appropriate institutions, structures and processes to achieve effective planning and development;*
> *(d) to facilitate inter-agency co-operation in planning and development;*
> *(e) to encourage appropriate private sector participation in planning and development;*
> *(f) to safeguard the immediate and long-term public interest in the processes and effects of planning and development."*

According to Section 12 of the Planning and Development Act, the National Development Strategy is a document prepared under the aegis of the Minister of Housing and Lands , which must:
"(a) state the aims, objectives, policies and strategies through which the objects of this Act shall be achieved;
(b) consist of plans, policies and guidelines with mechanisms for their implementation, which aim at creating and stimulating investment in the public and private sectors so that economic growth and social development in relation to land development can be undertaken in a sustainable and equitable manner and taking into account climate change, so as to maintain and enhance the natural and built environment;
(c) outline the resources to be committed for its implementation."

1. Aims iv and v of the Act have been amended by the Climate Change Act (2020).

Most importantly, the Act provides for statutory precedence of the NDS over any other planning instrument ("the National Development Strategy shall prevail over any other planning instrument to the extent of any inconsistency").

The requirement of legal certainty in administrative law

Legal certainty is one of the tenets of the rule of law. *The Déclaration des Droits de l'homme et du citoyen de 1789*, which is often quoted by our Supreme Court, sets out the principle of "sûreté" whereby citizens are protected against the arbitrary exercise of power.

When interpreting the said Déclaration, the French Constitutional Court has held that "*l'accessibilité et l'intelligibilité de la loi sont des objectifs de valeur constitutionnelle*".

According to the Organisation for Economic Co-operation and Development (OECD), the concept of the rule of law "first and foremost seeks to emphasise the necessity of establishing a rule-based society in the interest of legal certainty and predictability."

Legal certainty requires that laws and decisions be made public, and that they be definite and clear, so as to ensure predictability in the application of norms.

It is therefore of utmost importance that planning legislation and regulations be drafted in a clear and intelligible manner. Furthermore, laws should not be enacted only to be kept in abeyance during several years, instead of being proclaimed with reasonable promptness.

The Planning and Development Act, though enacted nearly two decades ago, has been proclaimed in a piecemeal and haphazard fashion, and several important sections of the Act remain in legal limbo. The planning instruments available to the relevant administrations in Mauritius are successively described below:

3.1.1. Outline Planning Schemes (OPS)

The preparation of the outline planning schemes falls under the responsibility of the Town and Country Planning Board under the provisions of the Town and Country Planning Act.

Outline Planning Schemes (OPS) set out policies in respect of areas declared by the Board as being planning areas, and cover matters such as roadway characteristics, building size, height and design, reservation of land for particular industries, trades or housing schemes, conditions applicable to amenities, public utility services and transport and communication.

Such schemes include development management maps which show settlement boundaries and areas

where development may be permitted. Outline Planning Schemes cover all local authorities, both urban and rural. The broad functions of the OPS are as follows:

1. To translate the strategies and policies of the NDS at the local level.
2. To set out the broad planning framework for development of each declared planning area under the administrative jurisdiction of a local authority.
3. To provide a plan led document acting as the main planning tool used by a local authority to assess planning applications.

Once a scheme comes into effect, *"no authority shall pass or approve any plan for building or development that contravenes the scheme".*

3.1.2. Planning Policy Guidance (PPG)

PPG is an instrument issued by the Minister of Housing and Lands to any local authority regarding *"any aspect of land-use planning and development and their relationship to, and impact on, economic and social development"*.

These aspects may pertain to any of the following:
a) the form, scale, intensity, built form, location and general development criteria for different classes of development;
(b) the form, content and process of preparing development plans;
(c) policies and practices to be followed in connection with the implementation of development plans through the granting of development permits;
(d) State-significant development;
(e) planning agreements;
(f) conditions to be attached to development permits; and
(g) all other powers exercisable by local authorities under this Act.

Local authorities are under an obligation to comply with the guidance issued to them pursuant to a PPG.

PPGs are given statutory precedence over the lower tier of planning instrument, being the development plan.

There are a number of PPGs in force, covering design guidance in various fields, including in heritage areas, in respect of radio-communication equipment, petrol stations and on steep slopes and in landslide hazard areas.

3.1.3. Development Plans (Local Plans, Action Area Plans, Subject Plans)

Development Plans can be classified into three categories.

Local Plans[1] are intended to set out the policies, programmes and proposals for the future direction of development of the area that falls under the jurisdiction of a local authority. They are prepared by the local authority, or in case of incapacity, by the Minister of Housing and Lands . They are applicable to the entire area of jurisdiction of the local authority, or to only part of this area, as specified in the plan.

Action Area Plans (AAP) operate at a more detailed level. They must set out detailed programmes and proposals for the future development of a targeted area, and furthermore provide a detailed plan for the implementation of the programmes and proposals. They are prepared by the Ministry of Housing and Lands alone or jointly with the local authority and/or landowners who own the entire targeted area.

Subject Plans are devised to set out policies, programmes and proposals for the future direction and development in respect of a specific subject-matter, either for the whole of Mauritius or for an area within that territory. They are prepared solely by the Ministry of Housing and Lands .

Where different types of development plan overlap in respect of any area, the action area plan or the subject plan prevail over the local plan in case of inconsistency, even if the local plan predates the other plans.

3.2. Judicial pronouncements on NDS: clarity and consistency

It may happen that applicants are dissatisfied with the manner in which the NDS, or plans which rest on the NDS, are applied. The obvious recourse in that case is a judicial one, which can mire local authorities and planners in court proceedings for a lengthy amount of time, often counted in years.

Legal challenges are not an efficient methodology for achieving planning decisions, and should therefore be avoided as far as possible.

Mauritian administrative law including planning law is based on English-law principles, as applied in particular by common-law courts.

It is appropriate to address the consequences of the decision rendered by the Judicial Committee of the Privy Council in the matter of Beau Songe Development Limited v The United Basalt Products Limited and Anor [2018] UKPC 1 on the National Development Strategy (NDS) for Mauritius. The Privy Council judgment in turn cited previous judgments referring to "the principles governing the interpretation of statutory planning documents of this kind, as explained by the UK Supreme Court in Tesco Stores Ltd v Dundee City Council [2012] UKSC 13 and Hopkin Homes Ltd v Secretary of State for Communities and Local Government [2017] UKSC 37", which are authorities that are applicable in Mauritius as acknowledged in the said judgment.

The following sections contain an overview of judicial pronouncements related to the Privy Council

1. Local Plans have not been proclaimed as at October 2022.

decision, as well as a summary of the principles that may be usefully derived from the Law Lords' reasoning in respect of the NDS.

3.2.1. Overview of relevant judicial pronouncements

Privy Council judgment Beau Songe Development Limited v The United Basalt Products Limited and Anor [2018] UKPC 1: This matter revolved around the interpretation of the then applicable NDS in respect of buffer zones around quarries and other bad neighbours, of a radius of "up to 1 km", and whether that phrase was prescriptive (i.e., mandatory) or indicative (i.e. in the nature of a non-binding suggestion). Whereas the first instance tribunal had found that the wording was merely indicative, both the Supreme Court and the Privy Council favoured the stricter interpretation and declared it to be prescriptive.

In order to reach its decision, the Privy Council relied heavily on the judicial precedent established in the Tesco Stores case referred to in paragraph 2(ii) below, whereby "… in this area of public administration as in others … policy statements should be interpreted objectively in accordance with the language used, read as always in its proper context".

The Law Lords then went on to conclude that "The appeal has highlighted the need for attention to be given to improving the clarity and consistency of the statutory planning document", i.e. the NDS as it existed at the time.

UK Supreme Court judgment Tesco Stores Limited v Dundee City Council [2012] UKSC 13: This case concerned a challenge against the grant by the Dundee City Council of planning permission to a competitor (Asda) for the construction of a new supermarket in proximity to an existing supermarket operated by Tesco Stores. The crux of the matter was whether the planning officer had properly interpreted the sequential test and properly included other material considerations. The Court found that he had acted properly.

In particular, Lord Hope provided useful guidance on the manner in which the sequential test should be applied where retail matters were concerned: "If they do not meet the sequential approach criteria, bearing in mind the need for flexibility and realism to which Lord Reed refers, in para 28, above, they will be rejected. But these criteria are designed for use in the real world in which developers wish to operate, not some artificial world in which they have no interest doing so".

UK Supreme Court judgment Hopkin Homes Ltd v Secretary of State for Communities and Local Government [2017] UKSC 37: This case concerned the proper interpretation of the UK's equivalent of the Mauritian NDS, and hinged in particular on the construction of the phrase "relevant policies for the supply of housing". The word "for" could potentially be taken to mean simply "about", or alternatively, be given a more active meaning in the sense of "to boost". Applying the Tesco Stores principles of interpretation, Court ruled in favour of the plain English meaning. However the decision is especially significant as it also recognised the applicability of the "tilted balance" test based on the "presumption in

favour of sustainable development" set out in para. 14 of the UK's national strategy document. Following Hopkins Homes, two further decisions, Keigar Homes Ltd and Gladman Developments Limited [2021] EWCA Civ 104 have illustrated the leeway given to local authorities to apply the tilted balance test, as per the words of Senior President of Tribunals Sir Keith Lindblom: "So long as the statutory duty is complied with, the decision-maker can go about the task in a way that seems suitable in the particular circumstances of the case."

England and Wales Court of Appeal (Civil Division) judgment Asda Stores v Leeds City Council [2021] EWCA Civ 32: This case pertained to the interpretation of paragraph 90 of the UK's national planning document, whereby *"Where an application fails to satisfy the sequential test or is likely to have significant adverse impact on one or more the considerations in paragraph 89, it should be refused".* The Leeds City Council had found no grounds to refuse an application for planning permission to carry out the construction of a mixed-use retail project, and the owner of a neighbouring retail store had appealed against the Council's decision to grant such permission.

According to the Court of Appeal, *"the relevant law is well established, and uncontroversial. The principles governing the interpretation and the application of national planning policy, and the clear distinction between them, have been identified at the highest level (see the judgment of Lord Reed in Tesco Stores Ltd. v Dundee City Council [2012] UKSC 13; [2012] PTSR 983, at paragraphs 18 and 19, and the judgment of Lord Carnwath in Hopkins Homes Ltd. v Secretary of State for Communities and Local Government [2017] 1 WLR 1865, at paragraphs 24 to 26), and frequently confirmed in this court (see, for example, Barwood Strategic Land II LLP v East Staffordshire Borough Council [2017] EWCA Civ 893, at paragraph 50).*

National planning policy is not the work of those who draft statutes or contracts, and does not always attain perfection. The language of policy is usually less precise, and interpretation relies less on linguistic rigour. When called upon – as often it is nowadays – to interpret a policy of the NPPF, the court should not have to engage in a painstaking construction of the relevant text. It will seek to draw from the words used the true, practical meaning and effect of the policy in its context. Bearing in mind that the purpose of planning policy is to achieve "reasonably predictable decision-making, consistent with the aims of the policy-maker", it will look for an interpretation that is "straightforward, without undue or elaborate exposition" (see Mansell v Tonbridge and Malling Borough Council [2017] EWCA Civ 1314, at paragraph 41). Often it will be entitled to say that the policy simply means what it says, and that it is the job of the decision-maker to apply it with realism and good sense in the circumstances as they arise – which is what local planning authorities are well used to doing when making the decisions entrusted to them (see R. (on the application of Corbett) v The Cornwall Council [2020] EWCA Civ 508, at paragraphs 65 and 66).

The policy we are considering in this case is a good example. Its language is simple. What it says is that planning permission "should be refused" in the circumstances it contemplates – including where the development proposed will have a "significant adverse impact" on a town centre. The words "should be refused" have a clear meaning, which requires no elaboration by the court. They do not mean "must be refused". The policy is not imperative".

3.2.2. Judicial principles governing the NDS

The above court decisions are a valuable guide to the interpretation and application of the NDS, and we summarise below the principles that can be extracted from the judges' reasoning.

The NDS should be read as a whole: The Privy Council decision in the Beau Songe Development case, drawing on the Tesco Stores jurisprudence, clearly underscores the importance of context in the interpretation of particular sections of the NDS, which need to be read in light of the overall aims of the planning document.

The NDS has therefore been designed with the objective of avoiding contradictions, in particular by providing the overall context in which particular paragraphs need to be read. The NDS clearly states its main overarching goals (including in particular the main objective of sustainable development facilitating economic growth that respects our country's limited natural resources), so as to allow the competent authorities and decision-makers to apply their own relevant sequential tests and other material considerations to the facts and circumstances presented to them.

Flexibility and realism: The Tesco Stores judgment has firmly anchored planning policies in the real world. Lord Reed held that "the application of the sequential approach requires flexibility and realism from developers and retailers as well as planning authorities." This requirement was reiterated by Lord Hope, who added that criteria devised and applied by planning authorities are intended for the "real world", and not for an "artificial world".

The NDS therefore demonstrates a firm grounding in Mauritian reality. It should be borne in mind that the NDS will serve as the basis on which the relevant authorities will design their objective criteria and material considerations, in view of achieving the balance between flexibility and realism mentioned in the Tesco Stores jurisprudence.

Clarity and consistency in drafting: In Tesco Stores it was held that "It has long been established that a planning authority must proceed upon a proper understanding of the development plan: […] The need for a proper understanding follows, in the first place, from the fact that the planning authority is required by statute to have regard to the provisions of the development plan: it cannot have regard to the provisions of the plan if it fails to understand them […] policy statements should be interpreted objectively in accordance with the language used, read as always in its proper context. That is not to say that such statements should be construed as if they were statutory or contractual provisions. Although a development plan has a legal status and legal effects, it is not analogous in its nature or purpose to a statute or a contract. As has often been observed, development plans are full of broad statements of policy, many of which may be mutually irreconcilable, so that in a particular case one must give way to another. In addition, many of the provisions of development plans are framed in language whose application to a given set of facts requires the exercise of judgment. Such matters fall within the jurisdiction of planning authorities, and their exercise of their judgment can only be challenged on the ground that it is irrational or perverse (Tesco Stores Ltd v Secretary of State for the Environment [1995]

1 WLR 759, 780 per Lord Hoffmann). Nevertheless, planning authorities do not live in the world of Humpty Dumpty: they cannot make the development plan mean whatever they would like it to mean".

In the same vein, the Privy Council has highlighted the need for clarity in the drafting of the NDS: "*The appeal has highlighted the need for attention to be given to improving the clarity and consistency of the statutory planning document".*

The NDS has therefore been drafted in plain English, with the aim of allowing the relevant authorities to apply its tests objectively and rationally in light of the circumstances and facts of each particular case. To paraphrase Lord Reed, the NDS avoids placing the local authority in the position of "Humpty Dumpty" where it is unable to show a rational and objective basis for its decision-making.

Urban Governance: The Hopkins Homes decision has been described by legal commentators as "de-lawyering" the national strategy document, insofar as the UK Supreme Court has laid greater emphasis on a less legalistic approach to the application of policy to planning permission requests, and reiterates that discretion rests in the hands of the decision-makers. Consequently, the NDS has been designed as a practical tool allowing planners and authorities to reach decisions objectively in the real world and not in a vacuum, based on criteria underlying sequential tests and relevant material considerations, provided of course that they respect the overarching Wednesbury requirements applicable to all administrative authorities.

4 GUIDANCE: HOW TO TRANSLATE THE NDS INTO OUTLINE PLANNING SCHEMES

4.1. Fundamental principles

It is trite to say that urban and rural planning systems should rest on plans.

One of the main purposes of the NDS is to provide guidance in the conception of such plans, and of the corresponding policies and guidelines at various levels of the administration (from the Ministry of Housing and Lands to the lowest tiers of local government).

Plans should avoid undue verbosity, and be kept updated. They must provide a tangible outlook for the development of each area they cover. Economic, social and environmental objectives, as well as housing requirements, should be addressed in plans.

Other principles that must be observed in the conception of plans are set out below:

1. Plans must be devised so as to assist in achieving the objective of sustainable development;
2. The objectives laid out in plans should be clear and capable of being attained;
3. Plan-makers should demonstrate that they have engaged with stakeholders such as other relevant administrative authorities, local organisations and enterprises and the community;
4. The policies set out in plans must be written in plain English, and avoid any ambiguous formulations, so that they constitute effective tools for decision-makers to assess applications for development and land use;
5. Plans must be available for perusal through e-media; and
6. There should be no contradiction vis-à-vis the NDS.

4.1.1. Policy-based planning

Once planning authorities have identified priorities for the development and use of land in their areas of jurisdiction (such priorities being at all times informed by the NDS), they must devise strategic policies accordingly for inclusion in the development plan.

The methodology for producing such strategic policies will vary depending on the issues faced by each area, and on the opportunities arising therein.

Policies that pertain to non-strategic matters should be set out in Local Plans that contain both strategic and non-strategic policies, and/or in local or neighbourhood plans that solely contain non-strategic policies.

4.1.2. Principles for devising strategic policies

Strategic policies should aim at setting out a comprehensive strategy for the pattern, size and quality of design of sites, and they should adequately provide for:

1. Community facilities, such as education, health, cultural and leisure amenities;
2. Infrastructure for water and utilities (including power and telecommunications), wastewater, drainage (including the management of flood risk), transport, waste management, wastewater and climate change mitigation (including in coastal regions);
3. Housing (of various categories, including low-income housing), employment creation, retail facilities, commercial developments, private leisure, sports and cultural offerings.

4.2. Decision-making

Positivity and creativity should guide decision-making by local planning authorities, which should rely on all planning tools at their disposal, such as land development plans, software and databases.

Their approach towards applicants should be collaborative and aimed at favouring developments that entail objective improvements to the local economic, social and environmental conditions. The presumption should tilt in favour of sustainable development where possible.

4.2.1. The application process

Improving pre-application processes has a positive impact on the efficiency of the planning application system as a whole.

Developers should be encouraged (but not obliged) to take advantage of any pre-application avenues available to them, such as outline planning permissions.

Improved pre-application endeavours tend to ameliorate the flow and accuracy of information that underpins the decision-making process especially where it is reliant on elements of fact, e.g. environmental impact assessment, traffic impact assessment and drainage impact assessment).

To that end, the local planning authorities' information requirements should be listed and accessible. These requirements should be focused on the core information required to make decisions and avoid calling for irrelevant data. The information requirement lists should be updated regularly in the light of any new circumstances (such as changes in relevant policies, new judicial pronouncements, and/or revisions of hierarchically superior norms).

In any case, the information demands issued by local planning authorities to applicants should be limited to information that is relevant, necessary and material to the application concerned. To that

effect the National Electronic Licensing System (NELS), developed under the aegis of the Economic Development Board (EDB), allows for more efficient permit application processes.

4.2.2. Rejecting or approving applications, with or without conditions

The relevant development plan will command how applications are determined, unless there are material considerations that may lead to a different outcome.

It is expected that the authority assessing the application will exercise due promptness in the making of its determination. Statutory time limits must be strictly observed, save where the applicant has otherwise expressly agreed.

Planning agreements may in certain circumstances allow the decision-making authority to greenlight an application that does not *prima facie* conform to the development plan. To that end legislative reform is required to provide a specific and detailed framework to govern planning agreements. However, planning agreements should be a last resort, only where the planning conditions would not be reasonably sufficient to address the non-conforming characteristics of a development application.

The viability of a development should not be smothered by planning conditions, which should therefore be applied sparingly and only to the minimum extent required. The planning conditions must be essential and relevant, and should be vested with clarity so as to be properly capable of effective enforcement. As part of the pre-application engagement process, the decision-making authority should ascertain whether or not any proposed planning conditions are fair and reasonable.

The following cumulative requirements must be met in order for planning conditions to be validly imposed on an applicant:

1. Direct relevance to the development;
2. Fairness and proportionality, taking into account the dimensions and characteristics of the proposed development; and
3. The impossibility of compliance of the proposed development with applicable plans unless planning conditions are imposed.

4.2.3. Enforcement

Enforcement is a cornerstone of the planning system, without which there would be no incentive to comply with planning rules. However, enforcement should not be so heavy-handed and arbitrary as to place a disproportionate burden on developers.

The general rules governing administrative action (including the safeguards set out in the Wednesbury-derived judicial pronouncements) shall govern enforcement action.

The Planning and Development Act should be amended to introduce the concept of "local enforcement

plans", to provide a structure for the effective use by local authorities of their enforcement prerogatives. Such local enforcement plans could set out the procedural rules for investigating alleged or suspected violations of planning rules and conditions, and for sanctions that range from pecuniary fines to actual pulling-down or demolition orders. In that regard, the amendments brought to the Local Government Act in 2018 to introduce enforcement aspects constitute steps in the right direction.

4.3. The presumption towards sustainable development

A presumption in favour of sustainable development should guide the creation of plans as well as the determination of applications.

4.3.1. The presumption in case of plan-making

Where plans are being created:

1. They should favour a sustainable framework of development that endeavours to:
   - fulfil the development requirements of their area of jurisdiction;
   - generate convergence between growth and infrastructure;
   - achieve improvements to the environment;
   - anticipate and counter the effects of climate change and where applicable, to mitigate its effects.
2. Strategic policies should include an objective assessment of local needs for housing and other uses, save where:
   - the application of NDS policies that protect environmentally-sensitive areas or heritage or other assets governs restrictions to the overall scale, nature or layout of developments in the relevant area; or
   - any adverse impacts of such developments would significantly and demonstrably outweigh the benefits thereof, in light of the overall policies put forward in the NDS.

4.3.2. The presumption when taking decisions

In the determination of applications, planning authorities should:

1. approve development proposals that are consistent with an up-to-date development plan with due promptness;
2. give due assessment consideration where there is a void in development policies or where the relevant policies are out-of-date, save where:
   - the application of NDS policies that protect environmentally-sensitive areas or heritage or other assets orders refusal of the proposed development; or
   - any adverse impacts of such developments would significantly and demonstrably outweigh the benefits thereof, in light of the overall policies put forward in the NDS.

It is important to remember that presumption in favour of sustainable development does not diminish the legal status and importance of the relevant development plan as the starting point in the decision-making process. Thus the determination should be negative if a planning application fails to comply both with an up-to-date development plan and with the NDS (and may be positive if the planning application complies with at least one of those).

5 VISION: KEY DEVELOPMENT PRINCIPLES

5.1. The evolution of the strategy

According to the Government Programme, to achieve its development goals towards an inclusive, high income and green Mauritius, it will be crucial to have a strong strategy to optimise the use of land. The Government has set out a broad strategic vision within which the National Development Strategy provides the land development planning framework. The National Development Strategy will be based on a sustainable development approach to land use, founded on the broad spatial strategy of the 2003 National Development Strategy which itself was based on the fundamentals of "encouraging economic growth in the conurbation, the countryside and the coast, whilst maintaining and enhancing the quality of the environment and striving for a more sustainable pattern of development". This will allow for an overall ecological urbanisation policy, as well as revised and updated outline planning schemes and planning guidelines for all regions.

There are several key strategy drivers that will shape the strategy as it responds to the challenges outlined in Section 2.

5.2. Government vision

Key policy directions from the Government Programme and its post Covid-19 budgets have influenced the preparation of this National Development Strategy (NDS). Based on these policy directions, it is considered that the Government's vision for an inclusive, high-income, and green Mauritius requires a balanced and holistic land use development approach, which values and includes diversified economic growth alongside social and community well-being for all Mauritians and the protection and conservation of its natural environment and cultural heritage assets for the benefit of existing and future generations.

Among other Government and private sector-led initiatives, commitments to a transformative knowledge, skill and data-based service sector, high tech agriculture and food security-focused enterprises and community-based authentic eco-tourism promotion will be required within a regime of ridge-to-reef environmental protection, conservation, and management. Underpinning these measures and initiatives, there will need to be provision for broad-ranging and inclusive quality of health and continuous learning facilities, with safe, affordable, and resilient transport and utilities facilities and systems to connect and support people, goods and services.

In responding to these key Government aims and initiatives and the challenges posed by structural changes in population and workforce expected over the next 20 years, this National Development Strategy will have a leading role to play in the future direction of land development in the conurbations,

countryside and coastal regions.

In land-use planning terms, this will include making a more efficient and environmentally-sound use of existing sites, which are capable of connection to existing utility supplies and transport networks without unacceptable public expense, buildings and technologies and committed schemes, before new greenfield sites and lands are considered or developed. This NDS rolls forward the aims of the 2003 Strategy for compact, resilient, and low-impact growth and provision of public services, encouraging sequential development, promoting social cohesion and protect and conserving the environment. The Government's National Regeneration Programme and developer incentive schemes are important considerations, especially post Covid-19 when near-term public sector resources both in Mauritius and internationally are likely to be constrained.

This NDS also recognises the need for flexibility in its planning approach to accommodate new land development demands from a knowledge-based and environmentally-conscious society. There will be a need for new and adaptive forms of workspaces, living environments and well-being facilities, which value and respect the conservation of the country's natural and cultural heritage and traditions, predominantly in the countryside and coastal areas as well as in and around the conurbation.

In summary, the following policy issues need to be incorporated into the spatial and land-use planning strategy of this National Development Strategy:

- The ageing population profile will impact and increase demand for a wide range of affordable and inclusive healthcare facilities (both general hospitals and specialist clinics), learning and retraining/ reskilling needs, safe and secure housing types, walkable, usable public open spaces, and related community facilities.
- In support of the Government's drive for a more inclusive, healthier and better quality of lifestyle for all its citizens, National Development Strategy policies need to achieve a better balance and range of recreational indoor and outdoor sports and well-being facilities in both urban and rural areas, especially where facilities can be co-located for shared and convenient use by students, seniors and the local community.
- To help meet demand for safe and accessible social and community facilities, National Development Strategy policies can enable and support public transport/Metro Express/urban and rural terminal regeneration, by facilitating integration with new town and village centre-based sheltered/secure residential apartment complexes and rehabilitating resource-efficient sites and buildings.
- As student enrolments fall and demand for new school buildings decreases, especially in the primary and secondary state education sector, there will be potential for dual use or adaptive re-use of existing but underused school buildings, facilities and sites, especially where these are well-located with respect to public transport services and safe and convenient footpath networks.
- To help achieve national policy aims for a knowledge-based economy as well as address future demand for adult/seniors' continuing education, there will be an increasing need for a broad range of tertiary-level education services and specialist vocational training (e.g. in food security sectors such as agri-tech, aqua-tech and environmentally- sound technologies such as renewable energy

incubators).

- Increasing demand for these knowledge-based services can be addressed through the conversion of disused or redundant buildings as part of town centre regeneration schemes where good public transport access and facilities are available e.g. the Metro Express/urban terminal programme with integrated bus stands, or are being promoted through smart city or expansion-zone schemes, such as Medine's Uniciti Smart City campus at Cascavelle in the Black River district.
- High-capacity integrated public transport networks and services, as well as safe and convenient footpaths and cycleways, will be required to sustain the education cluster at Reduit and its expansion eastwards via satellite educational village at Moka Smart City, with strong transport connectivity to the parent campus. A metro link to connect the clusters to the main conurbation public transport spine via Rose Hill and Ebene/Cyber City is committed.
- In and around towns and villages, there is a need to favour sequential development for sites which are capable of connection to existing utility supplies and transport networks without unacceptable public expense before new greenfield sites and lands are considered or developed. In addition reinforcing the protection and enhancement of public open spaces, especially where the few remaining green spaces, pocket parks and smaller tracts of open land and sites, such as spiritual parks and their settings, are coming under increasing pressure from encroachment.

5.3. Key themes

5.3.1. Introduction

The spatial strategy is based on several key themes that together provide the basis for spatial strategy policies and sector-based policies. The key themes are:

- Hierarchy of centres
- An island of neighbourhoods
- Revitalisation of rural communities
- Protecting the rural and coastal landscape
- Connected Island
- Climate responsiveness

5.3.2. Hierarchy of centres

The towns that make up the conurbation, together with the City of Port Louis, have long provided the urban structure of Mauritius. The strategy builds on the existing urban structure together with recognising planned urban expansion into the Trianon-Côte d'Or region, as set out in the 2003 National Development Strategy, together with an expansion north of Port Louis. The relationship of centres to each other and relative position in the hierarchy is an example of a polycentric urban structure. This polycentric structure has been reinforced by the development of the metro, which connects these centres with high-quality public transit.

The hierarchy is made up of three levels of centres in the urban area and two in the rural area illustrated in Figure 6. The centres are as follows:

Metropolitan Centres
- Port Louis
- Greater Ebene (Trianon/Moka)

Urban Centres
- Beau Bassin
- Rose Hill
- Quatre Bornes
- Phoenix
- Vacoas
- Curepipe

Primary Rural Centres
- Pamplemousses
- Riviere du Rempart
- Centre de Flacq
- Rose Belle
- Souillac
- Bambous

Local centres
- Not identified in the National Development Strategy

Rural Centres
- Not identified in the National Development Strategy

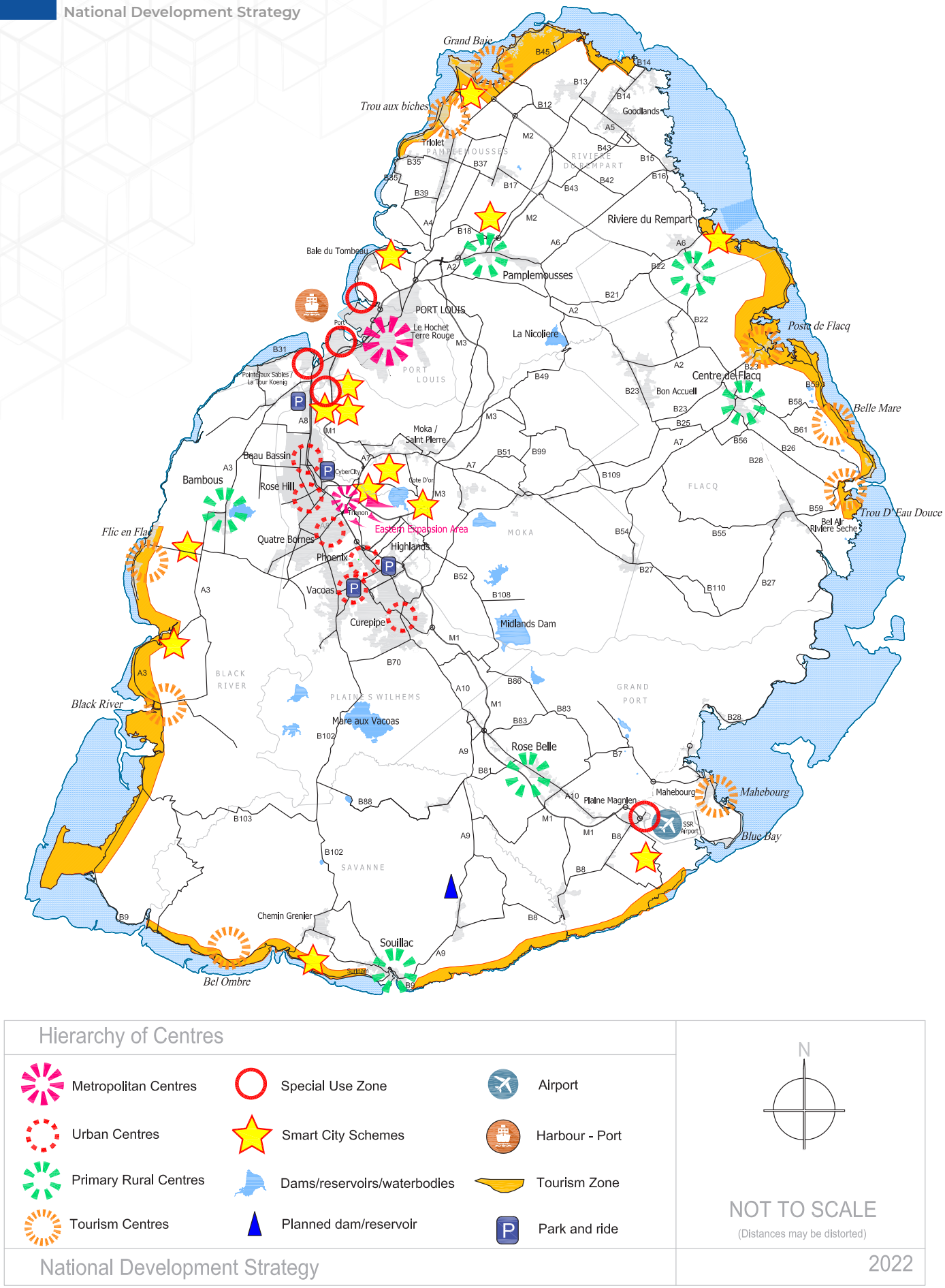


FIGURE 6: HIERARCHY OF CENTRES

5.3.3. Metropolitan centres

The highest-level centre in the urban area is the metropolitan centre. The two metropolitan centres of Port Louis and Greater Ebene (Côte d'Or/Trianon) will drive national economic growth with a focus on strategic facilities and services, while adding and integrating new residential development to stimulate 24/7 living, working, studying and leisure. This centre typology is expected to have all the elements found in the lower-order centres plus the higher-order (strategic) uses shown in Figure 7, such as government institutions, regional and international commercial offices and iconic HQ buildings, as well as specialist niche leisure and entertainment attractions, large business hotels and comparison retail. The metropolitan centres should also have a high level of national accessibility with multi-modal transport interchange and specialist regional-level further education facilities. The walking catchment for such centres would be 800 metres or 200 hectares, with a wider catchment by car and in case public transport accessibility is provided. The metropolitan centres are known to consist of a myriad of individual freehold land owners. In order to achieve the proposed integrated living development, whilst minimising major costs through compulsory acquisition, consultation and participation of the different stakeholders shall be required. As such the metropolitan expansion is expected to occur north of Port Louis and eastwards of Ebene in the Trianon – Moka region as illustrated in Figure 7.

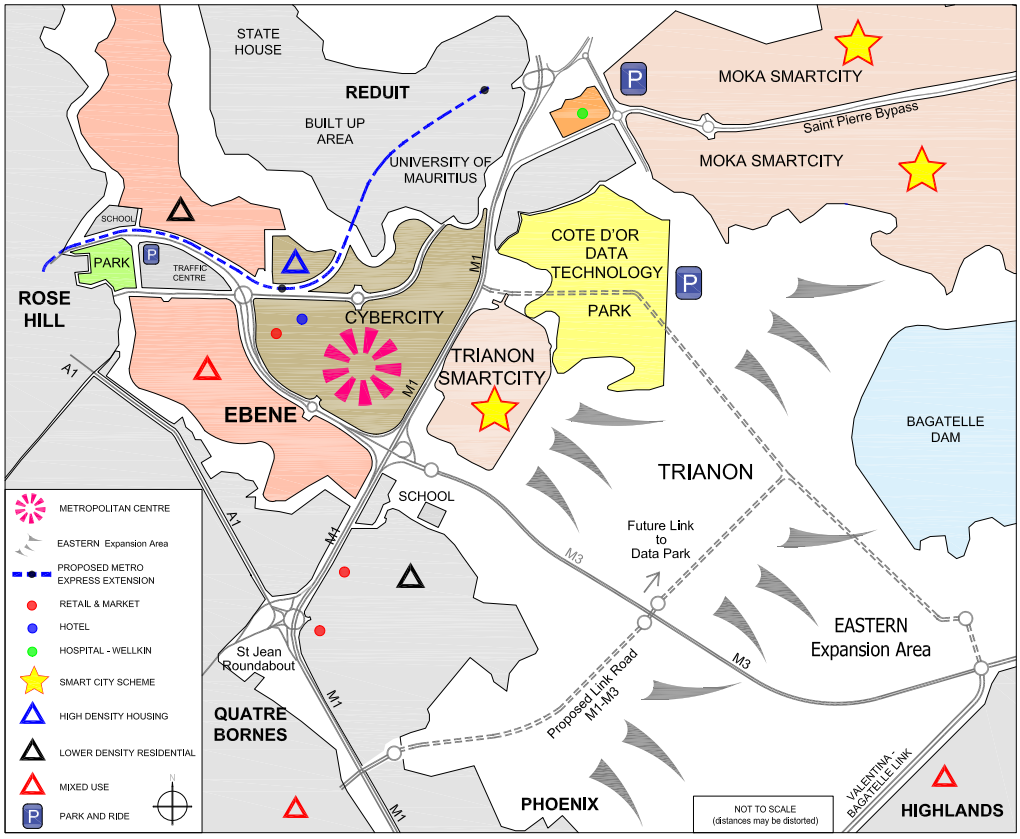


FIGURE 7 TYPICAL LAND-USE MIX IN METROPOLITAN CENTRE AND ITS EXPANSION AREA

5.3.4. Urban centres

Urban centres will be typically located in existing town centres and provide the focal point for residents of that area. They are important places as they provide the sense of identity for residents in the conurbation. Unfortunately, many centres are not fulfilling their role, as competition from malls has resulted in many spending less time in their town centres.

As illustrated in Figure 8, urban centres will have a typical walking catchment of around 400 metres radius or 50 hectares. They will be typically characterised by a mixed use centre at the core consisting of a mix of office and retail commercial and high density residential. Leisure and entertainment can also be part of the mixed-use core along with hotels. Community uses such as healthcare, libraries, education and public spaces will sit on the edge of the core with residential uses forming the hinterland to the centre. A wider catchment by car and public transport will be likely with catchments often overlapping. Some urban centres will also be the main centre for residents in the rural area and in the peri-urban area just beyond settlement boundaries.

Urban centres will be typically located in existing town centres and provide the focal point for residents of that catchment area. They are important places with well-established buildings, bus stands and markets that provide a sense of identity for residents in the conurbation. Unfortunately, many centres are not fulfilling these roles and have lost trade to more modern and attractive edge-of-town shopping malls and commercial complexes, which have increasingly attracted residents with cars, especially at weekends. For urban centres, there is a growing recognition that development cannot be left to grow unchecked either in its location or style of building and that major new projects should be concentrated in and around places capable of being well-served by infrastructure and transport services. Such development scenarios foresee new schemes being located in or adjacent to existing settlements before considering the option of developing greenfield sites. As such urban expansion areas are expected to occur close to or adjacent to existing built up areas where sites are capable of connection to existing utility supplies and transport networks or can be connected without unacceptable public expenses. Figure 8 illustrates a typical urban centre and its potential expansion area.

The urban centres are known to consist of a myriad of individual freehold landowners. In order to achieve the proposed integrated living development, whilst minimising major costs through compulsory acquisition, consultation with and the participation of the various stakeholders will be required.

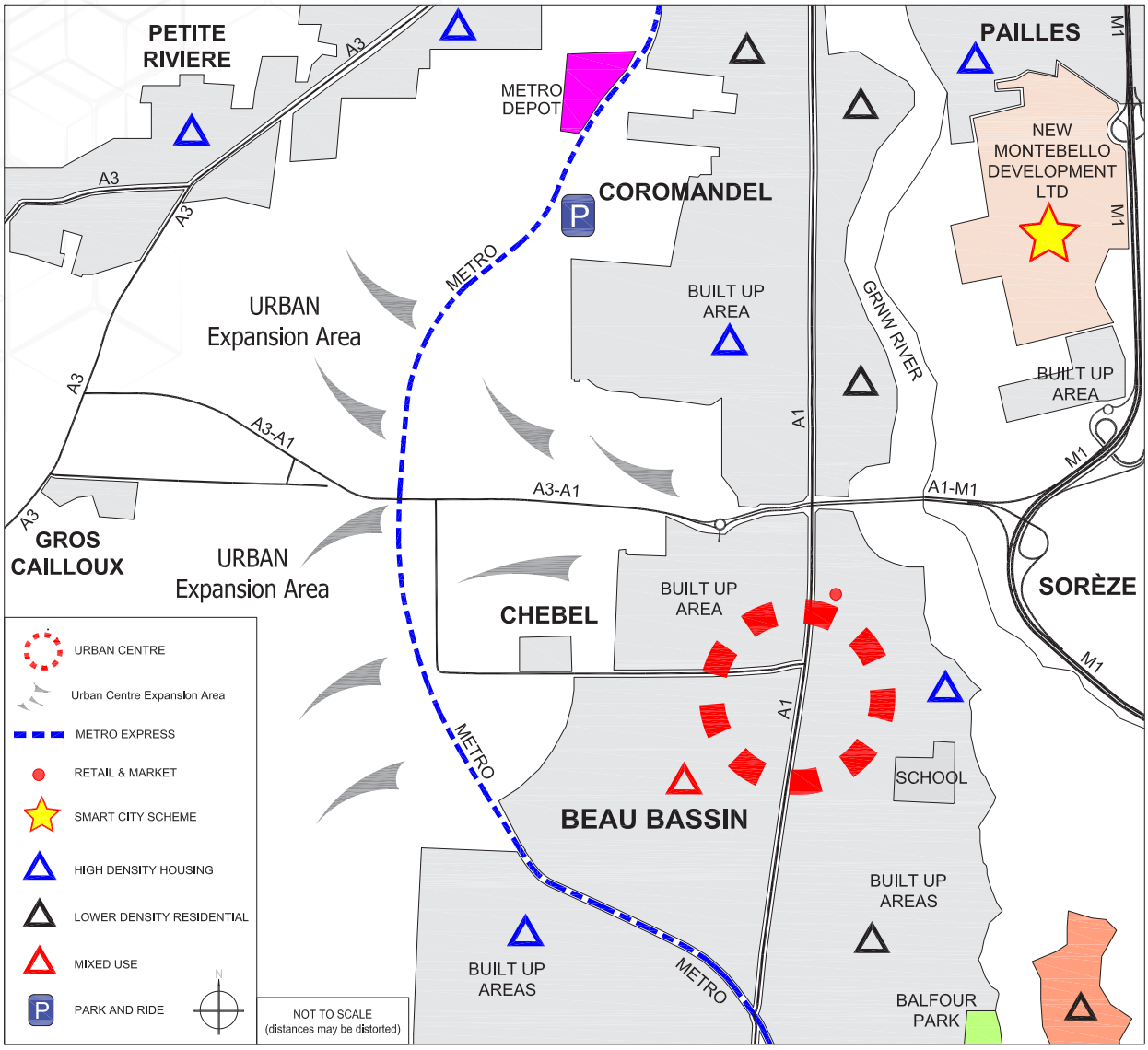


FIGURE 8 TYPICAL LAND-USE MIX IN URBAN CENTRE AND ITS EXPANSION AREA

5.3.5 Local centres

The local centre plays an important role locally in an urban area. The catchment will have a walking catchment of around 200 metres or 12.5 hectares. Local centres in urban areas are not identified in the NDS but will expect to be identified as part of outline planning schemes. They will typically be centred around a cluster of retail units and client-facing professional services.

5.3.6 Primary rural centres

Primary rural centres play an important role in rural areas, providing services for both the settlement and the wider rural area. The walking catchment for the primary rural centre is typically 400 metres but, due to their specific location and wider rural catchment, accessibility by car and public transport would have a much greater reach. As a result, primary rural centres will be able to accommodate major services and facilities.

As illustrated in Figure 9, primary rural centres will expect to be characterised by a mix of commercial workspaces, including agri-tech and eco-tourism incubators. In addition large scale convenience retail, cafés, restaurants, markets, small specialist retail outlets, health centres and small hospitals are anticipated. The core of the primary rural centre is likely to be smaller than that of the typical urban centre with a smaller commercial footprint. This will allow social infrastructure such as healthcare, education and other community facilities to be located more centrally, playing a larger role in defining the character of the centre. They are likely to be within walking distance of a secondary school and be served by a modern and integrated bus terminal. As far as possible, centres should be walkable areas with traffic-demand management measures introduced to ensure a good walking environment. The implementation of one primary rural centre within each district is therefore recommended to allow economic and development balance between the urban and rural centres. The primary rural centres should be located where growth opportunities are feasible owing to land availability for expansion.

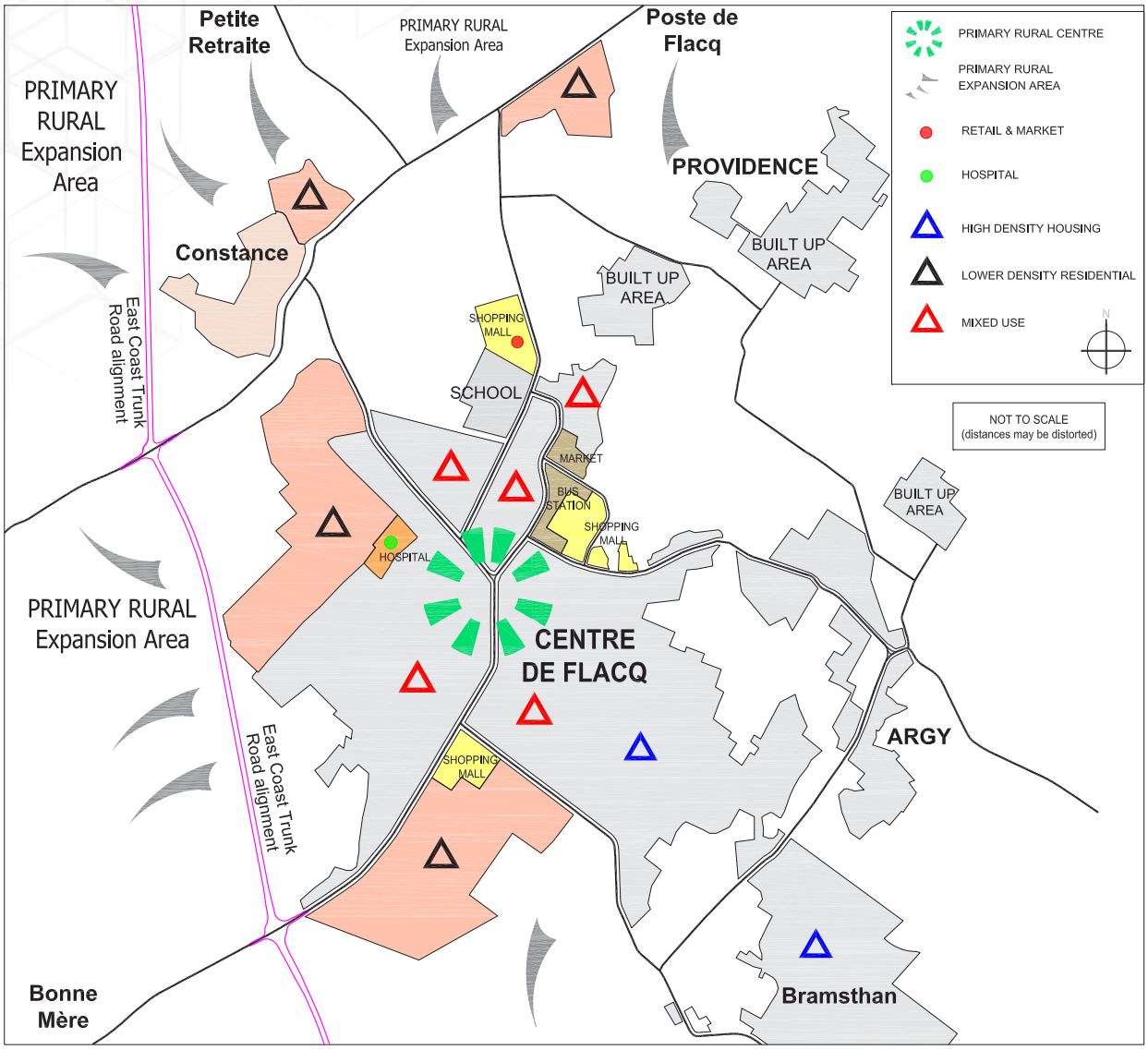


FIGURE 9 TYPICAL LAND-USE MIX IN PRIMARY RURAL CENTRE AND ITS EXPANSION AREA

5.3.7 Rural centres

Rural centres will have a typical walking catchment of around 200 metres but a much wider catchment for cars and public transport. The centres are important focal points for the settlement and surrounding rural catchment. They will typically have small office and commercial premises, including retail, together with small scale healthcare. A public space or local park will typically be provided. In some instances, a small market will be provided with an emphasis on selling local produce. Rural centres are not specifically identified in the NDS but will expect to be identified as part of outline planning schemes. Typically the region of Labourdonnais in the north of the island with its integrated planned developments consisting

of schools, a business park, residential areas and retail units around the Chateau de Labourdonnais would be a good illustration of a rural centre In order to achieve the proposed integrated living development, encouraging the minimisation major costs through compulsory acquisition, consultation and participation.

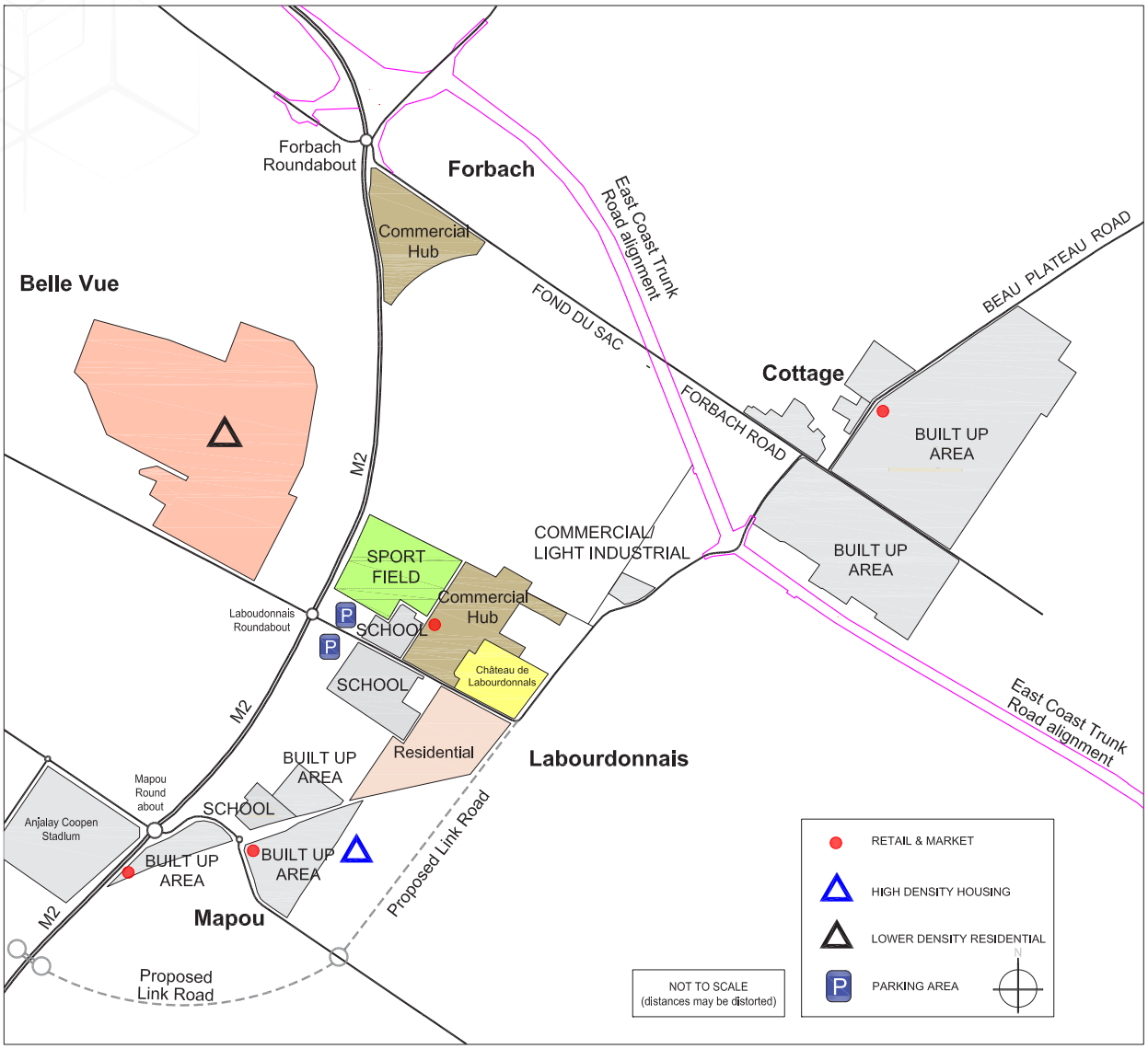


FIGURE 10 TYPICAL LAND-USE MIX IN RURAL CENTRE AND ITS EXPANSION AREA

5.4. Consolidation and intensification of the conurbation alongside strategic urban expansion

Mauritius has a population density of around 641 persons per square kilometre, placing it in the top ten most densely populated countries in the world. There are variations in density across the island, with over half of the population living in VCAs covering less than 12% of the total land area. A reduction in average household size, together with a fall in population, will result in a fall in density in urban areas unless sensitive intensification and infill is achieved. The strategy objective is to retain population density in urban areas through smart redevelopment of underused sites whilst enhancing the public realm. Metropolitan and urban centres will play key roles in meeting this objective.

Continued urban regeneration is necessary, building on the opportunities created by the enhanced connectivity in the conurbation. Where public transport access is high in the conurbation, new additional special use zones may be identified.

5.4.1. Continued renewal of Port Louis

Port Louis has seen significant investment in the waterfront area with the development of Le Caudan and cultural venues. Further development of Les Salines is proposed, bringing increased residential opportunities to the capital city. Port Louis therefore has the dual benefit of being the country's capital city but also harbouring the island's main waterfront. The waterfront should be enhanced and not merely considered as a structural element of Port Louis. The Port Louis Waterfront should be considered as forming part of the harbour cluster and requires wide ranging strategic measures so as to fully exploit cultural, tourist, economic and productive capital. Review of boat mooring and parking from Albion Dock to Bain des Dames should be given due consideration with a view to freeing up space around the Aapravasi Ghat World Heritage Site and creating potential space for marina development whilst preserving the character and respecting development guidelines around the Aapravasi Ghat World Heritage Site.

Less successful has been the renewal of the central business district (CBD) around Edith Cavell Street, with many sites still vacant and underused and with many historically significant buildings in poor condition. Consideration should be given to repurposing such underused infrastructure and buildings into residential accommodation in the city centre. Where freehold landowners are involved and to minimise compulsory acquisitions, public-private partnerships (PPP) could be envisaged thereby tapping on private sector funding and know how. The significantly enhanced connectivity by virtue of the metro provides a renewed catalyst for the regeneration and revitalisation of Port Louis. Investment in public realm and public space is needed, together with improved air quality and pedestrian connectivity through the city's relatively compact core.

The continuing market demand for offices in Port Louis CBD will be met through the regeneration of older sites whilst maintaining the capital's cultural heritage. Port Louis will continue to be promoted

as the principal centre for Government administration and culture and leisure entertainment, alongside the emergence of other metropolitan centres and the renewal of urban centres. For the continued sustainably and growth of Port Louis as the country's capital city, review of the Landlord and Tenant Act is required to allow market forces to operate, prevent de-urbanisation and gradual exodus. The construction of an urban terminal and metro station opposite of the Waterfront offers an exceptional opportunity for urban regeneration over a walking catchment of 200 hectares, providing the legal frameworks including the Landlord and Tenant Act, as may be amended, creates a conducive environment.

5.4.2. A diversified Ebene

The intensification of office space and jobs at Ebene Cybercity should be combined with a diversification of land use, to include residential and further retail units, together with community facilities such as healthcare and multi-modal public transport accessibility. A planned economic growth centre at Côte d'Or/Trianon will be part of a mixed-use development masterplan that complements and supports Ebene Cybercity, creating an extended metropolitan centre over the plan period.

5.4.3. Sustainable urban expansion

It is anticipated that the strategic land use and transport extension of the conurbation eastwards, to integrate the planned growth at the Reduit Triangle, Trianon and Moka regions will accommodate much of the major urban growth for the metropolitan centres. With the advent of the Metro Express currently along the Curepipe – Port Louis alignment, the use of such a mass transit transport system should be favoured thereby reducing pressure on the existing road network. To ensure the Metro Express' long-term sustainability, in view of its potential future expansion routes, high density mixed use development in urban expansion areas along or near the metro corridor and stations and close to major interchanges should be favoured. Further expansion of the Metro Express to other parts of the island including the airport is proposed to ensure that most of the conurbation population is close to key employment, health and education centres.

5.4.4. Accommodating new economic opportunities

Within the conurbation opportunities for new economic activities, such as data technology parks and MSME incubator and innovation sectors, jobs linked to transit-oriented developments will be promoted. Further commercial development at existing retail malls needs to be considered in the light of the opportunity they could offer as potential anchors for their existing offers in retail and leisure. Access to public transport is also key to ensuring the malls are accessible to all, with priority given to those sites with good public transport connectivity.

On-going upgrading of the international port's capacity and development of commercial activities will require the need to safeguard strategic access and enhance storage, warehousing and distribution facilities and networks. Ensuring resilient strategic connectivity to the port in Port Louis, whilst reducing

the impact of heavy goods vehicle movement on the urban environment of the capital city, is a key challenge for the country.

5.5. An island of neighbourhoods

The neighbourhood unit will be used as the main structural component of all settlements, formed around the planned hierarchy of centres. The conurbation will be made up of many highly-integrated neighbourhoods, most of which are well defined by those who live there, recognising that the conurbation is made up of numerous settlements that have expanded, may further expand and coalesce. Typical neighbourhood size is between 50 and 100 hectares or five to seven minutes' walk from the edge of the neighbourhood to the centre. Greater emphasis will be placed on creating neighbourhoods that meet the increasing demand for better quality lifestyles for the population, through the provision of a range of public services and community facilities. These will include:

- Retirement homes and integrated public health support services for seniors.
- Designated and safe access for the disabled.
- Improved and enforced traffic/demand management measures to control traffic congestion and indicate parking space availability at the conurbation entrance using display panels.
- Minimising noise and air pollution.
- Enhanced bus services and revamped mixed-use terminals in the main towns and rural centres.
- Upgraded, well-lit, safe and convenient public footpaths, resting places, good signage, CCTV along main arteries, street furniture and public conveniences.
- Usable green space and streetscapes with plant-a-tree promotion schemes led by community-based NGOs.
- Utility infrastructure to sustain town centre attraction and viability, such as effective year-round area-wide drainage networks, effective PPP-led solid-waste management regimes, joined-up pedestrian pavement networks and safe street initiatives involving street and pavement lighting, safe crossing points, community-based public art and urban townscape improvement programmes.

More flexible zoning at the local planning level to enable more compact forms of mixed-use urban lifestyles especially for single people, seniors, single parent and small families, will be encouraged provided the proposed site for development is acceptable on planning and environmental grounds.

5.6. Revitalisation of rural communities

The polycentric spatial structure extends to the rural area, recognising the important role that rural areas and villages have in providing employment, health, education and other social infrastructure for the rural population. The spatial structure is based on the hierarchy of centres set out previously in this section.

There is a need to recognise the tension that exists between the strong pull of the conurbation for employment versus the strong community ties that often exist in rural areas. This presents challenges

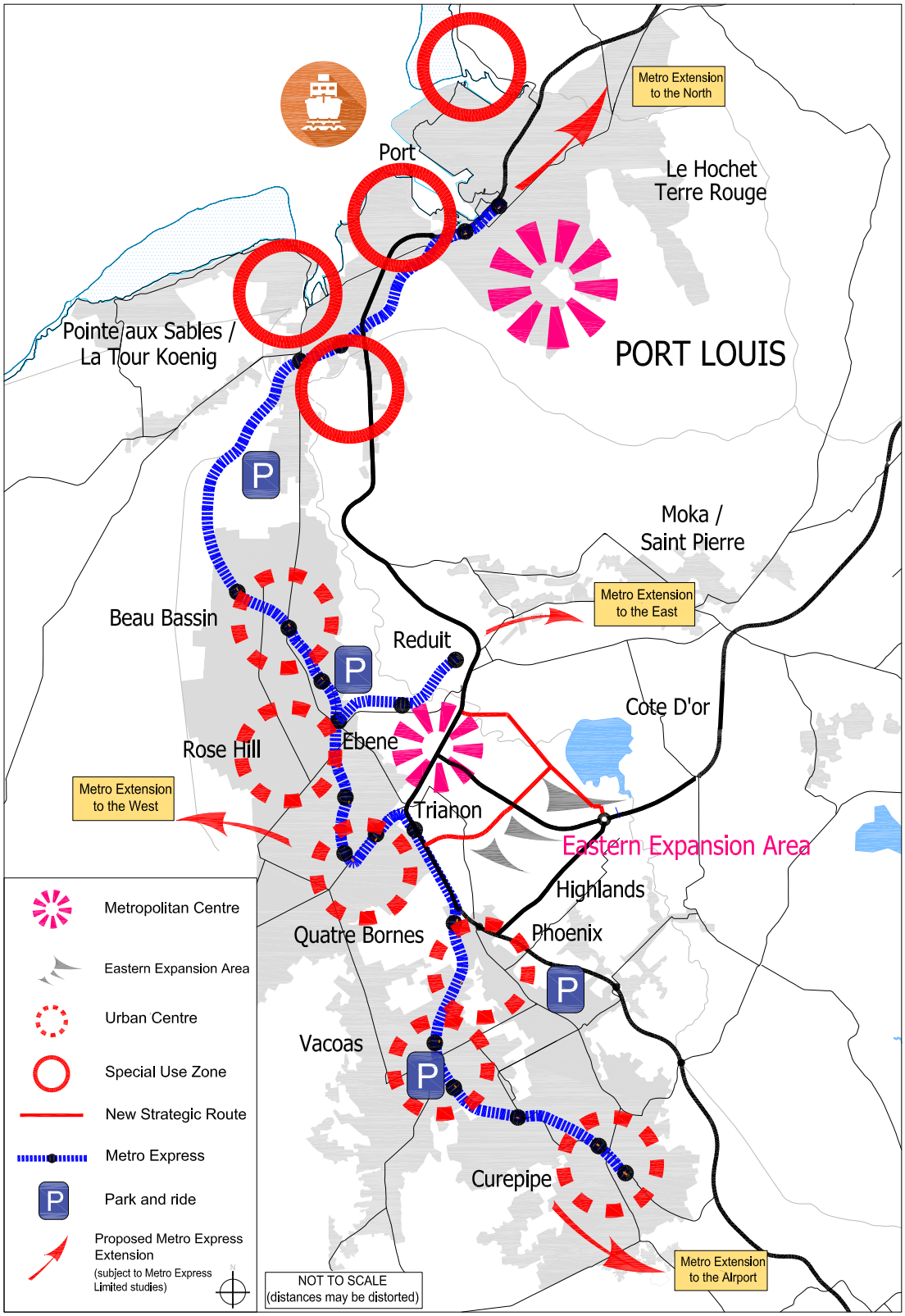


FIGURE 11 CENTRES FORMING THE BASIS OF NEIGHBOURHOODS

to the cost-effective provision of public services to low-density rural populations. Because of relatively low demand in such low density rural areas, improving the quality of public transportation services between rural area homes and conurbation jobs will nearly always require increasing the economic attractiveness of such rural locations to eventually increase ridership numbers. Increasing the range and scope of economic opportunities in rural areas, such as innovative agri-tech and eco-tourism MSME, is therefore a key strategy to enable residents to work closer to home and ensure that rural areas and villages do not become dormitory settlements. To that effect, and to ensure the economic prosperity and viability of rural communities, there should be a general presumption in favour of development on the edge of, but outside defined settlement boundaries, provided such development proposals have access to transport links, utilities, services and facilities and do not impinge on natural systems.

Increasing economic opportunities in rural areas may also be supported through the Government's "innovation-led and technology-intensive" agenda, to create dynamic clusters of productivity and competitiveness. This will be combined with the integration of existing communities, social facilities and utility networks, to ensure equitable opportunities and development for all. Inclusive growth and consolidation of residential, commercial and tourism clusters in, for example, the North (Mon Choisy/ Grand Bay/Perybere) and West (Flic en Flac/Black River/Tamarin) will therefore need to be met by counterbalancing strategies for the East and South, for example at Centre de Flacq/Belle Mare/ Trou D'Eau Douce and Blue Bay/Mahebourg/Grand Riviere SE.

Development in the rural areas needs to be coordinated and focused on primary rural centres and its surroundings where land is available for expansion to ensure an efficient provision of social and physical infrastructure. Rural centres will also have a role in creating appropriate opportunities for commercial development based around MSME and innovative companies. Focusing economic growth and the provision of higher level public services on key primary rural settlements will help sustain rural communities, whilst ensuring that the most highly regarded attributes of the rural environment and scenic landscapes are preserved and managed. It is important that sufficient land is identified for economic uses in each of the settlements, including strategic expansion where necessary. For primary rural centres, the development of larger business parks close to existing settlements, as at Rose Belle, should be considered.

5.7. Protecting the rural and coastal landscape

Poorly located and/or badly designed developments can each have detrimental impacts on the quality of the landscape either directly by degrading an important habitat or indirectly by spoiling an important view or landscape setting. To address this issue, the National Development Strategy proposes that release of strategic land for development be allowed only where acceptable on planning and environmental grounds or in the national interest.

By controlling and guiding the location of future developments, the National Development Strategy seeks to avoid the adverse fragmentation and change in scenic landscapes, particularly those

developments that put strain on the provision of public utilities and bus services, and which therefore become over-reliant on the use of the car.

As part of meeting Government commitments to the Paris Climate Agreement, the National Development Strategy supports the expansion of on-shore and off-shore renewable energy, subject to regulatory controls and procedures being holistically addressed. Reducing waste and increasing recycling is also supported by the National Development Strategy, through enhanced waste-management facilities and a reduction in the reliance on landfill.

There is a recognition that the prospects for major new tourism complexes and hotel resorts on large coastal sites are limited, with the likelihood that any new development would be more complex, expensive and environmentally sensitive to develop. In this regard, rebalancing tourism development pressures away from the fragile coastal environment in favour of promoting countryside-based eco-tourism and heritage tourism opportunities will be an important consideration.

Promoting the economic value of natural and built assets in rural and coastal areas through sensitive access and visitor facilities can form part of cross-cutting initiatives around environmental conservation and water management. There is a need to acknowledge the increasing costs of maintaining and conserving the natural environment, particularly wetlands and lagoons, and with these problems of sustaining the quality and quantum of the natural environment from invasive species, while meeting international obligations on biodiversity. To facilitate this process, the integration of marine spatial planning in public decisions for analysing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives should be introduced.

World heritage sites, national parks and mountain ranges are other examples of built and natural assets that require protecting, nurturing and proper management. The National Development Strategy promotes the sensitive renewal of existing tourism sites, supporting development that enhances the offer for tourists, whilst reducing the impact of tourism on the coastal environment and coastal communities. To that effect, it is proposed that the relevant planning policy guidance (PPG) is reviewed to promote inland tourism and allow for low density planned, sustainable and structurally sound and eco-friendly developments on sites offering sea views to a discerning and evermore demanding tourism market subject to other strategic policies..

The National Development Strategy promotes the balanced and sustainable use of the Pas Géométriques for environmental, economic and social benefit. Campement sites form a significant part of the Pas Géométriques and are therefore critical in delivering this strategy. Preserving access for residents to the coast and enhancing the quality of the coastal environment are key aims of the National Development Strategy.

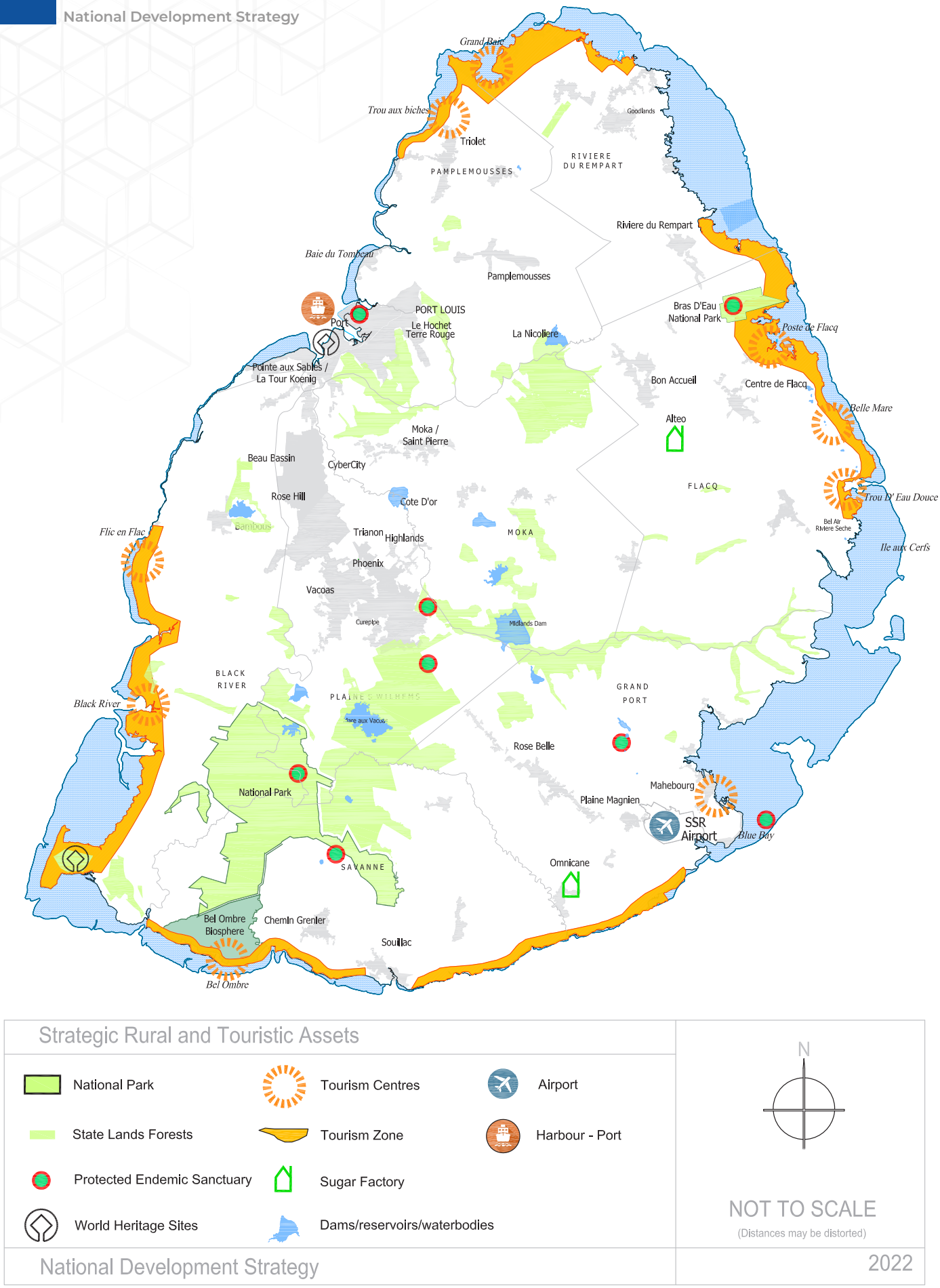


FIGURE 12 STRATEGIC RURAL AND TOURISTIC ASSETS

5.8. A connected island

Movement, including transport, is a derived demand. Every movement has a motivation or purpose – whether for business, education, leisure or social reasons. Each movement has a potential benefit. The movement and the benefit are generally not the same.

Connection is about the bringing together of people and places, and bringing about a connection with the associated benefit, but with a cost – in terms of time, resources and environmental impact. This is the transport process.

Transport can be a strategy, but also a driver that supports and facilitates other strategies. Therefore the NDS transport strategy, illustrated in Figure 13, works in sync with the drivers outlined in the key themes above. The transport strategy is developed and deployed as a key component in consolidation and intensification strategies in the conurbation and in the revitalisation of rural communities. At the same time, sensitive access can help protect rural and coastal landscapes, whilst maintaining the social benefits of accessibility for local visitors and the economic benefits of accessibility for international tourists.

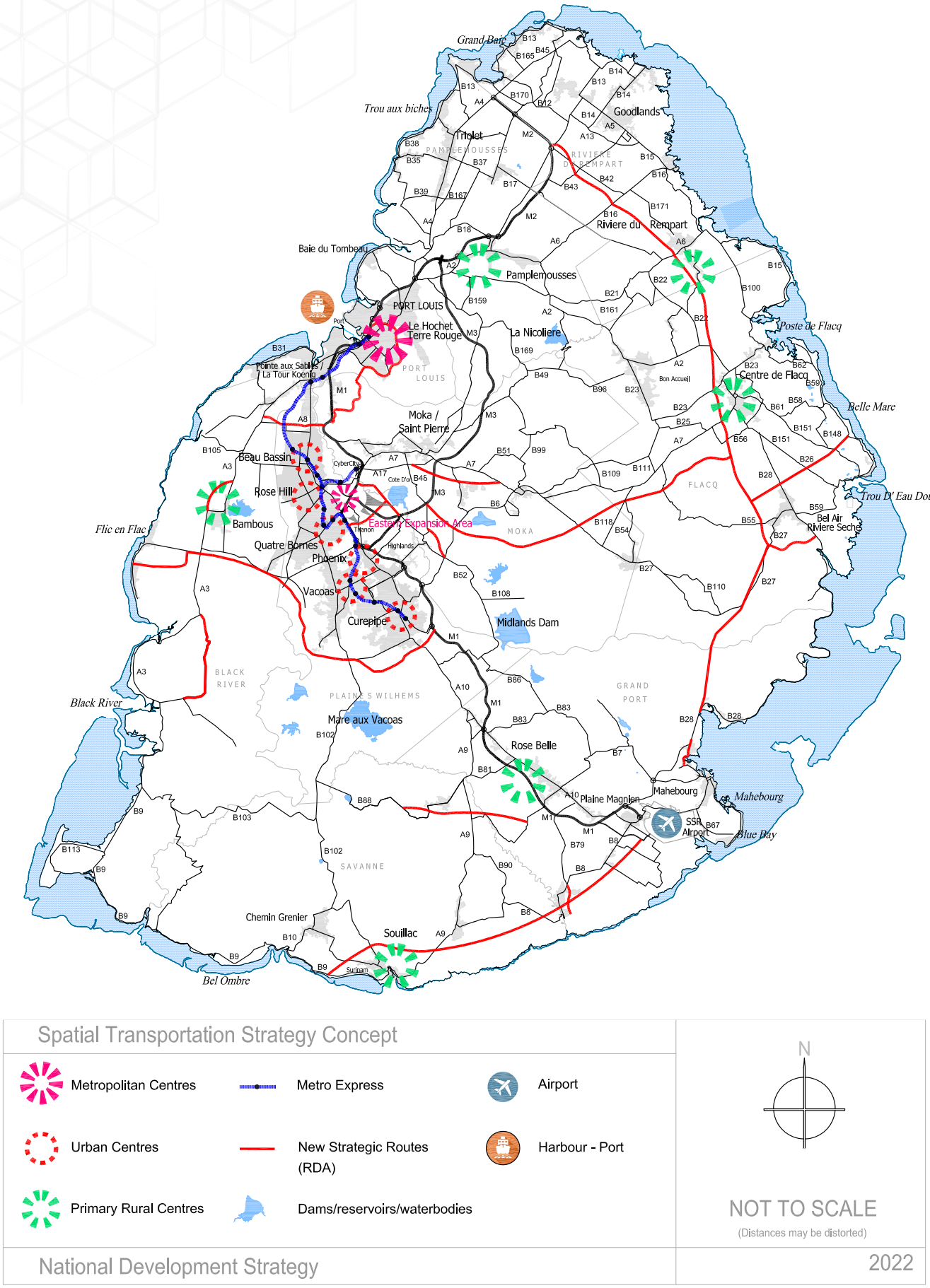
The island vision for connectivity works symbiotically with other themes, by providing appropriate and equitable accessibility and mobility for all communities – in an as environmentally friendly manner as is technically feasible.

The vision for transport and connectivity sees:

- transport strategy helping meet the country's contribution to reductions in greenhouse gases, reducing travel time and costs and consumption of non-renewable resources, helping achieve the benefits of transport more cost effectively, and reducing local pollution related to transport and its adverse health effects.
- a reduction in the need to travel and distance travelled coupled with measures to flatten peak hours and promote non-motorised transport as well as favouring mass modes of commuting, whilst maintaining the social and economic benefits of movement, for example including improving access to a range of house types for a variety of community groups.
- the expansion of the metro as the backbone of the public transport system.
- a super-fast bus network based on extensive application of bus priorities, working together with the expanded metro and delivering journey times equivalent to those possible by car.
- busy transit interchanges and terminals in every metropolitan, urban and primary rural centre, combined with land use intensification and passenger friendly transit-oriented developments.
- safe, green and pleasant streets and open spaces – designed for relaxation, leisure and play as well as movement – forming part of an extensive pedestrian and cycle network in the conurbation and main rural settlements.
- island-wide green connectivity, creating healthy recreational opportunities for residents and international tourists alike.
- a highway network that supports rural re-invigoration but that protects areas of natural beauty and

conservation.

- a highway network that creates development opportunities for Port Louis in a way that enhances its international status and as a regional hub.



Spatial Transportation Strategy Concept

- Metropolitan Centres
- Urban Centres
- Primary Rural Centres
- Metro Express
- New Strategic Routes (RDA)
- Dams/reservoirs/waterbodies
- Airport
- Harbour - Port

N

NOT TO SCALE

(Distances may be distorted)

National Development Strategy

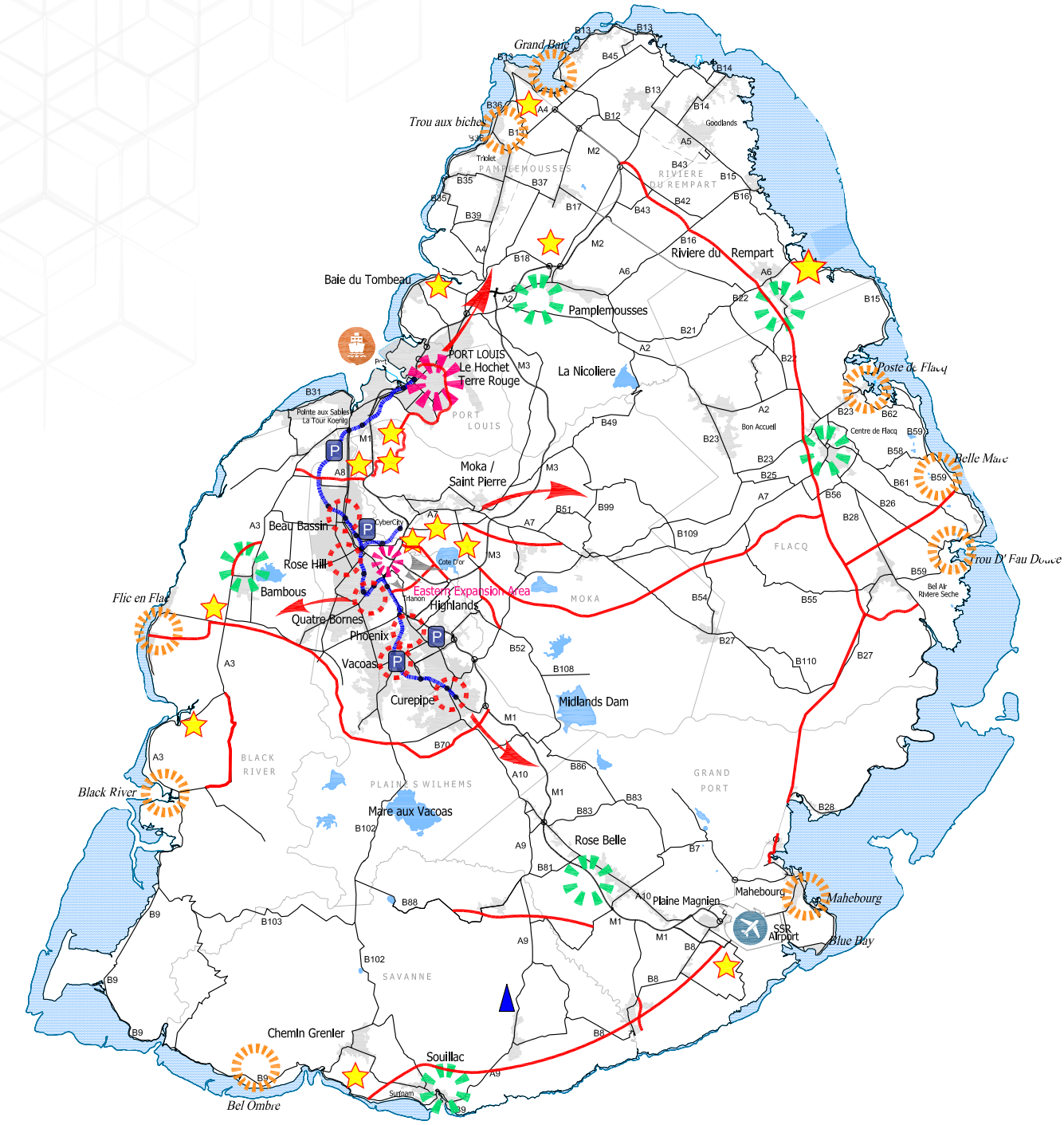
2022

FIGURE 13 SPATIAL TRANSPORTATION STRATEGY CONCEPT

5.9 Strategic spatial diagram

The strategic spatial diagram as illustrated in Figure 14, provides the overarching spatial strategy for the island of Mauritius, illustrating the key spatial features of the strategic policies set out in this chapter. The strategic spatial diagram illustrates the hierarchy of centres, from the two metropolitan centres and urban centres in the conurbation to the primary rural centres in the rural area. The centres will provide the focal point for employment, education, and retail and leisure activities, in both the urban and rural areas. A key challenge for the NDS is to protect the best of Mauritius whilst enhancing the quality of life for all Mauritians through continued economic development. Key zones where this balance is critical include tourism zones. The diagram also highlights the key strategic transportation proposals including proposed Metro Express extensions. The integration of land use and transportation planning is critical in order to provide better connectivity in the conurbation, between rural settlements and between the rural area and the conurbation. Also identified is the existing strategic transport infrastructure along with the key new roads as set out in chapter 10 to provide a better connected island.

The diagram is not a development control plan and boundaries should not be inferred through the scaling of the diagram.



Strategic Spatial Diagaram

- Metropolitan Centres
- Urban Centres
- Primary Rural Centres
- Tourism Centres
- Smart City Schemes
- Dams/reservoirs/waterbodies
- Park and ride
- New Strategic Routes (RDA)
- Metro Express
- Airport
- Harbour - Port
- Planned dam/reservoir
- Proposed Metro Express Extension (subject to Metro Express Limited studies)

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NOT TO SCALE

(Distances may be distorted)

National Development Strategy

2022

FIGURE 14 STRATEGIC SPATIAL DIAGRAM

6 CLUSTERED AND SEQUENTIAL GROWTH: TOWN CENTRES, RURAL CENTRES AND AND ADEQUACY OF HOUSING

The national spatial strategy put forward by the NDS remains consistent with the 2003 NDS, with the concept of clustered and sequential growth in the conurbation and major settlements in the rural areas and on the coast maintained.

However, the concept of urban renaissance zones found in the in the 2003 NDS has evolved and is now encapsulated in the concept of urban centres, whilst in the rural area, primary rural centres are identified to provide the focus for growth and investment there. Tourism zones and special use zones are maintained.

6.1. Urban Area

6.1.1 Town centres and the Conurbation

The Conurbation is the key urban cluster, providing the focal point for economic activity and provision of services. It is also home to nearly half the island's population. The Port Louis conurbation has seen significant investment in physical and social infrastructure, with the first phase of the metro system providing significantly enhanced connectivity. The opportunities presented by the development of Trianon and surrounding developments will provide space for much of the conurbation-driven growth anticipated in this plan period.

The future of the Conurbation lies in better guidance and management of new developments in a more balanced, sustainable and inclusive way, to address the key challenges that lie ahead. To produce a more compact and sustainable form of urban sequential growth, there is a need to revitalise traditional town centres to make them more attractive as hubs of community and social and cultural activity, where people can walk safely whilst shopping and enjoying a variety of leisure opportunities and local amenities. Complementary uses, such as apartments and accommodation for seniors, and environmentally-sound incubator offices and workshops, should be introduced to sustain sequential growth and help support the viability of an upgraded public transport system, particularly Metro Express, and enhanced public open space. In predominantly residential areas outside the centres, there is an urgent need to maintain and improve local amenities, particularly in the public realm, and to make housing areas pleasanter, safer and attractive places for people to live in and enjoy.

Urban centres benefit from an existing level of service and a strong sense of place to enhance their economic and social role. Quality of place, however, is a challenge in many of the urban centres, where competing demands on space often marginalise pedestrians with a loss of accessible footpaths and public spaces. Enhancing the built fabric through sensitive redevelopment and re-use of sites and buildings is required in many of the urban centres.

In summary the following key objectives for the Conurbation are proposed:

- Revitalisation of the capital city and town centres by introducing improvements to the public realm, innovative public transport and traffic management measures, as deemed suitable by the relevant ministry, upgraded storm water drainage networks, and a range of social, cultural and community facilities, to create more attractive, safer, accessible and inclusive urban environments in which to live, work, study and relax.
- Enhancement of urban environments and amenities by guiding new development proposals to the most sustainable locations, whilst conserving the amenity of cultural heritage assets, street patterns and neighbourhoods and promoting high-quality design for major developments and redevelopments.
- The National Development Strategy considers that Port Louis and Plaines Wilhems town centres should provide the focus for the social and economic life of communities. Developments should be favourably considered in such locations; in turn, this will attract large numbers of people. Such concentration of facilities should encourage more efficient and viable use of public transport and contribute to the viability of the Metro Express that links the capital with the Plaines Wilhems towns.

SP1 Urban regeneration and growth

At the strategic level, there should be a focus on development based on a hierarchy of mixed-use centres, with the economic hubs of Port Louis, Ebene-Trianon and Côte d'Or providing the catalyst for economic growth. In the conurbation, the urban centres should be the focus for urban regeneration, with a strong emphasis on connectivity, enhancement of the public realm and provision of mixed-use development.

Growth will follow a sequential approach and sites, which are capable of connection to existing utility supplies and transport networks, should be favoured before new greenfield sites and lands are considered or developed.

6.1.2. Regenerating towns

Town centres play a vital role in local communities, and should therefore be supported by planning policies and decisions which should adopt a positive approach to their expansion, management and evolution.

Local authorities are encouraged to apply a sequential test to development applications. Town centre uses should be preferably located in the town centres themselves, and thereafter at threshold locations; however if suitable locations are neither available nor expected to become available within a reasonable timeframe, then out-of-town sites may be considered.
When assessing applications for developments situated on the threshold or outside the bounds of

town centres, accessible locations that are already well connected to utilities and transport networks should be favoured.

Where a site is located within the planning area of a particular outline planning scheme, but is geographically located closer to an urban conurbation, the strategy of the adjoining OPS should be taken into account when assessing the merits of an application.

By contrast, the above-described sequential approach is not appropriate for the determination of applications pertaining to small-scale rural developments.

6.1.3. Brownfield developments: vacant, derelict or underused land

As urban areas evolve, it is inevitable that some uses will no longer be required or suited to their urban setting. With economic and social changes, land may become vacant or underused. For the successful evolution of an urban area, the re-use of this land is critical as new life is injected into a neighbourhood rather than vacant land becoming an eyesore and detracting from the qualities of the neighbourhood which, if left unchecked, can lead to longer term issues of blight and degradation. Along with the development of land, the revitalisation of derelict and underused buildings that can be redeveloped for alternative uses should also form part of the regeneration strategy.

SP2 Development of vacant, derelict or underused land

The development of vacant land or derelict sites within existing settlements should be encouraged, provided it does not lead to a reduction of urban green space or impinge on natural systems. The redevelopment of underused land will be encouraged if the planned scale and density of new development reflects its urban context.

Development that is out of scale with its context should not be permitted. A flexible approach to setbacks should be undertaken in urban areas where no-residential ground floor use is anticipated, provided the new development responds to the neighbouring built form.

The development of vacant or derelict land outside existing settlements should not be encouraged unless:

(1) the site is capable of connection to existing utility supplies and transport networks or can be connected without unacceptable public expense, and
(2) development commitments have been issued by authorities, or
(3) the site forms part of a Government approved scheme, and
(4) conforms to planning and environmental policies.

New development will be required to meet design guidance as set out in planning policy guidance.

With land as a finite resource, it is important that land is re-used for a positive purpose, whether that be social, economic or environmental. Land within existing settlements already benefits from many sustainable requirements, such as access to transport links and utilities, or services and facilities typically found in settlements. By re-using the land for development, this reduces the requirement for new greenfield sites to be developed in the rural area. It is however important that the re-use of land is done sensibly, with the new land use(s) being compatible with the urban context. The design of the development, whilst seeking to provide viable development, should also have regard to the density, scale and height of the surrounding development. Where open space formed part of the previous use, this should be retained or replaced as part of the redevelopment in accordance with Government standards of provision and biodiversity commitments. Co-ordination and consultation with freehold landowners will be necessary in order to implement this strategic policy whilst minimising compulsory acquisition.

6.1.4. The specific case of the capital city

Port Louis is due to remain the primary location for government administration and leisure, despite the emergence of Ebene Cybercity and the potential of Côte d'Or-Trianon. Although, it has seen competition from malls reduce its importance for retail and office uses, it remains a key location for both uses.

Congestion is still a problem in central Port Louis. Heavy goods vehicles accessing the port, as well as heavy industry around Port Louis also detrimentally impact the centre's physical environment.

By contrast, the metro provides clean, convenient access from the central part of the conurbation. Proposals have been made to extend the system further, which will consolidate the capital's future role as the hub of urban growth.

The renewal projects around the waterfront has brought new life into the central area, introducing new retail, hotel, leisure and entertainment, residential and commercial space to the area. It is important that this process continues through key urban renewal projects, such as the continued redevelopment of Le Caudan and the Victoria Urban Terminal, the renewal of Immigration Square in a manner that respects and preserves the Aapravasi Ghat World Heritage Site and the mixed-use Les Salines development project that incorporates the port's new cruise line terminal.

The unique setting and architectural quality of central Port Louis requires protecting from neglect and insensitive development. The tourism potential of Port Louis as a city of cultural and historical significance is not being fully exploited and this remains a challenge and opportunity both for Port Louis and the wider tourism sector.

For the continued sustainability and growth of Port Louis as the capital city and to counter-balance de-urbanisation trends, the construction of a second urban metro terminal opposite the waterfront offers a further opportunity to consolidate downtown urban regeneration over a walking catchment of 200 hectares, provided the legal frameworks create a conducive environment.

The role of Port Louis is changing, with a need to reverse the loss of population by providing a different housing offer. Building on the enhanced connectivity of Port Louis by the metro is vital for the capital city and the long-term success of the light transit system. Reducing the impact of cars and heavy goods vehicles is critical to enhancing the quality of the environment.

Retaining and enhancing the office sector can create a different offer for companies, with the historic fabric, capital city address and landscape setting creating the potential for a prestige environment. To fulfil the potential of Port Louis as a key economic driver, cultural destination and liveable space, there is a need to enhance the physical environment of the central area and waterfront. Connecting the central area to the waterfront is vital in bringing various opportunities together, particularly with the continued development of the waterfront for retail, culture, leisure and residential uses.

SP3 Protecting and enhancing the role of Port Louis

Port Louis should continue its regeneration with further enhancements to its urban environment, to fulfil its role as the nation's capital. It should continue to provide the location for most of the nation's key economic, governmental and cultural institutions.

The following policy actions are seen as critical to the successful renewal of Port Louis:

- Integrated redevelopment of the waterfront, including Le Caudan, Aapravasi Ghat and Les Salines development and its surroundings.
- Redevelopment of Immigration Square and the urban terminal area, and enhancement to Place d'Armes, connecting the city centre back to the waterfront.
- Renewal of urban fabric (buildings and public realm), including the protection and re-use of historic buildings and redevelopment of buildings in poor condition.
- Reducing the dominance of traffic, in particular heavy goods vehicles.
- Enhancing connectivity for pedestrians and light electric two-wheelers or three-wheelers, particularly to the waterfront.
- Review of boat mooring and parking from Albion Dock to Bain des Dames with the aim of freeing up space around the Aapravasi Ghat World Heritage Site and creating potential space for marina development whilst preserving the character and respecting development guidelines around the Aapravasi Ghat World Heritage Site.
- Repurposing suitable infrastructure and buildings into residential accommodation in the city centre through public-private partnership (PPP).

6.1.5. The Ebene-Trianon-Moka Region and Eastern Expansion Area

Ebene Cybercity has played a critical role in helping to diversify the Mauritian economy, providing a focal point for the expansion of financial and administrative services. There are a number of vacant sites within Ebene that provide opportunities for further development. In addition, there are opportunities

for the better use of land on existing sites through well-designed and integrated infill development, to further support its role as a primary employment centre. A key objective for Ebene is to improve it as a place for work and leisure through the expansion of commercial services and public facilities that workers can access either before, during or after work.

With major mixed use development opposite the Ebene Cybercity, owing to its geographic location and connectivity to the Ebene interchange, and future interchange connecting the M3 to Hillcrest, the Trianon region is called upon to develop as well. The National Development Strategy recommends that the Trianon - Moka region be developed as a mixed use area to provide a work, live and play environment. Trianon and its surroundings are the primary/largest urban expansions identified in the previous National Development Strategy.

Trianon and its surroundings are designed around a series of mixed-use centres and will play a key role in achieving the Government's vision for sustainable economic development, by accommodating MSMEs specialising in research and development, regional education, healthcare, and sports facilities, leisure attractions, offices, data-tech centres and retail offerings, as part of the development of a series of new housing neighbourhoods.

SP4 Supporting the growth and diversification of Ebene and the Eastern Expansion Area

Further development of Ebene Cybercity and Trianon together with other key developments in the Eastern Expansion Area, should be pursued alongside enhancements in public transit accessibility and public realm provision for cyclists and pedestrians.

The following policy actions are seen as critical:

- Densification and diversification of land uses in Ebene Cybercity and its immediate surroundings, with an emphasis on the development of hotels, apartments, retail, leisure, cafes and restaurants, and personal services.
- Further expansion of the metro line into the Eastern Expansion Area.
- Enhanced public realm in Ebene with a focus on providing a safe and accessible network of footpaths and cycleways with connections to neighbouring developments.
- Provision of public transit connectivity to Trianon and Moka, providing stations at key centres along the route.
- Development of Trianon and Moka in a manner that upholds the core principles of sustainable development, whilst responding to the emerging market and economic development strategy.
- Integration of other residential and mixed use developments in the Eastern Expansion Area to ensure that investment in public transport and facilities is optimised, whilst ensuring a broad range of housing is provided.

Ebene Cybercity has emerged as a key hub for financial and professional services in Mauritius. Its economic success has led to both international and national companies setting up offices in Ebene but this rapid growth has created connectivity and access issues with the surrounding motorway network, as well as problems of internal congestion, public transport availability and pedestrian safety and comfort. While vacant plots accommodate overspill car parking, buses are often full at peak times, get caught in the congestion and are not generally available in the late evening. Enhancing bus connectivity through bus priority lanes and junctions is necessary, and a key priority in the medium-term is achieving connectivity to the metro system through a new line and station at Ebene.

Partly due to non-availability of buses out of office hours, the city is largely dormant, with limited residential or leisure activity in the form of snack outlets, restaurants or bars. Diversifying Ebene's offer to create a true mixed-use centre will be its biggest challenge going forward.

The Eastern Expansion Area aims at promoting such diversification with mixed use development serviced by adequate public transport and infrastructure to ensure a cohesive and sustainable living environment. Moka Smart City for instance has been masterplanned with firm proposals in place to add a series of employment parks, education hubs and mixed-use centres. It has been developed based on established urbanism principles that provide a series of highly-connected centres, surrounded by walkable residential neighbourhoods. Access to the conurbation by high-quality public transit may include an extension to the metro system.

The Trianon region, opposite the Ebene Cybercity, already houses a number of commercial developments including a retail centre, a convention centre, an events hall, office buildings, apartment projects and warehousing structures. The Trianon region is a natural expansion to the Ebene Cybercity owing to its connection to the existing Ebene interchange and future link onto the M3 interchange connecting to Hillcrest. Trianon therefore has high potential to maintain the economic growth of the region and employment opportunities. Connection to the metro system in the medium term is thus recommended. Future extension of the metro system eastwards will ensure that new neighbourhoods are developed with excellent public transport connectivity as a key design principle.

6.2. New planned communities

New planned communities are likely to be anticipated in or close to existing settlements. For these new planned communities, there is a need to provide a settlement structure that is based on principles of high-quality, walkable, self-sustaining neighbourhoods served by public transport.

SP5 New planned communities

New communities should be masterplanned with the aim of becoming self-sustaining over the plan period and integrated into existing settlements as much as possible. They should cater for:

- Mixed-use walkable development to serve the needs of the new community and existing neighbouring communities, by optimising local employment opportunities linked to the site's economic potential and having regard to national economic drivers and priorities.
- High standard landscaping incorporating adaptive re-use of existing site buildings and utility services.
- Safe and convenient pedestrian, cycle and public transport infrastructure, with high levels of connectivity to existing settlements and movement networks.

Consideration should be given to the policies contained in the urbanism chapter of the NDS and guidance contained in the PPG.

Large scale residential developments do not meet the day-to-day needs of residents with regard to access to local jobs, social infrastructure and convenience retail. But they increase dependence on the private car for most trips. On the other hand, mixed-use development built around a defined centre, where feasible, creates a sense of place and community, enhancing the liveability of the development and enabling integration into the wider urban fabric as new facilities made available to existing residents.

Each major new planned development has the potential to enhance Mauritius' overall built capital, as well as expand the range of local employment opportunities to sustain community livelihoods by re-orienting local skills through continuous learning to meet new needs. It is therefore important that new development responds to a locality's architectural and heritage character and its landscape setting, as well as a site's climatic conditions. Whenever feasible, landscaping and open-space provision should beautify the site and contribute to the island's biodiversity of the Island.

Mixed-use walkable developments create opportunities to reduce the need to travel by car. This is only possible if pedestrian facilities are provided throughout developments and cycle facilities along the main arteries, with a particular emphasis on the provision of safe routes and junctions. The impact of cars should be minimised throughout new developments, through slow design speeds, reduction of crossroads and car parking either screened or set as part of landscaped streets or courtyards.

Planning Policy Guidance contains more detailed information that forms part of the planning toolkit. It is therefore imperative that requirements and guidelines are met as far as practical and that planning policy guidance itself is kept up to date

6.2.1. The concept of lifetime neighbourhoods

Dwellings and the neighbourhoods in which they sit should be adaptable so that they can meet the needs of residents as they go through life. The principle of lifetime neighbourhoods means that residents are not forced to move away from their communities to fulfil a comfortable and meaningful life. The same design ethos can enable those with physical impairments to also remain in their communities through implementing inclusive or universal design principles. These principles ensure that people of all ages and abilities can access buildings and spaces with ease, moving around the streets in safety and comfort.

LN1 Lifetime neighbourhoods and inclusive development

New development should be integrated into the surrounding neighbourhoods, so that people can easily access social and community infrastructure, green spaces, blue/green corridors and public transport. Public spaces should be provided to enable people to live active, healthy lives and to promote social interaction for all ages.

The public realm should be an inclusive environment suitable for all modes of non-motorised travel, including pushchairs and wheelchairs. Buildings should offer step-free access with minimal ramps and accessible entrances. New development should aim to meet best international practice for inclusive and universal design.

In new planned communities, provision should be made for designated parking and safe accessibility for disabled persons.

Successful neighbourhoods are characterised by the provision of a range of social and community facilities that support the day-to day-lives of residents and provide focal points for community interaction. At the neighbourhood level, these are typically schools, leisure and sports facilities, and open spaces. It is often difficult for new developments to justify the provision of some or all these facilities due to the limited size of the development. It is therefore important that new developments are integrated into the existing built fabric so that residents can access the facilities. Likewise, larger developments, such as smart cities are often of a scale that can justify the provision of new facilities. Where this is the case, these facilities should be located so that they are accessible to both new residents and existing residents of neighbouring communities.

The needs of residents change through their lifetimes. By providing a range of facilities and ensuring that the public realm is accessible to all, neighbourhoods can continue to serve their residents throughout their lives without them having to relocate, losing important social ties to the neighbourhood. An accessible public realm enables access to all regardless of ability. As such particular attention should be provided to ensuring adequate physical, technological, information, communication, economic and social access to all during the early stages of planning and implementation of new developments.

6.2.2. Strategic gaps

In combination with medium and high-density neighbourhoods, there is a need to provide space for nature within urban areas. These strategic gaps provide opportunities for residents to visually and physically connect to nature and the countryside, providing opportunities for exercise and well-being. The gaps are often based on natural eco-systems, which can assist in managing water systems to prevent flooding whilst also providing wildlife habitats and green and blue infrastructure corridors.

SP6 Strategic gaps

Strategic gaps shall be protected from built development by preserving river valley buffers, local hills, linear green/blue landscape features and nature-based networks that connect the urban area to the countryside except where development commitments have been issued by authorities and form part of Government approved schemes. This should be done by:

- safeguarding appropriate open land from built development
- preserving and enhancing landscape and open space features throughout the urban environment
- retaining open spaces between settlements where warranted.

Strategic gaps should be identified in updated outline planning schemes (OPS).

Continuous urban development provides little opportunity for nature or access to natural environments. Natural systems should not be disrupted and undermined especially as the impact of climate change is being felt more than ever. The provision of strategic gaps promotes the integration of green and blue networks as an integral characteristic of Mauritian towns and cities. The quality of river valleys is thus protected. This provision can be extended to the wider environmental and social benefits of providing access to nature.

Strategic gaps can play a key role in creating distinction between settlements so that they retain their character and sense of place.

6.2.3. Mixed-use developments

A key part of the spatial strategy is the provision of walkable neighbourhoods. Mixed-use development can support sustainable principles of reducing the need to travel whilst providing a focal point for neighbourhoods.

Policy SP7 encourages mixed-use development in metropolitan, urban and primary rural centres as well as their respective expansion areas subject to consideration around public transport accessibility and impact on neighbouring properties. Mixed-use development can make a contribution to a more sustainable land use pattern by reducing the need to travel and creating opportunities for linked trips by providing work, retail and leisure opportunities close to where people live. It also fosters social inclusion by making it easier for people to access jobs and services without requiring a car and with an enhanced public transport network, enabling better connectivity to other parts of the island.

SP7 Mixed-use developments

Mixed-use developments will be encouraged in metropolitan, urban and primary rural centres as well as their respective expansion areas well served by public transport, particularly with connecting links to urban and rural terminals. Developments should have regard to the existing building context in terms of density, height, massing and materials.

Mixed-use development also improves the viability and vitality of centres, benefiting residents through better choice and range of services and facilities, and by creating a larger catchment population for commercial activities. Well-designed developments, which consider the existing building context in terms of density, height, massing and materials, can make metropolitan, urban and primary rural centres as well as their respective expansion areas more attractive places to live in and visit. Increased residential population creates activity in the evenings and at weekends, providing a vibrancy and natural form of security otherwise missing in large single-land-use commercial locations. Mixed-use development is also more efficient in the provision of physical infrastructure, where roads, footpaths, open spaces and utilities are used more effectively throughout the day and week.

6.2.4. Urban centres

Urban centres will continue to play an important role in the provision of goods and services for large parts of the conurbation despite the proliferation of out-of-town shopping centres. With increased competition, it is important that the mix of uses remains relevant to those who live and work near the urban centres and provides public realm that is safe and accessible.

SP8 Urban centres and retailing

The location of major new retail should be based on the sequential approach with priority given to metropolitan centres, including the Eastern Expansion Area and the urban centres. Active frontages should be retained in existing centres, with a focus on improving the pedestrian environment and providing improved access to car parking and public transport. Where major new retail has been developed in out-of-town sites, consideration should be given to making them more accessible on foot, by cycle and public transport.

The urban centres within the conurbation have traditionally been the focus for shopping, because these locations were well-served by a variety of transport modes including buses. However, the combination of increasing town centre traffic congestion, lack of public parking and a related deteriorating pedestrian ambience have conspired to motivate the development of free-standing convenience food stores and retail parks. Since 2003 the trend towards peri-urban and out-of-town locations has seen the development of new malls along the motorway and the expansion of older malls, with many located close to the motorway. In addition to the retailing stock at La Croisette on the M2 near Grand Bay in the North, Bagatelle on the M1 near Moka in the centre and Bo'Valon Mall near Mahebourg in the Southeast, intensification and consolidation at existing commercial complexes has also occurred amongst others, at La City/Trianon on the M1 near Quatre Bornes, Jumbo on the M1 at Phoenix, and Super U at Centre de Flacq on the A7.

These significant developments, although expanding the range of consumer choice (mainly for those with access to personal transport), has drawn trade away from existing centres' retail and other related activities, which over time, as experienced elsewhere, can lead to town centre decay and loss of investment. In this context, the Government's significant intervention in implementing the Metro Express Light Rail Transit (LRT) service can be seen as a positive step in contributing and enhancing the vitality and viability of existing town centres. In recognition of this initiative, there has been a counter-trend more recently towards in-town retail developments serving local consumers, e.g. Intermart serving Ebene Cybercity and Winners serving Candos and nearby Victoria Hospital in Quatre Bornes. The policy will continue to support retail investment in urban centres, including redevelopment and densification of sites in and around existing urban centres, particularly around metro stations.

To compete with large malls, urban centres need to provide a high-quality public realm with convenient car parking options.

6.3. Rural regeneration

The rural areas in Mauritius serve many purposes. But land is still dominated by agriculture and in particular sugarcane cultivation. However, over the years, rural areas are becoming increasingly urbanised.

Rural poverty remains an issue, with residents in rural areas more likely to be in lower-grade employment or unemployed than their urban counterparts. Rural isolation is an issue for those without access to a private car, with travel times to employment centres in the conurbation being often more than double that of a private car. Hence opportunities should be provided to rural areas to create comparable economic chances.

Agriculture has changed from being a Mauritian industry to becoming part of a small-island-development-state industry and is now part of a global industry. Aware that agriculture, the primary process in the food-chain, needs an effective processing component supported by efficient marketing structures if it is to maintain returns, farmers, growers and fishers have come to terms with being part of a demand-oriented market and are now sensitised to producing what customers want rather than what they themselves want to produce. There is also now the drive to become as self-sufficient as possible in what is consumed and so become more independent in terms of food supplies.

Planning policies and determination should have the following objectives:

1. Sustainable growth and expansion of all varieties of businesses and trades in rural areas, whether by way of repurposing existing buildings or through the development of well-designed new buildings
2. Growth and diversification of land-based rural businesses including in particular agricultural activities
3. Sustainable rural tourism and leisure developments that blend into the character of the area;
4. Preserving and increasing accessible local services and community facilities, including local retailers and shops, meeting venues including sports facilities, village squares, and cultural and religious edifices.

It is likely that sites required to meet local business and community requirements in rural zones may need to be sought on the threshold of or outside existing settlement areas, where public transport may be deficient.

6.3.1. Rural regeneration and growth

In future, attractive and diverse rural regions can offer major competitive advantages to realising high-end growth in accordance with Government policy. The regeneration of rural areas can be distinctive, offering authentic landscapes to nurture high-end working and lifestyle environments, as well as producing high-quality foodstuffs as alternatives to sugar and helping achieve food self-sufficiency.

SP9 Rural rehabilitation

To encourage the renewal of run-down parts of towns and villages, rehabilitation will be permitted where buildings are no longer required for their original purpose and/or intensification of the site would not harm the local context. New development should be capable of being served by existing infrastructure and facilities.

Despite rapid economic growth and programmes to enhance major villages, there remain parts of rural settlements that still require rehabilitation. Government funding initiatives, including the National Regeneration Programme, should be targeted to addressing issues in a comprehensive manner, looking at the overall liveability of the place. This may involve mixing funding initiatives to remove and/or rehabilitate blighted land and buildings, enhance social housing provision and improve public realm and service provision. The funding process accompanying strategic policy SP9 may be undertaken over a defined period such that it will be implemented on a medium to long term basis. Issues relating to freehold land ownership would also need to be given due consideration and consultation and participation favoured rather than compulsory acquisition.

SP10 Rural regeneration and growth

Rural regeneration and growth should be clustered in and around existing primary rural centres and rural centres, with the aim of stimulating community-based job creation, meeting local housing needs and providing the focal point for social infrastructure to serve the wider rural catchment. Major economic investment and higher order facilities should be located in and around the primary rural settlements in each district. New retail should be located based on the sequential approach, with priority given to primary rural centres and rural centres. Primary rural centres and villages should be promoted as walkable settlements with a focus on improving the pedestrian and cycling environment, with through traffic removed from centres where possible.

Opportunities for growth and integration of new residential uses in and around rural centres should be encouraged including areas where existing sites are being redeveloped or bus terminal redevelopment schemes are being promoted under the Government's National Regeneration Programme. There should be a general presumption in favour of development where major roads interface with primary rural centres and their surroundings.

On the edge of rural settlement boundaries, consideration should first be given to creating rural regeneration expansion around the primary rural centre, by converting and re-purposing agricultural sector legacy sites and buildings before new greenfield sites are identified, provided the proposed development would not detrimentally impact:

- The safeguarding of sites for State-significant development approved smart cities, Government approved schemes or, an environmentally sensitive area (ESA) as defined by

the Ministry of Environment, Solid Waste Management and Climate Change or a national protected area as defined by the Ministry of Agro-Industry, Food Security, Blue Economy and Fisheries (MAIFSBEF), National Parks and Conservation Service.

- The capacity of existing or committed transport and utility networks and services.

The creation of a national green infrastructure framework, which integrates scenic landscapes and other rural assets, agro-industry, authentic nature-based eco-tourism and educational tourism opportunities, can help facilitate sustainable development, improve quality of life and retain high-value innovative enterprises. In the rural areas, rural regeneration zones will be promoted in the strategic clusters of the primary rural centres. In these zones, there will be a general presumption in favour of mixed-use developments, taking into account a site's level of accessibility to highway, public transport and utility networks, its suitability for agriculture and its environmental and landscape sensitivity.

Unutilised lands and buildings in rural areas represent a waste of valuable resources and a missed potential for novel initiatives. Under the Government's National Agri-Food Development Programme, a centralised land bank will be organised to monitor land use and land-use changes, ensure food security, reduce dependence on imports and support the drive towards healthier lifestyles. It will also assist MAIFSBEF to manage land yields and other leased areas more effectively, to ensure compliance with the provisions of lease agreements.

Effective use of available land can include employment-generating initiatives in agri-tech to increase land productivity and sustainable production, and ensure food and nutrition security, bio-tech and biological inputs in production systems, and tools to address labour shortages, improve post-harvest life and minimise food wastage.

Opportunities for conversion of surplus land or underused agricultural sector legacy buildings should also be considered. Proposals to adaptively re-use sites and buildings outside primary rural centres and village centres to create rural conservation clusters should be permitted where they contribute to:

- creating community-based employment or sustaining local communities, skills and traditions
- enhancing safe and convenient access by a range of modes including public transport, walking and cycling
- providing sufficient usable open green space in accord with national norms and Government aims for healthier lifestyles and climate change mitigation.

Furthermore, and in order to reduce development and infrastructure pressures on the conurbation, sustain rural economies and stimulate development opportunities, major new developments in the countryside should be focused on rural regeneration zones being the primary rural centres and their respective expansion areas and surroundings.

The policy underpins the use of the spatial hierarchy in rural areas. Optimising investments in existing

but underused agricultural sector sites and buildings for employment is key to maintaining rural growth. In addition creating opportunities can help sustain local communities by re-establishing traditional community skills, including nature-based eco-tourism, agri-tech and agri-tourism. Such development opportunities should nevertheless depend on the site's level of accessibility to highways, public transport and utility networks and its suitability for agriculture and the facilitation of economic growth outside the conurbation.

6.3.2. Open countryside

The open countryside is characterised by no or extremely low density scattered development, often related to agricultural production. Uncontrolled development in the open countryside can lead to expensive infrastructure costs as it may be located away from existing networks.

SP11 Development in the open countryside

There should be a general presumption against major new developments in the open countryside outside settlement boundaries except where development commitments have been issued by authorities.

Where sites in the open countryside have become surplus to long-term sugar sector requirements or are no longer required to support national food security objectives as determined by the MAIFSBEF, priority should be given to projects in support of green infrastructure schemes. Schemes incorporating ecological restoration of ESA, or reforestation or proposals which contribute to preserving or enhancing the amount of publicly-available natural landscapes should be incentivised.

Where major new development proposals in the open countryside are of national interest and where suitable alternative sites are not available, the full environmental, social, transport and utility infrastructure costs of the new location and the alternatives considered should form an integral part of the decision-making process.

However, where proposals are made on land which has been classified as having marginal suitability for agriculture and, are sited within or adjoining existing settlement limits, and where existing physical and social infrastructure networks already exist, there should be a general presumption in favour of development where it can be shown to sustain local needs especially in areas vulnerable to change in the agricultural sector.

Opportunities for conversion of surplus land or underused agricultural-sector legacy buildings should be prioritised where they can contribute towards new job creation or sustain local communities, skills and traditions, and where transport and utility infrastructure capacity already exists or can be provided without undue public expenditure. Such uses should look to complement or utilise existing rural assets. Effective use of available land can include employment-generating initiatives in agri-tech, to increase land productivity and sustainable production and ensure food and nutrition security, bio-tech and biological inputs in production systems, and tools to address labour shortages, improve post-harvest life and minimise food wastage.

Initiatives that support climate change mitigation and adaptation objectives, including incentivising authentic inland eco-tourism and agro-tourism schemes that help conserve landscapes, heritage and wildlife and reduce pressures on the coastal zone, should be encouraged. Restoration and reforestation programmes that can help re-purpose abandoned agricultural land and preserve biological diversity should be promoted.

There is also a need for incentives to support rural area regeneration and facilitate economic growth outside the conurbation on land which has been classified as having marginal suitability for agriculture and which is surplus to requirements.

6.4. Residential land strategy and housing supply

In conformity with the Government's strategic plan to provide all families with access to decent, safe and affordable housing fitted with adequate services, it is necessary to have a commensurate supply of land, so as to address the needs of population segments with specific housing needs.

There is a need to balance housing requirements with the protection of the environment, to ensure sustainable development. The policy seeks to provide support for investment in public transit infrastructure, by locating development close to existing or proposed routes and stops. It also seeks to ensure that uncontrolled urban sprawl does not damage the landscape character of the rural area. Housing demand assessment has calculated that 46,000 new dwellings are required over the plan period, with a further 23,000 required to meet unmet demand between 2011 and 2020. At an average of 25 dwellings per hectare, this would see around 2,760 hectares of land developed for residential development. Increasing the average to 40 dwellings per hectare reduces this demand to 1,725 hectares.

Authorities devising strategic policies should be given a broad and clear understanding of the land available in their area of jurisdiction. This can be achieved by means of centralised databases (cadastre, notarial databases modelled after the French B.I.E.N.[1]). This will inform planning policies modelled in the light of availability, suitability and likely economic viability of potential sites for residential developments.

1. The French B.I.E.N. stands for Base d'Informations Économiques Notariales. It is a real estate database constituted by the notaries in France since the 1990s and based on information contained in deeds signed by notaries.

6.4.1. Residential land requirements

A key part of the residential land strategy is to provide opportunities for more housing choice, with higher-density development constructed in the right places. Infill and redevelopment have provided a notable contribution to meeting housing demand. This is expected to continue with locations in the conurbation well served by public transport being promoted for urban redevelopment and urban expansions. Development in these locations reduces the demand for greenfield sites, re-invigorates urban communities and makes best use of existing infrastructure.

H1 Residential land allocation

The release of new sites for residential development should follow a sequential approach. Redevelopment of existing urban land will be prioritised, subject to meeting the provisions of Policy SP19 on bad neighbour activities and buffer zones.

Outline Planning Schemes should make sufficient land available in and around existing settlements to meet local housing needs when updating settlement boundaries. It is expected that approved developments on the edge of settlements will be incorporated into revised settlement boundaries. Development commitments, including BLUPs and administrative authorisations should be identified in the outline planning schemes as far as practicable, with preference given to sites adjacent or close to existing settlements.

Government has identified the need to meet local housing needs, particularly for those falling within the affordable segment. To that purpose Government has set up New Social Living Development Ltd (NSLD) in order to provide 12,000 housing units across the island. In addition, and in line with Government's intention to improve the housing stock on the island, it is proposed that 2,000 lots for residential purposes be put on sale by the State Investment Company and the Rose Belle Sugar Estate Board. In addition to development commitments, including BLUPs, administrative authorisations should be identified in the outline planning schemes where possible.

Significant investment in improving infrastructure has been undertaken by both the public and private sector since the 2003 NDS. It is therefore essential that priority to development is given to sites already serviced by transport links, utilities and facilities and which do not impinge on natural systems. There are no proposals to reduce the limits of approved settlement boundaries within outline planning schemes once renewed, unless there are new overriding environmental reasons that would indicate that sites should not be brought forward for development.

The provisions set out in Policy SP19 on bad neighbour activities and buffer zones override any provision set out in Policy H1.

6.4.2. National Housing Development Company (NHDC) schemes

The National Housing Development Company Ltd (NHDC) is the executive arm of the Housing Division of the Ministry of Housing and Lands (MHL), responsible for the implementation of the Government's social housing programme. Through the NHDC, its implementing agency, the Ministry implements housing projects promoting home ownership for all Mauritians, with the scheme targeting families in the lower household income spectrum. Since the 2003 NDS, the type of housing units has been enhanced and now accommodate at least two bedrooms, a kitchen, a living room, a toilet and a bathroom. Social and recreational amenities are provided within the housing estates, where required, so as to better integrate the residents within these estates.

Home ownership is promoted through the Roof Slab Grant Scheme, encouraging self-help construction for those who own a plot but are unable to construct a concrete housing unit for financial reasons.

The level of subsidy for new housing units is dependent upon income, with lowest income households eligible for a two-thirds subsidy on units, with a sliding scale as household income increases. A ground lease is also applied to the plots with a similar sliding scale system in place.

H2 Land conversion and social housing schemes

Land to be released for private and public sector residential development under the land conversion and NHDC & NSLD schemes should be located within or adjacent to existing settlements, to ensure that schemes are fully integrated into the physical and social infrastructure of existing settlements, subject to meeting environmental and social requirements for new development.

Those on low incomes are more dependent on public transport and on the ability to access basic goods and services by walking and cycling. It is therefore essential that they are integrated into existing settlements and have access to schools, shops, open spaces and public transport. Integration will also ensure that developments do not add costs to the public purse through the increased cost of connection to utility networks. Sites that have been developed and identified should be as physically connected as much as possible, through the provision of safe pedestrian and cycle paths, whilst new sites should be integrated from the outset. Government led housing estate projects should also aim at integrating other private sector developments to ensure an adequate social mix.

6.4.3. Residential urbanism

Residential development is the dominant built form in Mauritius. It is also the development that most impacts on the well-being of residents. Housing can be built with various densities and in various

locations but, regardless of these factors, it is important that housing is fit for purpose, provides safe and comfortable living, with the flexibility to adapt to changing circumstances. It should look to follow the principles of lifetime homes, providing living environments that can adapt to residents' individual needs, particularly as residents get older.

They should also, where feasible, be adaptable to the challenges of climate change, with a greater emphasis on environmental building standards, the integration of renewable energy generation and the provision of charging points for electric vehicles.

Residential development extends beyond the housing unit. Residential development should form part of a mixed-use neighbourhood that includes the provision of local retail services and access to open space and recreation. Climate adaptability is also important at the site level, with sustainable drainage systems introduced as part of a wider water-management and flood-mitigation strategy.

H3 Residential densities

There will be a sequential approach to the provision of higher-density housing applied in most settlements. Higher densities should be located within urban centres, with densities gradually declining further away. Greater design input for higher-density development will be required to protect a settlement's existing urban character and amenities. In primary rural centres and rural centres, higher densities will also be encouraged where it can be demonstrated that they do not impact on the character or setting of the wider settlement. Consideration needs to be given to building height and form, and the appropriate provision of on-site car parking for residents.

Marginal increases in density can reduce the need for greenfield development, helping to reduce pressure on environmental sites. It also reduces infrastructure costs, as more properties are served by the same length of roads, pipes, wires etc. Higher residential densities are also critical in supporting viable public transport networks, with metro services requiring higher densities than bus services. By locating higher densities in urban centres and urban expansions, a density profile is established, whereby more people are located within walking distance of shops, services and public transport stations.

Increased densities do not automatically equate to the development of tall buildings. Where higher densities are proposed, it is important that the development does not detract from the form and character of surrounding development. The proposed built form, massing, site layout, external spaces, internal design and ongoing management require increased scrutiny as density increases, as these elements consequentially come under more pressure.

6.4.4. Sustainability of residential neighbourhoods

Meeting requirements for new housing entails planning for large-scale developments, for instance new settlements or major expansions to existing primary rural areas or urban centres. However such developments must be suitably located and benefit from appropriate design, and they must be serviced by appropriate infrastructure and equipment. In order to identify suitable locations, policymakers should give due weight to the following considerations:

1. Assessing the opportunities arising from existing or planned investment in infrastructure, the region's economic potential and the possibility of achieving net environmental gains;
2. The sustainability of the community, with sufficient access to services and employment opportunities within the development;
3. Defining unambiguous expectations for the quality of the places to be created (for instance through the application of garden city principles); using mechanisms such as masterplans and design guides or codes to achieve a range of well-designed and beautiful homes for the various segments of the community;
4. Strategic gaps.

H4 Sustainable neighbourhoods

Residential estates should provide a mix of housing types and sizes, to encourage greater social diversity across neighbourhoods, thus enabling families to continue to live close together.

The policy seeks to ensure that, as families develop and housing requirements change, residents can find suitable, affordable housing in the neighbourhoods they consider home. This helps to preserve family and community cohesion and avoid the ghettoisation of settlements, which can lead to local people being priced out of the housing market. This will require the expansion of urban neighbourhoods and rural villages.

H5 Neighbourhood renewal

Where upgrading of existing settlements is required, a renewal plan should be drawn up to identify the most effective way of delivering renewal, whether that be at the street or neighbourhood level. If relocation is required, priority should be given to those dwellings that are located in flood-prone areas and the planning approach outlined in policies H1 and H2 should be followed to identify suitable sites.

Much progress has been made over the past two decades in enhancing the living standards of those in the poorest neighbourhoods. A declining neighbourhood undermines confidence in an area and places increased pressure on social schemes to address social and environment problems. In declining neighbourhoods, there is little incentive to invest in the maintenance or upgrade of property, as the underlying asset declines in value. This leads to further decline, resulting in a vicious circle. Breaking this circle through urban renewal is vital for the long-term health and well-being of a neighbourhood and its residents.

A general principle is to enable existing residents to remain in their existing neighbourhood wherever possible. They are the people who are the most invested in the neighbourhood, both in financial and social terms. Smart renewal should be pursued exploring ways in which renewal can be self-funded through utilisation of underused land and capturing uplift values.

One of the key driving forces behind renewal, and in particular the removal of substandard properties, is the danger of flooding. It is therefore important that all dwellings are located in safe areas away from danger (e.g. flooding, inundation and landslides), with at-risk properties removed as quickly as

7 ECONOMIC ACTIVITIES: COMMERCE & FINANCE, INDUSTRIES AND AGRICULTURE

As the Government's aim of maintaining a high-income economy becomes more mature and advanced, the demands on land and type of spaces will change.

For the Economic Development Board (EDB), manufacturing remains a key part of the economy and a key part of the land supply strategy with a number of business parks proposed, including high-tech manufacturing and innovation labs. As part of the global economy, it is anticipated that a large proportion of manufactured goods will be exported, placing increased pressure on the port, airport and surrounding infrastructure. Consideration will need to be given to expansion of both facilities, with safeguarded strategic accesses and land. In addition promoting the development of manufacturing premises in locations close to skilled workforce pools, while reducing the impact of heavy goods vehicles on residential areas and high profile sites will also be favoured

The development of Ebene Cybercity has enabled the major expansion of the service industry, with supply keeping pace with demand. Further commercial floorspace is expected to be developed in Ebene as well as the metropolitan centres and Eastern Expansion Area. There is also a wish to see new commercial office spaces around urban terminals, town centres and primary rural centres/bus stands. Developing such locations is more complex than greenfield sites, so higher returns for developers will be required. Consolidation of retail and commercial uses around existing edge-of town complexes can be anticipated, in order to attract other related uses including business hotels, leisure and sports facilities, showrooms and factory outlets.

Planning policies and decisions must assist enterprises in their investment, growth and evolution. The need to foster economic growth and GDP output is a material consideration. The planning authorities should allow each area to consolidate its strengths, remedy its flaws, and be prepared for challenges lying ahead, all the more so as Mauritius has the ambition of becoming a regional leader in innovative sectors.

7.1. Commerce and finance

Much emphasis is being laid on building innovative, dynamic and resilient MSMEs. In 2019, SMEs contributed to 35.7% of gross value added economic output (GVA) and accounted for 48.9% of total employment. A 10-year masterplan for the SME sector was prepared in 2017 and its recommendations are being implemented with the aim to building a 'Nation d'Entrepreneurs'. The contribution of SME exports to total domestic exports increased from 7.2% in 2013 to 11.7% in 2019. The global pandemic impacted on all sectors during 2020 and 2021. GDP is expected to recover and exceed pre-pandemic levels in 2022. Changes to the categorisation of SMEs in the SME Act will widen the scope of what is classified as an SME business in Mauritius.

A key feature is the drive to adopt new technologies and enter new market segments through product diversification and process re-engineering, including precision engineering, technical textiles, medical devices, agro-processing and bio-technology. High growth SMEs and industrial parks, medical hubs, life sciences, wellness and medical tourism, knowledge education and higher education hubs, and eco- and heritage tourism are also being promoted through government strategies.

The Côte d'Or Data Technology Park will lay the foundation for a data-driven economy and create the relevant eco-system to accelerate the innovation process from idea to creation. The Park will encompass highly skilled and specialised centres from additive manufacturing to deep artificial intelligence, and provide the necessary support for start-ups, existing businesses and government services to achieve a major digital transformation.

7.1.1. Spatial planning for enterprises (from micro-businesses to SMEs)

To foster the emergence of innovative, sustainable and globally competitive enterprises, Government aims to create more technology accelerators and incubators targeting the MSME sector. The setting up of technology centres across the island should be considered to accelerate innovation among MSMEs.

This will require a balance of existing and new sites and premises that are well-serviced with modern telecommunication systems and have good access to a range of transport systems, including public transport and supply-chain linkages between existing centres, industrial areas and emerging regeneration zones. Opportunities created by the Metro Express for improved commuter and worker access to MSME sites in the transportation corridors between Port Louis and Curepipe should be optimised over the plan period, with the creation of new or regenerated sites for MSMEs towards Riche Terre and Terre Rouge along the M2 corridor, eastward via the M3 corridor and the Reduit Triangle, Moka and Côte d'Or towards Verdun, and westward via the La Vigie-La Brasserie-Beaux Songes Link Road towards Pierrefonds, Cascavelle and Uniciti/Flic en Flac.

Consideration should also be given to adapting and refurbishing existing sites and buildings including vacant or underused sites in both urban and rural setting, and repurposed industrial or agricultural legacy buildings. At these sites the clustering of MSMEs needs to be considered to provide incubation services, recycling/circular economy activities, shared office or meeting spaces, training centres and meetings, conferences & exhibitions (MICE) including trade fairs that showcase new MSME products.

EC1 MSMEs and regeneration

Proposals for new MSMEs should consider opportunities for shared use or the repurposing of existing buildings and facilities in existing industrial areas, urban and rural centres or emerging regeneration zones before new greenfield sites are identified. Priority should be afforded to MSME locations where a high level of connectivity and accessibility is available or will be provided at or near metro stations, urban/rural terminals and traffic centres.

In rural areas other than rural centres, accessible and serviced but abandoned or underused agricultural sector legacy sites and buildings should be considered for adaptive re-use for MSME activities, including agri-tech, aqua-tech, eco-tourism and agri-tourism.

Where existing sites and buildings are not suitable, proposals for new MSMEs, including incubator units and other small and medium-sized innovative knowledge-based and data-tech activities, should be integrated within mixed-use development schemes, which take into consideration (i) the proposed settlement hierarchy, ii) new population growth and expansion areas including approved smart cities, and (iii) existing disparities in facility distribution.

In all cases of new development the following will be required:

- Incorporation of green technologies and principles into new site and building designs.
- Safe and convenient access via a range of modes including walking and cycling with adequate parking and waiting area space including off-street car parking for staff/workers and visitors.
- Safeguarding and maintenance of the amenity of nearby sensitive land uses.

When designing planning policies, the following should be included:

1. A clear economic vision and strategy aimed towards sustainable economic growth;
2. Criteria and strategic locations for local and inward investment, in line with the strategy defined;
3. The addressing of potential obstacles to investment, such as insufficient infrastructure, services or housing, or a hostile environment; and
4. New and flexible working practices (such as work-from-home), and agile principles that allow for adaptation to unforeseen changes in the economic environment (the impact of a pandemic, an increase in expatriates settling in Mauritius, etc.).

Government's drive towards new knowledge-based, data-tech and fin-tech services, combined with the increase in the use of the internet for work, shopping, education and e-delivery services, will impact requirements for future MSME sites and premises, as more people work, shop and study from home. Where homeworking is not a suitable option, there will be an increase in demand for affordable sites and premises, including for start-ups and incubator units that have a high level of connectivity to ICT systems, accessibility to transport services, and a range of local shops and support services.

Through Government programmes for public transport, town and primary rural centre terminal redevelopments, and urban and rural regeneration promotion schemes, opportunities can be exploited for adapting and repurposing existing sites and buildings, by introducing high-tech communication systems and services close to existing populations and education and community facility clusters. Such initiatives can create a more sustainable live-work-play-study environment, reduce the need for long journeys to work and maintain social cohesion.

Incentivising the shared or dual use of existing but underused sites or vacant buildings in existing industrial sites and estates, for example through warehousing conversions can create more flexible spaces for MSMEs such as call centres or venues for conferences and trade fairs, as well as help maintain and optimise supply-chain networks.

The release of abandoned agricultural land and buildings in peri-urban and rural areas, for the adaptive re-use for modern, well-designed MSME buildings set in mature landscapes, can provide for agri-tech, fin-tech and eco-tourism uses in accord with Government aims for a high-income, green and inclusive society which can sustain local communities and contribute to healthier lifestyles.

7.1.2. Office and regeneration: the Mauritius International Financial Centre

Market demand for prime office space in Port Louis continues to reflect its status as the nation's capital city and centre of Government administration. However, for specialised services and private sector head offices, lack of or difficulty in acquiring suitable centrally located area sites, coupled with traffic congestion and parking constraints and a deteriorating pedestrian ambience have motivated several public and private sector agencies to relocate to Ebene Cybercity as a preferred choice.

Upgrading the Caudan waterfront and implementing the Les Salines harbour front and cruise line project, the completion of the Metro Express and related Victoria and Immigration urban terminals, and the use of the Port Louis inner ring road to redirect heavy goods traffic to the port, will help regenerate and uplift the CBD office ambience and amenity. Managing the flow of commuter traffic can also be achieved using restrictions on parking standards for office buildings and higher public parking tariffs now that the metro system is operational and acceptable feeder bus services are being put in place.

Development opportunities outside Port Louis must also be encouraged to address Government aims for an inclusive and equitable society, while new forms of demand will have to be met. Modern mixed-use environments are already being promoted through the smart city programme and the Eastern Expansion Area and these will create a demand for different types of office sites and buildings. At the same time there is potential for opening up niche markets as Mauritius strives to secure a position in the regional and international ICT, health/bio-tech, sports and education arenas.

ICT is a key sector of the Mauritian economy. In 2018, it contributed some Rs 25 billion, equivalent to 5.7% of total gross value added (GVA). The ICT sector grew by 5.3% in 2018 and was expected to expand further by 4.8% in 2019. There were some 800 ICT-knowledge process outsourcing enterprises,

with a workforce of around 25,000 people, in 2018. The sector has the potential to grow further with the development of artificial intelligence and the blockchain. By 2030, the ICT sector is expected to contribute substantially to the economic growth of Mauritius and employ around 50,000 people.

The financial and insurance activities sector accounted for 11.1% of GVA and grew at 5.4% in 2018. Almost 25% of FDI inflows in 2018 were directed towards the financial services sector. In 2018, global business, a fundamental sub-sector of the financial services sector, contributed to 5.7% of GVA and grew by 4.0% [1].

EC2 Offices and regeneration

There should be a presumption in favour of proposals for the development of office space in metropolitan, urban and primary rural centres and the Eastern Expansion Areas as these will contribute towards the sustainable and equitable regeneration strategy. New office developments should in the first instance consider locations where a high level of accessibility by a variety of modes including public transport is available to serve i) existing centres, ii) new population growth and expansion areas including smart cities and iii) urban and rural regeneration zones or iv) to rectify disparities in existing distribution of office sites.

Opportunities for greening and re-use and adaptation of vacant or underused sites and buildings for new offices should be considered as important components of mixed-use urban and rural regeneration schemes, especially where these are being promoted in connection with improvements to public transport in support of the Government's National Regeneration Programme.

In all cases of new office development, the following will be required:

- Incorporation of green technologies and principles into new site and building designs
- Sufficient space within the development curtilage to allow for provision of usable green open space in compliance with national standards and Government aims for a healthier society
- Safe and convenient access via a range of modes including walking and sufficient parking and waiting area space including off-street car parking for staff and visitors.

To achieve Government aims for equitable growth and inclusive development, it is more desirable to create office environments that are active components of well- established towns and villages, mixed use urban and rural regeneration developments or self-contained new growth centres to reduce the need for new greenfield sites and enable more efficient use of public infrastructure and services including new public transport facilities.

Essential to the success of such aims is achieving a balanced combination of office, residential and retail elements in a mature mixed-use environment. To support these office environments, there will be a need for housing, social and community services (schools, public health centres and sports facilities)

1. Statistics Mauritius, Annual Digest of Statistics, 2019

and attractive, safe, usable public realm. A more integrated approach to office and retail development will also help maintain established community linkages and travel patterns, for social cohesion. It is likely that clusters will tend to develop at strategic transport nodes, regenerated town and village centres, public transport terminals and long-term planning should anticipate this trend.

In responding to Government's policy thrust towards high-tech knowledge-based initiatives, there will be a demand for a new type of office environment. Call centres are typically flexible shed-like structures filled with highly sophisticated electronic, fibre optic, and infra-red equipment. Their built form requirement resembles warehousing more than traditional office space, but there is also a requirement for the landscaped environment of business parks, which can be provided as an integral part of rural regeneration schemes.

Planning policies and decisions must acknowledge and deal with the specific geographic requirements of different sectors of industry, for instance by providing for hubs or networks of knowledge and data-driven, innovative or high-tech industries, as well as for logistics operations in properly connected locations.

7.1.3. The retail sector

Previous planning policy recognised the traditional main high street as a vital component of settlement life, with new developments being permitted to add variety as new stores and products were introduced in response to market demand. At that time, the principle of creating attractive local shopping centres serviced by public transport and other support infrastructure was to be encouraged, with the promotion of buildings to front streets so that the vitality of the high street was enhanced. However, the combination of increasing town centre traffic congestion and lack of convenient public parking and safe footpaths has led to a deteriorating shopping ambience, while the development of free-standing convenience food stores and retail parks on the edge of town has flourished. The advent of internet shopping and delivery services also has the potential to disrupt traditional shopping patterns and town centre high street offerings.

Data from Statistics Mauritius shows that there were 96,400 jobs in the retail/wholesale sub-sector in 2003. By 2019, this number had increased by over 45% to nearly 140,000. In terms of development activities, between 1990 and 2000, 1,745,000 square metres of floor space for trade (including retail, warehousing, hotels and restaurants) had been approved by local councils. By comparison, between 2008 and 2018, some 1,388,500 square metres of floor space for retail and trade had been permitted, showing a decline of 20.4%, probably reflecting consolidation and intensification of activities on existing sites, as suitable new urban sites became more difficult to acquire and assemble.

Significant new retail developments, although expanding the range of consumer choice (mainly for those with access to personal transport), can also adversely affect traditional town centre shopping and related activities, which over time, as experienced elsewhere, can lead to town centre decay and loss of investment. Since 2003, the trend towards peri-urban and out-of-town locations has seen further

additions to the retailing stock, including for example at La Croisette and Riche Terre on the M2 in the North, Bagatelle, on the M1 in Moka. Coupled with this has been the intensification and consolidation of existing commercial complexes at, among others, La City/Trianon on the M1 near Quatre Bornes, Jumbo on the M1 at Phoenix and Super U at Centre de Flacq on the A7. This trend is likely to continue as the extension of existing commercial complexes are delivered along with increased online retail.

In this context, the Government's significant intervention in implementing the Metro Express, urban and rural terminals, upgraded bus stations and taxi stands and increased bus feeder services can be seen as positive steps in underpinning the future vitality and viability of existing urban and rural centres. The Ministry of Local Government's redevelopment of major bus station sites centrally located in town centres into urban and rural terminals will create opportunities for modern market fairs, commercial spaces and food courts, as well as leisure and entertainment facilities.

To ensure inclusive and sustainable development outside the conurbation, countermeasures will be required that re-enforce rural regeneration initiatives, including small and medium-sized retail developments serving local community needs. Conversion of vacant retail stock for MSME incubators, which create local jobs, or for much-needed social housing for an ageing population, should also be considered.

EC3 Retail hierarchy facilities

To establish a balanced hierarchy of retail facilities at national/metropolitan level, urban centre level and rural district and village centre level, taking into account (i) the existing settlement pattern;, (ii) urban and rural regeneration zones, (iii) new population growth and expansion areas including smart cities, and (iv) existing disparities in distribution. Loss of shopping floor space at street level in existing town and village centres should be discouraged.

Safe and convenient access via a range of modes (including public transport, cycling and walking), and the provision and maintenance of upgraded local community facilities (including usable open space, safe seating and public toilets, street lighting and cleaning services) should be incentivised as integral components of urban and rural regeneration schemes.

Planning authorities should adopt a flexible approach to permit applications for change of use or adaptive re-use of sites and buildings in existing town and village centres, urban and rural regeneration zones, and urban and rural terminal redevelopments. A mix of uses should be encouraged as part of area-wide development schemes being promoted through the Government's National Regeneration Programme to sustain local jobs and communities.

Shifts in residential populations, increasing traffic congestion and poor ambience for shopping, combined with significant increases in out-of-town commercial complexes with parking space and future growth in internet shopping and delivery services, are continuing to adversely impact traditional town and village centre retailing activity, with many premises lying vacant or underused.

Recognising that these negative trends affect community life, the Government has embarked on a significant transport infrastructure investment strategy, with the introduction of the Metro Express and integrated urban terminals, as well as enhanced bus and taxi facilities and market fairs to help revitalise town and village centre retail ambience. The Government envisages the (urban) terminals being developed, operated and maintained by the private sector, with the expectation that the strategic location of existing bus stations will encourage promoters to implement mixed-use developments on these sites.

Future retail (and office) development should therefore be directed towards existing locations which have a high level of transport accessibility, including existing metropolitan and urban centres and urban terminals, urban and rural regeneration zones, and new growth and expansion schemes including smart cities, in accord with Policy SP10. Retailing and other complementary developments, including a wide range of MSME employment and leisure and entertainment facilities, should be clustered to encourage competition. This produces benefits to consumers and reduces the use of cars as a means of transport and related demand for new greenfield sites.

Urban sprawl can also be reduced by making optimum use of existing town and village centre sites and buildings, including repurposing vacant or underused retail sites for alternative local employment-generating uses (including by MSMEs or for social housing units), before considering new greenfield sites. A more integrated and flexible approach to mixed-use office and retail development will also help maintain established community linkages and travel patterns for social cohesion.

Further guidance is provided in the Policy and Planning Guidance Note on Commercial Developments.

7.2. Industries, logistics and tourism

Traditionally much of the country's heavy and manufacturing industry, warehousing and wholesaling activities were attracted to strategic locations around Port Louis, where close access to the port was critical, including to the North along the M2 motorway at Terre Rouge, Roche Bois and Riche Terre, and on the southern outskirts at Pointe aux Sables/La Tour Koenig near the A1 and at Pailles on the M1. Access for workers to these locations has also been improved by the introduction of Metro Express services south of Port Louis. The Metro Express service is expected to extend beyond Port Louis, towards the North of the island, thereby further improving access to the Port.

While access to the port and airport for the export of goods will remain significant, demand for new industrial sites and buildings will also be driven by the move towards a modern high-tech, knowledge-

based and value-added economy, and the increase in the use of the internet for shopping and home delivery services. Sites need to be well-located for strategic highway and public transport networks and to a range of supply chain and support facilities within attractive mature landscape settings. In cases where industrial developers employ expatriates, workers' housing needs should be provided in separate blocks on factory sites rather than converting residential buildings into dormitories, thereby contributing to more compact forms of development while minimising social conflicts with existing residential neighbourhoods.

Priority should be given to safeguarding strategic connectivity and accessibility to secure storage, warehousing and distribution facilities on existing industrial estates and at the international port and airport complexes, in accord with the most recent masterplans for the port and airport.

7.2.1. Industrial siting strategy

Under this National Development Strategy, a balanced approach to the spatial distribution of workplaces, homes and support services, both in existing industrial estates and identified regeneration zones as well as new sites in urban and rural areas, will be required to sustain long-term and equitable economic growth. Key policy objectives are:

- Upgrading, intensifying or re-purposing sites and buildings in existing industrial estates including the port and airport clusters or in urban and rural regeneration zones, through the use of green technologies, to contain urban sprawl, reduce impact on the environment and maintain established journey to work travel patterns for social and community cohesion.
- Incentivising the relocation of industrial land uses away from unsuitable sites including central urban locations and World Heritage Sites and their buffers and the provision of serviced advanced units for MSMEs and workers accommodation in new industrial complexes and regeneration zones in accord with the provisions of the Government's National Regeneration Programme Regulations and the need for integrated supply chain networks.
- Safeguarding and strengthening strategic transport linkages between the conurbation, main urban and industrial centres, and the port and airport, in accordance with updated masterplans for the two international transportation hubs, to support national and international supply chains that underpin long-term economic growth.

EC4 Industrial sites and buildings

Before new sites are identified, proposals for industrial development should follow a sequential approach by considering locations in or on the edge of existing industrial complexes and estates including the port and airport and urban and rural regeneration zones. To facilitate growth and consolidation of industrial uses including manufacturing and SMEs, storage, warehousing and distribution uses, and related support services, special use zones are maintained for emerging industrial estates around the port, around the southern boundary of Port Louis city and around the airport. In these zones, which require a high level of strategic accessibility, there will be a general presumption in favour of mixed industrial uses taking into account a site's existing and future requirements for strategic highway access, public transport and level of utility provision, the environmental impact of the proposed uses and measures for mitigation, including solid waste and wastewater treatment.

In existing industrial areas including the port and airport complexes and regeneration zones, priority should be afforded to proposals that:

1. Enable green upgrading of existing infrastructure and buildings, including buildings that accommodate activities relocated from unsuitable locations
2. Incorporate a high level of public transport and highway connectivity
3. Provide opportunities for the provision of serviced advanced units for MSMEs, where on-site space is still available.

In all these cases, a high level of accessibility by public transport and highway connectivity will be required.

Where sites and buildings in existing industrial estates or regeneration zones are not available or suitable, proposals for new industrial uses, including high-tech manufacturing, knowledge-based and data technology business parks and agri-tech, aqua-tech and renewable energy incubators, should take into account:

- The suitability of land or buildings no longer required for sugar, food production or long-term agricultural uses
- The availability of sufficient space for expansion including for serviced MSME and support uses
- The availability of sufficient space for providing accommodation for expatriate workers on site in relevant cases
- The availability of public transport and facilities for walking and cycling to access the site
- The provision of sufficient parking and waiting area space including off-street car parking for staff and visitors
- The availability of suitable landscaping around the site
- The safeguarding and maintenance of the amenity of nearby sensitive uses.

7.2.2. Logistics management

As part of the global economy, it is anticipated that a large proportion of manufacturing output will continue to be exported, placing increased pressure on facilities, connectivity and accessibility to the international port and airport complexes. Existing supply chains and associated facilities will also be impacted by changes in traditional town centre retail patterns, edge-of-town commercial complexes and shopping malls and increasing use of the internet for home delivery services. Demand for strategically located new sites for storage, warehousing and distribution facilities in and around the edge of the conurbation and primary rural settlements and tourism centres can be anticipated.

The Port Masterplan for 2025 supports Port Louis Port being transformed into a major transport and logistics hub connecting Europe, Africa and Asia, with additional shipyard capacity as well as fish unloading and processing facilities. Construction of a breakwater and island terminal to improve transhipment capacity is also envisaged. To complement this approach, the NDS incorporates updated policies for Port Louis CBD and waterfront regeneration, including completion of the inner ring road around the capital's CBD to improve HGV access to the port and the integration of the A1-M1 link which will also improve access from La Tour Koening and Pailles industrial zones.

Similar intentions are proposed for SSR International Airport to become a regional logistics and aviation hub, with a doubling in passenger terminal capacity and the development of an airport (Mon Tresor) smart city and a cargo village. Growth of airport-related industries, including distribution, secure storage and warehousing for specialised products and high-value, low-bulk commodities can be expected in line with international trends for air cargo.

Landscope Mauritius Ltd is also proposing the development of a pharmaceutical related park at Rose Belle in line with Government measures to attract pharmaceutical and related industries to set up in the country. To sustain such economic growth, land around the port and airport should be safeguarded, in line with the port and airport masterplans.

EC5 Storage, warehousing and distribution facilities

Proposals for storage, warehousing and distribution uses should consider opportunities for adapting and re-using existing vacant or underused sites and buildings in existing industrial areas, including the port and airport complexes, before new sites are identified. To that effect the special use zones can assist in the orderly growth and development of industrial and industrial support uses at key strategic locations including the port, around the southern city limits at Pointe aux Sables/La Tour Koenig and Pailles and at the airport.

In supporting industrial growth, incentives should be provided to facilitate the relocation of warehouses and wholesale establishments from unsuitable congested urban locations to

more suitable sites and premises in established well-connected industrial and business parks, including the port and airport complexes.

Where existing sites and buildings are not suitable or cannot be adapted for re-use, new sites for storage, warehousing and distribution uses should be located in strategically-connected and serviced locations, taking into account the distribution of existing industrial areas and regeneration zones, and proximity to existing settlements, smart cities and new growth and expansion zones.

In all cases of new development for storage, warehousing and distribution facilities, the following will be required:

- Convenient and safe access via a range of modes including public transport, well-lit footpaths and cycleways with sufficient parking and waiting area space that includes off-street car parking for staff and visitors
- Safeguarding and maintenance of the amenity of nearby sensitive land uses
- Incorporation of green technologies and principles in new site and building design.

7.2.3. Diversification of the tourism offering

Refocusing future tourism development opportunities inland and preserving coastal natural features will not only help mitigate the impacts of climate change but will also drive a new future for the tourism industry. Encouraging tourism activities inland can help reduce pressure on the coastal zone, with notably the development of eco-lodges and more nature-based leisure activities.

However, even with major initiatives for the development and promotion of alternative/inland tourism, beaches and the coastline are bound to remain central to tourism. Important portions of the coast will be needed to support the tourism industry, but the proportion allocated to resorts should be assessed whilst taking into consideration public access to the beaches and coast, as well as other types of operations/activities that could participate and contribute to the tourism industry.

A situation where tourists are isolated in resorts with a population shaped to meet the needs of tourists is not sustainable. Instead, a merged model is evolving based on enabling a greater diversity of tourism within the country.

To address these issues, the Mauritius Tourism Promotion Authority (MTPA) and the Tourism Authority are considering the green recovery of the tourism industry within a framework which should include:

- Authenticity – tourists will seek to go deeper into the country/destination.
- Cultural encounters and discovery – which implies mingling with the local population.
- Ethical factors – seeking to contribute to the destination's economy. Travellers will be making purpose-orientated decisions, often to serve one or more causes.

- Well-being – in an inspiring natural environment.
- Green issues – looking for facts about conservation and sustainable initiatives.
- Experimental and transformational experiences – implying investigating the country's hinterland.

Tourist attractions such as restaurants, cafés, and nightlife entertainment venues should be focused on existing tourism centres. Smaller coastal villages should be oriented towards authentic eco-tourism and nature-orientated activities to sustain coastal communities and conserve natural environments.

EC6 Diversification of tourism offer

Tourism developments that sensitively utilise and promote Mauritius' landscape and cultural heritage will be encouraged. The re-use of heritage sites, historic buildings and museums that contribute to the cultural offer will be strongly supported, as will facilities that promote active tourism. Accommodation that is integrated with the tourist offer will be encouraged, provided the design does not detract from the heritage and cultural value of the site. Business hotels should be located in metropolitan and urban centres, primary rural centres, rural centres, the Eastern Expansion Area, and urban and rural terminal locations or their immediate surroundings.

The landscape and cultural value of Mauritius needs to be protected and promoted carefully if Mauritius is to diversify and enhance its tourist offer to meet the changing demands of tourists. Landscapes and buildings that contribute to Mauritius' cultural capital should play a larger part in the tourist offer, lessening pressure on coastal sites and helping to distinguish Mauritius from its long-haul competitors.

Developing accommodation and purpose-orientated eco-tourism and leisure activities and attractions in unique and inspiring inland/countryside settings is a key orientation. In the past two to three years, several multi-purpose projects have been launched inland, combining leisure, tourism, micro-farming and ecology or wellness-orientated activities. These should be encouraged and receive incentives for their contribution to the destination's product mix.

7.2.4. Integrated Resort Schemes and tourism-oriented integrated projects

The vision for Integrated Resort Schemes is that they should complement and support local tourism whilst ensuring that the natural environment is protected. They are typically located on the edge of existing settlements and are often gated communities. Such integrated resorts schemes call for enhanced social integration and participation in the economy of their immediate vicinity. Going forward, it is important that the schemes are better physically and socially integrated with their host communities. Better integration would thus be achieved providing opportunities for local businesses to locate themselves in the development, serving both the development and wider community. This will lead to an enhancement in the quality of retail and services in such communities.

EC7 Integrated Resort Scheme development

Developments permitted under the Integrated Resort Scheme (or its successors) should be integrated into the nearest community as far as practicable. This includes providing space for local enterprises, e.g. retail and personal services.

7.3. Agriculture and food production: the goal of self-sufficiency

Land use is dominated by agriculture and in particular sugarcane cultivation. However, this suffers from a long-term trend for a reduction in sugarcane cultivation across the island. In 2003, land under agricultural cultivation was estimated to be 80,157 hectares, of which sugar accounted for 74,117 hectares (92.5%). By 2019 total land under agriculture had reduced by 29% to an estimated 50,810 hectares, while land under sugarcane had decreased further to 48,819 hectares (85.9%), reducing both in real and relative terms (Table 4).

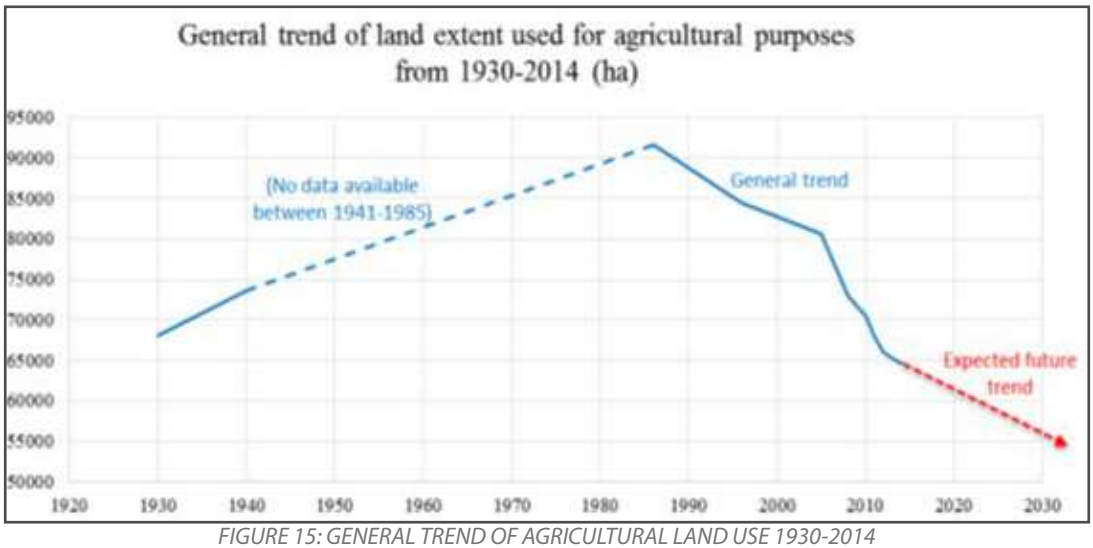

FIGURE 15: GENERAL TREND OF AGRICULTURAL LAND USE 1930-2014

(Source: Statistics Mauritius, 2014 Census of Agricultural Land Use 1930-2014)

LAND USAGE	2003 Area (Ha.)	2011 Area (Ha.)	2019 Area (Ha.)
Sugarcane	74,117	59,724	48,819
Food crops	4,980	8,200	7,335 (1)
Tea	681	651	656
Total agriculture	80,157(2)	62,872	56,810
Agricultural land under irrigation	21,619	19,886	15,640
Forest (state)	22,068	22,140	22,031
Forest (private)	34,540	25,000	25,000
Total forest	56,608	47,140	47,031

(1) Area harvested (2) Including tobacco

TABLE 4: AGRICULTURAL LAND UTILISATION 2003-2019

(Source: Statistics Mauritius, Digest of Environment Statistics 2019, Digest of Agricultural Statistics, 2019)

The share of agriculture in the economy, which stood at 7% in 2000, was 3.3% in 2019. In 2000, agricultural workers totalled 54,300 (10.9%), of whom 54% were involved in sugar activities. By 2019 direct employment was 40,300. In the food crop sector, 8,000 small farmers were cultivating food-crops on holdings averaging 0.25 hectares, and a small number growing fruit and flowers for export markets. Some have embarked on vertical integration into food processing to add value to their produce.

In the agricultural sector, the paradigm shift is towards better quality services and healthier lifestyle products which are convenient and affordable, as consumers become more demanding and knowledgeable about their food production. There is also an insistence on sound environmental practices, the promotion of biodiversity and the sustainable use of natural resources to ensure the livelihoods of future generations of farmers.

Key policies and challenges in the agriculture and food security sector include:

- Introducing a comprehensive national agri-food development programme to promote the farm-to-fork concept and reduce dependence on imports.
- Ramping up production of a larger volume and higher quality of food crops to satisfy the demand generated by higher per capita consumption of fruit and vegetables in support of healthier lifestyles and the needs of future inflows of tourists.
- Mitigating climate change effects that threaten agricultural land, national parks and forest biodiversity due to increasing numbers and varieties of undesirable pests and invasive species.
- Encouraging smarter agricultural land use by strengthening schemes to cultivate abandoned lands and by developing a comprehensive centralised land data-bank to ensure optimal utilisation of prime agricultural land.
- Preserving biodiversity by enhancing forests and national parks through restoration and reforestation and by protecting the country's unique flora and fauna from invasive species.
- Conducting a comprehensive forest inventory and providing basic amenities in natural parks to enhance eco-tourism.

Taking into account climatic and market risks as well as eco-friendly production methods, an annual increase of at least 4% in gross value addition from agriculture is targeted for the next decade.

7.3.1. Large-scale agricultural production

The Government intends to introduce a comprehensive national agri-food development programme to promote the farm-to-fork concept, ensure food security, reduce dependence on imports and support the drive towards healthier lifestyles. This national agri-food programme will require more land to be brought under cultivation, for which purpose a centralised land bank of state and private agricultural land will be set up to match demand and supply for land that can be used by willing stakeholders for food production. Consultation with land owners will be privileged for that purpose.

Unutilised lands and buildings represent a waste of valuable resources and a missed potential for novel initiatives. To assist the conservation and optimal utilisation of the country's limited fertile lands, the

centralised land bank will be organised to monitor agricultural land use and land-use changes. It will also assist MAIFSBEF to more effectively manage agricultural land settlements and other leased areas to ensure compliance with the provisions of lease agreements.

Effective use of available land can include employment-generating initiatives in agri-tech to increase land productivity and sustainable production, and ensure food and nutrition security, bio-tech and biological inputs in production systems, tools to address labour shortages, and to improve post-harvest life and minimise food wastage. Initiatives that support climate change mitigation and adaptation objectives, including encouraging inland eco-tourism schemes to reduce pressures on the coastal zone and restoration and reforestation programmes to preserve biological diversity, should be incentivised.

EC8 Agricultural land and food security

Agricultural land and buildings required to sustain long-term sugar sector uses or for supporting national food security objectives as defined by the Ministry of Agro-Industry, Food Security, Blue Economy and Fisheries (MAIFSBEF), including designated organic bio-farming and sheltered farming clusters, should be safeguarded from development.

Development/ redevelopment of agricultural land and buildings which are surplus to long-term sugar sector requirements or are not required to support national food security objectives should be permitted, provided the proposed development:

- Would create local jobs or help replace jobs lost in the agricultural sector.
- Would help retain social and community cohesion
- Would help contribute to the Government's biodiversity commitments and mitigate the effects of climate change.

And the proposed development would not:

- Form part of an environmentally sensitive area (ESA) as defined by the Ministry of Environment, Solid Waste Management and Climate Change (MESWMCC)
- Form part of a protected area as defined by the MAIFSBEF
- Detrimentally impact the safeguarding of sites for state-significant development or the development of area-wide regeneration schemes.

7.3.2. Use of small parcels of agricultural land

Mauritius is a net food importer, with an overall self-sufficiency ratio of less than 30%. Main items imported include wheat, rice, oil, fresh fruit, meat and milk. Over the last five years, there has been an increasing dependency on imported food. Although there are a few irrigated networks, food crop production continues to be largely rain-fed resulting in surplus vegetable production during winter

months and a shortage in summer months. Over the last decade, the production of selected crops, namely tomatoes, green peppers and cucumbers, has started under soilless, protected structures. There is also growing interest in mushroom production. In 2018, food accounted for 18% of total goods imported. Local production of food crops declined by 9.2% in 2018.

The Government's comprehensive National Agri-Food Development Programme aims to ensure optimal use of available land, for which a centralised landbank of state and private agricultural land will be set up to match demand and supply for land that can be used for food production.

Under this programme, where small parcels of land are no longer required to support long-term sugar requirements or for securing self-sufficiency in food production, small planters having up to 10 acres of agricultural land will be allowed to convert up to 10% of land for residential or commercial purposes ancillary to the agricultural activity, subject to planning and environmental approval. Such development for on-site residential accommodation, cold storage facilities, processing facilities and other agro based facilities on small parcels of agricultural land would empower farmers and growers to move from an artisan enterprise to an autonomous professional activity. However the provision of infrastructure for such agricultural land should not be at the public expense.

Such incentives can support or initiate rural regeneration schemes by optimising investment in underused or redundant sites and buildings while mitigating climate change effects. Support should be given to encouraging small planters to consider authentic eco-tourism activities, nature-based eco-lodges and agri-solar enterprises on abandoned sugar parcels, in order to reduce pressures on the coastal zone. By repurposing small parcels of land and buildings for other beneficial uses, established community skills and traditions and local travel patterns can be sustained for social cohesion.

EC9 Development on small parcels of agricultural land

The development of small schemes on small pockets of agricultural land and buildings which are surplus to long-term sugar sector requirements or are not required to support national food security objectives (as determined by the Ministry of Agro-Industry, Food Security, Blue Economy and Fisheries) should be permitted where they are required to sustain local needs in accordance with Policy EC8, provided the proposed development:

- Would create local jobs or help replace jobs lost in the agricultural sector.
- Would help retain social and community cohesion
- Would help contribute to the Government's biodiversity commitments and mitigate the effects of climate change.

And the proposed development would not:

- Form part of an environmentally sensitive area (ESA) as defined by the MESWMCC
- Form part of a protected area as defined by the MAIFSBEF

- detrimentally impact the safeguarding of sites for state-significant development or the development of area-wide regeneration schemes.

Opportunities for the conversion of surplus land or underused agricultural sector legacy buildings should be prioritised, where they can contribute towards new employment-creating uses and climate change mitigation, including eco-tourism and agro-tourism to sustain local communities, skills and traditions.

7.3.3. Poultry and livestock

Around 5,000 small farmers are active in the livestock sector producing milk and meat. While the corporate sector is heavily involved in the sugar sector, it has diversified its portfolio to cover food crops, venison, poultry, animal feed and processed milk products. It is estimated that around 50% of agricultural production comes from the corporate sector.

The efficient operation of the livestock sub-sector, which makes an important contribution to helping achieve the Government's food security objectives but which is categorised as a bad neighbour land use, continues to be hampered by complaints from nearby residents and related difficulties in complying with environmental regulations. The use of environmentally-sound technologies and resource-efficient sites and buildings can help mitigate these adverse effects.

Poultry and livestock rearing is associated with problems of foul odours and inadequate waste-disposal systems. Producers need to minimise the adverse impact of their operations on local neighbourhoods while, as far as possible, farmers should be allowed to continue animal rearing, subject to appropriate environmental and emission-control safeguards, in support of Government aims to achieve food security and self-sufficiency.

Where operations are being intensified on existing sites and premises, consideration should be given by the relevant authorities to incentivising producers and operators to monitor and use environmentally-sound technologies to mitigate adverse environmental impacts on nearby sensitive land uses.

The location of new undertakings should be carefully controlled in accordance with Policy SP19, which seeks to establish buffer zones between bad neighbour land activities and sensitive sites, such as protected areas as defined by the MAIFSBEF, as well as existing housing, community health and education facilities.

EC10 Poultry and livestock

Applications for new premises for poultry and livestock-rearing need to be assessed in terms of future consumer demand as well as potential environmental impact on nearby sensitive land uses and the need for buffer zones. Requirements for the use of modern buildings and equipment, in accordance with PER approval conditions and operator monitoring of emission control norms, will be important considerations.

Where applicants are seeking to intensify poultry and/or livestock-rearing premises on existing sites, consideration should be given by the relevant authorities to incentivising operators to modernise their premises and equipment with green technology, to mitigate any adverse effects on the amenity of nearby sensitive land uses.

7.3.4. Bio-farming

The Government is implementing a new agricultural reform package, which includes encouraging the shift to modern organic bio-farming and niche food production. The shift towards bio-farming will require new tools and models of development, with standards and norms defined to encourage rural competitiveness and innovation, and ensure the production of safe and quality food. Incentives will encourage the adoption of sustainable practices and agri-business ventures in processing food for local and export markets.

The linkages between agriculture and tourism will help create economic opportunities and build resilience for farming communities, while enhancing eco-tourism. With both sectors managed with smart practices, degradation of the natural environment will be mitigated. Linkages between bio-farming and agro-tourism can be explored, with farms growing organic produce coupled with offering tourism activities where visitors enjoy sight-seeing and local food, such as farm-fresh fruit and vegetables, with such local food promoted as *produits du terroir.*

Designation of specific areas or clusters for such production will provide the necessary protection for farmers undertaking organic production from their immediate non-organic neighbours. Opportunities to link bio-farming production with eco-tourism developments will help provide resilience to farming communities and mitigate environmental degradation.

EC11 Bio-farming

Specialised agricultural clusters devoted to the pursuit of organic production should be protected from new development and encroachment from engineering works in consultation with the Ministry of Agro-Industry, Food Security, Blue Economy and Fisheries.

Opportunities to create eco-tourism clusters linked to smart bio-farming practices should be encouraged to help sustain farming communities and mitigate environmental degradation.

7.3.5. Irrigation and urban development

Water for irrigation, which is limited, is obtained from rivers, impounding reservoirs and boreholes. Substantial investment has been and continues to be made, both by the Government as well as the private sector, in de-rocking, irrigation and mechanisation projects, designed to increase agricultural productivity and reduce labour requirements, thereby helping to achieve national targets for securing food self-sufficiency for the domestic market.

Irrigation schemes require significant infrastructure investment and the tendency of the Irrigation Authority is to lay emphasis on efficiency and the effective use of available water resources, so as to increase the productivity of existing systems and resources. To sustain support for long-term sugar sector needs or to help achieve national food security objectives, green use of existing irrigation infrastructure should be safeguarded and optimised.

EC12 Irrigation and urban development

There should be a general presumption against development of land under irrigation or land that is required for future irrigation schemes, to sustain long-term sugar sector uses or for supporting national food security objectives, as defined by the Ministry of Agro-Industry, Food Security, Blue Economy and Fisheries and the Irrigation Authority unless acceptable on planning and environmental grounds, or in the national interest.

7.3.6. Ocean economy

The Government intends to unlock the potential of the blue economy, while implementing measures to protect the oceans, lagoons and their marine resources. Traditional in-lagoon fishing is no longer sustainable and so fisher groups in small coastal communities need to be supported with upgraded infrastructure, such as landing jetties and support facilities, including boat maintenance and storage, to grasp the opportunities offered by Mauritius' Exclusive Economic Zone (EEZ) and its extensive fish stocks.

To support Government aims for developing the fishing industry and sustaining traditional fishing communities, the policy promotes the expansion and modernisation of facilities that support off-shore fishing, in order to promote food security and economic development in coastal regions. In addition, an inland aquaculture scheme will be introduced.

EC13 Fisheries

Provision of facilities for off-lagoon fishing will be supported in existing harbours. The upgrading of jetties, quays, docks, maintenance areas and warehousing will be encouraged, where these can contribute to sustaining local fisher communities.

Mauritius has an exclusive economic zone of approximately 2.3 million square kilometres. An additional expanse of extended continental shelf area of approximately 400,000 square kilometres is co-managed with the Republic of Seychelles. Prior to the Covid-19 pandemic, the Blue Bay Marine Park Visitors Centre had been operational since June 2016 to nurture the conservation and protection of marine biodiversity.

As part of its new industrial and trade policies, Government will focus on developing new economic pillars by aiming to further unlock the potential of the blue economy. To develop the fishing industry, the Mauritius Investment Corporation (MIC) will invest in joint ventures engaged in fishing activities and value chain, and an inland aquaculture scheme will be introduced. In addition, Government will enhance its support towards the development of a sustainable aquaculture and fishing industry through training for semi-industrial and industrial fisheries, and skill enhancement of artisan fishers.

In addition and in line with the Renewable Energy Roadmap 2030, the use of marine energy technologies such as offshore wind and wave, will be considered.

8 INFRASTRUCTURE: COMMUNITY HEALTH & WELL-BEING, EDUCATION, TRANSPORTATION, UTILITIES AND COMMUNICATION

Planning policies and decisions should aim to achieve adequate servicing of communities – both existing and future – with sustainable and adaptable infrastructure.

8.1. Health and well-being for communities

The Ministry of Health and Wellness (MHW) provides its services through regional hospitals, community hospitals, mediclinics, area health centres, (AHC) and community health centres (CHC). All the hospitals are accommodated in state-owned buildings. In the context of the implementation of the Health Sector Strategy Plan 2020-2024, priority is being given to the enhancement of primary health service delivery so as to alleviate overcrowding in regional hospitals.

8.1.1. Hospitals and healthcare provision

Previous policy identified the need for consolidation and expansion of hospital facilities in situ rather than building new hospitals on greenfield sites.

Improving healthcare services and creating a healthy lifestyle based on social, cultural and sports activities is a stated aim of Government. It is investing to expand, diversify and modernise public health infrastructure with the mission statement "to support universal and affordable access to high-quality healthcare for all" . Specialised care homes for people suffering from mental illnesses are an important part of the modernisation package.

Several primary health institutions, specifically CHCs, are housed in old, small, rented buildings and have become inappropriate for health service delivery. Finding appropriate regional premises for rent elsewhere has not been successful, resulting in demand for the Ministry of Housing and Lands to acquire/bestow a suitable plots of land for the construction of new health centres in such regions.

In addition, with the policy of Government to provide 12 000 housing units around the island and taking into consideration the development of new projects such as smart cities, there will be a need to provide additional public health institutions. As such, appropriate portions of land will have to be identified and put at the disposal of the ministry to provide for new such institutions, taking into consideration accessibility to transport and utility networks, parking demand and the availability of unencumbered land for expansion.

A key policy issue is therefore whether the existing system of strategically-located regional hospital complexes and specialist hospitals, supported by community hospitals and area healthcare facilities, will be able to meet increasing demand from an ageing population (range of specialist health and

wellness services) and from a better educated community seeking to attain the benefits of healthier lifestyles and an improved quality of life.

In the wake of the recent Covid-19 pandemic, Government has indicated a focus on encouraging private companies to construct purpose-built factories for the manufacture of pharmaceutical products and medical devices as well as for clinical and pre-clinical trials. Moreover, the Economic Development Board promotes Mauritius as a medical hub targeting medical tourism. A variety of fiscal incentives is proposed in terms of preferential taxes and repatriation of profits, dividends and capital for foreign investment in medical facilities.

IN1 Hospitals and healthcare provision

The continuing development and expansion of health facilities on existing sites of general hospitals, public health centres and mediclinics should be supported by:

- Adequate expansion space for a range of modern facilities and services
- Convenient access by a variety of modes including public transport
- Safe and well-lit footpaths and cycling networks
- Sufficient off-street parking for staff and visitors
- Access to utility networks.

Where necessary and subject to demand, new sites could be considered as part of a public-private Partnership (PPP) in the setting up of teaching hospitals. Proposed site for new teaching hospitals should: (i) serve new population growth and expansion areas ii) serve designated urban centres, urban expansions and rural regeneration zones or tourism zones or iii) rectify existing disparities in distribution (iv) be well located with regard to multi-modal transport networks, including safe and convenient access by public transport, and (v) provide ample space for parking facilities and future expansion.

Locations for mediclinics, area health centres and new community health centres should be focused on sites which can be integrated with the settlement hierarchy and are designed to (i) serve new population growth and expansion areas including approved smart cities and planned new communities, ii) serve designated urban and rural regeneration zones or tourism zones or iii) rectify existing disparities in distribution.

The enhancement of existing sites and facilities for general hospitals, public health centres and mediclinics should consider the potential for long-term growth, given the anticipated significant increase in demand especially from an ageing population. Land and sites in highly accessible locations should be prioritised where public transport improvements have been made or are committed financially, such as sites close to metro stations, bus stands and urban/rural terminals, especially where urban

and rural regeneration schemes are being planned. In new expansion and growth zones, including approved smart cities, provision of public health centres and mediclinics can be complemented by private-sector-led schemes, which integrate health and wellness services with a range of sports, recreation and leisure facilities.

Appropriate land requirements for the setting up of new health institutions have been calculated as follows:

- Teaching hospital –around 80,000 square metres
- Mediclinic - around 8,000 square metres
- Area health centre - around 3,000 to 4,000 square metres
- Community health centre - around 1,500 to 2,500 square metres.

The improved accessibility afforded by urban centres, urban expansion and rural regeneration schemes will become an important locational factor for new or upgraded health services and community facility clusters, which improve quality of life and are integrated with public transport, safe, convenient footpaths and quality green space. Upgrading existing sites and facilities can also help in maintaining established community linkages and travel patterns, for social cohesion. Consideration should also be given to the implementation of one (or more) teaching hospitals through a public-private partnership to enhance the practical training of medical students and promote affiliation with high calibre medical institutions.

In new expansion and growth zones, including approved smart cities, provision of public health centres and mediclinics can be complemented by private-sector-led schemes which integrate health and wellness services with a range of sports, recreation and leisure facilities.

8.1.2. Sports facilities

To encourage Mauritians to practice a sport for a healthier lifestyle, footpaths for jogging and walking together with usable open green space for all age groups should be included as part of major new residential developments including morcellements.

IN2 Regional sports facilities

Locations for new regional sports facilities should be considered in relation to the existing settlement hierarchy, levels of provision and areas of deficiency, or where new population growth and expansion areas including smart cities are committed financially or planned.

In all cases of new regional sports facility development, provision should be made for a high level of safe and convenient accessibility via a range of modes, including public transport, green

cycling and walking networks, with sufficient parking for both sports participants and visitors, especially at peak times and during major events.

In the longer term, as more activities are attracted to the Côte d'Or National Multisports Complex, consideration should be given to enhancing strategic public transport connectivity between the conurbation in Rose Hill, Ebene Cybercity, the Reduit Triangle, Moka, Trianon and Côte d'Or.

In cases where provision of new community and sports facilities requires collaboration with the private sector, the provisions of the National Regeneration Programme and the Investment Promotion Regulations 2018, including developer incentive schemes, should be considered.

The Government promotes Mauritius as an attractive venue for international sports and cultural events. Achieving this aim and encouraging a thriving sports economy will generate demand for a range of state-of-the-art sports, recreation, health and well-being services, including sports medicine and sports tourism facilities.

In areas of strategic growth, such as the Eastern Expansion Area, where new or upgraded transport, utility networks and service capacity have been provided or are planned, consideration should be given to the co-location and multi-use of regional sports, recreation, leisure and educational facilities. Such an approach can lead to more effective use of resources and publicly-funded infrastructure in locations that are well-planned, and implemented as part of an area-wide development framework.

Clustering of a range of sports, recreation and community leisure facilities in strategic locations can also form the focus for new urban and rural growth clusters and tourism hubs, especially where these are linked to employment-creating activities such as agro-tourism, eco-tourism and education-tourism enterprises.

To achieve Government's aims for an inclusive, high income and green Mauritius, strategic sites for regional sports facilities will need to be well located with regard to multi-modal transport networks, including safe and convenient access by public transport, as well as green and blue infrastructure corridors that incorporate dedicated green cycling and walking networks.

8.1.3. Community and cultural facilities

Sports, physical, leisure and cultural activities are all vital to quality of life. A lack of such facilities hinders the social and cultural life of the community. For sports, previous policy identified a hierarchy with three scales of provision – national, regional and local. At the regional and local levels, the Ministry of Youth and Sports implemented a programme of youth centres, while local authorities and the National Development Unit (NDU) also implemented some small community facility schemes, acknowledging there was a degree of overlap with the ministry in this regard.

The provision of market fairs, multi-purpose halls and village halls forms an important part of the

country's social infrastructure, while investment in sports facilities has occurred at all levels across the country. However, the changing age profile and increasing interest in healthier lifestyles will stimulate further demand for a range of modern community, open space, sports and cultural facilities, including in major new expansion schemes, and planned new communities and morcellements. Currently, because of community asset management issues, these have not always been provided in the past.

With the changing socio-economic profile and ageing population, the ministry's refreshed mission statement seeks "To promote Mauritian arts and cultural values and encourage practice of sports" (source: Three-Year Strategic Plan 2019/20-2021/22 Embracing a Brighter Future Together as a Nation, Government of Mauritius, 2019). For example, in support of this aim, a national cycling policy framework is being developed to encourage cycling for leisure and recreation as well as for transport and tourism. Dedicated cycle lanes are to be incorporated into the national road infrastructure development plans.

Future policy directions laid down by Government include facilitating the implementation of the National Sports Policy (sports infrastructure etc) by increasing accessibility, maximising utilisation and implementing a sports infrastructure maintenance policy. Accessible footpaths for jogging and walking together with usable open green space for all age groups should be included as part of major new residential developments, including morcellements.

Government's drive towards a society which enjoys healthier and happier lifestyles will generate

IN3 Community facilities

Locations for new community facilities, including sports facilities, should be considered in relation to the existing settlement hierarchy, levels of provision and areas of deficiency or where new population growth and expansion areas including smart cities are committed or planned.

In all cases of new community and sports facility development, provision should be made for safe and convenient access via a range of modes, including public transport and walking, sufficient parking and waiting area space that includes off-street car parking for staff, and adequate usable public open space for the population catchment.

In cases where provision of new community and sports facilities requires collaboration with the private sector, the provisions of the National Regeneration Programme and the Investment Promotion Regulations 2018, including developer incentive schemes, should be considered.

demand for an increasing range of leisure, recreation and sports facilities, as well as for modern community facilities, not least to serve an ageing population.

Equitable and inclusive provision of sites for new community and sports facilities should be considered in relation to i) the existing settlement hierarchy, ii) current areas of deficiency, iii) new growth and expansion areas including smart cities. In existing towns and villages, conversion or adaptive re-use of vacant or under-used school buildings, or sites released through urban and rural regeneration schemes, should be considered for much needed community and sports facilities.

For new community facility developments on sites not under public ownership, co-operation from the private sector will be required, for which the provisions and incentives included in the Investment Promotion Regulations 2018 should be utilised. In all cases, sites should be well-located and accessible by a range of transport modes and safe, convenient footpaths.

8.2. Education

Previous policy anticipated that, despite a projected decline in birth rates over a 20-year period, there would be an increase in pre-primary and primary schools to cater for deficiencies in certain areas, an increase in secondary schools as secondary education was to become compulsory for all, and an increase in tertiary education.

Government's aim is to secure an inclusive education system fully adapted to the new developmental needs of the economy and society. The Ministry responsible for Education is actively constructing or upgrading new schools, with significant recent investment under a Rs 15 billion programme for the renovation, upgrading and refurbishment of over 70 primary and secondary schools. In primary schools, upgrading will involve additional playgrounds and green and endemic corners, to sensitise and stimulate interest in the conservation and protection of the environment. Together with the deployment of wireless local area networks in secondary schools, this programme will considerably add to the stock of modern schools and facilities across the country. In line with the education reform policy, an Institute of Technical Education is to be set up and the National Skills Development Strategy 2020-2024 will help address future skill requirements and policies, such as Industry 4.0 and after-school learning about the national cultural heritage.

Where excess capacity can be anticipated on some larger school sites, the co-location of activities and shared use of space for sports or leisure facilities can be considered, with local communities, especially where sites are well-located for a range of transport modes, including public transport services, bus stands and parking facilities.

In smaller urban or rural locations where school sites, access and parking are constrained, consideration may be given to the consolidation of school activities on a nearby larger school site. The smaller site would be re-purposed to provide community facilities, pocket parks and children's play areas, provided

1. The Fourth Industrial Revolution (4IR or Industry 4.0) is the ongoing automation of traditional manufacturing and industrial practices, using modern smart technology.

the student catchment of the consolidated schools is not adversely affected in terms of travel patterns for the staff and students.

Provision for new schools should be assessed in the context of demand, the updated settlement hierarchy and related range of public services, and community facilities relative to long-term residential growth in designated expansion zones, new planned communities and approved smart cities/growth zones, as well as current areas of deficit identified by the Ministry responsible for Education.

8.2.1. Pre-primary education

Pre-primary education provides an introduction to full-time education for children, although often provided in a non-educational setting. Due to the shorter hours and younger age of children, it is often beneficial for such services to be delivered close to where parents live, reducing the time and cost of travel.

ED1 Pre-primary education

Encourage and facilitate the provision of pre-primary centres by means of the following measures in order of preference:

- The shared use of existing buildings, such as community centres, village halls, religious buildings and existing primary schools including re-purposed primary school buildings, where future enrolment figures are likely to exceed demand.
- The use of part of a private residential building or plot, provided that the premises are of a suitable size and design to accommodate the maximum number of children enrolled.
- Purpose-built centres on separate sites within residential areas.

In all cases of new development, proposals should:

- Include safe and convenient access via a range of modes, including walking, sufficient parking and waiting area space that includes off-street car parking for staff
- Comply with local standards of residential amenity.

The Government's aim has been to offer access to pre-primary education for all children in the three to five-year age group. Ideally, such education facilities should be attached to all primary schools but financial constraints mean provision will have to continue to be made in other premises by both the public and private sector. A considerable contribution is made by small private pre-primary centres on residential plots and this will continue to be permitted provided that certain conditions are met and where demand can be sustained e.g. in areas of new growth and expansion.

In other areas where school enrolment rates are in decline, opportunities for shared use or adaptive re-

use of existing primary school sites and buildings to accommodate pre-primary school needs should be considered, where such sites are well-located having regard to convenient access by a variety of modes, with safe pedestrian links and adequate parking space.

8.2.2. Primary education

Access to good quality education is a key driver in house-purchase decisions. Primary schools are considered a key facility in walkable, liveable communities, with most students being able to walk easily to school. As demographics in different communities change, the demand for education facilities will change. Primary school numbers have already peaked in Mauritius, resulting in many areas where demand for school places will be falling. How existing schools are maintained, and the impact this has on travel demands and access to school, will change.

ED2 Primary schools

Locations for new primary school sites should be focused on sites which can be integrated within or close to the settlement hierarchy and are designed to i) serve new population growth and expansion areas including approved smart cities or ii) rectify existing disparities in school distribution.

In all cases, new primary school developments should:

- Include sufficient space within the curtilage for sports facilities in compliance with national standards
- Incorporate safe access via a range of modes including walking and sufficient convenient parking and waiting area space, including off-street car parking for staff
- Not detract from the residential amenities of the area during operation.

In locations where enrolments are falling and capacity is likely to exceed future demand, opportunities for the shared use of existing school sites, buildings and facilities should be considered, with the vacated sites and buildings being adapted for re-use for other activities, including community facilities.

Due to a predicted reduction in school-age children and falling enrolments over the plan period, there will be a general decline in demand for primary school education. In areas of new growth and expansion or in areas where there are current shortfalls in the provision of buildings or facilities the provision for new schools should be assessed in the context of the settlement hierarchy and sustainable demand.

In other cases where school enrolments are in long-term decline and excess capacity can be anticipated, consideration should be given to shared use of existing primary and secondary school sites, where such sites are well-located with regard to convenient access by a variety of modes and safe footpaths, as well as having adequate parking space.

By adapting and re-using existing school sites, demand for new greenfield sites can be contained and more efficient use of public services and investments can be achieved in support of proposed urban and rural regeneration initiatives. The adaptive re-use of existing sites can also help maintain community linkages and school travel patterns, which enhance social cohesion.

8.2.3. Secondary education

Secondary schools are more spread out than primary schools, serving wider catchment areas. Access to school by walking and cycling should remain an objective, with older children able to travel further independently than their younger counterparts. With secondary school numbers having already peaked, there will be many areas where demand for school places will fall. Achieving a good spatial distribution of secondary schools will become increasingly challenging over the plan period.

ED3 Secondary schools

Locations for new secondary schools should be focused on sites which can be integrated within or close to the settlement hierarchy and are designed to serve:

1. New population growth and expansion areas including approved smart cities
2. Areas of existing deficit, as determined by the Ministry responsible for education.

In all cases, proposed sites for new secondary school development should:

- Include sufficient space within the school curtilage for a range of sports facilities in compliance with national standards
- Incorporate safe access via a range of modes, including convenient footpath and cycle routes, with sufficient parking and waiting area space that includes off-street car parking for staff
- Not detract from the residential amenities of the area during operation.

In locations where enrolment is falling and future capacity is likely to exceed demand, opportunities for the merger of secondary school sites and buildings and the shared use of facilities should be considered, with the vacated sites and buildings being adapted for re-use for other activities, including community facilities.

Due to a predicted reduction in school-age children and falling enrolment over the plan period, there will be a general decline in demand for secondary school education, other than in areas of new growth and expansion or in areas where there are current shortfalls in the provision of buildings or facilities. In these areas, provision for new schools should be assessed in the context of settlement hierarchy, sustainable demand and transport and infrastructure services capacity. Co-location of new secondary schools with existing secondary schools, sports and recreation facilities combined with community facilities should be considered.

In other cases where school enrolments are in long-term decline and excess capacity can be anticipated, consideration should be given to the colocation of primary and secondary school sites, where they are well-located with convenient access by a variety of modes and safe footpaths and with adequate parking space, especially where school sports and recreation facilities can be shared with local communities.

8.2.4. Technical and vocational education

As the country moves towards a knowledge- and data-based economy and society, there will be an increased demand for vocational courses, continuous and e-learning, including from an ageing population, over the plan period. Though this demand will be addressed to some extent by the increased use of home-based internet and virtual technology studies, there is likely to remain some demand for physical premises for MICE activities (meetings, incentives, conferences and exhibitions), as well as regional specialist educational events, for example on climate change and eco-tourism topics. In these cases, sites should be well-accessed by a range of public transport services, including metro facilities, that are close to a range of supporting social and community facilities.

ED4 Technical and vocational education facilities

Locations for new technical and vocational colleges should be focused on sites which can be integrated within or close to the settlement hierarchy and are designed to serve:

- New population growth and expansion areas including approved smart cities
- Designated urban and rural regeneration zones
- Existing disparities in college distribution.

In all cases of new technical and vocational education facilities development, safe and convenient access will be required to colleges, libraries and facilities for continuous learning via a range of modes, including public transport and convenient footpath networks, with sufficient parking and waiting area space including off-street car parking for staff.

In locations where school building capacity is likely to exceed future demand, opportunities for adaptive re-use of vacant or underused buildings and facilities which are well-served by a variety of transport modes should be considered to meet technical and vocational education requirements.

Where physical premises are required, demand for adult and seniors' education and vocational training services can be addressed through adaptive re-use of vacant school buildings, where there is excess capacity. In addition, where urban and rural regeneration schemes around bus stands and metro stations release existing sites for new uses, such locations may be used for provision of physical premises. In both cases such facilities should be integrated with convenient and safe public transport access and community facilities.

Demand will increase for tertiary, vocational, continuous and e-learning education facilities and services in well-accessed and serviced locations in both urban and rural areas. It will be generated both from existing residents, including those of retirement age, in regenerated town centres and primary rural centres, as well as from newcomers in expansion areas and smart cities.

Access to libraries and facilities for continuous learning need to be preserved and provided, though increasingly demand will be addressed through e-learning and internet-based services including study from home – a trend which will have been accelerated by the worldwide Covid pandemic.

By adapting and re-using existing sites, including vacant or underused school sites in town and village centres, demand for new greenfield sites can be contained and more efficient use of public services and investments can be achieved. This in turn will support the urban and rural regeneration initiatives, especially where new or upgraded transport networks and service capacity have been provided or can be anticipated.

8.2.5. Tertiary education

The Government is committed to a knowledge-based economy and well-educated society, driven in part by the need for new high-tech and ICT skills to address, among others, climate change and food security challenges. To meet this demand, new accommodation or the expansion of existing sites and campuses over the plan period at Reduit and La Tour Koenig is likely to be required. Demand for new accommodation may however be partly mitigated by trends in e-learning and home-based studies.

The university campus, college and laboratory complex at Reduit suffers from local access and circulation problems. Expansion space is constrained by a motorway intersection and an attractive and valued environment. To address future on-site demand, solutions are required that provide high-capacity integrated public transport networks and services, as well as safe and convenient footpaths and cycleways between university and college campuses Connection to the metropolitan centre of Ebene and Eastern Expansion Area is also recommended. In the longer term, a strategy of decentralised education clusters supported by upgraded physical, social and ICT/virtual infrastructure should be considered to sustain growth in accord with Government policy. Other tertiary education clusters have emerged around approved smart cities such as Medine Smart City in the West or Beau Plan Smart City in the North.

As the country moves towards a knowledge-based and data-driven economy, there is a need to expand capacity and have a greater diversity of courses especially in the fields of new technologies and innovation. In this changing context, short-term policy options for expansion should focus on ensuring resource-efficient and environmentally-sound utilisation of existing sites, land and building resources, with a focus on ensuring incorporation of green building codes that include local access, circulation and public realm improvements.

ED5 Tertiary education facilities

Locations for new universities and colleges should be focused on sites which are designed to:

1. Serve new population growth and expansion areas including approved smart cities
2. Serve designated urban and rural regeneration zones or tourism zones
3. Rectify existing disparities in distribution.

In all cases of new tertiary education facilities development, safe and convenient access will be required via a range of modes, including public transport, cycling and walking, with sufficient parking and waiting area space that includes off-street car parking for staff.

To provide for the continuing development and expansion of existing facilities in and around the university campus at Reduit, consideration should first be afforded to optimising the utilisation or rehabilitation of existing buildings, with green technologies including innovative transport technologies, before new sites are considered.

In the longer term, the integration of the Reduit complex with satellite educational clusters and branch campuses located in the metropolitan centre of Ebene and Eastern Expansion Area should be considered, in light of the Metro Express extension line from Rose Hill to Reduit through Ebene. Decentralised locations in other parts of the island serving regional catchments should also be expanded in accord with demand and Government aims to establish a regional education hub and national vision for equitable growth.

In the longer term, opportunities for further expansion beyond existing sites will be afforded through Government policy commitments to attract and integrate branch campuses of international institutions, potentially as satellite education clusters to create a regional education hub. Such development proposals need to be considered in an area-wide context, considering the need for a high level of multi-modal connectivity between locations (including Metro Express extension links in appropriate cases). A tertiary education action area plan or masterplan should be drawn up with the responsible university, college, relevant Government department and community stakeholders, to ensure an integrated long-term development framework is in place.

8.3. Transportation and mobility

The delivery of a sustainable transport system is critical to achieving the core objectives of the strategy. A system that delivers easy, safe and convenient access to employment, leisure and services, in a way that balances economic, social and environmental objectives, is required. Key structural elements of the spatial strategy are:

- Expansion of Metro Express and feeder services
- Investment to deliver a fast bus network.

Transport should be a consideration that is taken on board from inception in plan-making and development applications. The aim of this exercise is that:

1. Possible effects of developments on transport networks can be identified;
2. An assessment is made of the efficiency of existing or proposed transport infrastructure, and of evolutions in transport technology;
3. The environmental impacts of traffic and transport infrastructure are analysed, in order to mitigate any adverse effects, and in view of achieving net environmental gains; and
4. Vehicular and pedestrian traffic flows and patterns are incorporated into plans and developments, and allow for high-quality placemaking.

8.3.1. Sustainable transport

Sustainable transport can play an important role in meeting the vision and objectives of the National Development Strategy. Likewise, the location of development in appropriate places can support the Government's integrated transport strategy. Significant investment has been made in public transport since 2003 and the transformative Metro Express project that provides high-quality transport connectivity through large parts of the conurbation. It is therefore imperative that the land-use strategy leverages this investment and enables further expansion of the public transport network. By shaping the pattern of development and influencing the location, scale, density, design and mix of land uses, the need to travel, the distance required to travel and related energy consumption can all be reduced.

SP12 Sustainable travel modes

Equitable accessibility and mobility for all communities is a policy objective. The policy target is to provide equivalent travel times by public and by private transport within urban areas. Extension of public transport operating times needs to be encouraged, as well as extended provision of appropriate public transport in rural areas.

Strategies and policies need to:

- Reduce the adverse impact of transport in the community through the provision of safe and improved streets
- Encourage the switch to healthy travel modes with the development of comprehensive pedestrian and cycling networks.

Traffic demand management is needed in the conurbation, to help reduce and control the ever-increasing volume of motorised vehicles, in particular into and out of Port Louis at peak periods.

The integration of sustainable transport modes, particularly around urban and rural terminals, should be supported, with a focus on investing in the public realm for those within walking catchment of the station/ urban terminal, and cycle routes and bus feeders for those outside the catchment (walking catchment can typically be up to 800 metres for high-quality public transport such as the Metro Express).

Traffic and environmental management schemes are needed to assist with the re-allocation of road space in favour of sustainable travel modes in general, and regeneration uses in town centres in particular.

The integration of transport planning and land-use planning is more important now than ever. With the investment in higher-quality public transport and the need to tackle climate change, the promotion of sustainable transport modes to serve existing and new development is vital. Increased emphasis needs to be placed on non-motorised transport modes, with linkages to built environment policies to enhance the public realm of centres and to enable safe walking and cycling from nearby residential and commercial premises.

The investment in the Metro Express has created a high-quality system that is made up of tracks, stations and rolling stock. Public realm enhancement is needed to complement this investment, starting at the metro stations and extending outwards into the surrounding neighbourhood. The first mile is recognised as being particularly important in influencing journey mode choices. People need to feel safe and comfortable at each end of their metro journey, for the journey to be an alternative of choice to the private car. In addition to walking and cycling, the integration of the bus network with the metro (including ticketing and fares) is also important in creating a seamless system.

8.3.2. Traffic Impact Assessments

Traffic impact assessments are an important part of the transportation planning process and help ensure that sufficient capacity exists to accommodate development, without having a detrimental impact on the transport network. They will also identify where access is unsafe or inappropriate, particularly where larger vehicle movements are expected. Prospective developers are encouraged to hold early discussions with the Traffic Management Road Safety Unit to clarify the need and scope of any traffic impact assessment. It is likely that those schemes that are part of the development plan (National Development Strategy and outline planning schemes) will require less scrutiny than those that are not.

SP13 Traffic Impact Assessment

Where developments will have significant traffic implications as determined by the relevant authority, a TIA covering all modes of transport (public, private and active travel modes) must be prepared by scheme promoters and submitted alongside the relevant planning applications for development. The coverage and detail of the TIA will reflect the scale of development and the extent of the proposal's transport implications.

TIAs will demonstrate how proposed developments make provision for associated supporting transport measures that meet the requirements of the National Development Strategy and transport policies SP12 and T1 to T9 in particular.

Where new developments impact on the existing road network, the requirement for amelioration measures will be determined on the basis of no net detriment to existing road network users. This will ensure that existing road network users are not disadvantaged.

Developers are expected to provide such access and/or make financial provision for others to make the required transport network improvements, in the form of developer contributions.

The traffic impact assessment will enable decision-makers to better understand the impact of development on the existing transport network, identifying potential mitigation and improvements that are required. They should also help determine the level of car parking, taking access to public transport into consideration, whilst also covering connectivity by walking and cycling. Policy T8, Development control, elaborates on SP13 in more detail.

8.3.3. Transport strategy

The transport strategy policy is required to help meet Mauritius' contribution to reductions in greenhouse gases. It also aims to reduce travel times and costs, and the consumption of non-renewable resources, to help achieve the social and economic benefits of transport improvements, especially in deprived

regions, more cost-effectively and to reduce local pollution related to transport and its adverse health effects.

The continued expansion of the public transport network is required to further help meet Mauritius' contribution to reductions in greenhouse gases. It also contributes to more efficient use of space and reduces overall travel costs. Moving to more equitable journey times between cars and public transport increases choice for all.

T1 Transport Strategy

There shall be a general presumption in favour of developments that reduce distances and journey times between major trip generators and attractors. There is hence a general presumption in favour of developments that contribute to clustering, intensification and mixed uses. Investment in proposed strategic highways, in particular the M4 (East Coast Trunk Road) and the East-West Link should be leveraged with a general presumption in favour of development where such roads support urban expansions, rural regeneration, primary rural centres and their surroundings.

T2 Public transport and feeder network

Mode shift from private cars to walking, cycling and public transport will be promoted. Public transport policies and projects that help balance travel times by private and public transport within the conurbation will be promoted. Park-and-ride projects will be encouraged to further promote mode shift within urban areas.

Rights of way for public transport developments and feeder networks, cycle and pedestrian facilities should be safeguarded.

There is a general presumption in favour of transit-oriented developments that will contribute to clustering and intensification, particularly near public transport stations, hubs, termini and stops, and within public transport catchments in general.

To achieve the expansion of the public transport network, land and rights of way will be needed to enable and sustain an intensive programme of public transport improvements including extensive priority for buses, delivering much increased journey speeds and enhanced reliability. By improving the efficiency of public transport this can also increase public transport patronage. By reserving space and rights of way for public transport, cycleways and pedestrian feeder networks to mainline public transport routes, public transport catchment areas will be expanded.

Encouraging the densification of land uses around public transport hubs will further encourage public transport uses as access to the network is increased. Transit-oriented development, intensification and clustering are specifically encouraged.

8.3.4. Parking and demand management

To help control and minimise the adverse effects of ever-increasing traffic volumes demand management schemes are required. Together with other policies, parking controls can help re-allocate town centre road space to urban regeneration uses.

T3 Parking and demand management

Parking supply in the conurbation should be managed and controlled in a way that will:

- Encourage traffic peak spreading – particularly in and out of Port Louis
- Support and encourage mode shift and sustainable travel
- Provide road users with real time indication on well-lit display panels as to the number of free spaces available in a parking area
- Support urban regeneration policies in the conurbation town centres, including re-allocation of roadway and parking spaces to urban regeneration uses
- Anticipate technological evolutions (smart parking spots, e-vehicle charging stations, etc.)

The funds generated through parking charges should be ring-fenced to support urban regeneration transport projects – walking, cycling and public transport, and associated public open space enhancements.

Parking and demand management measures are required to help reduce persistent traffic congestion into and out of Port Louis. This will contribute to reducing associated pollutants, greenhouse gases, road user costs and consumption of non-renewable resources. Implementation requires authorities to manage, price and control car parking throughout the conurbation in a way that will assist travel demand management in and out of Port Louis and other town centres as congestion becomes problematic. Parking and demand management controls can also support urban regeneration of urban centres and encourage a mode shift to public transport in support of Policy T2 and in further support of Policy T1. Parking income should be ring fenced and spent on projects detailed in the policy.

8.3.5. Traffic and environmental management

To help reduce or eliminate the adverse impacts of transport on the community, better traffic management is required. This will also support urban regeneration through safer and better streets, whilst maintaining safe public transport penetration into traffic-free areas for community convenience. As cycling becomes more popular, the creation of pleasant cycle as well as pedestrian networks, which are as traffic-free as feasible whilst having regard to security concerns is supported.

T4 Traffic and environmental management

With a holistic approach to planning, the inclusion of traffic and environmental management schemes (TEMS) in Action Area Plans, as a part of updating Local Plans will need to emphasise:

- Better streets, traffic calming and low-traffic neighbourhoods
- An enhanced pedestrian environment and public realm
- Access and priority public transport
- Mobility access
- Parking schemes and controls
- Lorry routes and access and loading restrictions
- Cycling facilities or reservation of space for future facilities
- Intermodal connectivity between transit and bike share schemes at major transit stops
- Redefinition of road hierarchies in and around town centres in a way that releases and repurposes town centre roads and parking spaces for urban regeneration uses
- New roads if required to facilitate any of the above
- Road safety measures.

Traffic and environmental management practices are required at the local level to help reduce the adverse impacts of traffic on the community. Safer and better streets will support urban regeneration, whilst enabling safe public transport penetration into traffic free areas for community convenience. The creation of attractive, safe and efficient pedestrian and cycle networks will further enhance the liveability of local neighbourhoods, encouraging people to make local journeys without the use of a car.

8.3.6. Transport and land use planning integration

The integration of transport and land use planning is critical in achieving sustainable development goals. Through the integration of the two disciplines, the need to travel can be reduced and the transport choices for those needing to make journeys can be greatly increased. These two factors have environmental, social and economic benefits for individuals and society.

T5 Safe spatial, temporal and sustainable accessibility

Plan and implement new, improved, sustainable and safe integrated transport networks and infrastructure, on the basis of accessibility related to land use, trip purpose and particularly in support of policies SP12 and T1 to T4, and which:

- Improve safe provision for pedestrians, by direct and non-circuitous movement in the conurbation, rural settlements and in tourist areas throughout the island, ensuring adequate provision for those with disabilities and reduced mobility.
- Encourage vehicular slow design speed, reduction of crossroads and promote pedestrian, cycling and public transport movements
- Sensitively enhance public access to areas of natural beauty and recreation.
- Develop cycle networks.
- Support economic and social development.
- Relieve severe and prolonged congestion on the conurbation highway network through demand management (T3) and through focused highway capacity enhancements, which include bus priority measures (such as segregated busways or bus lanes and bus advance, associated with queue relocation) in support of T2, and working in synchronisation with T3 and T4.
- Open up land parcels in rural areas for new developments, particularly in agri-tech, enhancing marketing and food storage capacity, and in support of rural development and regeneration
- With heavy investment by Government in new roads, take advantage of such planned infrastructural assets. There should be a general presumption in favour of development where such roads interface with urban expansions, and primary rural centres and their surroundings.
- To ensure the Metro Express' long term sustainability in view of its potential future expansion routes, high density mixed use residential development in urban expansion areas along or near the metro corridor, should be favoured (see also T2).
- Enhance freight and logistics networks in support of policy T1 (reducing the need to travel).
- Maintain strategic access to the port and airport and between major centres of population and economic activity
- Respect, enhance and improve all environments adjacent to transport network infrastructure.

Encourage better bus layout designs to cater for more types of potential users. Specifically cater for passengers with mobility issues, baggage, young children and cyclists, in support of SP12.

To provide appropriate, equitable and safe accessibility and mobility for all communities, a number of key policy interventions are required. This requires actions for all transport modes, taking an integrated approach. The need for much improved pedestrian networks is emphasised to enable safe accessibility for local trips and access to public transport networks.

All strategic transport networks should be designed to support urban and rural development and regeneration in line with NDS strategy. Extending bus timetables throughout the day and into the evening is important for those without access to a car. At the moment operators tend to focus on the more lucrative peak commuting routes. The expansion of bus fleets to include modern, safe and better designed buses is important in ensuring equitable access for all passengers.

Dangerous and stressful route layout and connectivity can reduce accessibility to key destinations whilst also causing potential public harm through severance. It should no longer be acceptable for the day-to-day movements of transport network users to be dangerous.

Severance can often result from upgrades to highway networks as traffic speed and volume increase at the expense of connectivity for pedestrians. This has an adverse impact on the liveability of neighbourhoods as access to shops, schools, health care and relatives is reduced. Emphasis is therefore placed on integrated transport networks to ensure all modes work in sync.

8.3.7. Strategic land transport infrastructure

In support of strategic land-use planning vision and policies, a series of strategic land transport infrastructure projects have been identified. These include road, metro and bus projects that aim to enhance connectivity to key employment hubs and destinations from all parts of Mauritius.

T6 Strategic land transport infrastructure

In support of rural regeneration in the South, East and Northeast, implement:

- The East Coast Trunk Road (M4)
- The East-West connector
- Connection between the Airport and the South
- New strategic routes in the medium term to help improve connection between the Northeast/East and the Airport.

In support of regeneration in Port Louis:

- Completion of the inner ring road and removal of heavy goods vehicles from the Aapravasi Ghat World Heritage Site buffer zone
- Design and implement an urban boulevard along the Port Louis Waterfront between Victoria

Square and Immigration Square.

Continuing support for the metro and for extension to:

- the Eastern Expansion Area
- the North
- the Cascavelle area and to the West
- the SSR International Airport and to the South

Continued support for the enhancement of strategic bus routes connecting rural residents to their primary rural centre and the conurbation's metro system.

To help achieve the objectives of transport policies T1 to T5, in support of rural and urban regeneration key projects have been identified. These projects are illustrated in Figure 13.

In combination with the East Coast Trunk Road (M4), the East-West connector will be effective in linking rural regeneration areas in the East and Northeast to the conurbation. This improved linkage between the conurbation, the East and the Northeast will increase economic and social interaction between all three areas to their mutual benefit. It is envisaged that this increased interaction will help sustain rural enterprises and the regeneration process. There is a prospect that some settlements in the East/ Northeast could become dormitory towns, serving the conurbation. This should be minimised with the support of complementary rural regeneration measures resulting in an overall net benefit for rural regeneration.

The proposed new strategic routes would create much improved access from the Northeast to the South and the airport, and much improved access from the airport to tourism zones in the Northeast. This would help rural regeneration in the Northeast by creating greater accessibility and connectivity to key markets. The route is a less invasive and more environmentally friendly alternative than the southeastern highway, previously included in NDS 2003 and subsequently cancelled. In addition, the route eases potential future congestion at the M3-M5 junction and, together with other proposed routes, has all the benefits of the strategic eastern highway proposed in NDS 2003, but delivered at far less economic and environmental cost.

The revised policy includes further expansion of the metro in support of urban regeneration, mode shift and the sustainable servicing of conurbation growth areas. By creating a larger network, more residential areas, and existing and planned employment hubs will be served by the Metro Express network. The completion of the inner ring road and development of a waterfront boulevard in Port Louis will help facilitate and consolidate Mauritius' regional and international identity and vision.

8.3.8. Location of new developments and public transport catchment areas

The location of major new developments can greatly influence accessibility by public transport and by road.

T7 Location of major new developments

Locate new developments well served by public transport in accordance with the principles of policies SP12 and policies T1 to T6, excepting the following types of development, which may be located on sites at or near high-capacity junctions well served by the strategic highway network:

- Developments that generate large numbers of heavy good vehicles
- Developments that enhance logistics networks and storage, including storage and distribution of agricultural produce and value-added products
- Developments needed for national security (including food security, emergency preparedness, disaster mitigation and appropriate military uses)
- Developments of national significance that generate large volumes of vehicular traffic
- Developments required for the storage and distribution of hazardous substances
- Developments in or near to and serving rural regeneration zones, or near country towns adjacent to and serving rural regeneration zones
- Appropriate developments in or near to and serving tourism zones.

To ensure location of new developments within public transport catchment areas and to identify the types of development appropriate for location on the strategic highway network.

The policy focuses this issue into a single policy and sets clear boundaries with the aim of locating almost all development within the catchment of public transport. The policy promotes a holistic approach for the planning of major new developments, with transport being a key consideration. Multidisciplinary teamworking is encouraged, with transportation impacts of major new developments considered at the earliest stage practical.

8.3.9. Development control

To strengthen development control and introduce the principle of no net detriment, a policy covering development control and determining appropriate developer contributions is introduced.

T8 Development control

In accordance with SP13, where developments will have significant transport implications as determined by criteria specified in PPGs, traffic impact assessments (TIAs) must be prepared and submitted alongside the relevant BLUPs. TIAs must demonstrate how proposed developments make provision for supporting measures that meet the requirements of policies SP12 and T1 to T9. Transport measures will consist of transport services and/or transport infrastructure. The criteria for assessing adequate provision of transport measures will be no net detriment to users of the affected highway network. No net detriment to users must be demonstrated over a forecast period or periods as determined by the relevant authority.

The TIA must demonstrate the feasibility of implementing the required transport measures, in particular where additional land is required and where ownership issues may need resolution, or where utility diversions may be needed. Planning consent will be conditional on resolution of land acquisition requirements and resolution of utility diversion requirements.

The policy seeks to strengthen development control and enforcement of transport assessment, and introduce a clear no net detriment principle in the delivery of major development projects. It also seeks to ensure that developments meet the requirements of policies SP12 and T1 to T9, and to initiate the establishment of a mechanism whereby consent for developments, which impact on the transport network, include developer contributions.

For transport assessments to be effective, they should be completed to a satisfactory international standard. Training is encouraged to ensure that there is sufficient capability and capacity in the production, review and evaluation of TIAs. Resources and capability are also required to enforce consent conditions and successfully manage and deal with appeals.

The Government's PPG and current traffic impact assessment (TIA) guidelines should be upgraded to include all modes of transport and include guidance on the application of policies SP12, 13 and T1 to T9.

8.3.10. Electric vehicles

It is anticipated that, in line with other developed countries and to meet climate change commitments, Mauritius will see a major increase in the number of electric vehicles on the roads over the plan period. With range not an issue for journeys in Mauritius, the country is well-placed to adapt to electric vehicle use. The bigger challenge is to ensure sufficient capacity in electricity supply and availability of charging stations.

The uptake of electric vehicles will be promoted by setting up a scheme to encourage private investment in fast charging infrastructure points across the island. Electric and hybrid vehicle owners will be allowed to install a photovoltaic system not exceeding 10 kW to charge their vehicles and export any surplus to the grid.

T9 Migration to electric vehicles

Install electric car charging points in new commercial developments, in particular those with office and retail space and when there is a change of use, in accordance with standards defined and guidance given in relevant PPGs.

PPGs should be updated to include:

- Guidance and standards for the provision of electric vehicle charging points in new developments, and for change of use and guidance for provision in existing developments.
- Guidance on provision of on-grid and/or off-grid sustainable energy charging and storage systems for electric vehicle fleets.

There is anticipated to be widespread migration to electric vehicles over the NDS period to 2040. New PPGs and development control procedures will be needed to help ensure a successful transition, with charging points being a requirement of most new commercial developments in particular office where there are office and retail spaces. This will require a holistic approach and multidisciplinary teamworking in the design of dwellings, commercial uses and car parks, to enable effective and efficient charging to take place.

8.4. Utilities

Urban sprawl or densification is dependent, amongst other factors, on the utility network. Existing or planned communities will be heavily reliant on a modern and sustainable supply of utilities. The creation of plans and the determination of applications should take into account the interdependency between development and utilities: new developments can be an avenue for expansion of the utility networks, where appropriate through public-private partnerships.

8.4.1. Protecting the water supply system

Mauritius is one of a few Sub-Saharan countries to enjoy good access to water resources. The island has an average annual rainfall of 2,000 millimetres. As at the end of December 2019, approximately 99.5% of the population was connected to the drinking water network.

The main source of drinking water is from surface water (51%) such as reservoirs, dams and river off-

takes. The remaining 49% is from groundwater resources from five main aquifers. These are abstracted from around 532 boreholes, of which 170 for domestic use , 192 for non-domestic use and 170 for agricultural purposes.

However, the island faces potential water shortages in the medium to long-term because of increasing water demand exceeding supply capacity, a situation impaired by a downward trend in mean annual rainfall. In addition, the fact that domestic and industrial sewage effluent is not adequately collected or treated means surface and groundwater resources are being polluted, including in the coastal zone (due to sea outfalls from the country's few sewerage treatment plants).

With the gradual conversion of agricultural land to other uses, there is a considerable need to cope with a shift in water use, ideally through a regime which allows for a strategic use of available water resources in a way that best fits the country's economic and social needs, and ensures the best economic and social returns.

Water collection and distribution should be able to address short, medium and long-term water demand, through the mobilisation of additional water resources to meet the sustained increase in demand and the reduction of non-revenue water from the present level of around 50% to an acceptable level of around 20%.

WS1 Protection of proposed dam sites and associated catchment areas

Land for dam sites should be identified in the relevant water resources masterplan of the Water Resources Unit. Such land should be safeguarded as part of outline planning schemes and protected from any development. The associated catchment areas as identified in the relevant water resources masterplan should be safeguarded against pollution, erosion and deforestation. Existing dam catchment areas should be protected from uses requiring nutrient-rich fertilisers and harmful pesticides.

The demand for water is projected to continue to increase in Mauritius and climate projections indicate reduced rainfall. To cope with the challenge, potential future deficits in water resources should be identified early and minimised. The associated upstream catchment areas should be subject to strict guidelines and developments within them should be regulated. Prior to implementation, potential developers should obtain an agreement with the Water Resources Unit, so as to ensure the development does not pose a threat to downstream water resources.

Healthy forest buffers significantly improve water quality, while enhancing groundwater recharge and also being important in hydrological cycles. On the other hand, the use of fertilisers and harmful pesticides, particularly at creeks, can significantly affect dam water quality.

WS2 Development close to boreholes

Development close to boreholes may be permitted subject to provision of a wastewater (sewage) system meeting the requirements and approval of the competent authorities. Groundwater quality monitoring is to be implemented as part of major developments. Furthermore, in the absence of a wastewater system, no development should be permitted within a 200 metre radius of a borehole without consultation with and approval of the Water Resources Unit (WRU).

There are five main aquifers in Mauritius that are harnessed to cater for water demand through 520 boreholes. However, the potential for further groundwater exploitation is becoming limited. Governments should assert themselves as guardians of the precious resource and it should be ensured that planning guidelines set for residential and industrial developments within the vicinity of boreholes are strictly adhered to, in order to harness groundwater in a sustainable manner. Regular sampling and testing of both surface and groundwater is encouraged to safeguard freshwater resources against pollution. Hydrological studies which aim to improve groundwater potential are also encouraged.

WS3 Development above aquifers

Extensive human settlements should be avoided on major aquifers, except where waterborne sewerage systems are available and mitigation measures are implemented against sub-surface contamination. Existing settlements should be provided with waterborne sewerage systems. New industrial activities should not be permitted on areas overlying major aquifers.

If improperly constructed, used and maintained, septic systems have the potential to be a significant source of groundwater contamination, particularly in extensive human settlements. In an era of continuous development, it is particularly important to mitigate the risk of groundwater contamination, which can lead to waterborne disease outbreaks and other adverse health effects. The implementation of waterborne sewerage systems helps safeguard the integrity of underlying aquifers, although pollution risks are not eliminated. As such, the second measure is to ensure sufficient attention is paid to maintenance and rehabilitation. The third measure is to prevent industrial activities overlying major aquifers. These activities have the potential to lead to higher and more hazardous pollution loads.

8.4.2. Electrical power

In the context of electricity supply, the Ministry of Energy and Public Utilities has the major challenge of ensuring long-term energy security by diversifying sources of electricity generation and cleaner energy. This can be achieved by developing an adequate and clean power generation capacity and by modernising the electricity grid to ensure a reliable and secure electricity supply.

The Central Electricity Board (CEB) is the sole electricity provider and is under the aegis of the Ministry

of Energy and Public Utilities. It is responsible for the control and development of electricity supplies in Mauritius. The Utility Regulatory Authority is the utilities regulator.

The functions of the CEB are to prepare and carry out development schemes relating to electricity services; and amongst other prepare plans for the generation, transmission, procurement, distribution and sale of electricity.

As of June 2019, the CEB was producing around 40% of the country's total power requirements from its four thermal power stations and ten hydro-electric power stations. The IPPs are private electricity generators and produce electricity by burning bagasse, a by-product of sugarcane, in the crop season and coal during the intercrop season. During the former, less electricity is exported to the CEB's grid as part of the electricity generated by IPPs is used for their own consumption and some of the steam produced is sent to nearby sugar factories for sugar production processes.

In 2020, around 76% of electricity was generated from non-renewable sources, mainly coal and fuel oil, while the remaining 24% was from renewable sources, mostly bagasse. The main energy source for electricity generation was coal (40%), followed by diesel and fuel oil (40%) and renewable sources (21%). In 2018, coal (52%) was the major fuel used to produce electricity, followed by fuel oil (29%) and bagasse (20%). Independent power producers produced around 57% of total electricity. The peak power demand was 468 MW in 2016.

E1 Sites for new power plants

Expansion areas around power plants to be safeguarded from development. Some of the existing CEB thermal power plants are to be converted to run on LNG or clean/renewable energy sources with the aim of decarbonising the electricity mix. Such facilities would be planned with logistical facilities for the transportation of LNG or renewable energy. Hybrid facilities' dependence on energy production will be reduced in line with the Government Energy Strategy. Additional areas should be earmarked for the development of energy storage systems and new power plants which will operate on cleaner fuels such as LNG as Government's strategy is to phase out coal by 2030.

Electricity supply developments are leaning towards renewable energies and LNG and associated works, such as tanks and interconnecting pipe networks, have already been started. The gradual shift towards the use of cleaner energy technologies, such as LNG, is also in line with the latest strategy in the Government's Renewable Energy Roadmap 2030 and the aim of producing 60% of the country's energy needs from green sources by that time. Planned developments should consider preliminary studies on the required logistical facilities to ensure the reliable and safe supply of electricity and banning of coal by 2030.

E2 Service corridors

The need for service corridors and rights of way for power cable networks must be considered during the planning stage for major development projects. Relevant enactments will be reviewed to enable utility authorities to secure wayleaves and corridors the for connection of services including between renewable/green power plants and substations.

Corridors should be identified beforehand for the laying of underground cables and erection of overhead lines. High-voltage lines will generally require wayleaves, while medium and low voltage lines laid across road reserves should respect setbacks and clearances.

8.4.3. Sewerage

The provision of adequate sewerage management seeks to improve public health and the environment. There is also a need to address environmental challenges related to economic and demographic growth, and rapid changes in the utilisation of water and land resources, with the aim of preserving the country's fragile environment.

ST1 Sewerage systems

The provision of centralised sewerage systems should be accelerated in major settlement areas with an emphasis on reaching 50% coverage in 2030. Major coastal settlements should be connected to such systems as a matter of priority and the provision of seawater outfalls for the disposal of treated water studied, to mitigate nutrient blooms in lagoons.

The coverage of a central water supply is close to 100% on the island of Mauritius. The generation of wastewater is strictly related to the water produced and distributed through the water supply networks. Furthermore, water consumption for industrial, commercial and institutional uses is bound to increase, given the increasing level of urban development. It is also important to mitigate threats to coastal ecosystems through the discharge of insufficiently treated wastewater into the environment.

ST2 Sites for sewage treatment works

A new centralised sewerage treatment facility should be identified to cover the West Coast and southern and eastern areas of Mauritius. Additional treatment facilities should safeguarded in the northeast part of Mauritius.

Through the implementation of sewerage networks and centralised sewerage treatment facilities, the number of households still relying on on-site sanitation will be greatly reduced and the needs of future developments can be met. Sites where it will be economically viable to construct sewage treatment facilities should also be identified and safeguarded from development through buffer zones at an early stage. Land should be preserved in the northeastern part of Mauritius for extensions, as in the case of existing facilities at Saint Martin, Tombeau Bay and Grand Bay.

ST3 Polluting industries

All major polluting industries should be connected to a professionally designed and maintained sewerage system connected to a sewage treatment plant.

Connection to a professionally designed and maintained sewerage system is important in ensuring that polluting industries do not cause undue harm to nearby habitats and downstream water networks and habitats. Proper control and treatment of wastewater enables the removal of harmful bacteria and the potential re-use of beneficial nutrients for agriculture.

ST4 Septic tanks and soakaways

In smaller settlements outside the conurbation and major settlements, and where centralised systems are not viable, the construction of septic tanks and soakaways need to be controlled to ensure they do not lead to the pollution of property, watercourses and aquifers.

Septic systems are considered a potential source of groundwater contamination if improperly constructed, used and maintained. The provision of such facilities should ensure that wastewater is adequately treated and is in line with soil conditions. In line with Policy WS3, on-site wastewater disposal is not recommended in extensive settlements.

8.5. Communications

In the 21st century, economic progress is heavily dependent on the availability of modern, high-quality and fail-safe communications infrastructure.

Therefore planning policies and planning determinations need to encourage the extension of digital communications networks, and anticipate evolutions in mobile technology as well as fibre-optic broadband connections.

Policies must set out a timeline of delivery and upgrade of high-quality digital infrastructure. New developments should be encouraged to connect to fibre networks.

Local planning authorities should not unduly restrict new digital communications development, but they must take into consideration factors such as the risk of major interference with other essential electrical equipment such as air-traffic services or national-security equipment, or international guidelines on safe distances from dwellings, schools, hospitals.

8.5.1. ICT infrastructure and data centres

Information Communication Technology (ICT) is a critical part of the infrastructure required to support a modern economy. As more jobs and services are reliant upon high-level communications, it is imperative that Mauritius provides the infrastructure required.

Mauritius is recognised as being a safe investment destination due to its long established tradition of socio-political stability, free market economy and good governance. Although the tourism and financial sectors are well anchored in its traditional economic setup, the ICT sector, albeit a nascent industry a few years ago, has recently been propelled into its new role as the third pillar of the Mauritian economy. International ICT players, including Oracle, Microsoft, CISCO, HP, Orange, Accenture, Ceridian and KPMG, are now present in Mauritius. These players operate a wide range of activities, including software development, call-centre operations, business process outsourcing, IT-enabled and web-enabled services, sales, consultancy and multimedia development.

In the context of telecommunications, Mauritius is currently served by a modern, digital telecommunications network, numerous mobile networks and a small number of other service providers. With the development of 5G currently on C band allocated by the Information and Communication Technologies Authority and future evolution using higher frequencies (MM bands), the position of emitting devices will require closer proximity to buildings and dwellings for adequate coverage of devices. Such emitting devices mounted on buildings or towers should be adequately regulated to ensure that integration in the built environment is in line with relevant planning policy guidelines.

TC1 ICT infrastructure

Work with providers and regulators to ensure the provision and delivery of the information and communications technology (ICT) infrastructure to sustain a modern and developing economy. Ensure adequate and suitable network connectivity across the island, including the provision of well-located and well-designed telecommunication masts. Erection and operation of new mobile communication towers should seek to utilise existing sites and rooftops to minimise the visual impact of communications apparatus. The telecommunication authority should study feasibility and strengthen regulations to regulate deployment of telecommunication equipment on existing towers, with different operators sharing existing towers on a priority basis.

Ensure that networks are future-proofed to enable the rollout of the latest technology through the safeguarding of sites and corridors.

It is recommended to partner with service providers for continuous investment in network infrastructure. Adequate broadband capacity, resilience, redundancy and national and international connectivity route diversity will ensure the successful role of the telecommunications sector in ICT-driven economic growth.

TC2 Data centres

Ensure that, when locating data centres, suitable electrical power supply and security and resilience is available, by locating them close to existing strategic electrical supply corridors.

One of the main considerations in site selection for data centres is the reliability and redundancy of power. Power supply also has direct cost implications which affect the economic viability of projects. As such, data centres, setting up of IT infrastructure and electrical supply corridors should form part of an integrated and carefully planned framework.

8.6. International connectivity: ports and airports

Regional and global connections are critical to the economy and growth of an island nation such as Mauritius.

While ocean connectivity is essential for importing supplies, materials, fuel oil and gas, ports also present economic opportunities of their own, for instance in the bunkering sector. Air connectivity is crucial to the tourist industry, but has taken on increased importance for Mauritius as an international financial sector. The growth of the freeport sector also needs to be encouraged.

The National Development Strategy supports the implementation of the long-term strategic plans for the port and airport.

Storage of hazardous substances in zones within or around a port or airport should be addressed in accordance with Policy I3 Storage of hazardous substances.

8.6.1. Ports

The Mauritius Ports Authority (MPA) operates the port which lies within the city limits of Port Louis. Port Louis, being the country's sole maritime gateway, handles around 99% of the total volume of external trade and contributes about 2% to GDP. As such, the port play a major role in facilitating economic growth.

Despite the economic crises in the eurozone and slower growth in emerging markets, the 2018 port trade performance remained buoyant, with an expansion of 5.5% due to new records in transshipment and bunkering activities. Total cargo traffic reached a new peak of 8,064,954 tonnes in 2018, compared with 7,642,297 tonnes in 2017.

The review of the Port Masterplan by Royal Haskoning DHV concluded that, for the port to be able to maintain and enhance its services, major upgrading works are required to the port infrastructure, internal road and amenities. It should be noted that the previous masterplan was completed in early 2009 and the revised masterplan focuses on likely development between 2015 and 2040.

The prescribed works were based on the projected increase in trade and for the Port Louis port to be able to berth container vessels of more than 9,000 TEU (twenty-foot equivalent units) in coming years, and with regard to strong trade growth in the Western Indian Ocean and the number of large developments at competing ports over the next 10 to15 years.

In the latest masterplan, the forecasts are also heavily related to an increasing need to upgrade the infrastructure within and outside the port area, with particular emphasis on motorway corridors. Storage cargo outside the port area has the potential to improve port operations, attracting a wider customer base, allowing space for expansion and generating employment. The Jin Fei area, located at Riche Terre three kilometres north of Port Louis, has been designated for an extension to the port's free zone. A link road between Jin Fei and the port, along with the input of the Road Development Authority, should avoid congestion on the motorway, thereby reducing stress on the major transport corridor and economic growth around the Port Louis area.

Port operations should also be flexible and in line with the ocean economy initiative set up by the Government, thereby ensuring an increased contribution by the maritime sector to the Mauritian economy. It should aim to be competitive in terms of port operations, in anticipation of the trade growth in the Western Indian Ocean and a large number of developments in competing ports over the next decade.

P1 Ports

The integration of activities related to the blue economy in port development plans is encouraged. There is a need to integrate surface multimodal connections between the port and adjoining areas, including the urban terminals, Aapravasi Ghat and Les Salines area, aiming to integrate the various activities.

Mauritius has a tiny landmass, surrounded by a vast maritime zone of 2.3 million square kilometres and an additional sea area of 396,000 square kilometres co-managed with Seychelles. As such, Mauritius' blue economy represents an important untapped resource, which has the potential for higher and faster GDP growth in the Indian Ocean Region. In addition to trading opportunities, the blue economy offers environmental and social benefits which are yet to be exploited in Mauritius, particularly in terms of employment, and research and development opportunities.

P2 Ports and their environments

A mobility study should be commissioned to provide multimodal mobility plans around the port and Port Louis Waterfront, including the urban terminals and the Aapravasi Ghat and Les Salines areas, with a view to integrating the various activities.

To cope with the anticipated growth and expansion, there is also a need to integrate surface multimodal connections between key areas such as the port, urban terminals, the Aapravasi Ghat and Les Salines. Such a framework also fits in well with the LRT plan and ultimately amplifies the impact of the various activities, – for instance the Aapravasi Ghat as a World Heritage Site and the urban terminal as a tool for modern urban landscape regeneration. With regard to Les Salines, which has now been returned to the MPA, the Port Masterplan, prepared in 2017 by Royal Haskoning DHV, makes recommendations for its use for, amongst others, expanded terminals, tourist attractions, light industry and logistic centres, including support facilities.

To further support Policy P1 and take up the key opportunity to modernise and interconnect the adjoining key areas, such as the urban terminals, the Aapravasi Ghat and Les Salines, the need for a defined framework is identified.

Such framework should consider both the short-term and long-term requirements for accessibility to the adjoining areas. It should further deal with the complexity of ensuring compatibility between the various activities and should be in line with the LRT system.

The promotion of a multimodal mobility study to examine operational issues and impact on sensitive environments, including the Aapravasi Ghat World Heritage Site is also needed. The previous NDS classified this as a proposal rather than a policy.

8.6.2. Airports

SSR International Airport currently has 25 scheduled airlines, serving more than 30 destinations. The passenger terminal currently handles an average of 1,640 passengers per hour (both arrivals and departures) and has a capacity of 4.5 million passengers per year. Passenger traffic, including those in transit, has increased by nearly 31% since 2015 to reach 3.84 million in 2018 and as at today, the airport is found to be operating at 85% of its capacity and will attain 100% by 2023. Airport provision should be able to expand in line with a growing tourism sector and meet the growth in passenger numbers.

An airports also represents a gateway to economic growth and should be able to sustain commercial and industrial growth. In terms of performance, air cargo remains a very tough and competitive business. Changes in representations in main markets and a review of the sales strategy have seen an upsurge in activity. High demand mainly for perishables, pharmaceutical products and manufacturing goods contributed to the growth. The air cargo volume recorded in 2018 was 62,000 tonnes, is expected to be around 68,000 tonnes in 2020 and will further grow to a forecasted amount of 100,000 tonnes by 2030.

Based on the above-described situation, which could potentially hinder economic growth, the Government has adopted some strategic directions, in line with its Vision 2030 and the air-transportation masterplan, to improve its global standard, airside safety, passenger-handling capacity and air-cargo volumes, essential for economic growth. To accommodate future expansion, the current infrastructure will have to be upgraded especially within the airport area, where all developments (aesthetic, drainage, utilities, lighting and roads) are regulated through the Airports of Mauritius planning policy document.

Government has approved the Airport Masterplan for SSR International Airport which includes the following infrastructure spanning over 20 years:

- A new high-tech and eco-friendly main passenger terminal of about 50,000 square metres to cater for 8 million passengers annually
- Improvement of airside infrastructure including runway and taxiways
- Extension of the cargo village and free-port area
- New fuel and power plant
- New maintenance stands and hangars
- New airport city with mixed use development including transit stations, airline offices, retail, hospitality and commercial developments.

It is not expected that a second airport will be constructed in the foreseeable future at Plaines des Roches. However the site should be safeguarded until such time as the possibility of a second airport is ruled out completely by the competent authority. Any development within the proposed airport safeguarding area, as defined by the outline planning scheme presently in force, shall be subject to the approval of the Department of Civil Aviation and the delimitation of such zone should be finalised in the relevant updated outline planning scheme.

A1 Airports

The airport expansion zone around SSR International Airport shall be preserved for the provision of a second runway and surface strategic accesses provided on the runway's eastern boundary.

Airports (and ports) are national transport gateways to sustain future economic growth. To ensure their efficiency, the transport system in and out of runways should not be a limiting factor. Given the long-term nature of the NDS, it is paramount to ensure the existence of planned expansion for long-term airport growth.

- Strategic access routes to the airport should be preserved in view of the expansion plans.
- Air traffic may require a future second runway and strategically-situated land should be preserved to that end.

A2 SSR International Airport safeguarding

The areas subject to building control and restriction around SSR International Airport are illustrated on the Airport Safeguarding Area Restriction Inset Plan reproduced in the Outline Planning Scheme for Grand Port Savanne (2011) and as subsequently modified by the competent authority, i.e. the Director of Civil Aviation. These include areas affected by existing and future operations and also previously defined safeguarding areas. Five zones have been defined by the Director of Civil Aviation with four obstacle limitation surfaces (subject to modification by the competent authority) as follows:

- Approach areas: no new building or structure is permitted within the approach area without a no objection certificate from the Director of Civil Aviation.
- Transitional surface: there are restrictions on new buildings and structures and hence a no objection certificate from the Director of Civil Aviation would be required for development within this zone.
- Inner horizontal surface: a no objection certificate from the Director of Civil Aviation is required for any new development within this zone; the height of any such development is restricted to 100 metres above mean sea level (MSL).
- Conical surface: restrictions vary according to location; however a no objection certificate from the Director of Civil Aviation is required for any new development in this zone.
- Areas outside obstacle limitation surface: within a radius of eleven kilometres from the threshold of Runway 14 as shown on the Restriction Inset Plan, any new building or structure exceeding 15.20 metres in height requires a no objection certificate from the Director of Civil Aviation.

For operational, security and safety reasons it is necessary to control the scale and nature of developments within the environs of SSR International Airport in accordance with the Plaisance Airport (Building Restrictions) Act 1964 and Annex 14 to the Convention on International Civil Aviation (1944), which prescribes the standards and recommended practices.

9 URBANISM: OPTIMISING LAND USE, AESTHETIC DESIGN, PRESERVING HERITAGE

Optimal use of land in the fulfilment of housing and other requirements should be promoted by planning policies and decisions. At the same time, these should not be detrimental to the need for environmental protection and improvement, as well as the protection of health and safety.

9.1. Optimising land use

The following should guide the conception of planning policies and decisions:

1. Optimising the use of urban and of rural land, through mixed-use developments and projects that lead to net environmental gains
2. Devoting undeveloped land to utilitarian uses, for instance food production, flood-risk abatement, leisure, and wildlife habitats
3. Endeavouring to mitigate the impact of abandoned, derelict, contaminated or risk-prone land
4. Encouraging the use of air rights, especially to achieve well-designed places and linkages.

9.1.1. Making efficient use of land

The efficient use of land should be encouraged by the application of planning policies and decisions to proposed developments. This should be achieved by taking on board the following considerations:

1. Needs in terms of housing and other uses, and matching available land to those needs
2. Whether sufficient infrastructure and services are available (taking into account proposed infrastructure as well), and whether sustainable travel modes are incorporated in the proposed development
3. The protection of the local aesthetic character and green areas
4. The need to promote urban or rural regeneration
5. Achieving aesthetically attractive and safe places.

Demand for land is not static. Therefore planning authorities should be kept abreast of the volume of land allocated for development in the relevant plans, as well as the availability of land through up-to-date brownfield and greenfield databases.

PPGs, as well as locally-based character schemes, design codes and guidance can assist in ensuring efficient use of land without detriment to the creation of aesthetically-appealing places.

9.1.2. Land conversion schemes

Land conversion schemes have taken many different forms over the past two decades and have

contributed to the country's socio-economic development, in line with provisions of the Sugar Industry Efficiency Act 2001. As a significant contributor to land supply, with large areas yet to be developed, it is important that land conversion schemes are brought forward, in line with the land use planning principles outlined in the NDS. Due to the nature of the sites' original agricultural use, almost all the sites are located outside settlement boundaries. This will ensure that new development sites are broadly in line with the land use planning strategy.

The policy seeks to encourage the use of previously used and underused land in settlements, whilst protecting green spaces from development. As Mauritius' economic profile changes, old industrial sites will become available. It is important that such sites are re-used for positive uses, including housing. Such sites subject to provisions set out in Policy SP19 on bad neighbour activities and buffer zones can contribute to the residential land supply, reducing the need for greenfield development.

UR1 Development within settlement boundaries

Housing proposals for sites located within settlement boundaries will normally be approved, provided the site is integrated with existing social, transport and utility infrastructure networks and does not lead to a reduction in the amount of green space in the settlement.

The redevelopment of previously developed land (brownfield land) within existing settlements will be supported if it does not lead to a reduction of urban green space or impinge on natural systems. New development will be required to meet design guidance as set out in planning policy guidance and ensure that any contaminants are removed or mitigated to international best practice standards.

9.1.3. Delivering quality

There are several pieces in the planning toolkit that can contribute to the delivery of quality development and the safeguarding of protected assets. Additional guidance and policy can be provided through planning policy guidance notes or Action Area Plans. These may be based on policies, standards, development codes and urban design masterplans or frameworks. The tool chosen is based on the issue to be addressed and the resources available. Site-based approaches, such as codes, masterplans and frameworks, are valuable in ensuring design parameters, such as land use, densities and heights, are controlled whilst ensuring that transport connectivity by different modes is integrated into the design process.

For larger developments and for development close to legally protected sites, there is a need to ensure that development does not cause harm or damage to existing environments or infrastructure. In these instances, developers will be asked to provide environmental and/or transport assessments to demonstrate that the impacts of new development can be avoided or substantially mitigated.

SP14 Supplementary policy guidance

Developers should have regard to the detailed guidelines and requirements set out in planning policy guidance in the design of new development. For larger developments, masterplans or Action Area Plans should be prepared to ensure that a multi-disciplinary area-wide approach to new development is undertaken.

Supplementary planning guidance forms an important part of planning policy in Mauritius and is part of the National Development Strategy. It is designed to translate national policies to site specific situations, aiding architects, engineers and planners. Guidance notes are used by officers involved in development control decision-making at central and local levels.

Master plans and Action Area Plans enable an area-wide approach to planning for major developments and land use control measures. They should be drawn up for special use zones, regeneration areas, town centres, rural centres and tourism zones. In preparing such plans, consideration should be given to the integration of public transport, education, health and open space facilities. They should also incorporate the protection and enhancement of natural systems and also include adequate provision of utilities and access to the existing road system, implementing necessary upgrades identified through a traffic impact assessment.

9.2. Aesthetics of design

One of the objectives of the planning and development process should be the production of high-quality, aesthetically pleasing and sustainable buildings and spaces.

A crucial component of sustainable development is good design, which generates improved live-and-work spaces, and brings developments closer to communities. To attain this objective, it is essential that authorities be clear about design expectations, and objective standards to be attained.

Mauritius is blessed with many natural, cultural and built assets. It is important that this capital is enhanced and not depleted over the plan period. This can be achieved through protecting the best assets, enhancing those with potential and ensuring that new development adds to the value of the natural and built capital of the island.

SP15 Design quality and sustainable development

The built and natural environment should be maintained and enhanced in order to create desirable places to live, and meet the day-to-day lifestyle needs of the residents, whilst protecting the natural assets of the island. New development should have regard to detailed policies contained in outline planning schemes and planning policy guidance aimed at preserving and enhancing Mauritius' built and natural environment.

A range of planning policy guidance notes and technical design sheets are in place, to help ensure the delivery of high-quality development that meets relevant planning and design parameters appropriate to the type and location of each proposal. The role of the NDS is to elevate the importance of design in the decision-making process in the interests of better-quality sustainable development.

A key objective of the Strategy is to promote liveable communities, and good design is an essential component in achieving high-quality places where people want to live, work and visit. Quality design is fundamental to any sustainable growth or redevelopment strategy in urban, rural or coastal areas.

9.2.1. Principles of aesthetic design

In order to foster certainty in the minds of applicants as to what might be approved, there should be intelligible design goals and requirements set out in plans.

Design policies should be informed by the relevant area's most desirable features, and by the expectations of local communities.

There should be a national urban design code that consolidates essential expectations in terms of local design throughout the island. This should serve as a framework for placemaking in terms of aesthetic appeal and varied local character.

Such a national framework code shall serve as guidance on applications where there is no PPG or local urban design code.

In assessing whether developments are well designed, the following factors should be favourably taken into consideration:

1. Compliance with local design policies and government design guidance; and/or
2. The outstanding or innovative nature of designs, coupled with sustainability, or high-quality standards of design that blend in their surroundings.

9.2.2. Residential design

A fundamental part of sustainable communities is the creation and preservation of places where people choose to live. The design of individual housing units and neighbourhoods contributes to the collective sense of quality of place. New housing development should address the NDS' wider objectives, enhancing the environment of Mauritius as a whole. Many urban areas are characterised by dwellings with gardens, with the gardens providing urban greenery. It is therefore important that new development responds to and protects the characteristics of neighbourhoods.

UR2 Residential design

Housing developments should be of the highest quality internally and externally, in relation to their context and wider environment. New housing developments, including morcellements, should follow the appropriate design guidance as set out in planning policy guidance, subject to any additional policies as set out in outline planning schemes or Action Area Plans. Outline Planning Schemes should consider introducing policies to ensure the maintenance of green space and usable public open space. In new housing developments and morcellements, over-intensification should be avoided through redevelopment. Residential sites and housing units should incorporate climate change mitigation measures to reduce impacts on the housing environment.

Some neighbourhoods will require renewal over the plan period. Renewal can operate at different scales, from the individual unit to complete neighbourhood renewal strategies. It is imperative that, where renewal is planned, the replacement dwellings and urban environment are built with the long-term needs of residents in mind, providing flexibility to respond to changes in working and travel demands. Planning Policy Guidance (PPG1) provides more detail on design requirements for new housing.

9.2.3. The concept of placemaking

A strong sense of place can help differentiate one place from another, making it memorable and potentially more desirable. A sense of place is derived from a variety of features including the form, function and structure of an area, place or street, and the scale, mass, orientation and architectural style of surrounding buildings, plus the setting within the wider landscape. In Mauritius, the coastal setting or views to mountains can play a major part in establishing a sense of place for new development.

UR3 Character and sense of place

New development should have regard to the existing form, function and structure of an area, street or space. It should respect the scale, mass and orientation of surrounding buildings, and seek to optimise views to the surrounding landscape, whether that is a prominent single feature (such as a mature tree or historic structure), the coastline or a mountain. In areas of poor or little character, new development should seek to utilise the positive attributes of surrounding neighbourhoods to enhance the overall character.

Mauritius has a strong character and sense of place that is represented in its built form, natural landscape, streets and spaces. Character is formed over a long time and changes according to the time of development and the economic, social and environmental context in which the development occurs. This is evidenced by the different character examples in Mauritius, which include the scale, layout and distinctive architecture of central Port Louis, the vistas of mountain ranges, coastline, and sugarcane fields, plus the low-density villas with landscaped gardens in Quatre Bornes' grid-street pattern. New development needs to be mindful of the characteristics that contribute to the Mauritian sense of place and seek to incorporate these into the design of new developments.

9.2.4. Designing out crime

Places that feel naturally secure and safe are more socially and economically attractive than those that feel unsafe. It is important that the safety and security of users and premises are considered at the design stage, utilising design features that take advantage of natural surveillance and creating defensible space through the orientation and layout of buildings.

UR4 Designing out crime

Development should promote a sense of security, without being overbearing or intimidating, through the integration at the design stage of the following measures:

- Legible and well maintained paths with adequate lighting at night
- Design of places to create a sense of ownership over communal spaces
- Clear distinction between private and public space with natural surveillance of public spaces from the buildings
- Design of developments to minimise on-going management and future maintenance costs of the safety and security measures proposed.

Measures to design out crime should be integral to development proposals and considered early in the design process, taking on board the principles contained in international best practice and guidance, such as the UK's Secured by Design Scheme. This will ensure development proposals

provide adequate protection, do not compromise good design, do not shift vulnerabilities elsewhere and are cost-effective. New development should be located and designed in such a way as to deter antisocial or criminal behaviour. Poorly designed buildings and surroundings can create feelings of hostility, anonymity and alienation, which can have significant social, economic and environmental costs, leading to environments that are unwelcoming.

9.2.5. Density and tall buildings

Higher-density developments can help reduce the need to travel and support an increased number of services and facilities within walking distance of residents. Tall buildings can form part of higher-density developments, but tall buildings alone do not necessarily result in high density development as they may be located on large sites. It is important that the positive and negative impacts of both higher-density developments and tall buildings are considered together.

UR5 Higher density development

Higher-density developments should be located on sites with connecting links to an existing or proposed metro station, urban terminal or bus terminal, and where the character of the area will not be affected adversely by the scale, mass or bulk of a high-density development.

Maintaining and raising development density in the most accessible locations can help achieve a more sustainable development pattern, with better integration of transportation and land use planning. It helps support the vibrancy and vitality of centres, reduces the need to travel and creates the opportunity to provide different house types that are generally not available on greenfield sites. The policy seeks to take advantage of the opportunities presented by the development of the metro system and investment in bus infrastructure. Major new developments should be ones with higher-density nodes that can support future high-quality public transport systems.

High-density development reduces the overall land take for development, reducing the need for greenfield development. It makes better use of existing utility and road infrastructure in existing urban areas and urban expansion areas.

Whilst high density does not always equate to high rise, tall buildings can be used as part of a positive plan-led approach to promote regeneration or / densification of urban centres and primary rural centres to make optimal use of the capacity of sites well-connected by public transport. They can also provide reference points, legibility and landmarks.

UR6 Tall Buildings

Tall buildings are encouraged in metropolitan centres, the Eastern Expansion Area, urban centres around metro stations, primary rural centres and pre-designated areas as defined by the relevant PPG for development along the motorway. In such pre-designated areas should also be extended to the region of Phoenix-Highlands, which has witnessed significant development. Tall building development is encouraged where the character of the area would not be affected adversely by the scale, mass or bulk of a tall building. Tall buildings should be of the highest architectural merit.

The positioning of tall buildings should not impact on local or strategically important view corridors or sensitive locations, such as historic buildings and conservation areas. They should not have a detrimental impact on the surrounding area in terms of microclimate or telecommunications. They should also be near high-quality public transport, with their car parking requirements being assessed, taking into consideration the increased need for access to public transport. Tall buildings should be supported by a visual impact assessment.

Located in the right place, tall buildings of high architectural merit can make a positive contribution to Mauritius' townscape and its global perception as a modern high-tech economy. Conversely, they can have a detrimental visual, environmental and even social impact if they are of poor design and are poorly located. Additional design guidelines are contained in design sheets on tall buildings published by the Ministry of Housing and Lands and should be complied with.

9.2.6. The urban green network: open spaces

The urban green network plays an important ecological, natural, recreational and visual role. It also plays an important role in the character of the urban area and the overall quality of residents' lives. Preservation of the green network and its utilisation, where appropriate, for recreation is to be encouraged, emphasising the importance of the continuity of links.

UR7 Open Spaces

Major developments will be expected to provide open space for passive and active recreation in accordance with planning policy guidance. Natural features, such as rivulets and feeders, should be integrated into open space networks as far as possible across the conurbation and rural towns and villages. There is a presumption against the loss of existing open space.

Outline Planning Schemes should consider introducing policies to ensure maintenance of green space and usable public open space in new developments and morcellements, avoiding over-intensification through redevelopment or development in open spaces.

Open spaces are important for the health and well-being of residents. They are particularly important for those who live in apartments and have no access to a garden. Open spaces have proven social, environmental and economic benefits. They enable greater community interaction and make a neighbourhood more liveable, creating a better cultural and physical environment. They provide space for flora and fauna, providing space for biodiversity. They can also contribute to stormwater management and climate change mitigation, and reduce the heat island effect in urban settings. They can host events and activities, contributing to the local economy, whilst also increasing values of properties near open spaces and acting as a catalyst for more re-investment in the neighbourhood. The value of open space extends beyond residential areas, with commercial areas and healthcare settings realising the positive value of connecting to nature for well-being and recovery from illness.

Provisions for open space will be in accordance with guidelines set out in revised Outline Planning Schemes, updated policy and planning guidance and any area-specific requirements set out in approved Action Area Plans. Particular attention will be paid to the provision and maintenance of such areas through the application of implementation mechanisms. The potential use of funding, through schemes such as the National Regeneration Programme, National Environment Fund and Community Development Fund, should be explored.

Within open spaces and landscape corridors, consideration should be taken as to how those spaces can contribute to nature conservation. Increasing wildlife habitat in urban areas is good for both humans and wildlife. Schemes that introduce native or naturalised planting are encouraged, as are planting trees which can provide shade and habitat, reduce air pollution and contribute to mitigating the wider challenge of climate change.

UR8 Urban nature conservation

Identify, protect and nurture areas of open space for gardens, landscaped areas, new tree planting areas and spaces beside watercourses in all settlements.

The management and maintenance of nature conservation sites is important to prevent their degradation by invasive species or inappropriate human activities. The involvement of the public and private sectors and partnering arrangements will be encouraged in the implementation of such schemes. The utilisation of Corporate Social Responsibility funds from private organisations and Government funding and incentives, through schemes such as the National Environment Fund and Community Development Fund, should be explored.

9.2.7. Designing the public realm: streets and spaces

The public realm is defined as all the publicly accessible space between buildings. It includes streets, footpaths, parks, squares, waterfronts, beaches and riverbanks. It can be privately or publicly owned.

The squares and walkways in shopping malls and metro and bus stations can all be considered as part of the public realm. The quality of public realm in many parts of the island detracts from the quality of the architecture and landscape, with many footpaths incomplete or poorly designed. Addressing the quality of public realm will help support regeneration of places and ensure they are places where people choose to live, work and visit. Most of the public realm in Mauritius will be in the form of roads and streets, with the vast majority of these being residential streets, where only a small number of vehicles are expected to circulate.

UR9 Streets and spaces

Streets and spaces should be designed in a manner where the needs of pedestrians are placed at the top of the user hierarchy. This means providing a continuous and connected pedestrian network, with adequate footpath widths in new developments and retrofitting them into existing streets, prioritising city, town and village centres and tourism zones. Where dedicated cycle paths cannot be provided shared use paths should be introduced. Ensuring access for disabled people is a key priority.

Streets should be clear of visual and physical clutter, barriers, unnecessary signs and unnecessary or poorly positioned street furniture. Areas of high intensity use, particularly where a high number of tourists are expected, should have a legible way finding system that makes people feel safe, comfortable and able to navigate their way around. Street furniture needs to be of high-quality materials, have a clear purpose and maintain clear paths through spaces. CCTV should be implemented along commercial and busy streets to provide a sense of security to users.

The provision of shade, through trees or shade structures, is promoted, particularly in mixed-use centres. Landscaping in public spaces should utilise native or highly adaptive species that do not require irrigation during the summer months.

The quality of the public realm has a significant impact on the quality of life of residents and perception of place for those living and visiting. The public realm is how residents reach their home or destination. Different locations will experience different intensity of use, with some areas being primarily movement corridors, for example in urban and rural centres, tourism zones and around metro and bus stations, whilst other areas will be quieter with the focus being on providing places to relax, sit, play and dwell outside.

It is important that streets are designed and managed according to their built form context. Residential streets will have a different set of demands to busy urban centre streets with a high number of pedestrians and vehicles. Regardless of the type of street, there should be a greater emphasis on accommodating pedestrians and cyclists in a manner that is safe and free of impediments to movement in the form of excessive or poorly located signs and street furniture.

Greater emphasis is needed on the quality of materials used in the public realm. Poor quality materials detract from the quality of place and need replacing more frequently, placing a burden on local authorities.

The public realm should be as comfortable as possible, which means choosing materials that reduce the urban heat island effect and provide natural shade for walkways and resting areas wherever possible. Dark materials, such as roads and pavements, absorb solar energy and release it back to the surrounding air as heat. The hardscape should be designed to seamlessly adjust levels between public and private spaces, ensuring all buildings can be accessed by people of all abilities. Vertical softscape elements, such as trees, provide more shading benefits than shrubs, lawns and bushes. Decisions about the use, extent, type and placement of landscape should be based on the realisation of a number of wider benefits relating to micro-climate, human health, placemaking, traffic calming and the need for irrigation. The use of native and indigenous species of plants is encouraged wherever possible, as they reinforce the sense of place, can be grown locally and help to support native fauna.

Making the public realm safer, more comfortable and more attractive will increase the number of people willing to walk and cycle for short trips and parts of their journey for longer trips, thereby supporting the use of public transport.

9.2.8. Non-built features in design: landscape character

Landscape character assessment is a recognised process that enables the identification and description of elements, features and use, and provides a broader context for the assessment of new development than a visual impact assessment alone. A landscape character assessment can help inform strategic decisions around how land is managed and developed. The process can assist in tracking progress over time, recording whether landscapes are deteriorating, improving or have completely changed in character.

UR10 National landscape character

All development should look to respond to the landscape character of its setting. Proposed developments requiring an environmental impact assessment should demonstrate how the development seeks to protect and enhance the landscape character of its setting. In areas of poor or ill-defined character, development should build on the positive elements that do exist, having regard to the wider landscape setting of mountains, river valleys and the coast.

Encouragement should be given to improving landscape character through adaptation and re-use of existing buildings and structures that add value to the area or removal of features that detract from the quality of the area.

In addition to natural and built assets, the importance of character areas that may be of social or cultural significance through traditional or historical activities should also be recognised. Utilisation of areas of landscape character for managing renewable energy supplies, such as mountain range summits for pumped hydro storage, are also important considerations in both the landscape character strategy and renewable energy programmes.

The quality and character of urban settings can be improved by the presence of trees, which also help mitigate climate change. Therefore planning policies and decisions should encourage tree-lining of new roadways, and foster the incorporation of trees in other developments (such as green spaces and public or private common areas). There should be appropriate measures to ensure that new trees are maintained so that their long-term existence is guaranteed. In the same vein, developers and other applicants should be incentivised to retain existing trees where reasonably possible. Local authorities should receive advice as to the proper varieties of trees that are adapted to particular regions or plots. Trees should not be incompatible with road safety standards.

Unregulated siting or design of advertisement hoardings and objects can have an adverse impact on the quality and attractiveness of places. The planning system should therefore include a process for assessing advertising display applications, to preserve the aesthetics of the environment.

Likewise, radio and telecommunications masts can adversely affect the visual qualities of a landscape. The sites for those installations should be kept to a minimum consistent with efficient operation of the network including future expansion. Wherever appropriate, equipment should be designed to avoid constituting eyesores, and should be camouflaged to the fullest possible extent.

9.2.9. Design in tourism zones

The importance of design in tourism zones has long been a feature of planning policy in Mauritius. This has been reinforced by the development of design guidance and design sheets for the various types of coastal development, including hotels/resorts and residencies. Detailed guidelines have been established for parameters such as setbacks, plot coverage and building heights. In addition, general guidelines around natural systems dealing with topography are provided. It is important that all development in tourism areas complies with planning and design guidance, to ensure consistency in quality of design and protection of key natural assets, including the coastline itself. The protection and management of ESAs, many of which are found in the coastal areas where tourism is concentrated, will have a direct influence on tourism activities and tourism development, and therefore need to be taken into consideration during the design process.

UR11 Design in tourism zones

The design, scale and form of development should maintain the nature of the tourism zones to preserve their intrinsic character. The repair, re-use and adaptation of buildings with historic value is encouraged. The choice of materials and landscaping of the site should reflect the local character. Particular attention should be given to the design of buildings in tourism centres that sit within the tourism zones. New development should meet the requirements of design policies, and design sheet guidance set out in the relevant PPG.

Policy UR11 should be seen as an integral component of SP15 Design quality and sustainable development, but with specific reference to coastal developments where environmental and landscape sensitivity are of paramount concern.

The various tourism zones offer a slightly different character due to specificities in the coastline, landscape setting and character of coastal settlements. Tourism zones should be the focus for new strategic developments on the coast. Existing settlements, resort hotels and complexes and major campement sites can form the basis of employment-generating clusters in these areas. It is important that the features that make them so renowned internationally are preserved and protected from inappropriate development. As such it is important to ensure that the character of the settlements in tourism zones is preserved and enhanced through sensitive redevelopment. Tourism zones will typically include the main settlement and the adjacent tourism activities that extend from the tourism centres. Tourism centres are the main commercial hub, often acting as a key service centre for residents, workers and visitors to the wider tourism zone. Design-responsive new development and tourism heritage assets should also be protected in line with policies SP15 Design quality and sustainable development and UR3 Character and sense of place.

9.3. Heritage and culture

Heritage assets are priceless resources that demand preservation measures that are commensurate with their significance, especially in the case of UNESCO World Heritage Sites.

An affirmative strategy for the preservation and use of the historic environment should be included in plans, focusing in particular on assets that are jeopardized by neglect. Such a strategy should consider the factors listed below:

1. Reconciling the sustainability and preservation of heritage assets with the viable use
2. The broader social, cultural, economic and environmental advantages that can stem from conservation efforts
3. The positive contributions that can be made by developments to the local environment in the vicinity of the heritage asset.

Areas designated for conservation purposes should justify this status on the basis of special historic interest.

Where a heritage asset is in a state of disrepair, neglect or damage, this should be taken into account when determining planning applications, especially where the proposed development would mitigate or remedy the degraded condition of the asset.

9.3.1. World Heritage Sites

Integrating the value of cultural and natural heritage in formulating strategic policies is critical. Invaluable natural and built assets should be preserved and protected from visually intrusive development. Since the publication of the last NDS, Mauritius has seen two sites designated as World Heritage Sites by UNESCO. The Aapravasi Ghat in Port Louis was inscribed in 2006 and Le Morne in the Southwest was inscribed in 2008. The Aapravasi Ghat was the site where over half-a-million indentured labourers arrived from India to work in Mauritius or be transferred to other parts of the world as part of what was called the great experiment, to replace slavery. Despite only half of the original site remaining, it still has many original features of historical and cultural significance.

Le Morne Cultural Landscape is a prominent natural feature that is inscribed on the UNESCO list because of its association with resistance to slavery, a site where escaped slaves sheltered in small caves and on the summit of the mountain, escaping onward transfer into slavery. There is also a lagoon management plan which was revised for the period 2017-2021 for the Le Morne Heritage Site.

SP16 World Heritage Sites

Development in World Heritage Sites (WHS) and their settings, including any buffer zones, should conserve, promote and make appropriate use of cultural assets. Development should conserve and enhance the authenticity, integrity and significance of the World Heritage Site in accord with UNESCO guidelines, PPG2 and PPG 6. Outline Planning Schemes should safeguard both the site and its setting. Where available, World Heritage Site management plans should be used to inform the outline planning scheme.

UNESCO World Heritage Sites are recognised for their global cultural heritage significance and are key features of a country's identity. As such Mauritius has made a commitment to protecting, conserving, presenting and transmitting to future generations the outstanding universal value of World Heritage Sites.

The context of the two World Heritage Sites is distinctive, with the qualities of each conditioned by the character and form of the surroundings as well as other cultural, intellectual, spatial or functional relationships. The context of each site therefore needs to be carefully protected, managed and enhanced to ensure its attributes are secured and its future outstanding universal value is not degraded

or compromised.

The need to revitalise the waterfront area in Port Louis needs to be managed in the context of the Aapravasi Ghat World Heritage Site. Changes to the setting can have an adverse, neutral or beneficial impact on the ability to appreciate the site's outstanding universal value. The action area plan developed for the Aapravasi Ghat World Heritage Site provides the planning and design guidance for Port Louis' historic waterfront and should form a key part in the design and decision-making process for all new development on the site and its buffer.

Planning Policy Guidance 2: The Le Morne Cultural Landscape provides the design guidance for the Le Morne World Heritage Site. Th PPG also refers to design sheets, design guidance and technical sheets that have relevance to the World Heritage Site, namely:

- Design sheets for design for sloping sites
- Design sheets for residential coastal development
- Design guidance for hotels and integrated resorts development
- Technical sheets for provision of infrastructure.

9.3.2. National heritage sites

A key part of Mauritius' townscape and landscape character are the buildings of special architectural, cultural and historic interest that have been identified either as individual buildings or as part of a collection of sites.

National heritage assets are identified by the Ministry responsible for Arts and Culture and protected under the National Heritage Fund Act 2003, with a remit for the National Heritage Fund "To identify, valorise and promote our national heritage". Before the setting up of the NHF, the heritage of Mauritius was managed under the Ancient Monuments Act of 1944, which was updated in 1985 through the National Monuments Act as amended in the National Heritage Trust Fund Act 1997.

UR12 National heritage sites

The quality and local distinctiveness of the historic urban and rural built environment shall be maintained and improved by:

- Protecting all national heritage assets, their settings and historic landscapes against demolition and inappropriate alteration or development. There is a presumption in favour of the preservation of national heritage sites.
- Proposals for external or internal alterations or additions to national heritage assets should respect the integrity of the buildings or structures, and harmonise with their special architectural, cultural or historic features and character.
- Encouraging conversion of appropriate redundant national heritage assets to new uses that do not adversely affect their special architectural, cultural or historic value and as a means of securing their economic viability.
- The setting of a national heritage asset is a material consideration in the determination of development proposals.
- Preserving and enhancing the character of national heritage sites by new development respecting the scale, massing, architectural style and use of materials characterised in these sites.

In applying this policy, consideration should also be given to the provisions of SP15 and SP16, where relevant, when altering, adding to or converting national heritage assets.

The preparation of specific development guidance for national heritage assets is fully supported. Mechanisms for the acquisition, management and maintenance of national heritage assets should be explored through the use of existing statutory devices, such as the National Environment Fund and the Community Development Fund.

10 ENVIRONMENT: POLLUTION MITIGATION, CLIMATE CHANGE, COASTAL MANAGEMENT

This section provides the policy framework for the protection and enhancement of the natural environment. Environmentally valuable and sensitive sites are often protected by primary legislation, with the planning system providing an additional level of protection and the framework against which development decisions can be made.

Planning policies and decisions should be oriented towards the enhancement of the natural environment, by favouring environmentally sustainable developments or those that provide net environmental gains over developments that fail to bring any significant environmental contribution.

10.1. Environmental management principles

Mauritius has rich biodiversity spread across its many ecosystems and strenuous efforts are made for its protection. As a country, Mauritius has ratified the Aichi Biodiversity Target 11 of the Strategic Plan for Biodiversity 2010-2020 , which calls for parties to achieve legislative protection of at least 17% of terrestrial and inland water areas and 10% of coastal and marine areas by 2020. The strategic plan for biodiversity places particular importance on biodiversity and ecosystem services, which are conserved through effectively and equitably managed, ecologically representative, and well-connected systems of protected areas and other effective area-based conservation measures integrated into the wider landscape and seascape. In 2020, the Protected Area Network (PAN) in Mauritius under the National Parks and Conservation Service was around 4% of the terrestrial land area, while according to Statistics Mauritius Environmental Digest of Data 2019 the terrestrial protected areas of mainland Mauritius including offshore islets was just over 14,915 hectares (state and private lands) or about 8% of the total area.

Although the strategic plan sets targets, these can only be achieved through effective environmental management. This requires horizontal or networked co-operation and liaison between many interested and involved parties. Previous studies have schematically identified environmentally sensitive areas (ESA) and these form a basic building block in the process by which sustainable development is encouraged and valuable natural assets remain protected. One of the many tools available to be used in the protection of ESA is the EIA process. Therefore ESAs should be accurately mapped and delimited prior to a development. In addition to this, many agencies can play a significant role in successful environmental management within their existing and current rules of engagement, provided appropriate resources, co-ordination and implementation measures are in place.

ENV1 Environmental management

Within or adjacent to sites accurately mapped and identified as environmentally sensitive areas (ESA), there will be a general presumption against development. Any development proposed within or adjacent to an ESA will be required to first obtain clearance from the relevant competent authority. Based on the findings and recommendations of the competent authority, an environmental impact assessment or preliminary environmental report under the Environment Act 2024 may be warranted, prior to seeking a Building and Land Use Permit. Environmental management of the ESA must be stated and agreed as part of the EIA process. Those sites, which are not formally identified as an ESA but are of ecological value, should be accurately mapped and identified and considered during the EIA process and should also be subject to protection. A visual impact assessment should form part of the EIA process as per international best practice.

For those sites currently not identified as ESAs or of ecological value, but which are identified in the protected area network, the precautionary principle should be applied in the determination of planning permission.

Environmental management is a cross-sectorial issue and a holistic approach needs to be adopted. Environmental management will be incorporated in traffic management (Policy T4), control of noise and air pollution in urban environments (Policies ENV2 and ENV5), handling of hazardous and toxic waste and (Policies T7 and SW1) and climate change adaptation through the control of greenhouse gas emissions (Policy T9).

There is a wide range of terrestrial and marine environmental assets located throughout the island of Mauritius that are under development pressure and environmental stress from a combination of factors, including land-use development and environmental change. It is vital for these national environmental assets to be protected for existing and future generations of Mauritians.

An important challenge for the relevant authorities is continuing and enforcing protection and conservation of the most vulnerable natural environments, cultural heritage sites and scenic landscapes, including environmentally sensitive areas protected in legislation, whilst setting out clear and unambiguous conditions for permitting development on other sites.

10.1.1. Environmental Assessment

In respect of relevant sites and developments, environmental impact assessments (EIAs) should be initiated as early as possible in the application process, to avoid uncertainties and undue delays.

SP17 Environmental reporting and assessment

Requirements for EIAs are set out in the Environment Act (EA) 2024. EIAs should be prepared by promoters at the project planning stage in consultation with central government and local authority agencies.

The intent of Policy SP17 is to re-enforce the relationship between land use and environmental planning during the initial stages of the planning process.

Environmental assessment is a technique which should be deployed through the feasibility planning and design stages of major projects, to assist in identifying potential impacts and their mitigation, and to make realistic proposals to improve the project design in order to overcome or offset negative impacts. It should also identify mechanisms for effective implementation, mitigation, monitoring, management and aftercare. Such actions will involve both public and private sector agencies. Without such co-operation, the country's environmental assets will be irreversibly damaged.

Provision is made for the preparation of preliminary environment reports and environmental impact assessments under the EA 2024. Activities requiring PER approval or an EIA licence are listed in Part A and Part B respectively of the EA's sixth schedule.

Legislation and administrative practice should be updated to achieve a well-balanced environmental assessment process, to avoid meritless challenges against applications that fulfil all environmental requirements, and conversely to ensure that only environmentally sound projects are approved.

10.1.2. Preserving air quality

Poor air quality in urban areas can severely impact on the liveability of a place and have long-term impacts on people's health. It is one of the key drivers for governments and citizens addressing carbon-based pollution, with subsequent knock-on implications for climate change measures. Air pollution can result from a number of sources, with vehicle-based pollution being particularly evident in denser urban areas. Systematic air quality monitoring in Mauritius has recently been introduced. Air-quality monitoring provides useful data on traffic management issues and impacts arising from bad neighbour activities in urban areas.

ENV2 Air quality

To improve the local air quality of town centres and main roads to create a more liveable environment through the following measures:

- Reducing traffic and traffic congestion through better traffic management.
- Supporting the transition to low-emission vehicles.
- Utilising landscaping and buffers to mitigate impacts on local air quality.
- Implementing tree-planting obligations for residential plot owners in conurbations.

Air quality is one of the key measures of liveable places. Failure to control air quality can lead to long-term health issues, particularly amongst the young and elderly. Introducing a policy on air quality highlights its importance in creating liveable communities and the wider perception of place for visitors and investors. It is anticipated that clean air will become a key factor in lifestyle choices, and it is therefore important that Mauritius is seen to be actively addressing the issue.

10.1.3. Green and blue corridors

Mauritius' natural and heritage landscape provides many opportunities for sustainable land uses that work with the natural and built environment. Green and blue corridors need to be identified and extended across the island to improve multi-modal public access to countryside and coastal sites. Existing and committed rights of way along rural and coastal routes would be greened through the incorporation of pedestrian and cycling facilities, landscaping and layover places/picnic spots en route. The aim would be to:

- Stimulate eco-tourism and education tourism opportunities (e.g. guided tours, coastal, hiking and biking trails, forest nature trails, interpretation centres around/through natural and heritage assets)
- Provide opportunities for environmental enhancement, conservation and research by greening and safeguarding links between PAN/ESA sites (including rivers, streams, lakes and reservoirs), to enable the movement/interaction of flora and fauna
- Enhance rural and coastal regeneration, agri-tech and agri-tourism (e.g. improved access to working farms, organic/bio-farming clusters and agri-legacy site developments).

SP18 Green and blue corridors

The creation of an integrated network of green and blue corridors that enables rural regeneration, supports environmental management and sustains community cohesion should be prioritised. Multi-modal connectivity between the conurbation and the countryside's economic, social, cultural and environmental assets should be enhanced.

In coastal areas, the creation of corridors that run perpendicular to the coastline should be explored in addition to the coastal route promoted in T6 to improve inland tourism linkages and opportunities.

As a counterbalancing measure to the economic pull of the conurbation and the transport infrastructure investment already committed there, the new NDS identifies and promotes the concept of integrated green and blue corridors, in order to enable rural regeneration, environmental management and community cohesion through enhanced multi-modal connectivity between the conurbation and the countryside. The green and blue corridors would comprise both hard infrastructure (new greened highway and rural road, and rights of way (ROW) incorporating cycleways and footpath networks) and nature-based infrastructure (river valleys, rivulets and streams, nature trails, hiking pathways and publicly-accessible sugarcane tracks).

Over the plan period, an integrated network of green and blue corridors should be identified in updated outline planning schemes and incrementally implemented through incentives and initiatives, including a mix of public-private partnerships and rural regeneration initiatives. Consultation with land owners should be prioritised to minimise costs associated with compulsory acquisitions. New or upgraded access would be created to stimulate agri-tech and food-processing MSME clusters, promote authentic eco-tourism, agri-tourism and educational tourism sites, and signpost inland cultural heritage sites. Other potential nature-based and water-based health, well-being and sports attractions including passive and active use and enjoyment of publicly accessible lakes, reservoirs and coastal landscapes should also be considered for inclusion.

10.1.4. Bad neighbour activities and buffer zones

Bad neighbour activities are identified as such, as they can impact on the health and well-being of those living, working or undertaking leisure activities close to them. As urban areas and settlements have expanded, the conflict between human settlements and bad neighbour activities has increased.

It should be noted that in accordance with the UK Privy Council ruling on buffer zones this NDS clarifies buffer zones in accordance with item 45 of the ruling, which states "The appeal has highlighted the need for attention to be given to improving the clarity and consistency of the statutory planning document in particular to clarify the interaction of the 1954 and 2004 Acts pending full implementation of the latter."

SP19 Buffers to bad neighbour activities

The indicative setback distance from the site boundaries of existing and new bad neighbour development being known as the buffer zone shall vary depending on the nature of the bad neighbour development as follows:

- 500 metres from a rock quarry, stone crushing plant, pigsty, transfer stations or foundry.
- 400 metres from a scrapyard, batching plant, asphalt plant, composting facility or primary sewage treatment plant.
- 200 metres from a poultry farm, livestock farm, civic amenity site, rolling mill or cemetery.
- 50 metres from a crematorium or cremation ground.

The above mentioned buffer zone are indicative figures, to be used as a basis for the application of the sequential tests, objective criteria devised by the local authority and other relevant material considerations applied by the competent authority.

As regard to buffer distance of stone crushing plant considered as clustered site or located in high pollution areas, as determined by the Ministry responsible for Environment, a 1km buffer from site boundary is to be maintained in the short and medium terms.

No new sensitive land use will be permitted within the above mentioned buffer zones of existing bad neighbour activities, save and except where the application of a sequential approach (including all relevant criteria and other material considerations) by the competent authority leads to a different conclusion. The sequential approach should be based on objective criteria determined by the competent authority, such as the possibility of mitigating nuisance from the bad neighbour activity, the outcome of any assessments that may be required, the benefits such as job creation or the improvement of infrastructure at the local level, as well as relevant material considerations.

Sensitive uses are as defined in outline planning schemes and planning policy guidance. Where applicable, buffer zones will be measured as the distance between the site boundary of the existing or planned bad neighbour activity and the nearest plot boundary of the sensitive use.

Within the buffer zone around bad neighbour industries, sensitive uses including residential development, schools and health facilities will not be permitted, unless otherwise concluded by the permit authority applying a criteria-based sequential approach.

Left unchecked, such development would create potential conflict between the new home-owners or occupiers and the bad neighbour activity/operator. Such conflicts are to be avoided by prudent planning, emissions monitoring and operating licence conditions enforcement, as well as an objective criteria-based approach combined with relevant material considerations in light of the circumstances of the application.

In the case of rock excavations and crushing plants these activities tend not to be sited next to each other but to be in separate locations. The buffer zone applies to both the place where the rock material is being won and the place where crushing, screening and stockpiling is being carried out. In other cases, where practicable, new bad neighbour activities should be clustered on a single well accessed and serviced site.

Where stone crushing plant operations are at existing sites, consideration should be given by the relevant authorities to encourage promoters and operators to implement the use of environmentally-sound technologies, retrofit the plant as required and use of water bowsers to mitigate adverse environmental impacts on existing nearby sensitive land uses in line with international best practice. Such mitigating measures should be included in the criteria underlying the sequential approach, and must be taken into consideration.

Cemeteries, cremation grounds and crematoria are important community uses. They should be accessible to local communities and individual cultural and religious groups, yet if not carefully located could restrict or frustrate the future expansion of settlements. A sequential approach to the location of new facilities should be followed so that such uses are located on the edge of settlements, in accessible locations for the community, away from environmentally sensitive areas and where they do not pose a threat to restricting or sterilising development of existing settlements. Clearances from the relevant authorities are required prior to the siting of these facilities.

The difference in approach between existing bad neighbour sites (where the criteria-based approach may lead to the admission of nearby sensitive use within the buffer zones) and new sites is justified by the fact that applicants for new sensitive uses are deemed to have weighed the potential inconvenience of an existing bad neighbour site prior to making their application, whereas the implementation of a new bad neighbour site in the vicinity of an existing sensitive use would be disproportionately detrimental to the latter.

Planning Policy Guidance relating to industry adjacent to sensitive uses and bad neighbour buffers should be amended in line with the policy. Taking into account the relevant jurisprudence of the Privy Council on the matter, it is particularly important that the guidance supports the policy position. Where buffer distances are specified, the modes of application of the sequential approach should rest on clear and objective criteria laid down by the competent authority.

10.1.5. Quarry life-cycle management

Although making an important economic contribution to helping achieve the Government's building construction targets, the quarrying industry is regarded as a bad neighbour and continues to be hampered by complaints from nearby residents and related difficulties in complying with environmental regulations. The use of environmentally-sound technologies and resource-efficient sites, infrastructure and machinery can help mitigate these adverse effects.

ENV3 Transport around rock quarries and crushing plants

The EIA process must consider traffic impacts arising from the operation of rock quarries and crushing plants, which may be more far reaching than the buffer required in SP19. A traffic impact assessment (TIA) should be included in the EIA's scope of works. Heavy vehicles accessing and egressing rock quarries and crushing plants should be restricted from using routes through residential areas and other sensitive land uses, town centres and sensitive environments, including scenic landscapes.

Trucks must not be allowed to leave a site without passing through wheel washing, such as water sprays or wheel cleaning facilities such as metal grids at access/egress points, to improve road safety. All transported materials must be securely covered.

ENV4 Close-out plan and afterlife of quarries

Proposals for new quarries should include a site closure and remediation plan as part of the BLUP and EIA procedures. The plan should give details on timing of the closure, fencing off of the perimeter, infilling of any ponds presenting a drowning hazard and rehabilitation to a permitted use, consistent with the relevant outline planning scheme. Permit conditions should include funding arrangements, which, include provision by the developer or site owner of a bond, escrow account or similar financial mechanism, to be held by the relevant authorities until such time as the closure plan is adequately implemented according to the terms and conditions of the permit.

If an application is made for a new quarry to be permitted to commence operation, then a total life-cycle evaluation should be carried out before permission is given. The life of the quarry may be several decades and will last until the materials being extracted are exhausted or no longer economically retrievable. Once the materials are no longer being extracted, the quarry operation may stop and the equipment be removed. However, the responsibility of the quarry operator does not cease at this point. They cannot just abandon the quarry and leave it to the elements. Abandoned quarries are a hazard to local residents, particularly children, and an eyesore. The initial application must contain a site-closure plan or an alternative use plan. If properly planned, quarry sites can be put to beneficial environmental and economic uses following closure and remediation. Sites which have a clay layer in the base of the excavation can be used as sanitary landfills. Water may be channelled into disused quarries to be repurposed thereby creating man-made alcoves, which could be used for water-based leisure activities. Alternatively impounded water can be changed into man-made ponds for recreational/commercial uses or become fish ponds. The edges of any repurposed quarry should be made gently sloping, for

the safety of children and the public at large. Fencing around such man-made ponds, warning signs and life belts should be provided to discourage children from swimming.

Site rehabilitation costs must be met by the operator. It may be appropriate to require the developer of a new quarry to lodge a financial bond with the authorities to be returned on satisfactory closure, or to be cashed in and used to implement any remedial measures by the authorities themselves.

Existing quarries should be required to submit a closure plan which is time-bound, budgeted and enforceable, with a clear explanation that, if remedial measures are not implemented at cessation of quarry operation, then the authorities will take all necessary steps to render the quarry safe and back charge all costs to the quarry operator. If necessary legal steps can be taken to recover such costs.

10.1.6. Noise pollution

Noise pollution can impact on people's homes, workplaces and open space. It can have an adverse impact on education premises and health settings, whilst also undermining rural tranquillity and the enjoyment of the natural environment.

ENV5 Noise pollution and soundscapes

To reduce noise pollution and improve the soundscape of Mauritius through the following measures:

- Mitigating and minimising as far as practicable the existing and potential adverse impacts of noise by the new development.
- Separating new noise-sensitive development from major noise sources, utilising distance setback, screening and layout measures.
- Promoting new technologies and improved practices to reduce noise at source and on the transmission path from source to receiver.
- Promoting the designation of quiet areas and spaces of relative tranquillity.

Noise management and the achievement of a healthy acoustic environment make important contributions to securing well-being. Developments that are adversely impacted by noise pollution will not be desirable and will therefore not endure over the long term, resulting in a failure to achieve sustainable development. Sensitive uses, such as residential, healthcare and education settings, are more sensitive to noise than other urban uses, particularly at night when ambient noise levels are lower. Not all areas will have the same acoustic environment and not all uses will have the same acoustic sensitivities to noise. The provision should extend to nature conservation areas, where important nature conservation sites contain noise-sensitive wildlife species. The introduction of some sounds can

help mitigate other noise pollution, replacing one noise with a more pleasant noise. An example of this is the installation of water features, which can replace the sound of nearby traffic.

10.1.7. Management of solid waste: landfill siting

The Ministry of Environment, Solid Waste Management and Climate Change, through its Solid Waste Management Division, is responsible for the protection of the environment and public health through proper management of solid and hazardous waste.

Local authorities are in charge of waste collection in both rural and urban areas. Collection is operated by private contractors, by the local authority itself or by a combination of both, based on regional and cost-efficiency factors.

Collection routes and collection days are well defined, and schedules are adapted to avoid as much as possible any disturbance to the population. Some collectors have developed highly performing control systems with GPS tracking to follow up on the quality of the service and also to monitor fuel consumption. They have also developed continuous improvement systems to find solutions to issues limiting sustainability and efficiency.

Other collection systems are organised for specific waste streams. Municipal/district councils organise bulky waste collection in addition to similar initiatives at the national level.

There is currently no separation and collection of household hazardous waste, nor any mandatory separation of recyclable or compostable waste. Therefore a regulatory framework should be introduced to compel households to sort and separate these various types of waste, and to implement an efficient and environmentally-sound collection and disposal system.

Mauritius, with a total population of around 1.3 million, generates about 1,488 tonnes of waste daily. In 2018, the total volume of waste disposed of at the Mare Chicose landfill site was 543,196 tonnes. It is the only such site on the island. Waste generated and disposed of through landfill is on a rising trend.

A compost plant, with a capacity of 300 tonnes of waste daily and set up by a private promoter, is also operational at La Chaumiere. An interim storage facility for hazardous waste has also been constructed at La Chaumiere. Five transfer stations are available throughout the island. Waste collected by local authorities (except for Grand Port and Savanne District Councils) and other waste generators transit through these transfer stations, where bigger trailers are filled to be sent to Mare Chicose.

In view of the saturation of the Mare Chicose landfill site and to prevent a major waste management crisis in Mauritius post-2019, the idea has been put forward of raising the site to provide further disposal capacity. In view of future expansion, land around the site should be preserved and environmental monitoring should be ongoing, to ensure that the natural environment remains protected.

ENV6 Sites for landfill

The area around the Mare Chicose landfill site should be preserved for future expansion and the siting of leachate treatment facilities. A buffer zone of one kilometre around the expansion area should be provided, without human settlements.

10.1.8. Storage of hazardous substances

The Government proposes to expand international port and airport activities, including cargo, as well as drive the new economic agenda for high-tech knowledge-based enterprises, including bio-tech and pharmaceutical products. A development strategy that aims for cleaner and greener outcomes has also been put forward for the country, and a centralised medical and clinical waste incineration project is planned to ensure better management of toxic and hazardous products. In this context, the availability of existing and new sites for the safe and secure storage of hazardous substances, incorporating environmentally-sound practices and standards, will continue to be a concern for responsible agencies.

ENV7 Storage of hazardous substances

To support the safe and secure storage of hazardous substances in existing industrial locations, including the port and airport hubs, consideration should be given to retro-fitting sites and buildings with green technologies to reduce safety risks.

Consideration should be given to the relocation of storage facilities for hazardous substances from currently unsuitable sites to existing industrial locations (including the Port and Airport hubs) where safe and secure capacity still exists.

New sites for storing hazardous substances should be well-located on the strategic highway network, existing industrial estates, the port and the airport, and have regard to the proximity of residential and other sensitive land uses.

In all cases of new hazardous substance storage facilities, the following will be required:

- Incorporation of green technologies and principles into new site and building designs
- Safe and convenient access via a range of modes including walking and cycling with adequate parking and waiting area space including off-street car parking for staff/workers and visitors
- Safeguarding and maintenance of the amenity of nearby sensitive land uses.

Increases in demand for secure storage for hazardous substances can be anticipated because of recent Government masterplan proposals for the expansion of the international port and airport cargo activities over the period up to 2025 and beyond. Demand will also be stimulated by Government's policy thrust towards enhancing the production of agri-tech, pharma-tech and other specialised process engineering products for the regional and international market.

By adapting and re-using existing sites and buildings for secure storage and warehousing for hazardous substances where there are already established supply chains and community safety and security mitigation measures in place, requirements for new sites in greenfield locations can be reduced.

To enable smooth and efficient distribution of hazardous goods between the conurbation, industrial areas, new storage and warehousing hubs, and the international port and airport complexes, priority routes for heavy goods vehicles should be identified and monitored as part of the country's national disaster risk-reduction management programme.

10.1.9. Protecting national parks and nature reserves

Protected national parks and nature reserves cover around 4% of Mauritius' terrestrial land, as provided for under the Native Terrestrial Biodiversity and National Parks Act 2015 and the Forests and Reserves Act 1983. Along with Ramsar sites and islets, national parks and reserves make up Mauritius' existing protected area network (PAN). While national parks and nature reserves are state owned, mountain reserves and river reserves are mostly privately owned. The NDS supports the on-going protection of these natural areas, which are recognised for their national significance.

ENV8 National parks, nature reserves, mountain reserves and river reserves

Major new development should not be permitted within a national park, nature reserve, mountain reserve or river reserve, other than in exceptional circumstances, with the conservation and enhancement of these areas given priority.

Opportunities to enhance the valued characteristics of national parks, including scenic landscapes, should be identified by all stakeholders, demonstrating that the proposals offer significant benefit to the area's natural beauty, wildlife, and cultural heritage. Enhancement can include the treatment, adaptation, retrofitting, re-use or removal of non-conforming buildings, structures or uses.

Mauritius is a party to international agreements (Aichi Accord[1]) that seek to preserve and increase the percentage of land that is protected under environmental legislation. The protected area network (PAN) in Mauritius is around 4% of the terrestrial land area, compared with Aichi Biodiversity Target (section 11 of the Strategic Plan for Biodiversity 2010-2020) of at least 17% of terrestrial and inland water areas (and 10% of coastal and marine areas) to be protected by legislation. To achieve the Aichi Biodiversity Target, sites that have been recognised as containing environmental, scientific or cultural historic value, as well as UNESCO World Heritage Sites, need to be protected.

Mauritius has committed to reducing GHG emissions and so inhibit climate change under the Paris Agreement (2015). Incrementally increasing the amount of land under afforestation, ecological re-use of abandoned sugar lands and maintenance of green space and usable open space provision in new developments can all contribute to mitigating climate change effects by the sequestering of carbon in vegetation.

10.1.10. Protecting forests

Rapid economic development, limited land area, an increasing population and more lucrative alternative land uses, such as infrastructural housing development and agricultural development, place constant pressure on forest lands. In 2003, there were approximately 56,600 hectares of forests (state and private). By 2020, the total extent of forest cover in Mauritius had decreased by approximately 9,000 hectares to 47,103 hectares or 25% of the total land area. The forest lands were cleared mostly for infrastructural developments, including built-up areas, roads, reservoirs, dams and agriculture. Good quality native forest, i.e. having more than 50% native plant cover, is estimated to cover less than 2% of the island, with the remaining forests consisting of plantation forestry or highly-degraded vegetation invaded by alien plant and animal species. The invasive species pose a serious threat to biodiversity.

The remaining patches of native forests have now been converted to national parks, nature reserves or are restricted to other protected areas such as mountain reserves. The bulk of upland forest consists of forest plantations of fast-growing exotic species of economic importance, such as pine.

The forest sector provides direct and indirect employment to some 5,000 people in biodiversity conservation, tree planting, ecotourism, the production and processing of wood and non-wood products, deer ranching and the capture of feral monkeys. The main non-timber products (NTP) derived from forests include fruit (e.g. goyave de chine, jamblong and wild berries), venison, fodder, medicinal plants and fibres. Mauritius' upland forests play a vital role in soil and water conservation, and the production of rain-fed and irrigated agricultural crops at middle and low altitudes. The contribution of the sector to the gross national product is estimated to be about one per cent. This is a gross underestimate, since the ecological services of forests, now deemed to be of considerable value, are not considered in national accounts.

Being deemed unprofitable, timber exploitation in Mauritius is set to be gradually phased out, and

1. International Union for Conservation of Nature (IUCN) Conference of the Parties, held from 18 to 29 October 2010, in Nagoya, Aichi Prefecture, Japan, adopted a revised and updated Strategic Plan for Biodiversity, including the Aichi Biodiversity Targets.

the object of management has shifted primarily to the protection of forests for environmental and ecosystem reasons, biodiversity conservation, and non-consumptive uses, such as ecotourism and leisure.

The Government Programme 2020-2024 highlights the creation of three new endemic forests and the restoration of existing ones, which are to be accessible for hiking and nature walks. The tree-planting programme is aimed at increasing tree cover throughout the island. Existing legislation and policies will be reviewed to increase tree and forest protection; special care will be taken of environmentally-sensitive areas, such as watershed and steep slopes; biodiversity and ecosystem services will be enhanced; and the general public will be educated on the importance and value of trees and forests.

Consideration should be given to incentivising landowners and stewards (large estates and small planters) to increase tree cover and restore degraded forest lands, which are essential to maintaining vital eco-systems, protecting and conserving soil quality and helping retain stormwater run-off, in order to reduce the risk of flooding and for the benefit of the general population.

ENV9 Forests

To protect, conserve, increase and restore endemic forests, planting schemes and tree cover in private mountain and river reserves, state-owned forest lands, degraded forest areas and other areas identified in the national protected area network, in order to comply with the International Convention on Biological Diversity and contribute to the implementation of the National Disaster Risk Reduction and Management Policy, Strategic Framework and Action Plan (2020-2030).

Where state control of forests is the best management mechanism to ensure forest longevity while protecting rare and endangered species or environmentally sensitive areas, maintenance of privately- owned forest land should be considered, for example through public-private partnerships (PPP).

Permit conditions in favour of public interest should be used where new development schemes are considered to benefit from a backdrop of tree cover or the utilisation of tree cover as part of the ambience of a leisure or recreational experience (for example in hunting grounds).

Potential sites for tree planting and re-afforestation should be identified in consultation with any private landowner involved, the MAIFSBEF and the Conservator of Forests. All reasonable steps will be taken by the relevant authorities to prevent and control invasive species which may endanger forests, habitats, ecosystems and indigenous flora and fauna. Planting and forest management schemes should have regard to the prevention of forest fires.

This policy should be seen as an important instrument of Policy EC8 on Agricultural land, food security and diversification.

Forests are invaluable assets harbouring rich biodiversity and they protect watersheds and environmentally sensitive areas. They need to be protected from degradation, conserved and further enhanced. They can also play a critical role in mitigating the impacts of climate change and contribute to long-term disaster risk reduction. Forestry management should aim at increasing tree cover and favour non-consumptive uses and activities that are sustainable, less destructive and more rewarding in the long term.

Demand for leisure and recreation in natural surroundings is increasing with natural recreation and ecotourism on the rise. More and more people are visiting forests for leisure activities, such as shooting, fishing, jogging, camping, picnicking, collecting wild fruit and watching wildlife, and as a result are expecting better facilities and services from the forestry sector. Recent Government announcements on the creation and restoration of endemic forests, accessible for hiking and nature walks, reinforce these aims.

Funding from new development or redevelopment (for example via the National Environment Fund) should be considered, to increase and enhance tree cover and offer a financial incentive for owners to maintain natural assets, which would benefit all Mauritians.

Alternatively, public-private partnerships (PPP) could be considered as a suitable management mechanism to ensure forest longevity and the protection of rare and endangered species and/or protection of environmentally sensitive areas. Holistic incentivising mechanisms and permit conditions should be used, particularly if new developments benefit from a backdrop of tree cover or utilise tree cover as part of the ambience of a leisure or recreational experience (for example in hunting and shooting reserves).

10.2. Climate change and responsiveness – flood protection

Climate change is an acknowledged fact and its potential effects pervade all aspects of society and development. Climate change mitigation or adaptation must be incorporated into all development plans by all public and private institutions. As a small island developing state (SIDS), Mauritius is exceptionally vulnerable to extreme weather events. The report 'Integrating Climate Change into Coastal Planning and Management in the Republic of Mauritius' (2013), noted that "the effects of rising sea levels (that) will effectively shift the coastal zone in a landward direction. Thus, it is clear that consideration of climate change is paramount in a comprehensive and inclusive system for coastal planning and management".

In the short term, more intense cyclones, higher storm surges, heavier rainfall, flash floods, landslides on steep slopes, longer periods of drought, water shortages, higher temperatures with associated health effects and greater demands for air conditioning may all be expected. In the long term, rising sea levels may threaten low-lying coastal areas and communities.

10.2.1. Mitigating the impact of climate change

There is a need to reflect major changes in approach to climate change since 2003. The updated National Disaster Risk Reduction and Management Policy, Strategic Framework and Action Plan (2020-2030), under the Climate Promise Initiative aims at integrating climate change into core development policies, strategies and plans. Key interventions include enhancing the resilience of key economic sectors, mitigating risks and damage to human settlements and infrastructure, and avoiding the loss of lives due to extreme climatic events.

As a signatory to the 2015 Paris Climate Accord, Mauritius has a major commitment to limiting global warming. The Climate Change Act 2020 has already been promulgated and entered into force on 22 April 2021. The main object is to establish a legal framework towards making Mauritius a climate change resilient and low-emission country.

Government and society need to become fully aware of the value of the services that ecosystems render. Coastal mangroves, seagrass and coral communities buffer the impact of sea-level rise. In so doing, they reduce coastal erosion and infrastructure rehabilitation costs. But to perform their services, they are also dependent on the wetlands, tidal marshes and sand dunes next to them, as they absorb and filter surface run-off of chemical fertilisers and pesticides. Their destruction, through land clearing and construction, causes mangroves, seagrass and corals to be directly impacted and thus more degraded by water surface run-off. These natural barriers against coastal erosion thus become weaker and eventually disappear altogether.

The concept of ridge-to-reef needs to be integrated into the NDS through consideration of:

- The integration of the land drainage network to minimise drains discharging stormwater laden with pollutants directly into the lagoon
- The integration of wastewater management to stop inadequately treated sewage from coastal urbanisation getting into the lagoon
- The integration of the rehabilitation of river reserves to reduce the sediment load in the lagoon
- The integration of wetland conservation and restoration to protect beaches and the lagoon
- The implementation of mangrove plantation/transplantation programmes where development commitments are granted.

SP20 Climate change and responsiveness

All potential impacts of climate change must be factored into long-term planning decisions through collaboration among all Government, private sector and community stakeholders on cross-cutting issues in a ridge-to-reef approach to climate change and responsiveness.

Consideration should be given by the relevant authorities to adopting nature-based adaptation solutions while preserving environmentally sensitive areas, including:

- Incrementally increasing the amount of land under afforestation
- Creating biodiversity zones managed through public, private and local community partnerships
- Reusing of abandoned sugar lands for ecological, educational or outdoor recreational purposes
- Enhancing and connecting national and regional green and blue infrastructure networks
- Ensuring maintenance of green space and usable open space provision in smart cities, expansion zones, planned new communities and major morcellement sites

10.2.2. Anti-flooding measures: drainage design

Catchment areas for rivers in Mauritius are generally small. Only two are over 100 square kilometres, river gradients are steep and the courses are deep. However, over the last decade, the control of flooding/ water accumulation has become a national priority. In this respect, the Land Drainage Authority was recently established under the Land Drainage Authority Act in 2017. The aim of this authority is to be responsible for:

1. The development and implementation of a land drainage masterplan.
2. Co-ordinating the construction of drainage infrastructure by local authorities, the NDU, the Road Development Authority (RDA) and other relevant stakeholders.
3. Ensuring that there is a routing and periodic upgrading and maintenance of the drainage infrastructure.

Drainage impact assessment guidelines, indicate that the effects of climate change are becoming more and more pronounced. Reference is also made to the assessment carried out by the then Ministry of Environment, Solid Waste Management and Climate Change in relation to the main causes of flooding, which revealed that flooding/water accumulation occurs as a result of high intensity rainfall events and a combination of other factors which are inter alia:

1. Changes brought about by new development in terms of sealing of ground and reduction in surface area for percolation and ground water infiltration.

2. Encroachment on floodplains of watercourses reducing the carrying capacity of natural drains.
3. Construction along natural drainage paths, in areas which were previously wetlands and areas with high water tables.
4. Hindrances to the performance of drainage systems, such as obstructions, siltation and encroachment by services.
5. Construction in low-lying areas without adequate drainage provision.

ENV10 Design of drainage systems and protected watercourses

All new developments should provide appropriate systems in line with the relevant provisions of the approved Land Drainage Master Plan (LDMP) and to the satisfaction of the Land Drainage Authority to ensure that they are adequately drained, that neighbouring developments are not adversely affected & that the implications for the catchment area are considered in the planning of new schemes.

The provisions of the Rivers and Canals Act 1863, prohibiting the construction of buildings within the reserves of rivers, canals, feeders and rivulets should be respected.

Through the identification of the impact of surface run-off from the catchment upstream as well as within the project, appropriate systems should be implemented to ensure that stormwater is managed and there is no negative impact on neighbouring developments.

In addition, special attention should be paid to developments along river courses, low-lying areas and depressions, so as to prevent the introduction of future high-risk areas. Local planning authorities should use accurately mapped environmentally sensitive areas as the basis for protecting developments & preventing loss of life.

10.3. Coastal zone management

The coastal environment is one of the most fragile environments in Mauritius and the area most at risk from climate change. It is also one of the main tourist attractions, as well as the foundation of the coastal economy (see Policy ENV13 and Policy EC13). The practice of integrated coastal zone management (ICZM) is an internationally recognised process for the protection and management of coastal environments. There is an Integrated Coastal Zone Management (ICZM) Division within the Ministry of Environment operating within the ICZM framework.

In 2016 the Department of Continental Shelf, Maritime Zones Administration & Exploration (CSMZAE) under the aegis of the Prime Minister's Office was tasked with preparing a marine spatial plan for the Exclusive Economic Zone (EEZ) to take into account the increasing demand for space for fisheries and

aqua-culture, marine renewable energy, tourism and leisure.

In addition to controlling further intensive coastal development in areas which are currently saturated and stressing the natural carrying capacity of the environment, a paradigm shift to promote future development inland is proposed. This will relieve the pressure on coastlines. There are many inland attractions based on natural beauty, which can become the centre for new touristic enterprises.

ENV11 Coastal Zone management

The principles of integrated coastal zone management (ICZM) will be followed. Within or adjacent to sites that are classified as accurately mapped ESAs, there will be a general presumption against development.

As such and in accordance with Part B of Sixth Schedule of Environment Act 2024, modification of existing coastline such as beach re-profiling, coastal protection works and removal of basaltic and beach rock, except for urgent rehabilitation works as approved by the Minister after adverse weather conditions, requires an EIA licence prior to seeking a BLUP where required.

Environmental management of the coastal zone must be stated and agreed as part of the EIA process. A minimum 30 metre setback from the high water mark should be observed unless environmental impacts dictate that an increased setback is required.

Activities requiring an EIA licence are captured in the Sixth Schedule of the EA 2024 and as per its Section 30.
Over the plan period and beyond, the potential impacts of sea-level rise, storm surges and tsunami events on coastal communities and natural environment assets need to be considered. In the long term, development planning and disaster risk-reduction programmes need to re-enforce the requirement to diversify tourism away from coastal areas and towards inland sites and locations.

10.3.1. Coastal development and tourism

A more environmentally and socially responsive paradigm shift towards tourism and the coast is required to ensure that their qualities are retained and that coastal communities can continue to live and work in their traditional neighbourhoods. Consolidating and upgrading existing tourism hotels and resorts in situ, while redirecting major new developments inland, will help preserve the coast's natural features, mitigate the impacts of climate change, provide a new thrust to the eco-tourism

SP21 Coastal development and tourism

Development should provide a balance between protecting the economic value of tourism with the need to protect and conserve sensitive coastal environments and traditional fishing communities. Proposals should follow a sequential approach to site selection: existing settlements and resorts located in tourism zones together with sites obtaining development commitments issued by authorities and Government approved schemes will remain the focus for tourist-based coastal development and regeneration schemes in line with sustainable development principles, having regard to updated planning policy guidance.

On the coast within tourism zones, clustering of tourism and other employment-generating activities within or adjacent to existing settlements, resorts and campement sites and utility and transport networks will be encouraged. Consolidation of campement sites into larger sites will also be encouraged.

Outside coastal tourism zones, there will be a general presumption in favour of small-scale developments, where these can be shown to promote job creation, meet local housing needs and provide the focal point for social infrastructure to serve the wider coastal area, especially where changes due to agricultural or blue economy sector restructuring and diversification are being experienced or can be anticipated.

In these cases, consideration should first be given to creating coastal regeneration clusters, by converting and re-purposing agricultural or fishing sector legacy sites, provided the proposed development would not detrimentally impact:

- The safeguarding of sites for state-significant development or the development of approved smart cities, Government approved schemes or sites with Government commitments, masterplanned new communities or area-wide rural regeneration schemes.
- An accurately mapped ESA as defined by the Ministry of Environment, Solid Waste Management and Climate Change or national protected area as defined by the Ministry of Agro-Industry, Food Security, Blue Economy and Fisheries's (MAIFSBEF), National Parks and Conservation Service.
- The capacity of existing or committed transport and utility networks and services.

In all cases of new large scale development in coastal locations, the provision of publicly-accessible and usable open spaces and the creation or upgrading of green pedestrian and cycle networks, which enhance strategic and local coastal accessibility and help mitigate climate

industry and sustain rural communities.

There is a need for more public spaces on the coast. Local coastal communities should be supported

in developing the skills and in having the resources for a new coastal economy that will be sustainable and inclusive. The recent Government/EDB initiative at Mahebourg under the National Regeneration Programme is an attempt to improve public-private partnership mixed-use tourism planning and regeneration, with support from the local community and businesses.

There is a need for more inclusive distribution of publicly accessible spaces on the coast such as public parks and beaches. Much of the Pas Géométriques, which are a national public asset, are leased to hotels and as campement sites and are selectively accessible to the public. At the same time there is a need to protect the coastal assets, including wetlands and sand dunes, from the effects of sea-level rise and coastal erosion.

Policy support for the coast should therefore focus on i) protecting coastal landscapes while ensuring public access to promote awareness of environmental preservation, ii) maintaining a balance between regenerating and enhancing existing coastal zone settlements and tourist facilities, and coastal asset conservation and management (including agriculture, blue economy/ fishing and heritage assets), taking climate change into account, and iii) enhancing established coastal linkages, travel patterns and utility networks for social cohesion, with a focus on affordable and equitable service provision for all.

Tourism in Mauritius is largely concentrated around the coastline, which is finite. Much of the readily accessible coastline has been developed with land-extensive resorts and international high-end hotels spread along pristine beaches. The settlements in these areas have developed a network of support services that enable the tourism offer to be of a high standard. The settlements themselves are part of the tourism offer and it is therefore important that the character and setting of these settlements is preserved and enhanced.

Public beaches are important coastal assets which need at all costs to be protected, preserved and maintained. The Beach Authority in accordance with its one office objectives, is implementing beach management plans (BMP) on public beaches. BMPs for four highly frequented public beaches (Mont Choisy, Flic En Flac, La Prairie and Belle Mare) are under preparation and will be implemented on a phased basis.

BMPs are of vital importance for the Beach Authority as they provide an integrated framework in its decision-making process to the ensure the sustainable development of public beaches. They will also be a reference and an important guide for future development leading towards high quality public beaches. Healthy beaches are not only paramount to quality of life but also protect people and property along the coasts from unjustified human activities and natural processes through the impact of climate change. In addition, the implementation of BMPs will contribute to economic development in the

ENV12 Tourism development around the coast

There should be a general presumption against tourism development outside tourism zones and tourism centres unless.

- the site is capable of connection to existing utility supplies and transport networks or can be connected without unacceptable public expense, or
- development commitments have been issued by authorities, or
- the site forms part of a Government approved scheme
- conforms to planning and environmental policies.

coastal communities.

In order to protect pristine coastline whilst also encouraging the enhancement of the existing tourism offer on the coast, development within existing settlements, resorts and major campement sites, should be encouraged. Developments should also be required to conform to planning and environmental policies and make better use of existing infrastructure networks and services so that the existing coastal tourist offer is refocused and upgraded through redevelopment of older or lower quality resorts. Where the Government has identified future hotel sites and invested in road and utility infrastructure, these should be developed in accord with the tourism strategy to enhance and diversify the tourism offer in Mauritius.

10.3.2. Open coasts

The 2003 NDS contains many important provisions for the preservation of the coast and its natural ecosystems, along with the public's right to enjoy these. By refocusing future tourism development opportunities inland except for sites obtaining development commitments issued by authorities and Government approved schemes and rehabilitating undeveloped sites on open coasts, this can help preserve natural landscape features and mitigate the impacts of climate change.

There is a need for the integration of marine spatial planning in public decisions for analysing and allocating the spatial and temporal distribution of human activities in marine areas, to achieve

SP22 Development on open coasts

On open coasts outside tourism zones, settlement boundaries and existing resorts and hotel clusters, there should be a general presumption against major new development except for sites obtaining development commitments issued by authorities and Government approved schemes.

To build coastal resilience, priority should be given to land and site rehabilitation in support of green infrastructure schemes. Schemes incorporating ecological restoration of accurately mapped ESA or reforestation, or proposals which contribute to preserving or enhancing the amount of publicly-available natural landscapes, should be incentivised.

Where major new development proposals on the open coast are of national interest and where suitable alternative sites are not available, the full environmental, social, transport and utility infrastructure costs of the new location and the alternatives considered should form an integral part of the decision-making process.

ecological, economic and social objectives.

With the onset of climate change and the rethinking of the tourism industry in Mauritius, the coastline as an environmental and economic resource needs to be preserved, protected and better managed because:

- It is the major natural venue for the local population to spend leisure time
- It has the most vulnerable and complex suite of ecosystems
- It is the gateway to important sources of livelihood
- It remains a key asset of the tourism industry.

Incrementally creating coastal biodiversity zones managed through public private and local community partnerships, ecological re-use of abandoned sugar lands and enhancing national and regional green and blue infrastructure networks and scenic coastal routes for public benefit can also contribute to mitigating climate change effects.

10.3.3. Protecting coastal access for the public

Preservation of coastal landscapes and the improvement of public access should be supported. This can be achieved via the creation of a network of green and blue scenic route corridors, by increasing the amount/surface of publicly accessible "natural landscape" state-owned land under lease (mainly for game/deer-hunting), as well as by encouraging landowners to make them accessible on a controlled, commercial and/or purpose-orientated basis. Owners should be incentivised for rehabilitation/restoration works of accurately mapped ESAs or for wilding their plots to improve biodiversity and mitigate climate change effects.

ENV13 Coastal access

The creation of a green and blue infrastructure corridor linking the conurbation to the coast remains a key policy objective. The corridor would comprise an integrated network of green roads and bridges, footpaths and cycleway, rights of way, with publicly accessible sugarcane tracks, inter-laced with sports/jogging routes, nature trails, hiking and woodland forest walks. Where provision for green and blue infrastructure corridor is not possible for safety or landownership reasons, the corridor should be re-aligned along the most convenient alternative route, keeping the diversion to a minimum. Areas earmarked as public beaches should be enhanced, maintained and upgraded to provide a comfortable and safe beach experience for the public.

Except for developments where commitments from authorities have been obtained and Government approved schemes, redevelopment of sites within the Pas Géométriques and on campement sites should prioritise the creation, retention and enhancement of the coastal corridor. On land identified as public beaches, development should only be permitted that provides:

- Sensitively- designed visitor facilities
- Local access
- The conservation and enhancement of coastal biodiversity
- Landscapes that add to the amenity and public use of the beach.

It is a critical component of the national strategy and essential for the health and wellness of the population that all Mauritians have easy access to (preserved) natural environments. Like inland landscapes, coastal, beach and lagoon landscapes should be conserved and protected from loss of identity and be more accessible to local communities as well as tourists.

A key policy objective of the PPG1 design sheet on residential coastal development is to secure/ maintain public access to the sea at intervals of no more than one kilometre.

10.3.4. Landward coastal area

The high desirability of coastal property has continued to place pressure on the coastal area, particularly in what is known as the coastal frontage area. Planning Policy Guidance in the form of technical sheets has been produced since the 2003 NDS, providing detailed technical guidance and criteria for development in the coastal area.

ENV14 Landward coastal area

Development within the landward coastal area should follow the guidance set out in planning policy guidance as updated, relating to coastal development, and following the area-based approach to development, with the greatest protection and scrutiny given to development in the coastal frontage area (a strip of land of a minimum 81.21 metres from the high-water mark), followed by the coastal road area and inland area.

Development within the landward coastal area, where permitted, should be of the highest design quality and holistically integrated into the local topography and landscape, considering the socio- economic and environmental impacts on local communities and natural and cultural heritage assets. A minimum setback of 30 metres from the high-water mark should be observed with increased setback required where environmental impacts dictate.

There is a general acknowledgement that coastal projects should follow the area-based approach to development, with the greatest protection and scrutiny given to the sites' sensitivity. Improved access to public beaches for the local population shall be encouraged to reduce overcrowding and delays in accessing the beach particularly at festival times.

In order to avoid further loss or degradation of coastal public open spaces, tourism activities should also be encouraged on inland sites and locations. In such cases, development proposals will be required to follow the EIA process to ensure any fragile and vulnerable asset is protected from any imprudent actions.

10.3.5. Pas Géométriques

The Pas Géométriques, is a strip of state-owned land of an average width of 81.21 metres wide extending inland from the high-water mark located around most of the coast, and enables the Government to have ownership and control of most coastal development. The land has recently been associated with

ENV15 Pas Géométriques

The Pas Géométriques should be considered as a national resource that can help mitigate the impacts of climate change. To reflect this, intended development on committed and non-committed Pas Géométriques land should only be intensified where development commitments have been obtained or form part of Government approved schemes or is located within a designated tourism zone and does not adversely impinge on an accurately mapped ESA.

The Pas Géométriques are important national land areas that can help protect and enhance Mauritius' coastal environment and combat the impacts of climate change. With a mixture of coastal cliffs, beaches and meadows, fronting of pristine lagoons and wild open ocean, the Pas Géométriques from Le Bouchon to Bel Ombre offer unparalleled hiking, camping and nature experiences.

The role of the Pas Géométriques in managing coastal development extends beyond just tourism uses. They contain many ESAs and therefore play an important environmental role that is reflected in the new NDS policy position. They have an important role in protecting the coastal environment and mitigating the impacts of climate change. State ownership of land gives an additional level of control over the location, type and scale of development. Pristine coastline can be carefully managed and developed under Government approved schemes, whilst damaged or threatened coastline environments can be slowly repaired through coastal management plans.

10.3.6. Campement sites

Campement sites are State leased sites, which could enable some better planning control over large swathes of the coastline as leases are renewed. Campement sites have increased in popularity and therefore the underlying value of properties has increased accordingly. The type of coastal development, the management of the coastal environment and access to the coast is governed by the Pas Geometriques Act. The environmental, social and eco-tourism roles of campement sites should form part of considerations around the future use of sites.

ENV16 Campement sites

Within designated tourism zones, campement sites should be considered for redevelopment for low-density tourism uses, provided they meet planning policy guidance. When redevelopment opportunities arise, the potential environmental role of campement sites should be considered, particularly in relation to maintaining and repairing natural systems and providing strategic connection to and along the coast. Redevelopment of campement sites outside of designated tourism zones shall be undertaken in accordance with planning policy guidance (PPG).

Development, where required on planning and environmental grounds, will be subject to the provisions of the Environment Act 2024, including the preparation of a preliminary environment report or an environmental impact assessment if necessary. Existing structures on small sites within a reduced setback should be considered as established uses in case of renovation/ redevelopment owing to specificities of the site which would otherwise make the site unviable.

Coastal environments are fragile and exposed to the effects of climate change. With sea level rises, campement sites are at risk and it is therefore critical that the PPG on coastal developments is adhered to, with the high-water mark likely to change over time. There is a need for better management and control of campement sites within tourism zones. The environmental footprint of tourism facilities on campement sites should be monitored over time with a focus on better environmental conditions, through the repair of coastal habitats and natural systems where these have been damaged in the past.

10.3.7. Wetlands

Wetlands are important environmental assets that have been put under threat and stress due to poor agricultural and land-use development practices. The infilling or diversion of wetlands not only damages important wildlife habitat but can lead to flooding of other areas, due to the natural systems of which they were an integral part being disrupted. Wetlands are important habitats for capturing and storing carbon. With the impacts of climate change, the need to protect and restore wetlands is more critical now than ever.

ENV17 Wetlands

Within or adjacent to wetland sites as defined by the Ramsar Convention, there will be a general presumption against development. A clearance from the National Ramsar Committee of the National Parks and Conservation Service of the Ministry of Agro Industry should be obtained for any development proposed within or adjacent to wetlands, prior to application for an EIA licence as per the list of schedule undertakings. A minimum of 30 metre setback from the accurately mapped wetland should normally be observed for construction.

Wetland restoration is the manipulation of a former or degraded wetland's physical, chemical, or biological characteristics to recover its natural functions. Restoration practices include re-establishment, the rebuilding of a former wetland and its rehabilitation, and repairing the functions of a degraded wetland. Wetlands protection is defined as removing a threat or preventing the decline of wetland conditions.

ENV18 Restoration of wetlands

The restoration of wetlands is encouraged in recognition of their valuable contribution to landscape and ecology. Many degraded wetlands exist on private property as well as on state land. Wetlands can service many ecological functions such as birdlife habitat, water filtration and wave protection.

Private landowners and state enterprises will be encouraged to restore and/or manage wetlands, offering the services provided to them, through PES (payment for ecological services) or other forms of incentive. Degraded wetlands on state land will be restored as an economic benefit, due to their carbon sink properties. The participation of NGOs, communities, schools and individuals will be encouraged.

Although there is a general presumption against most forms of development within or adjacent to wetlands, there may be cases where new development in close proximity to wetlands can support a vulnerable site's future management, maintenance and funding, to enhance its ecological value. A clearance from the National Ramsar Committee of the National Parks and Conservation Service of the Ministry of Agro Industry and Food Security should be obtained for any development proposed within or adjacent to wetlands, prior to application for and EIA licence as per the list of undertakings of the Sixth Schedule of the Environment Act 2024.

Active encouragement of private owners to participate in wetlands protection can help in creating biodiversity zones managed through local community partnerships. Wetland protection and restoration can also contribute to expanding and enhancing national and regional green and blue infrastructure networks in accord with Government biodiversity commitments, while increasing the number of sites that may qualify for Ramsar status.

10.3.8. Marine parks and fishing reserves

Marine parks have been established to protect Mauritius' coastal resources and are aligned with fishing reserves so that the marine ecosystem is protected. It is therefore important that the aims and objectives of Marine parks and fishing reserves are recognised by the land-use planning system.

ENV19 Marine parks

In addition to the requirements under the Fisheries and Marine Resources Act, the aims and objectives of the Balaclava Marine Park Blue Bay Marine Park and the six fishing reserves (Port Louis Fishing Reserve, Poudre d'Or Fishing Reserve, Poste Lafayette Fishing Reserve, Trou d'Eau Douce Fishing Reserve, Grand Port Fishing Reserve – Zone A and Zone B – and the Black River Fishing Reserve) should be acknowledged in the assessment of any development which may affect the operations and environmental functions of such parks and reserves.

The policy is framed to restrict the catching of fish to within limits established by the maximum sustainable yield and avoid overfishing which may pass the tipping point from which there is no recovery. Protection of natural coastal resources is also provided by, for example, avoiding or minimising i) beach erosion ii) interference with offshore current littoral drift or iii) impacts on the natural dispersion of rainfall runoff, all of which are factors which, if disturbed, may lead to irrecoverable loss of a valued ecosystem.

Local communities, including fishing communities, can be involved in co-managing, monitoring and maintaining marine park protected areas, relieving management pressure on government agencies.

10.3.9. Islets Conservation

There are 49 islets surrounding Mauritius out of which 7 have been proclaimed as nature reserves and 8 as national parks which are components of the nation's Protected Area Network (PAN). The islets are part of the sensitive lagoon ecosystem and regular expeditions are carried out to the islets of conservation

ENV20 Conservation of islets

The conservation and protection of islets which have been proclaimed as national parks or nature reserves is supported through Policy ENV 8 National parks, nature reserves, marine reserves and river reserves. Where islets have not been proclaimed as nature reserves or national parks there should be a general presumption against development unless for conservation, education, eco-tourism, leisure or state-significant uses.

Where eco-tourism developments including establishing, upgrading or minor expansion of facilities are being proposed, proposals should be consistent with the aims and objectives of conservation management plans where these have been prepared by relevant authorities, and be in accord with Policy ENV 1 Environmental management, and the requirements of the Environment Act 2024 and have obtained an EIA Licence. The design of new or enhanced facilities should also follow design guidelines contained in updated Design Guidance and international best practices.

importance for habitat restoration by the Islet and Offshore Unit of the National Parks and Conservation Service (NPCS), to monitor the plants and animals and to control alien invasive species.

While many of these islets have potential for conservation, education and leisure if managed sensitively, some smaller islets are incapable of supporting any development as this would detract from the natural character and views to the islet and sea. Development proposals such as eco-tourism facilities, if carefully sited, designed and managed, can add to the attraction of an area, support the local economy and revitalise the water-based experience for Mauritians and visitors. Low-impact, high-value tourism models, such as limited-access eco-lodges or seasonal tourism activities, that can balance economic benefits with environmental sustainability should be encouraged.

In this regard the Ministry responsible for Agro-Industry, Food Security, Blue Economy and Fisheries through the NPCS has prepared conservation management plans for some of the islets and these efforts should be supported to retain and sustain natural resources as well as eco-tourism related developments where appropriate. Where eco-tourism or leisure development is being considered, strict design and infrastructure guidelines should be enforced to minimize environmental impact (such as off-grid and reversible structures, sustainable water discharge systems and nature-based solutions).

The NDS supports the on-going protection of islets where they are designated national parks or nature reserves because they are natural areas recognised for their national significance.

However, growth in the leisure sector and changing recreation patterns are placing more demands on the use of the lagoon, the islets and off-shore islands As resort facilities continue to be upgraded and the demand for water-based recreation, leisure and recreation activities intensifies over time, future proposals for eco-tourism development on and around the islets will require effective oversight if the environmental integrity of these national assets is to be protected. Strategic zoning and carrying capacity studies should be conducted to determine the extent to which islets can support controlled eco-tourism without degrading their ecological functions.

Opportunities to enhance the valued characteristics of islets including scenic landscapes should be identified by all stakeholders, demonstrating that relevant proposals offer significant benefit to their natural beauty, wildlife and cultural heritage. Public-private collaborations should be leveraged to finance conservation programs while ensuring that commercial activities do not supersede environmental responsibilities. Enhancement can include the treatment, adaptation, retrofitting, re-use or removal of non-conforming structures or uses.

The planning, implementation and monitoring of such proposals should be carried out in accordance with the Environment Act 2024, NDS policies ENV 1 Environmental management and SP 17 Environmental reporting and assessment, and updated Design Guidance. The opportunity to develop design guidelines specifically for islets should be considered given the increasing pressures for private investment and tourism activities. In this context future development projects should also take into consideration international best practices such as UNWTO's (United Nations World Tourism Organization) best practice for low-impact tourism that prioritizes local community involvement and environmental sustainability.

APPENDICES

A1 APPENDIX 1 CONURBATION POPULATION 2000-2020

DISTRICTS	Cluster	Settlement/ VCA*	Population 2000 Census	Population % of total	Population 2020^	Population % of total
Port Louis	Greater Port Louis	Port Louis City	127,855	23	117,880	22
		North: Tombeau Bay	12,011		15,301	
		Terre Rouge	8,736		11,210	
		Le Hochet	13,878		15,662	
		South: Pailles	9,954		9,895	
		Pointe aux Sables/La Tour Koenig	16,448		17,658	
	Subtotal	Greater Port Louis	188,882	34	187,606	34
Plaines Wilhems		Beau Bassin/Rose Hill	103,872		103,452	
		Quatre Bornes	75,884		72,695	
		Vacoas/Phoenix	100,066		104,317	
		Curepipe	78,920		78,251	
	Subtotal	Plaines Wilhems	358,742	66	358,715	66
Conurbation	Total		547,624	100	546,321	100

Island of Mauritius	1,143,069	100	1,221,921	100
Conurbation % of island		48		45

Source: 2000: CSO 2002; 2020: Statistics Mauritius 2020

** VCA: Village Council Area* *^ estimate mid July 2020*

BLUP (sq m) 2003-7		BLUP (sq m) 2008-12		BLUP (sq m) 2013-18		BLUP (%) 2003-18	
Res.	Non Res.	Res.	Non Res.	Res.	Non Res.	Res.	Non Res.
Port Louis City							
443,671	259,219	322,844	169,728	389,841	188,852	18	28
Plaines Wilhems							
1,802,493	601,332	1,488,536	528,133	2,018,121	445,514	82	72
Conurbation							
2,246,164	860,551	1,811,380	697,861	2,407,962	2,407,962	100	100

Source: Statistics Mauritius 2020

APPENDIX 2
LIST OF ISLETS SURROUNDING MAURITIUS

Islets proclaimed as National Park

1. Pigeon Rock
2. Ilot Vacoas
3. Ile d'Ambre
4. Ile aux Oiseaux
5. Ilot Fous
6. Ilot Fouquets
7. Ile aux Flamants
8. Rocher aux Oiseaux

Islets proclaimed as Nature Reserve

9. Serpent Island
10. Round Island
11. Flat Island
12. Gabriel Island
13. Gunners Quoin
14. Ilot Mariannes
15. Ile aux Aigrettes

Other islets

16. Ilot Matapan
17. Ilot Bemache
18. Ilot Fourmi
19. Islet at Pte de Flacq
20. Islet at Pte de Flacq
21. Lerique Islet
22. Goyaves de Chine
23. Bambaras Islet
24. Ilot Grosse Bite
25. Islets opp. P.G. Bras D'Eau
26. Ilot Maino
27. Ilot Vacoas
28. Ilot de la Batterie
29. Rocky Islet at Bras de Mer aux Huitres
30. Ile aux Levrettes
31. Ilot Lievres
32. Ile du Trou Vire
33. Ile Couba
34. Ile aux Rats
35. Ile de L'Est or Mangenie
36. Ile aux Cerfs
37. Ilot Chat
38. Ile aux Singes
39. Islet near coast of War Department Land
40. Mouchoir Rouge
41. Ile de la Passe
42. Ile aux Aigrettes
43. Ile des Deux Cocos
44. Ilot Brocus & Lafond
45. Ilot Sancho
46. Ilot Foumeaux
47. Ile aux Benitiers
48. Ilot Malais
49. Ilot Fortier

A3 APPENDIX 3 ABBREVIATIONS AND GLOSSARY OF TERMS

Listed below are abbreviations and technical terms used in the National Development Strategy.

13.1. Abbreviations

AAP	Action area plan
BLUP	Building and land-use permit
CBD	Central Business District
EDB	Economic Development Board
EPZ	Export Processing Zone
ESA	Environmentally sensitive areas
GDP	Gross domestic product
ICT	Information communication technology
MAIFSBEF	Ministry of Agro Industry, Food Security, Blue Economy and Fisheries
MESWMCC	Ministry of Environment, Solid Waste Management and Climate Change
MHL	Ministry of Housing and Lands
MSME	Micro, small and medium-sized enterprises
MTPA	Mauritius Tourism Promotion Authority
NDC	Nationally determined contributions
NDS	National Development Strategy
NHDC	National Housing Development Company Ltd
NGO	Non-governmental organisation
NSLD	New Social Living Development Ltd
OPS	Outline planning scheme
PPG	Planning Policy Guidance
RDA	Road Development Authority
TIA	Traffic Impact Assessment
SDGs	Sustainable Development Goals
SIDS	Small island developing states
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Education, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
WHS	World Heritage Site

13.2. Glossary of terms

A

- **Authenticity (World Heritage Sites)**

  Authenticity relates only to cultural properties and is about the link between attributes and outstanding universal value. It is embodied in those characteristics that most truthfully reflect and embody a place's cultural heritage values. They can be expressed in the types of attributes listed in the definition of attributes (operational guidelines).

- **Attributes (World Heritage Sites)**

  Attributes are tangible or intangible aspects of a World Heritage property, which are associated with or express their outstanding universal value (OUV) and can be the physical elements, the relationships between elements and/or time-related processes. UNESCO's Operational Guidelines for the Implementation of the World Heritage Convention indicate a range of types of attribute which might convey OUV, including form and design, materials and substance, use and function, traditions, techniques and management systems, location and setting, language and other forms of intangible heritage, and spirit and feeling. Attributes identified for a property should flow from the adopted Statement of Outstanding Universal Value.

B

- **Biodiversity**

  This refers to the variety of plants and animals and other living things in a particular area or region. It encompasses habitat diversity, species diversity and genetic diversity. Biodiversity has value in its own right and has social and economic value for human society.

- **Blue network**

  Areas covered by water including rivers, feeders, canals, reservoirs, lakes and ponds.

C

- **Comparison retail**

  These refer to shopping for things like clothes, electrical items, and household and leisure goods. Comparison goods are bought relatively infrequently, so consumers usually evaluate price, features and quality before making a purchase.

- **Conservation (heritage)**

  The process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance.

- **Convenience retail**

  These refer to shopping for everyday essential items like food, drink, newspapers and confectionery.

D

Density

Density is the measure of concentration of either people or units in a particular location (site, neighbourhood, district). It is typically measured in either dwellings per hectare for housing density or people per hectare for population density.

Designated heritage asset

A world heritage site, scheduled monument, listed building, protected wreck site, registered park and garden, registered battlefield or conservation area designated under relevant legislation.

Development

Means the carrying out of any building, engineering, mining, or other works or operations in, on, under or over land, or the making of any material change to the use of land or to any building or morcellement; including—

(i) use of land
(ii) morcellement
(iii) the erection of a building
(iv) the carrying out of a work
(v) the demolition of a building or work
(vi) any other act, matter or thing that is controlled by a planning instrument.

Development plan

Means a local plan, an action area plan or subject plan.

Development proposal

This refers to development that requires a planning permit.

Digital infrastructure

Infrastructure, such as small cell antenna and ducts for cables, that supports fixed and mobile connectivity and therefore underpins smart technologies.

E

Environmental assessments

In these assessments, information about the environmental effects of a project is collected, assessed and taken into account in reaching a decision on whether the project should go ahead or not.

Environmental impact assessment

This sets out a developer's assessment of a project's likely environmental effects, prepared in accordance with the Environment Act (EA) 2024. The EA 2024 specifies the contents of the EIA.

F

Freight

A general term to refer to trips made for the purposes of delivering goods, enabling servicing activity or supporting construction.

G

Green corridors

Relatively continuous areas of open space leading through the built environment, which may link to each other and to the rural periphery of other urban open spaces. They often consist of rivers, railway embankments and cuttings, roadside verges, canals, parks, playing fields and extensive areas of private gardens. They may allow animals and plants to be found further into the built-up area than would otherwise be the case and provide an extension to the habitats of the sites they join.

Green infrastructure

Comprises the network of parks, rivers, water spaces and green spaces, plus the green elements of the built environment, such as street trees, green roofs and sustainable drainage systems, all of which provide a wide range of benefits and services.

Green space

All vegetated open space of public value (whether publicly or privately owned), including parks, woodlands, nature reserves, gardens and sports fields, which offer opportunities for sport and recreation, wildlife conservation and other benefits, such as storing floodwater, and can provide an important visual amenity within the urban landscape.

Gross value added (GVA)

Gross value added (GVA) is an economic productivity metric that measures the contribution of a corporate subsidiary, company, or municipality to an economy, producer, sector, or region.

H

Heritage assets

Valued components of the historic environment. They include buildings, monuments, sites, places, areas or landscapes positively identified as having a degree of historic significance meriting consideration in planning decisions. They include both designated heritage assets and non-designated assets where these have been identified by the local authority (including local listing) during the process of decision-making or planning.

Historic environment

All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.

Household waste

Household waste includes waste from collection rounds of domestic properties (including separate rounds for the collection of recyclables), street cleansing and litter collection, beach cleansing, bulky household waste collections, hazardous household waste collections, household clinical-waste collections, garden-waste collections, and any other household waste collected by the waste authorities.

I

Integrity (World Heritage Sites)

Integrity is a measure of the completeness or intactness of world heritage property and its attributes which express the outstanding universal value it holds (UNESCO Operational Guidelines).

M

Metropolitan centres

The highest-level centre in the urban area is a metropolitan centre. Metropolitan centres will drive national economic growth, with a focus on strategic facilities and services, while adding and integrating new residential development to stimulate 24/7 living, working, studying and leisure. This centre typology is expected to have all the elements found in lower-order centres plus higher-order (strategic) uses shown in FIGURE 7, such as, at national level, central government institutions, regional and international commercial offices and iconic HQ buildings, as well as specialist niche leisure and entertainment attractions, large business hotels and comparison retail. Metropolitan centres should also have a high level of national accessibility, with multi-modal transport interchange and specialist regional-level further education facilities.

Mixed-use development

Development for a variety of activities on single sites or across wider areas such as town centres.

N

Nature conservation

Protection, management and promotion for the benefit of wild species and habitats, as well as the human communities that use and enjoy them. This also covers the creation and re-creation of wildlife habitats and the techniques that protect genetic diversity, and can be used to include geological conservation.

P

Previously developed land

Land which is or was occupied by a permanent structure, including the curtilage of developed land (although it should not be assumed that the whole of the curtilage should be developed) and any associated fixed surface infrastructure. This excludes land that is or has been occupied by agricultural or forestry buildings, land that has been developed for mineral extraction or waste disposal by landfill purposes where provision for restoration has been made through development control procedures, land in built-up areas such as private residential gardens, parks, recreation grounds and allotments, and land that was previously developed but where the remains of a permanent structure or fixed surface structure have blended into the landscape over time.

Primary rural centres

Primary rural centres play an important role in a rural area, providing services for both the settlement and its wider rural area. The walking catchment for a primary rural centre is typically 400 metres but, due to its specific location and wider rural catchment, and accessibility by car and public transport, would have a much greater reach. As a result, primary rural centres will accommodate services and facilities not normally seen in settlements of their size. They will expect to host workspaces including agri-tech and eco-tourism incubators, large-scale convenience retail, cafés and restaurants, markets,

small specialist retail, health centres and small hospitals. They are likely to be within walking distance of a secondary school and be served by a modernised and integrated bus terminal. The centres should be walkable, with through traffic limited by the enforcement of traffic demand management measures.

- **Public realm**

Publicly accessible space in public or private ownership between and around buildings, including streets, squares, forecourts, parks and open spaces.

R

- **Ramsar Site**

Nature conservation site designated under the Convention on Wetlands of International Importance 1971.

- **Recycling**

Involves the reprocessing of waste, either into the same product or a different one. Many non-hazardous wastes, such as paper, glass, cardboard, plastics and metals, can be recycled. Hazardous wastes, such as solvents, can also be recycled by specialist companies or with in-house equipment.

- **Renewable energy**

Energy derived from a source that is continually replenished, such as wind, wave, solar, hydroelectric and energy from plant material, but not fossil fuels or nuclear energy. Although not strictly renewable, geothermal energy is generally included.

- **Rural centres**

Rural centres will have a walking catchment of around 200 metres but a much wider catchment for cars and public transport. They are important focal points for settlement and surrounding rural catchments. They will typically have small office and commercial premises, including retail, together with small-scale healthcare. A public space or local park will typically be provided. In some instances, a small market will be provided with an emphasis on selling local produce.

S

- **Sequential approach**

Planning policies that require particular steps to be taken or types of location or sites to be considered, in a particular order of preference. For example, retail, commercial and leisure development should be focused on sites within town centres, or if no in-centre sites are available, on sites on the edges of centres, which are or can be well integrated within the existing centre and public transport.

- **Social infrastructure/community infrastructure**

Covers facilities such as health provision; early years' provision; schools, colleges and universities; community, recreational and sports facilities; places of worship, policing and other criminal justice or community safety facilities; and children and young people's play and informal recreational facilities. This list is not intended to be exhaustive and other facilities can be included as social infrastructure.

Soundscape

The overall quality of an acoustic environment as a place for human experience. Soundscape design might include preserving, reducing or eliminating certain sounds or combining and balancing sounds to create or enhance an attractive and stimulating acoustic environment.

Sustainable drainage systems

Using sustainable drainage techniques and managing surface-water run-off from buildings and hardstandings in a way that reduces the total volume, flow and rate of surface water that runs directly into drains, sewers and waterways.

T

Townscape

An assessment of the urban form and its visual appearance, which includes buildings, streets, spaces and particularly how the different elements combine to give a place a character that is distinct to a particular locality.

Traffic Impact Assessment

This is prepared and submitted alongside planning applications for developments likely to have significant transport implications. For major proposals, assessments should illustrate the following:

- accessibility to the site by all modes, the likely modal split of journeys to and from the site, and
- proposed measures to improve access by public transport, walking and cycling.

U

Urban centres

Urban centres will be typically located in the existing town centres and provide the focal point for residents of that area. They are important places as they provide the sense of identity for residents in the conurbation. Unfortunately, many centres are not fulfilling their role, as they have lost trade to more modern and attractive edge-of-town shopping malls and commercial complexes, which have increasingly attracted residents with cars, especially at weekends.

The centre will have a walking catchment of around 400 m radius or 50 ha. A wider catchment by car and public transport will be likely, with catchments often overlapping. Some urban centres will also be the main centre for residents in the peri-urban area just beyond settlement boundaries.

Urban heat island

The form and density of buildings and their arrangement means that, while more heat is absorbed during the day, it takes longer to escape at night. The temperature difference is usually larger at night than during the day. The urban heat island effect is noticeable during both summer and winter months.

Urban terminals

Urban terminals refers to land immediately surrounding a Metro Express station. They may or may not form part of a wider centre as established by the centre hierarchy.

Ministry of Housing and Lands

Ebene Tower, Plot 52

Ebene, Cybercity

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