

Ministère de l'Environnement,
de la Gestion des déchets et
du Changement climatique

URBANISME ET POLITIQUE
ENVIRONNEMENTALE



Les Assises de
l'Environnement

CAUDAN ARTS CENTRE / 16 -17 DECEMBRE 2019

TECHNICAL SESSION 3

BACKGROUND

Urban planning is a large-scale concept concerned with planning, design and development of land-use and the built environment, including water, infrastructure, transportation, communication and distribution networks. Urban planning deals with physical layout of human settlements and public welfare, which takes into consideration efficiency, sanitation, protection and use of the environment, as well as effects on social and economic activities.

Like many Small Island Developing States, Mauritius has a limited area of land suitable for development. Rapid economic growth over the past decades has seen increasing pressure on land resources, with rising demand for urban and infrastructural expansion as well as to support the agricultural, industrial, manufacturing and tourism sectors. In turn, this has resulted in significant impacts on the environment, with an increase in pollution load, land clearing and traffic congestion.

Urban development has changed the environment landscape through the expansion of paved and impermeable areas, thus contributing to increasing flood hazard, especially in low-lying areas, amongst others. Inadequately planned and improperly managed areas have created new risks, which are threatening to erode current development gains. In addition to being a sanitary concern, poor waste management can impede storm water evacuation, thus leading to flooding. Loss of watersheds can lead to water scarcity, while incompatible development in permeable zones can pollute aquifers and contaminate water resources. Lack of access to safe housing, along with inadequate provisions for water and sanitation, can also increase the vulnerability of populations. Furthermore, in certain parts of the island, inappropriate zoning and inadequate land-use planning have resulted in an incompatible development, with the siting of industries in close proximity with residential areas.

Given that most prime land is already committed, future development is being envisaged on difficult sites, such as Environmentally Sensitive Areas (ESAs), including mountain slopes, islets, wetlands and sites prone to landslides and flooding. In addition, land-use planning is becoming more complex due to emerging challenges such as climate change, droughts, flash floods and landslides, amongst others.

A judicious use of land and mix of compatible activities are therefore required to address various impacts related to food, water and energy security, climate change, coastal development, urban development, traffic congestion, poverty alleviation and sanitation.

Being fully conscious of the serious consequences resulting from the degradation of the environment and its impacts on the quality of life, health and the economy, Mauritius has put in place several development control mechanisms in order to ensure proper land-use planning and protection of the environment. These include a legislative framework on land-use planning, the National Development Strategy, Outline Planning Schemes, Development Management Plans and Planning Policy Guidance (PPG) for residential, commercial, industrial and hotel development.

A guideline for "Mainstreaming Climate Change in Building and Land Use Permit" has also been

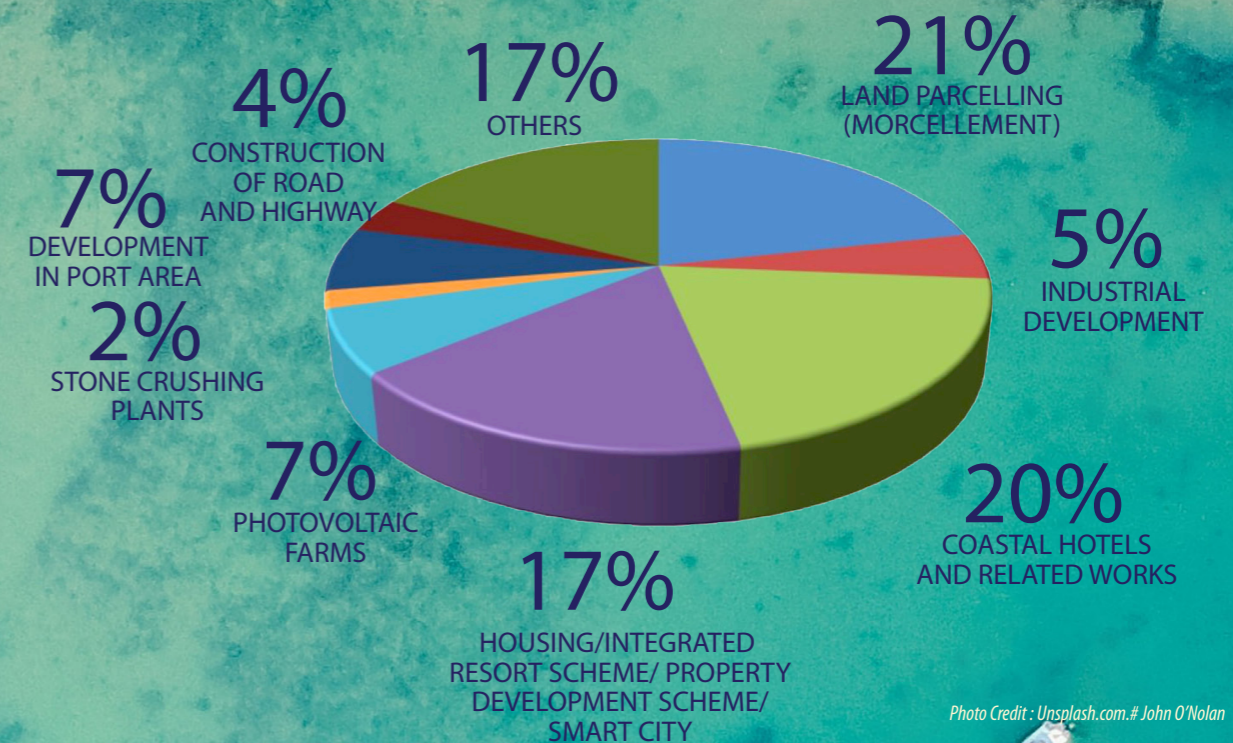
prepared to assist Local Authorities with the integration of climate change risk management, mitigation and adaptation in their local development process.

In addition, the Environment Impact Assessment (EIA) and Preliminary Environmental Report (PER) mechanisms, the Study on Environmentally Sensitive Areas (ESAs) and the development of the Integrated Coastal Zone Management Framework provide necessary tools for development control. Moreover, to address recurrent flooding issues, a Drainage Impact Assessment (DIA) for major morcellement and other land developments is now mandatory and is assessed during the processing of EIA applications.

The EIA and PER mechanisms are development control instruments, which ensure that environmental aspects are duly considered at the inception and design stages of projects. They are among the most important tools for sound decision making and for achieving sustainable development. Over the past 5 years, about 167 EIA Licences have been granted for land parcelling, hotel projects and residential development under the Property Development Scheme, amongst others. Figure 1 shows the sectorial breakdown of EIA licences issued from 2014 to 2018.



Figure 1: Sectorial breakdown of EIA licences issued from 2014 to 2018



VISION/TARGETS

To achieve an integrated sustainable land-use planning, taking into consideration the 'triangle of sustainability', that is, to attain a right balance of economic competitiveness, socio-cultural integration and ecological responsibility.

ISSUES OF CONCERN

1. Increasing demands for land resources and conflicting land uses
2. Loss of prime agricultural land to other uses
3. Overconcentration of development in urban areas
4. Incompatible development such as industries located in proximity of residential areas
5. Increased hazards due to climate change such as sea level rise, flooding
6. Increasing traffic congestion
7. Limited green spaces, footpaths and cycle tracks
8. Habitat destruction and loss of biodiversity
9. Development on sensitive areas such as steep slopes, flood-prone areas, landslide-prone areas and mudflats
10. Backfilling of wetland and encroachment on its buffer zone
11. Encroachment on river reserves
12. Insufficient land-use development control and monitoring due to lack of human resources, as well as technical capacity at the level of Ministries and Authorities
13. Absence of a 'Cahier des Charges' at the level of Local Authorities, thereby leading to disorganised development patterns within residential areas
14. Poor maintenance of existing drainage infrastructure

An example of bad neighbourhood activities amidst sensitive land uses



Extract from Google Earth

Industrial development near residential zone ¹



Flooding in Port-Louis ²



Development on slope ³



Dense urban development ⁴



¹ Mauritius Tourism Promotion Authority, ² Local Newspaper, ^{3&4} Mauritius Tourism Promotion Authority,

EXISTING POLICIES AND STRATEGIES

- National Development Strategy
- Planning Policy Guidance
- Outline Planning Schemes
- Development Management Plans
- Study on Environmental Sensitive Areas
- Technical Advisory Committees on:
 - Scrap Metal Recycling involving Foundries
 - Rivers
 - Air emission
 - Used Oil
 - Coal Ash Management, amongst others
- Guideline on Drainage Impact Assessment for major morcellement and other land developments
- Guideline for “Mainstreaming Climate Change in Building and Land Use Permit”
- Development of sustainable building design code for low and middle-income housing, schools and other buildings

EXISTING LAWS AND REGULATIONS

- Environment Protection Act (EPA) 2002 as amended and all environmental standards, declared environmental laws and regulations under the EPA
- Planning and Development Act 2004
- Rivers and Canals Act 1863
- Forest and Reserves Act 1983
- Local Government Act 2011
- Public Health Act 1925
- Building Control Act 2012

ACTIONS TAKEN/ONGOING

- Amendment of the Environment Protection Act
- Climate Change Bill
- Wetland Bill

PROJECTS IMPLEMENTED /BEING IMPLEMENTED

- Review of ESA Study under the ‘Mainstreaming biodiversity into the management of the coastal zone in the Republic of Mauritius’
- Review of National Development Strategy and updating of the Strategic Planning Framework for Mauritius up to 2030

PROPOSED ISSUES FOR DISCUSSION (NON EXHAUSTIVE)

1. Are existing policies and legislative instruments adequate for proper planning?
2. How to address increasing demands for scarce land resources and conflicting land uses?
3. How far environmental policies are being integrated in land-use planning?
4. What types of urban planning concepts can be adopted?
5. Are setbacks from sensitive land-uses to bad neighbourhood activities such as, slaughter house, stone crushing plant, concrete batching plant, mineral resource sites, adequate?
6. What types of development are permissible within buffer zones of bad neighbourhood activities?
7. How to better manage development on and around sensitive areas such as wetlands, steep slopes, flood prone areas, landslide prone areas and mudflats?
8. How to address stormwater management, solid waste management, wastewater management and utilities requirements in an innovative and efficient way?
9. How to better integrate and protect national heritage sites as well as sites of cultural importance in development?
10. How to manage traffic congestion issues in a practical and innovative manner?

Where we are

- There is an increasing demand for land resources due to rapid economic development and emerging development projects such as smart cities, Property Development Scheme
- Conflicting land uses
- Incompatible development due to inappropriate zoning and lack of planning
- Future development is being proposed on difficult sites, such as Environmentally Sensitive Areas, mountain slopes, islets, wetlands and sites prone to landslides and flooding
- Emerging challenges such as climate change, flash floods, landslides, amongst others
- Increasing public concern regarding new development projects, especially in ESAs and sensitive areas (beaches, highly residential areas)

Where we need to go?

- To achieve sustainable land-use planning by integrating development and ecological responsibility
- To valorise ESAs such as wetlands and mudflats, amongst others
- To shift towards sustainable buildings as well as to encourage the adoption of sustainability requirements in the retrofitting of existing buildings
- To ensure that new development is in harmony with the natural landscape
- To ensure that all promoters are aware and adopt environmental stewardship

How to reach there?

- To establish a clear legislative framework, comprising the necessary setbacks for the conservation and management of ESAs
- To review and establish well-defined setbacks and buffer zones for sensitive areas and bad neighbourhood developments
- To clearly delimit heavy industrial development zones, light industrial development zones and sensitive land-uses (residential, educational and health) as well as identify some light industrial activities that are compatible with sensitive land-uses
- To clearly define and demarcate the roles and responsibilities of agencies involved in land-use planning, development control and sensitive areas management, amongst others
- To strengthen enforcement to ensure better compliance to existing laws and planning guidelines
- To introduce a comprehensive legal framework for Strategic Environmental Assessment (SEA) for major policies and plans such as smart cities, transition towards Liquefied Natural Gas, amongst others and ensure proper capacity building for SEA
- To promote modern urban planning concepts of development such as eco-village, garden city model
- To empower authorities with the necessary tools, skills and competencies so that they can fully integrate and mainstream environmental planning issues in spatial development planning as well as to enable them take the lead in enforcement of planning legislation
- To explore the option of vertical development (high rise buildings) to cater for limited land resources
- To review green space extent, plot coverage and development density, taking into consideration new and emerging challenges such as climate change and increased risks to disasters, amongst other
- To explore the possibility of adopting a ‘Cahier des Charges’ for a more harmonised development approach





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