

Environment Statistics - 2003

1. Introduction

This is the third issue of the “Economic and Social Indicators” on environment statistics, presenting the main driving forces which have an impact on the environment. Information have been gathered from various institutions and thus some of the data may already be available in other publications. In most of the tables, comparative data are provided for the years 2001 to 2003, and unless otherwise stated, they relate to the Republic of Mauritius.

2. The economy

Table 1 provides some key socio-economic indicators showing the structural changes that have occurred during the last decade.

From 1994 to 2003, Gross Domestic Product (GDP), which measures the total value of production, has increased in nominal terms by about 145%, from Rs 64,048 million to Rs 156,906 million. The share of agriculture in GDP decreased from 10% in 1994 to 6% in 2003, that of manufacturing, from 23% to 21% while that of the financial and business services increased from 15% to 19%.

During the same period, the population rose by about 10% from 1,112,846 to 1,222,811 and the population density from 548 to 602 per km².

3. Forestry and Agriculture

3.1 Forestry

Table 2 shows the forest area by category for the Island of Mauritius. In 2003, the total forest area was 56,608 hectares, of which 22,068 hectares (39%) were state-owned and the remaining 34,540 hectares (61%), private-owned.

3.2 Agriculture

From 2002 to 2003, the area of agricultural land has shrunk by 1,454 hectares, (-1.8%). Most of the area (92%) was under sugarcane while the remaining was planted with tea, tobacco and foodcrops (Table 3).

3.3 Fertiliser and other inputs

The total quantity of fertilisers consumed and its breakdown by main nutrient components are shown in Table 4. The consumption of fertilisers for the year 2003 was 63,507 tonnes, a decrease of 2% over 2002.

4. Energy

4.1 Primary energy requirement

The total primary energy requirement of the country increased by 6% from 1,169 ktoe in 2002 to 1,238 ktoe in 2003. Around 77% of the total primary energy requirement was met by imported fuels (oil, LPG and coal) and the remaining 23%, obtained from local sources (bagasse and hydro). Details on the primary energy requirement by energy source are shown in Table 5.

4.2 Inputs for electricity production

The different types of fuel used for electricity production expressed in energy units are shown in Table 6. Fuel oil, which represented about 172 ktoe of total energy used in 2002, increased by 14% to reach to 196 ktoe in 2003, while the amount of bagasse used fell by 3%.

4.3 Final energy consumption

In 2003, final energy consumption reached around 813 ktoe, an increase of 6% over the figure of 765 ktoe in 2002. The largest consumers were the transport and manufacturing sectors, which accounted for 48% and 32% of the total consumption respectively (Table 7 and fig.1).

5. Transport

5.1 Stock of registered motor vehicles

In 2003, the fleet of motor vehicles stood at 276,371, up by 4% over the year 2002 (Table 8).

The amount of fuel consumed by the transport sector in 2003 was 390 ktoe, of which diesel represented 42%, aviation fuel, 33% and gasoline 25%. Consumption of aviation fuel rose by 14% and diesel, by 5% (Table 9).

6. Greenhouse gas (GHG)

6.1 Total GHG emissions and removals

In 2003, some 2.78 million tonnes of Carbon Dioxide, the major greenhouse gas, were emitted in the atmosphere while 0.24 million tonne was removed. Thus net emission worked out to 2.54 million tonnes, representing an increase of 5.7% over last year (Table 10).

The emission of minor greenhouse gases was as follows: Carbon Monoxide (65,700 tonnes), Sulphur Dioxide (32,100 tonnes), Non-Methane volatile organic compound (17,500 tonnes), Oxides of Nitrogen (15,100 tonnes), Methane (12,000 tonnes) and Nitrous Oxide (1,500 tonnes).

6.2 Carbon Dioxide emissions from fuel combustion activities.

In 2003, total Carbon Dioxide emissions from fuel combustion activities increased by about 5% from 2.65 million tonnes in 2002 to 2.78 million tonnes. Energy production contributed to 51% of the total emissions, followed by transport, 29% and manufacturing industries, 14% (Table 11).

6.3 Greenhouse gas inventory

The national inventory of greenhouse gas emissions by source categories for the year 2003 is given in Table 12(b). Carbon Dioxide with an emission of 2.78 million tonnes was the major greenhouse gas injected in the atmosphere. Most of this gas was produced as a result of fuel combustion activities such as electricity production, transport and manufacturing processes.

7. Water

7.1 Water balance

The water balance is based on long term records of annual average rainfall and indicates how fresh water resources are distributed. In 2003, the island of Mauritius received on average 4,097 million cubic metres (Mm³) of precipitation (rainfall) which is an increase of about 9% over the previous year. Some 1,230 Mm³ (30%) of this water was lost through evapotranspiration, while surface runoff and ground water recharge accounted for 2,458 Mm³ (60%) and 410 Mm³ (10%) respectively (Table 13).

7.2 Water utilisation

The water demand in 2003 was estimated at 1,030 Mm³, of which 491 Mm³ (47%) were used for irrigation, 305 Mm³ (30%) for hydropower and 234 Mm³ (23%) for domestic and industrial purposes (Table 14).

Around 86 % of the total water demand was met by surface water and the remaining 14 %, by ground water.

8. Waste

The total amount of solid waste landfilled at Mare Chicose went up from 363,913 tonnes in 2002 to 372,440 tonnes in 2003, representing an increase of 8,527 tonnes or 2.3% (Table 15 and figure 2).

9. Environmental Impacts Assessment (EIA) and Preliminary Environmental Report (PER) Licences, complaints and contraventions.

The Department of Environment grants EIA licences as from the end of 1993 and PER licences as from September 2002 for undertakings (projects) which have an impact on the environment or on human health. These undertakings are listed in the First Schedule of the Environment Protection Act, 2002.

9.1 EIA and PER licences

In 2003, the number of EIA and PER licences granted were 95 and 65 respectively. The highest in number among the EIA licences was “industrial development” which accounted for 29% and among the PER licences, “land parcelling”, 43% (Table 16).

9.2 Complaints

The number of complaints by category received by the Pollution Prevention and Control Division at the Department of Environment is shown in Table 17 for the years 1999 to 2003. The number of complaints rose from 1,656 in 2002 to 1,768 in 2003, showing an increase of 7%. In 2003, the largest cause of complaint was noise, accounting for 33% of all complaints followed by odour, 19% and air pollution, 12%.

9.3 Contraventions

In 2003, the Police de L’Environnement issued 4,571 contraventions of which illegal littering accounted for 87% (3,965).

During the same period, 3,666 notices were issued to drivers of vehicles emitting black smoke (Table 18).

10. Air Quality

The Ministry of Environment and National Development Unit has an air quality station in Cassis to monitor the ambient air quality.

The main pollutants under investigation are Dust (PM 10), Ozone, Sulphur Dioxide, Nitrogen Dioxide, Carbon Monoxide, Total Suspended Particles and Lead.

For the year 2003, the results for all the pollutants under study showed that on the average, the levels of ambient pollutants were well below the norms (Table 19).

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Concepts and definitions

Economy

Gross Domestic Product (GDP): GDP is the aggregate money value of all goods and services produced within a country out of economic activity during a specified period, usually a year, before provision for the consumption of fixed capital.

Energy intensity: Energy intensity provides a measure of the efficiency with which energy is being used in production or energy used (tonnes of oil equivalent) per Rs 100,000 GDP (at constant prices)

Land use, Agriculture and Forestry

Land use: Land use refers to the main activity taking place on an area of land, for example, farming, forestry or housing.

Built-up areas: Built-up areas consist of land under houses, industrial zones, quarries or any other facilities, including their auxiliary spaces, deliberately installed so that human activities may be pursued.

Nutrient: A nutrient is a substance, element or compound necessary for the growth and development of plants.

Energy

Primary energy requirement: It is the sum of imported fuels and locally available fuels less re-exports of bunkers and aviation fuel to foreign aircraft after adjusting for stock changes.

Greenhouse gas emissions

Greenhouse gases (GHG): GHG are gases occurring naturally and resulting from human activities (production and consumption); that contribute directly or indirectly to global warming. Some main naturally existing GHG are Carbon Dioxide (CO₂), Methane (CH₄) and Nitrous Oxide (N₂O). Other gases such as Carbon Monoxide (CO), Oxides of Nitrogen (NO_x), Non Methane volatile organic compounds (NMVOC) and Sulphur Dioxide contribute indirectly to global warming. GHG's act much like a glass greenhouse, trapping heat in the lower levels of the atmosphere and reflecting the heat back to the earth's surface, causing it to heat up.

Water

Water balance: The water balance is based on long term records of annual average rainfall and indicates how freshwater resources are distributed.

Precipitation: Rain falling from the atmosphere and deposited on land or water surfaces.

Evapotranspiration: Combined loss of water by evaporation from the soil or surface water and transpiration from plants and animals.

Surface runoff: The flow of surface water from rainfall, which flows directly to streams, rivers and lakes. Runoff may cause soil erosion.

Groundwater recharge: Process by which water is added from outside to fresh water found beneath the earth surface.

Waste

Solid waste includes domestic garbage, industrial and commercial waste, sewage sludge, wastes resulting from agricultural and animal husbandry operations and other connected activities, demolition wastes and mining residues.

Landfill: Final placement of waste in or on the land in a controlled or uncontrolled way according to different sanitary, environmental protection and other safety requirements.

Environmental impact assessment

Environmental impact assessment (EIA): Analytical process that systematically examines the possible environmental consequences of the implementation of projects, programmes and policies.

Preliminary environmental report

Preliminary environmental report (PER) is a short form of EIA and this preliminary analysis is undertaken to identify the impacts associated with the proposed development and the means of mitigation.

Air Quality

Ambient air quality is the quality of the air that surrounds us and which we breathe.

Air quality standards: Levels of air pollutants prescribed by regulations that may not be exceeded during a specified time in a defined area.

ABBREVIATIONS AND SYMBOLS

Abbreviations

Rs mn	Rupees million
Rs	Rupees
US\$	US dollar
%	Percentage
f.o.b	free on board
c.i.f	Cost, insurance, freight
000	Thousand
n.e.s	Not elsewhere specified
Mm ³	Million cubic metres
Gg	Gigagram (thousand tonne)
ktoe	Thousand tonne of oil equivalent
Toe	Tonne of oil equivalent
µg/m ³	Microgramme per cubic metres
ppb	Part per billion
ppm	Part per million
TSP	Total suspended particles
EIA	Environmental impact assessment
PER	Preliminary environmental report

Symbols

-	Nil or negligible
...	Not available

Conversion factor

1 square kilometre = 100 hectares

Table 1 - Main socio-economic indicators, 1994 and 2003

Indicator	Units	1994	2003 ¹
1. Gross Domestic Product (GDP) at market prices	Rs mn	64,048	156,906
2. Sectoral contribution to GDP			
<i>Agriculture</i>	%	9.8	6.2
<i>Mining and quarrying</i>	%	0.2	0.1
<i>Manufacturing</i>	%	22.6	21.5
<i>Construction</i>	%	7.1	6.1
<i>Electricity, gas and water</i>	%	2.3	2.5
<i>Wholesale and retail trade</i>	%	13.1	11.5
<i>Hotels and restaurants</i>	%	4.6	5.8
<i>Transport and communications</i>	%	11.3	13.7
<i>Financial intermediation and business services</i>	%	14.9	19.5
<i>Other²</i>	%	14.1	13.1
3. GDP annual growth rate (basic prices)	%	+4.8	+4.4
4. Per capita GDP at market prices	Rs	57,545	128,288
5. Per capita GDP in US dollars	US\$	3,180	4,520
6. Investment	Rs mn	19,400	35,550
7. Exports (f.o.b) (include re-exports)	Rs mn	24,697	54,164
8. Imports (c.i.f)	Rs mn	34,548	66,389
9. Population (mid year)	000	1,112.8	1,222.8
10. Population annual growth rate	%	1.1	1.0
11. Population density (per km ²)	Number	548	602
12. Total labour force	000	475.8	549.5
13. Total employment	000	454.8	495.1
<i>Agriculture (as a % of total)</i>	%	13.7	9.4
<i>Manufacturing (as a % of total)</i>	%	29.5	27.1
14. Unemployment rate	%	4.5	10.2
15. Inflation rate	%	7.3	3.9
16. Tourist arrivals	000	400.5	702.0
17. Primary energy requirement	ktoe	828.3	1,238.6
18. Energy intensity	toe per Rs 100,000 GDP	2.01	1.66

¹ Provisional² Includes public administration, education, health and financial intermediation services indirectly measured (FISIM).

Table 2 - Forest area by category, Island of Mauritius, 2001 - 2003

Hectares

	2001	2002	2003 ¹
State - owned	22,089	22,089	22,068
Plantations	12,362	12,418	12,256
Nature reserves	799	799	799
<i>On mainland</i>	200	200	200
<i>Islets</i>	599	599	599
National Park ²	6,574	6,574	6,574
Unplanted, protective or to be planted	1,702	1,646	1,804
Pas Geometriques	652	652	635
<i>Plantations</i>	230	243	226
<i>Leased for grazing and tree planting</i>	230	230	230
<i>Unplanted, protective or to be planted</i>	192	179	179
Private - owned lands	34,540	34,540	34,540
Reserves	6,553	6,553	6,553
<i>Mountain reserves</i>	3,800	3,800	3,800
<i>River reserves</i>	2,740	2,740	2,740
<i>Nature Reserves</i>	13	13	13
Forest lands, incl.scrub,grazing lands ³	27,987	27,987	27,987
Total	56,629	56,629	56,608

Source : Forestry Service, Ministry of Agriculture, Food Technology and Natural Resources.

¹ Provisional² Black River Gorges National Park was proclaimed in 1994 and data on the area enclosed by the boundaries of the park were not available until 1997³ Figures not available but estimated

Table 3 - Utilisation of agricultural land area, Island of Mauritius, 2001 - 2003

Hectares			
Detail	2001	2002¹	2003²
Sugarcane	76,478	75,501	74,117
Tea	660	680	681
Tobacco	383	340	379
Foodcrops ³	5,140	5,090	4,980
Total	82,661	81,611	80,157

¹ Revised² Provisional³ Estimates**Table 4 - Consumption of fertilizers, Island of Mauritius, 2001 - 2003**

Tonnes			
Detail	2001	2002	2003
Fertilizers	65,527	64,739	63,507
Nutrients content			
<i>Nitrogen</i>	11,428	11,028	10,742
<i>Phosphate</i>	4,059	4,011	4,094
<i>Potash</i>	12,911	13,296	11,516

Table 5 - Primary energy requirement by energy source, 2001 - 2003

ktoe (000 Tonne of oil equivalent)

Energy Source	2001	2002	2003
Imported	901.2	898.7	956.2
Oil ¹	664.9	652.3	704.4
Liquefied petroleum gas (LPG)	50.8	52.5	55.8
Coal	185.5	193.9	196.0
Local	290.3	270.1	282.3
hydro/wind	15.6	18.9	25.9
Bagasse ²	267.4	243.9	249.1
Fuel wood ²	7.3	7.3	7.3
Total	1,191.5	1,168.8	1,238.5

¹ Includes gasoline, diesel oil, dual purpose kerosene and fuel oil² Estimates**Table 6 - Fuel input for electricity production, 2001 - 2003**

ktoe (000 Tonne of oil equivalent)

Fuel	2001		2002		2003	
	Quantity (Ktoe)	%	Quantity (Ktoe)	%	Quantity (Ktoe)	%
Fuel oil	177.9	33.1	172.4	32.4	196.3	35.3
Diesel oil	3.2	0.6	3.5	0.6	3.9	0.7
Kerosene	3.9	0.7	5.7	1.1	10.3	1.9
Coal	169.5	31.6	177.9	33.4	178.0	32.0
Bagasse	182.8	34.0	173.1	32.5	167.5	30.1
Total	537.3	100.0	532.5	100.0	556.0	100.0

Table 7 - Final energy consumption by sector, 2001 - 2003

ktoe (000 Tonne of oil equivalent)

Sector	2001		2002 ¹		2003	
	Quantity (Ktoe)	%	Quantity (Ktoe)	%	Quantity (Ktoe)	%
Manufacturing	262.4	43.0	249.2	32.6	260.3	32.0
Transport	372.3	40.2	364.1	47.6	390.2	48.0
Household	101.8	12.0	102.8	13.4	107.0	13.2
Commercial	40.8	4.0	41.7	5.5	47.7	5.9
Agriculture	4.8	0.5	4.8	0.6	4.8	0.6
Other (n.e.s & losses)	2.3	0.3	2.4	0.3	2.9	0.4
Total	784.4	100.0	765.1	100.0	812.9	100.0

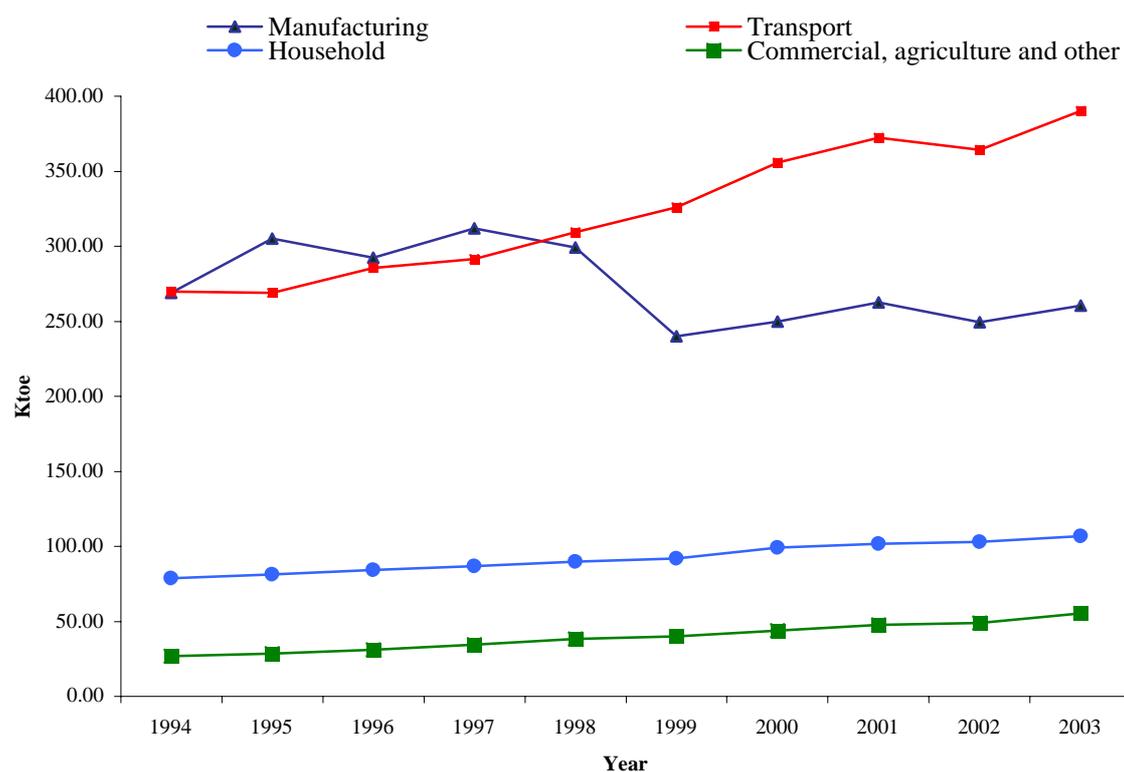
¹ Revised**Fig. 1 - Final energy consumption by sector, 1994 - 2003**

Table 8 - Stock of registered motor vehicles, Island of Mauritius, 2001 - 2003.

Type of vehicle	Number		
	2001	2002	2003
Cars and Dual Purpose Vehicle (DPV)	95,066	101,436	107,907
Auto / Motorcycles	119,953	122,801	125,602
Heavy Motor Car and Bus	3,331	3,394	3,418
Van and Lorry	31,582	32,986	33,997
Other vehicles ¹	5,217	5,224	5,447
Total	255,149	265,841	276,371

No of vehicles per 1000 population	218	225	232
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¹ Includes tractor and dumper, prime mover, trailer and road roller

Table 9 - Fuel used for transport, 2001- 2003

Fuel	ktoe (000 Tonne of oil equivalent)		
	2001	2002	2003
Gasolene	95	95	96
Liquefied Petroleum Gas (LPG)	1	1	2
Diesel oil	147	155	163
Aviation fuel	129	113	129
Total	371	364	390

Table 10 - Total emissions and removals of greenhouse gases, 2001 - 2003

Gg or thousand tonne

Greenhouse gas	2001	2002 ¹	2003 ²
Emissions			
Carbon Dioxide	2,597.7	2647.9	2783.5
Methane	8.5	11.7	12.0
Oxides of Nitrogen	14.2	14.5	15.1
Nitrous Oxide	1.4	1.5	1.5
Carbon Monoxide	65.9	62.9	65.7
NMVOC ³	17.1	18.5	17.5
Sulphur Dioxide	31.5	30.6	32.1
Removals			
Carbon Dioxide	234.5	239.5	237.9
Net emissions			
Carbon Dioxide	2,363.2	2,408.4	2,545.6

¹ Revised² Provisional³ Non-methane volatile organic compound**Table 11 - Sectoral carbon dioxide emissions from fuel combustion activities, 2001 - 2003**

Gg or thousand tonne

Sector	2001		2002 ¹		2003 ²	
	Quantity	%	Quantity	%	Quantity	%
Energy industries (electricity)	1302	50	1,325.9	50	1,418.3	51
Manufacturing industries	383.6	15	385.5	15	386.4	14
Transport	734.6	28	760.0	29	793.2	29
Residential	141.7	6	141.8	5	145.9	5
Other ³	33.1	1	32.2	1	37.3	1
Total	2,595.0	100	2,645.4	100	2,781.1	100

¹ Revised² Provisional ³ includes Agriculture and Commerce

Table 12(a) - National inventory of greenhouse gases by source categories, 2002¹

Gg or thousand tonne

Category	Carbon dioxide(CO ₂)		Methane (CH ₄)	Nitrous oxide(N ₂ O)	Oxides of nitrogen(NO _x)	Carbon monoxide(CO)	NMVOC ²	Sulphur dioxide(SO ₂)
	Emissions	Removals						
1. Energy	2,645.4	-	0.6	0.1	14.1	62.9	8.1	30.6
Fuel combustion activities								
(a) Energy industries (electricity)	1,325.9	-	0.3	0.1	4.8	8.9	0.5	21.5
(b) Manufacturing industries	385.5	-	0.1	-	1.4	14.5	0.2	7.1
(c) Transport	760.0	-	0.1	-	7.7	38.0	7.2	1.9
(d) Other sectors	174.0	-	0.1	-	0.2	1.5	0.2	0.1
2. Industrial processes	2.5	-	-	0.3	0.4	-	10.4	-
3. Solvent and other product use	...	...	...	...	...	...	...	...
4. Agriculture	-	-	1.1	1.1	-	-	-	-
5. Land use change and forestry	-	239.5	-	-	-	-	-	-
6. Waste	-	-	10.0	-	-	-	-	-
Total	2,647.9	239.5	11.7	1.5	14.5	62.9	18.5	30.6

¹ Revised

² Non - methane volatile organic compound

Table 12(b) - National inventory of greenhouse gases by source categories, 2003¹

Gg or thousand tonne

Category	Carbon dioxide(CO ₂)		Methane (CH ₄)	Nitrous oxide(N ₂ O)	Oxides of nitrogen(NO _x)	Carbon monoxide(CO)	NMVOC ²	Sulphur dioxide(SO ₂)
	Emissions	Removals						
1. Energy	2,781.1	-	0.7	0.1	14.7	65.7	8.4	32.1
Fuel Combustion Activities								
(a) Energy industries (electricity)	1,418.3	-	0.3	0.1	5.0	8.6	0.5	22.8
(b) Manufacturing industries	386.4	-	0.2	0.0	1.5	16.6	0.3	7.2
(c) Transport	793.2	-	0.1		8.0	39.0	7.4	2.0
(d) Other sectors	183.2	-	0.1		0.2	1.5	0.2	0.1
2. Industrial Processes	2.4	-	-	0.3	0.4	-	9.1	-
3. Solvent and Other Product Use	...	...	...	...	...	...	...	...
4. Agriculture	-	-	1.0	1.1	-	-	-	-
5. Land use Change and Forestry	-	237.9	-	-	-	-	-	-
6. Waste	-	-	10.3	-	-	-	-	-
Total	2,783.5	237.9	12.0	1.5	15.1	65.7	17.5	32.1

¹ Provisional

² Non-methane volatile organic compound

Table 13 - Water balance ¹, Island of Mauritius, 1998 - 2003

	Mm ³					
	1998 ²	1999 ²	2000 ²	2001 ²	2002 ²	2003
Rainfall	3,861	2,002	3,654	3,445	3,764	4,097
<i>Surface runoff</i>	<i>2,317</i>	<i>1,201</i>	<i>2,192</i>	<i>2,067</i>	<i>2,258</i>	<i>2,458</i>
<i>Evapotranspiration</i>	<i>1,158</i>	<i>601</i>	<i>1,097</i>	<i>1,034</i>	<i>1,130</i>	<i>1,229</i>
<i>Net recharge to groundwater</i>	<i>386</i>	<i>200</i>	<i>365</i>	<i>354</i>	<i>376</i>	<i>410</i>

Source: Water Resources Unit of the Ministry of Public Utilities.

¹ *Estimates*

² *Revised*

Table 14 - Water Utilisation, Island of Mauritius, 2003

Use	Surface water		Ground water	Total
	River-run offtakes	Storage		
Domestic, Industrial, and Tourism	38	72	124	234
<i>of which</i>				
<i>private boreholes (Industrial)</i>	-	-	10	10
Agricultural (irrigation)	370	97	24	491
Hydropower	131	174	-	305
Total	539	343	148	1,030

Source: Water Resources Unit of the Ministry of Public Utilities.

Table 15 - Solid waste landfilled at Mare Chicose by source of waste material, 2001 - 2003

Waste material	Tonnes		
	2001	2002	2003 ¹
Domestic	292,880	325,006	352,916
Construction	3,709	6,404	7,198
Other ²	10,102	32,503	12,326
Total	306,691	363,913	372,440

Source: Ministry of Local Government, Rodrigues and Rural & Urban Development.

¹ Provisional

² Includes mainly industrial waste.

Fig. 2 - Percentage composition of solid waste landfilled at Mare Chicose, 2002 and 2003

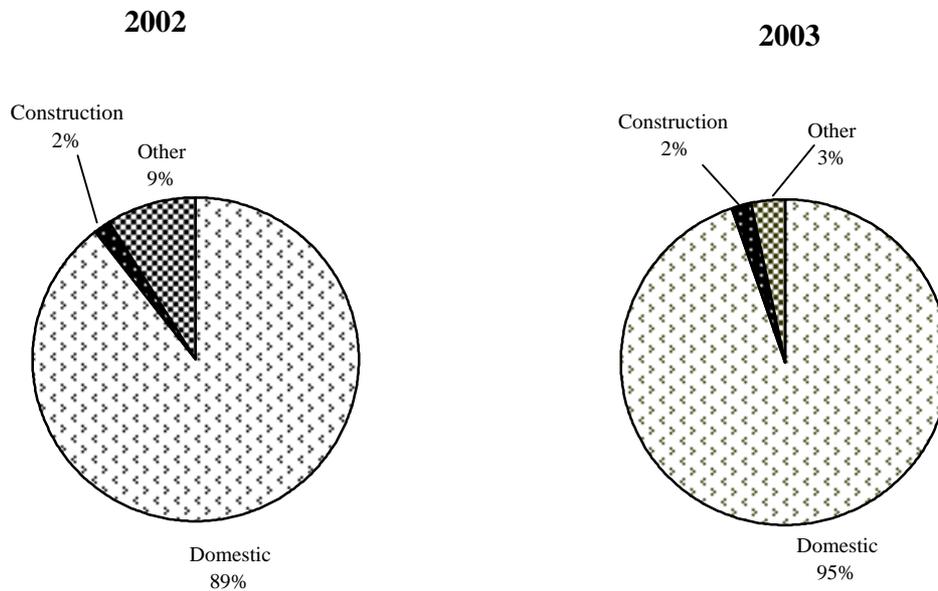


Table 16 - Number of EIA and PER licences granted by type of project, Island of Mauritius, 1999 - 2003

Project	EIA					PER ²
	1999	2000	2001	2002	2003 ¹	2003 ¹
Land parcelling (morcellement)	17	31	74	16	14	28
Poultry rearing	35	26	13	13	18	3
Industrial development	6	7	1	2	28	3
Coastal hotels & related works	13	11	9	15	4	11
Livestock rearing	11	4	-	1	4	2
Housing	7	4	4	3	4	1
Stone crushing plants	3	3	-	1	1	2
Development in port area	2	2	2	-	-	-
Service ("filling") station	2	2	-	1	14	2
Other	2	2	7	12	8	13
Total	98	92	110	64	95	65

Source : Department of Environment of the Ministry of Environment and National Development Unit

¹ Provisional

² PER licence was issued as from September 2002. Four PER licences issued in 2002 were included in 2003.

Table 17 - Number of complaints received at the Pollution Prevention and Control Division of the Department of Environment by category, Island of Mauritius, 1999 - 2003

Category	1999	2000	2001	2002	2003 ¹
Noise	121	555	821	458	583
Solid waste	57	586	758	88	88
Air pollution	32	71	188	229	209
Waste water	32	150	210	286	155
Animal husbandry	12	-	-	-	-
Odour	56	251	417	406	344
Other	93	293	657	186	389
Total	403	1,906	3,051	1,656	1,768

Source : Department of Environment of the Ministry of Environment and National Development Unit

¹ Provisional

**Table 18 - Contraventions and notices established by Police De L'Environnement,
Island of Mauritius, 2001 - 2003**

Type of contravention	2001	2002	2003
Illegal Littering	1,368	3,731	3,965
Illegal Dumping	27	39	31
Noise	85	156	97
Smoking in prohibited area	93	267	40
Waste carriers offences	...	70	101
Setting fire within 50 metres from building/plantation	...	27	32
Obstruction	...	45	39
Road Traffic Offences	...	68	65
Trading without licence	...	50	126
Allowing animal to stray	...	18	40
Disturbance	...	4	11
Others	313	231	24
Total	1,886	4,706	4,571
No. of notices issued to drivers of vehicles emitting black smoke	1,592	2,764	3,666

Source: Ministry of Environment and National Development Unit.

Table 19 - Ambient air quality monitoring around Cassis, 2002 - 2003

Pollutant	Unit	Minimum		Maximum		24 hour Average for the year		Ambient air quality standard ²
		2002	2003 ¹	2002	2003 ¹	2002	2003 ¹	
Dust (PM ₁₀)	µg/m ³	12.0	10.0	75.0	119.2	25.0	41.0	100.0
Ozone (O ₃)	ppb	0.0	0.0	42.0	26.0	15.0	3.0	46.7
Sulphur dioxide (SO ₂)	ppb	0.0	0.0	14.0	7.0	3.0	1.0	70.0
Nitrogen dioxide (NO ₂)	ppb	0.0	0.0	25.0	27.0	9.0	2.0	97.5
Carbon monoxide (CO)	ppm	0.0	0.0	1.8	8.4	0.3	1.4	8.0
Total suspended particles (TSP)	µg/m ³	47.2	29.6	65.9	107.5	56.4	57.7	150.0
Lead	µg/m ³	0.0	0.0	0.1	0.0	0.0	0.0	1.5

Source: Ministry of Environment and National Development Unit.

¹ : Estimate

² : 24-hour standard except for Ozone, Carbon monoxide and lead which are based on 1 hour, 8 hour and 3 month averages respectively.

Note:(i) Conversion coefficients (at 25⁰ C and 1013 bar) have been used to convert the ambient air quality standards.

(ii)Measurements of the parameters are taken on a quarter hourly basis and the averaging time used is 24 hours.