



World Health
Organization



**WHO COUNTRY
COOPERATION
STRATEGY
2015-2019**

MAURITIUS

I. INTRODUCTION

The World Health Organization's Country Cooperation Strategy (CCS) is an Organization wide reference for country work, which guides planning, budgeting, resource allocation and partnership.

The CCS reflects the overarching values of the United Nations that underpin WHO's Constitution and contribute to improving global health, health-related human rights, equity and gender equality.

The key principles guiding WHO cooperation in countries and on which the CCS is based are:

1. ownership by the country of the development process;
2. alignment with national priorities and strengthening national systems in support of the national health strategies or plans;
3. harmonization with the work of other UN agencies and other partners in the country for better aid effectiveness; and
4. collaboration with Member States' contributions in shaping the global health agenda.

The CCS is a medium-term vision for WHO's technical cooperation with Mauritius in support of the country's national health policies, strategies and plans.

It is expected to constitute the main tool for harmonizing WHO cooperation in Mauritius with government plans and those of other UN agencies and development partners.

The work of WHO as the world's health agency is directed by the General Programme of Work (GPW). The general programme of work also describes the WHO core functions, which reflect the comparative advantages of the Organization. The purpose of the general programme of work is to provide high level strategic vision for the work of WHO. The Twelfth GPW establishes priorities and provides an overall direction for the six-year period beginning in January 2014.

The 12th GPW reflects the three main components of WHO reform: programmes and priorities, governance and management. In this context, it sets out leadership priorities that will both define the key areas in which WHO seeks to exert its influence in the world of global health and drive the way work is carried out across and between the different levels of the Secretariat.

The six core functions that were articulated in the Eleventh General Programme of Work remain a sound basis for describing the nature of WHO's work. They are:

1. Providing leadership on matters critical to health and engaging in partnerships where joint action is needed;
2. Shaping the research agenda and stimulating the generation, translation and dissemination of valuable knowledge;
3. Setting norms and standards, and promoting and monitoring their implementation;
4. Articulating ethical and evidence-based policy options;
5. Providing technical support, catalysing change, and building sustainable institutional capacity;
6. Monitoring the health situation and assessing health trends.

The 12th General Programme of Work of WHO identified six leadership priorities (Box 1).

Box 1 Leadership priorities 2014-2019

Advancing universal health coverage: enabling countries to sustain or expand access to essential health services and financial protection and promoting universal health coverage as a unifying concept in global health.

Health-related Millennium Development Goals – addressing unfinished and future challenges: accelerating the achievement of the current health-related Goals up to and beyond 2015. This priority includes completing the eradication of polio and selected neglected tropical diseases.

Addressing the challenge of noncommunicable diseases and mental health, violence and injuries and disabilities.

Implementing the provisions of the **International Health Regulations:** ensuring that all countries can meet the capacity requirements specified in the International Health Regulations (2005).

Increasing access to essential, high-quality and affordable **medical products** (medicines, vaccines, diagnostics and other health technologies).

Addressing the **social, economic and environmental determinants** of health as a means of reducing health inequities within and between countries.

The strategic priorities for the period 2014–2019 set forward directions for WHO reform, which reflect new realities, and the need for both continuity and change. The Twelfth General Programme of Work of WHO agreed on six categories, which will define the structure for successive programme budgets from 2014 (box 2)

Box 2: Categories for priority setting

1. Communicable diseases
2. Noncommunicable diseases
3. Promoting health through the life-course
4. Health systems
5. Preparedness, surveillance and response
6. Corporate services & enabling functions

The first generation WHO CCS in Mauritius covered the period 2004–2007, followed by the second generation CCS for 2008-2013.

The CCS development process was guided by the new WHO CCS Guide 2015 involved documentary reviews, situation analysis and broad based consultation with key national stakeholders in health, including UN agencies, WHO Regional office for Africa and WHO headquarters.

Important documents, such as the Health Master Plan 2012–2015, the Government Programme (2015-2019), the WHO GPWs, the WHO Programme Budget 2014-2015 and other documents were reviewed and used as the basis for identifying priorities for WHO's work in Mauritius.

The CCS development process involved extensive consultation with stakeholders and high-level decision makers in formulating the priorities and the working modalities reflected in the current CCS. Among the principal outcomes of these consultations are:

- identification of the strategic agenda for WHO collaboration;
- agreement on strategic priorities, main focus areas and strategic approaches; and
- a new country cooperation strategy.

2. HEALTH AND DEVELOPMENT SITUATION

2.1 Main health achievements and challenges

Macroeconomic, political and social context of the country

With an average economic growth rates of 4.5% over the period 1990 – 2012 the Gross National Income per capita rose (PPP) was US\$ 17,220 in 2013. Sustainable macroeconomic policies and reforms have boosted Mauritius to emerge as an Upper Middle Income Country within three decades.

Since independence in 1968, free and fair elections have been held. All democratically elected governments have upheld democratic values, good governance and promoted social inclusion.

Mauritius is a full-fledged member of all the major African regional organizations, namely the African Union, Southern African Development Community (SADC), Common Market for Eastern and Southern Africa (COMESA) and Indian Ocean Commission (IOC). By virtue of its geographical location and size Mauritius is classified by the UN as a Small Island Developing States (SIDS).

Demographic transition

Island of Mauritius has already undergone the classical phases of demographic transition to attain the third phase of a declining birth rate and a relatively stable low death rate since the early 1990's. Crude birth rate dropped well below the ten year average for period 2003-2012 (13.56 per 1000 mid-year population) to 10.7 per 1000 mid-year population in 2013. Crude death rate was 7.6 per 1000 mid-year population in 2013.

The general shape of the population pyramid over the period 2000 – 2011 has the stereotype features of highly developed countries, with relatively smaller proportion in the less-than-39 -years-of-age categories and larger proportion of the population older age group. 52% of the population comprises women in the reproductive age group (15–49 years) in 2011 compared 56% in 2000.

The size of the population over the age of 65 accounting 7.2% in 2010 for the Republic of Mauritius is projected to more than double by 2030, rising to 15.9%.

The rapid ageing population is a main challenge for the health care delivery system in terms of provision of geriatric care.

Health Status of the population

The health status of the people of Mauritius has improved in the past two decades. Life expectancy at birth improved from 70 years in 1990 to 74.1 years on average in 2013 (70.7 years for males and 77.7 years for females). Health Adjusted Life Expectancy (HALE) was estimated at 62 years for males and 68 years for females in 2012. This implies that that about 12% of the total life expectancy is lived with disability.

Mauritius has reached an advanced stage in its epidemiological transition, characterized by a leveling of population growth resulting from declines in fertility rates and shift from infectious diseases to chronic diseases over time due to expanded public health and sanitation.

Sustained programme of Immunization led to eradication of several communicable diseases such as Diphtheria, Whooping Cough and Poliomyelitis. The last case of poliomyelitis was in 1965 and certification of

Table 1 CURRENT HEALTH INDICATORS	
Total population in thousands (2013) ¹	1217(Mauritius Island) 41 (Rodrigues Island)
% Population under 15 (2013) ¹	19.7
% Population over 60 (2013) ¹	13.7
Life expectancy at birth (2013) ¹ Total, Male, Female	70 (Male) 78 (Female) 74 (Both sexes)
Infant mortality rate per 1000 live births(2013) ¹	12.2(Mauritius Island) 8.5(Rodrigues Island)
Under-5 mortality rate per 1000 live births (2013) ¹	14.6 12.8(Rodrigues Island)
Maternal mortality ratio per 100 000 live births Interagency estimates (2013) ²	73
% DPT3 Immunization coverage among 1-year olds (2013) ²	98
% Births attended by skilled health workers(2013) ²	100
Density of physicians per 1, 000 population (2013) ¹	1.62(Mauritius Island) 0.46(Rodrigues Island)
Density of nurses and midwives per 1 000 population (2013) ¹	3.08(Mauritius Island) 3.8(Rodrigues Island)
Total expenditure on health as % of GDP (2012) ²	4.9
General government expenditure on health as % of total government expenditure (2012) ²	9.7
Private expenditure on health as % of total expenditure on health (2012) ²	51.8
Adult (15+) literacy rate (2010) ² Total	89
Population using improved drinking-water sources (%) (2011) ²	100 (Total) 100 (Urban) 100 (Rural)
Population using improved sanitation facilities (%) (2011) ²	90 (Rural) 91 (Total) 92 (Urban)
Poverty headcount ratio at \$1.25 a day (PPP) (% of population) (2005)	
Gender-related Development Index rank out of 187 countries (2012) ³	70
Human Development Index rank out of 187 countries (2013) ³	80
Sources: ¹ MoH Health Statistics ² WHO World Health Statistics ³ UN Human Development Report /	

Mauritius as a polio free zone is underway. In order for Mauritius to maintain its polio free status the challenge is to maintain immunization national coverage above 80% and on ongoing active Acute Flaccid Paralysis Surveillance Programme. Other communicable diseases such as Measles, Mumps, Rubella and Tuberculosis are, also, under control.

The immunization schedule includes BCG, polio and DPT, Tetanus Toxoid (TT), Measles-Mumps-Rubella (MMR). Hepatitis B (Hep B). Rotavirus vaccination was introduced in 2015. Vaccination coverage against tuberculosis, diphtheria, whooping cough, tetanus, hepatitis B, poliomyelitis, measles, mumps and rubella is about 90% of live births in the public sector. In addition, it is reasonable to assume coverage of about 8% in the private sector. Nevertheless, immunity gaps do exist in some districts.

Burden of chronic noncommunicable diseases and risk factors

In view of the sheer importance of cardiovascular diseases and cancer as a cause of death, interventions addressing risk factors that prompting conditions such as diabetes, hypertension, high cholesterol and obesity and high-risk behaviour, in particular smoking, alcohol abuse needs to be evaluated and re-orientated. The pace at which the island has opened itself to the external world has brought in its wake changes in life styles in turn impacting adversely on the health and nutritional welfare of the communities.

The leading causes of NCD deaths, including Rodrigues Island, in 2013 were : Diseases of the Circulatory system (23.4 ths per 10,000 or 31.1% of total deaths) followed by Diabetes -predominantly Type 2 (18.4 death per 10,000 or 24.5 % of total deaths), Cancers (10 deaths per 10,000 or 13.3 % of total deaths), Diseases of the respiratory system (6.4 deaths per 10,000 or 8.5 % of total deaths).

Table 2 : Trends in Diabetes and NCDs Risk factors

Diseases & Risk factors	Trends	1987	1992	1998	2004 *	2009
NCDs		Prevalence Rate	Prevalence Rate	Prevalence Rate	Prevalence Rate	Prevalence Rate
Diabetes Mellitus	Increase (1987 - 2009)	14.3 % M: 14.2% F: 14.5%	16.9% M: 16.3% F: 17.4%	19.5% M: 18.4% F: 20.6%	19.3% M: 18.9% F: 19.7%	21.3% M: 21.9% F: 20.6%
Metabolic Risk Factors						
Hypertension (BP >= 140/90 mm)	Decrease (1987-1992) Increase (1992-2009)	30.2% M: 31.7% F: 28.9%	26.2% M: 26.5% F: 26.1%	29.6% M: 30.0% F: 29.5%	29.8% M: 29.7% F: 29.9%	37.9% M: 40.5% F: 35.4%
Overweight/obesity (Body Mass Index > 25Kg/m ²)	Increase (1987 - 2009)	30.5% M: 24.8% F: 35.7%	40% M: 33.4% F: 45.7%	40.6% M: 36.1% F: 43.2%	35.7% M: 30.7% F: 39.4%	50.9% M: 46% F: 55.65%
Behaviourally modifiable risk factors						
Cigarette smoking	Decrease(1987–2004) Increase (2004 – 2009)	30.7% M : 57.9 % F:7.0 %	24.3% M: 47.3 % F:4.8%	20.2% M:42.0% F:3.3%	18.0% M:35.9% F:5.1%	21.7% M:40.3% F3.7%
Abusive Alcohol Consumption (≥4 days weekly for men or ≥ 2 days weekly for women)	Decrease (1987-1998) Increase (1998 - 2009)	9.6% M: 18.2% F: 2.2%	7.5% M: 14.4% F: 1.6%	7.2% M: 15.9% F: 0.45%	9.1% M: 19.1% F: 1.9%	M: 19.1% F: 1.7%
Physical Activity	Increase (1987 - 2009)	M: 11.8% F: 1.4%	M: 17.3% F: 2.3%	M: 21.2% F: 7.2%	M: 24.5 % F: 9.5 %	M:23.2 % F: 10.9%

Source: NCD Survey, Ministry of Health & Quality of Life

Prevalence of Diabetes Mellitus has maintained an upward trend over the period 1987- 2009 to reach a prevalence rate of 21.3% for age group 20-74. Diabetes is predominantly of type 2 in Mauritius. Furthermore, another 24.2% in the age group 25-74 years are in a pre-diabetes state. A worrying concern is that 50 % of people known to have diabetes is poorly controlled and have a risk profile of developing complications. 8000

diabetic patients are at risk of Diabetic retinopathy due to poor glycemic control. The National Diabetes Registry estimated 175,000 Type II diabetic patients and 500 Type I. In the same vein, it is estimated that number of cases of diabetes in adults that are undiagnosed is as high as 70,440. Among 80,000 Type II diabetic patient 56% do not suffer from retinopathy.

The high rates of diabetes and pre-diabetes, coupled with concomitant risk factors – Overweight and obesity (65.6%), hypertension (37.9%), Dyslipidaemia (30%), Smoking: 21.7% (M 40%; F 4%) and lack of physical fitness (16.5%), represent significant future social and economic burden of cardiovascular disease and diabetes complications for Mauritius. This will impact adversely on medical costs and national productivity due to the impact of these diseases on the workforce.

Metabolic/physiological risk factors

Raised blood pressure

The Prevalence of high blood pressure continued to maintain an upward trend since 1986; except in 1992 where a negligible drop was observed. The age and gender-standardised prevalence of hypertension¹ was on average 37.9% (40.5% in males and 35.4% in females). The prevalence of hypertension rose steadily with age in both men and women. After the age of 54 years, hypertension was more prevalent in females. Across all age groups untreated hypertension was more common among men than women. Medication to control hypertension was being taken by 15.5% of the population and its usage increased with age, from levels of 1-2% for the youngest groups, to an average of 45% for the oldest group. Overall, for every patient being treated for hypertension there was at least another untreated person except for the older age groups.

Obesity and overweight

The NCD Survey (2009) estimated 477,000 Mauritius aged within the age group 25 and 74 years were overweight/ obese. This represents a prevalence² of 65.6% (62.8% in males and 68.2% in females).

A comparative analysis of the last two Nutrition Surveys³ (2004 and 2012) shows some positive signs while in absolute terms the prevalence confirms the urgency to address overweight/ obesity among both adults and children. Among the 5 to 11 years age group, prevalence of overweight increased from 7.7% in 2004 to 9.8% in 2012, whereas a minor fall in the prevalence of obesity from 8.1% in 2004 to 7.8% in 2012 has been noted.

The adverse health impacts of obesity occurring in childhood, as well as in the long term, need to be underscored. Whilst child obesity is associated with higher risk of obesity and NCDs in later stages of life, likelihood of adverse outcomes such as breathing difficulties, increased risk of fractures, hypertension, early markers of cardiovascular diseases are real in childhood.

Prevalence of overweight slightly increased from 8.4% in 2004 to 9.2% in 2012 among the age group 12 to 19 years. On the otherhand the prevalence of obesity for the same above referred age group remained almost the same (7.4 % in 2012 as compared to 7.3 % in 2004).

In adults aged between 20 to 49 years a slight decrease has been noted in the prevalence of overweight from 32.9 % in 2004 to 31.6% in 2012. This declining trend was more significant for obesity as prevalence decreased from 22.9% in 2004 to 17.6 % in 2012 in adults aged 20 to 49 years.

Alcohol

Prevalence of abusive alcohol consumption among males was 19.1% in 2009, representing an increase of 20% over a ten year period. Among women, abusive alcohol consumption is low. Management of mental and behavioural disorders due to high alcohol in take is exerting much pressure already on the health care system. Approximately 51% of cases treated as in-patient at the BS Psychiatric Hospital were related to mental and behavioural disorders due to alcohol. To prevent and control the harmful use of alcohol amendments were brought in 2009 to the Public Health Act to regulate the availability of alcoholic products (including reasonable limitations on the distribution of alcohol and operation of alcohol outlets) and marketing of alcoholic beverages. The main challenge is the enforcement of these regulations.

Smoking

Tobacco consumption decreased steadily with current smoking among males dropping from 57.9% in 1987 to 35.9% in 2004; a rise was recorded in 2009 with prevalence rate estimated at 40.3%. In females the trend has been on the decline over the period 1987 -2009. Notwithstanding that smoking patterns among the youth

¹ both untreated persons with hypertension and those who have been diagnosed and are on treatment

² Applying the World Health Organization classification of BMI (weight/height) - cut points depending on ethnicity (European and asian origins)

³ using a different standard classification of BMI (CDC)

demonstrates a declining trend it remains a cause for concern. According to the 2008 Global Youth Tobacco Survey, 28.4 % of students had ever smoked cigarettes in 2008 as compared to 31.3% in 2003. Over the same corresponding period youth attending school and who currently smoke cigarettes dropped from 14.8% to 13.7%.

National strategies, plans and programmes on tobacco control developed are reinforced by existing legislation amended in line with the Framework Convention for Tobacco Control (FCTC). Mauritius is implementing regulations to strengthen policies on smoking in public places; and tobacco advertising, promotion, and sponsorship as well as regulations on pictorial warning labels, packaging descriptors, and the sale of tobacco products. Embracing the FCTC Mauritius is actively engaged in implementation of programs for smoking cessation, including programs for diagnosing, counselling, preventing, and treating tobacco dependence, as well as facilitating accessible and affordable treatments. Seven (7) smoking cessation clinics are operational once a week at the regional level. Brief interventions are conducted at all primary health care points to assess readiness to quit and provide referrals for counseling and pharmacological therapies in smoking cessation clinics at the regional level. As counseling is at the core of the behavioural therapy for cessation clinics, the use of mobile phone technology through the mHealth Initiative of WHO and ITU, will leverage smoking cessation interventions.

Cancer

The National population-based Cancer Registry shows a rising incidence of cancer among both males and females. The Age Standardised Incidence Rate (World) in males rose from 84.8 per 10⁵ in 2009 to 127 per 10⁵ in 2013; and among females from 111.5 per 10⁵ in 2009 to 149 per 10⁵ in 2013.

The most prevalent common site for cancer incidence among males in 2013 were colon/rectum (20.1 per 10⁵ in 2013) followed by prostate (17.3 per 10⁵ in 2013) and lungs (12.4 per 10⁵ in 2013). Among females, breast cancer (56 per 10⁵ in 2013) followed by colon/rectum (14.3 per 10⁵ in 2013) and cervix (11.7 per 10⁵ in 2013).

The Age Standardised Mortality Rate (World) for males rose from 78.4 per 10⁵ in 2011 to 85.9 per 10⁵ in 2013. Among females the ASR rise was more significant from 60.3 per 10⁵ to 74.3 per 10⁵ over the same corresponding period. The most prevalent common site for mortality among male is lungs (18.1 per 10⁵ in 2013) and breast among females (20.9 per 10⁵ in 2013).

Burden of communicable diseases

HIV/AIDS

The HIV epidemic in Mauritius is of a concentrated nature, with a prevalence of 1.02%⁴ in the adult population, but high prevalence among key populations. People Living with HIV (PLWH) are currently estimated to be 9,200 (8,000 - 10,000) of whom 5,000 to 6,000 know their status. Thus, leaving 3,000 to 4,000 undiagnosed. An average of 83,000 HIV tests are being carried out annually, half of which are among blood donors while 20% are among pregnant women. Voluntary Counseling and testing which is done at rate of 1,000 annually needs to be scaled up rapidly.

Prevalence of HIV among key populations is highest among People who inject drugs (PWID) accounting for 44.3%, followed by 22.3% among female sex workers (FSW) 20% among men who have sex with men (MSM), and 19% among prison inmates (PI).

Evidence generated in 2013⁵ projects that the emergence of the MSM population as a key driver of the epidemic accounting for 36.3% of new infections, compared to 1% in 2013. IDU will continue to be the main driver of the epidemic (representing approx.44% of new). Clients of sex workers (SWs) would be responsible for 7.3% of new infections, and 2.2 % would be among stable heterosexual couples. While outreach programmes towards SWs and MSM are constrained by stigma and discrimination, innovative approaches to improve and scale up access through peer support groups and community work are to be devised.

Based on mapping of PWID the total number of active PWID, including those on Methadone Substitution Treatment (MST) is estimated at 11,700. As 6000 members of the active PWID are enrolled on MST, this leaves about 5,700 active injectors. The 2013 PWID IBBS found that about 70% of people on MST had stopped injecting. The total number of active PWID, including those on MST and still injecting drugs amounts to 7598; of whom 6595 are male, 874 are female, and 129 are transgender.

⁴ Spectrum 2014

⁵ Mode of Transmission Study

Furthermore, some 2540 PWID are reached with non-MST services such as NEP. About 75% of PWID have been tested for HIV at least once.

Free ARV treatment and care which was introduced in 2001 has been decentralized to all the five health regions, including the prison settings and Rodrigues Island. Much can be achieved still through revisiting the role of Area Health centres, Harm reduction centres, prisons and NDCC facilities in providing comprehensive and integrated HIV prevention, treatment and care including ART. Facilitating service integration as a standard of care is to be underscored. .

Coverage of ART according to existing protocols based and aligned with WHO Guidelines is good. The number of people ever enrolled on ART at end 2013 was 2200, with 1830 adherent to HIV treatment. In view of the concentrated nature of the HIV epidemic, among key populations, loss to follow up at every stage of the treatment cascade is high. The diagram illustrates the actual situation. A national target of 95% has been set for adherence to ART treatment. ART treatment adherence improved from 71.1% in the 2011 cohort to 82.1% in the 2013 cohort.

An impressive increase in the percentage of HIV-positive pregnant women receiving ART has been noted rising from 68% in 2010 to 97.4% in 2014. However, People Living with HIV (PLHIV) do not receive appropriate counselling and services to ensure self fertility management. In this regard, provision of fertility management education and services, needs to be urgently addressed.

HIV and co-infections

The major co-infection with HIV is Hepatitis B & C infection among the Injecting Drug Users with prevalence rate estimated as high as 95%.

HIV –TB co-infection among the population of TB patients is very low with only xx cases registered in 2013. Resistance to first line TB treatment is regularly monitored to ensure HIV/TB does not lead to an increased MDR-TB given the poor treatment adherence of PLHIV who inject drugs. More specific confirmatory tests such as routine sputum for AFB testing need to be carried out so as not to miss any genuine TB case, especially in the prisons.

STI management is also a big challenge amongst PLHIV as STI patients have to be referred to skin clinic and this is a recipe for defaulting.

Tropical and vector borne diseases

Notable achievements have been made in the control of communicable diseases and neglected tropical diseases. Mauritius is malaria free as the last indigenous case was reported in 1997. The total annual number of imported malaria cases notified annually from 2000 to 2013, ranged between 23 to 63. Rodrigues Island is malaria free with no case of malaria has been notified so far.

However, environmental and climate changes contributed to outbreak of dengue and chikungunya following a first imported case Following zero reporting of dengue for over 15 years , Dengue was re-introduced in 2008. An important outbreak of Dengue was reported in the capital city in 2009 when some 252 cases were confirmed. In 2014 within a period of few weeks a small outbreak of Dengue was reported with 19 confirmed cases concentrated within a particular locality. The outbreak was controlled with the prompt activation of the national preparedness and response plan for Dengue control. In the same vein, the treat of Chikungunya can not be underestimated. A first outbreak of Chikungunya was reported in 2005 with 1,381 followed by a second outbreak in 2006 with over 11,000 cases occurred over the period February – May 2006. In 2010 and 2011 one case of chikungunya was reported. Vaccine preventable diseases have been controlled to such an extent that diseases such as polio, neonatal tetanus, pertussis and diphtheria are nonexistent.

Organisation of Health Systems

A mix of public and private providers supplies health services in Mauritius The national. Public hospitals which provides free services, provides for 3,581 beds and accounts for 83% of bed capacity across the Island of Mauritius. The private sector provides for 690 beds and represents 17% of bed capacity across the Island of Mauritius. In the Island of Rodrigues there are 181 beds available and all are in public hospital facilities.

The current nomenclature and management of public health sector dates back to the Health Sector Review undertaken in 1988. Decentralisation of health services was ensued then with the establishment of five (5) health regions. Within the current decentralized system each health region is entrusted in principle more autonomy in the management of their respective health programmes. Policy formulation and coordination of the health sector response rest with Ministry of Health and Quality of Life at the central level. In essence, the

central level fulfils the stewardship role of the country's health system through planning, resource mobilization and allocation, coordination, management, regulation and overall administration.

Health Care Delivery (Public Sector)

Health care is delivered in the public sector around a three-tier system.

Primary health care services: Primary Health Care is the cornerstone of the national health system in Mauritius. This first level of contact comprises a network of Community Hospitals (2) Medi-Clinics (6), Area Health Centres (18), Community Health Centres (116) and Satellite health care institutions. The peripheral units are managed through a multi-disciplinary team namely Medical & Health Officer, Dental Surgeon, Community Health Nursing Officer, Dispenser and Health Inspector. 100% of the population has reasonable access to the first point of contact with the health system (CHC and AHC) within a radius of three(3) miles. To complement the Primary Health care, there is a Mobile Service providing comprehensive health programmes in schools, workplaces as well as outreach regions in terms of health promotion and screening of NCDs. Rodrigues Island is served by 3 AHCs and 14 CHCs.

District & Regional health care services: This second (secondary) level comprising two district hospitals and five regional hospitals provides primary inpatient and outpatient medical care to their respective catchment populations, emergency services and supervision of satellite AHCs and CHCs. Services provided include accident and emergency, general medicine, general and specialized surgery, gynecology and obstetrics, orthopaedics, traumatology, pediatrics and intensive care services. Each regional hospital has its own laboratories for bio-chemistry, haematology, histology, microbiology and parasitology testing and, also, provides blood transfusion services. The Central Laboratory provides pathological tests for both public and private sectors. Rodrigues Island has one main hospital with some specialist services. Major surgical cases are referred to Mauritius.

Hi-tech/quaternary health care: The tertiary level is the highest referral level comprising specialized hospitals and centres (Eye Hospital, Psychiatric Hospital, Chest Diseases Hopital, Cardiac Centre, ENT Centre and Diabetes and Vascular Centre). Furthermore, cardiac surgery, invasive cardiology, neurology, renal transplantation, laser and laparoscopic treatment are offered as part of the national high-tech programmes. Dialysis is provided for patients with end-stage renal failure.

Private health care has evolved in 2 forms: private practice of medical and dental care practitioners, and private clinics with in-patient beds, and facilities for examination, consultation and diagnostic procedures. There are at present 13 clinics with in-patient service operating in the private sector, which besides the renal dialysis also provide cardiac surgery amongst other services.

There has been a rapid expansion of medical services, in terms of human resources, over the last ten years. In 2004, there were 1,303 medical doctors with a doctor-to-population ratio of 1:943 while in 2013 there were 2,046 doctors with a doctor-to-population ratio of 1:617 (of which 35% are specialist and nearly 49% are in private health institution). In 2004, the number of nurses was 2,937 with a nurse-to-population ratio of 1: 416, whereas in 2013, with the total number of nurses increasing to 3,879, the nurse-to-population ratio was 1:325. The nurse-to-doctor ratio was about 1.9:1.

Strengthening of the health information system is widely acknowledged as a main priority to support evidence-based decisions. As a national e-health strategy has been developed it is vital to strengthen data and information management systems to contribute to effective policy-making, and ensure that the e-health plan is implemented to enhance service level performance.

Health Response to national challenges

The stewardship mandate entrusted to the Ministry of Health & Quality of Life includes leadership in national health policy making, planning and management, resource allocation, monitoring, inter-sectoral policies and programmes, public health promotion, health service delivery as well as regulation and quality assurance of health services. Furthermore, there are regulatory bodies (Medical Council, Dental Council and Nursing Council) responsible for regulating the practice and conduct of professionals in relevant fields.

The national health sector response is driven through the Health Sector Strategy (HSS), covering the period 2014 - 2018. The vision set under the HSS are as follows:

- Sustain a high-performing quality health system that is patient centered, accessible, equitable, efficient and innovative
- Improve quality of life and well-being of the population through the prevention of communicable and

- NCDs , promote healthy lifestyles and sustain an environment free of health hazards
- Harness the potential of Information and Communication Technology to empower people to live healthy lives
- Ensure that available human, financial and physical resources lead to the achievement of better health outcomes
- Facilitate the development of a medical and knowledge hub and support the advancement of health tourism

Core principles guiding the Health Sector Strategy are :

- Health is a fundamental human right.
- Maintaining the Welfare philosophy for free health services
- Ensuring value for money service to meet satisfaction of health clients
- Sharing values pertaining to universality, provision of high quality care, equity in health delivery, patients' safety and patients' rights among all stakeholders
- Promoting Community based participation in the decision-making, planning and implementation processes related to the delivery of services
- Enhancing the quality of health care services in response to patients' growing expectations.

HSS 2012-2016 has ten strategic directions with respective targets to be attained by 2016. The strategic actions reflect the commitment of Government to ensure universal coverage and equity in the provision of health services, with emphasis on customer care. The ten strategic directions are as follows:

Strategic Direction 1 (Primary Health Care): Strengthening primary health care services and setting up a strong gatekeeper mechanism so as to reduce the excessive flow towards secondary and tertiary care services.

Strategic Direction 2 (Public Health): Further strengthening programmes related to the prevention and control of vector borne and waterborne diseases, emerging and re-emerging infectious diseases, as well as environmental and occupational health and food safety.

Strategic Direction 3 (HIV and AIDS): Scaling up HIV/AIDS programmes to reduce the incidence of HIV infection

Strategic Direction 4 (Noncommunicable Diseases and Health Promotion): Reducing the burden of premature morbidity, mortality and disability associated with the NCDs and their risk factors.

Strategic Direction 5 (Hospital Services): Providing an evidence-based clinical service of high quality in line with international best practices and supported by appropriate skilled human resource.

Strategic Direction 6 (Public Private Partnership): Develop a hybrid model of effective partnership between the public sector and private partners for further improving the performance of the national health system.

Strategic Direction 7 (Human Resources & Capacity Building): Improving the mix of medical and paramedical personnel to the level of developed nations for the timely delivery of high quality services to the population.

Strategic Direction 8 (Education, Research & Medical Education): Strengthen education, research and training for the sustainable supply of a skilled workforce in the national health system.

Strategic Direction 9 (Governance): Improve the stewardship role of the Ministry of Health & Quality of Life through restructuring and re-engineering the organizational set up at the Headquarters Level and the Regional Hospitals to allow evidence-based policy making and implementation of decisions.

Strategic Directions 10 (Medical Hub): Supporting the development of Mauritius into a medical and knowledge hub and a medical travel destination.

Going forward the new Government Programme for the next five years (2015 – 2019) defines the key priority actions for the development of the Health Sector as follows:

- Provision of universal, accessible and quality health services, free of any user cost, with emphasis on customer satisfaction. Special counters will be set in hospitals to deal with the complaints of patients and a special code of ethics will be introduced for health professionals.

- Formulation and implementation of a new Master Plan on Primary Health Care will be formulated and implemented. The existing system will be re-engineered to reduce pressure on the regional hospitals.
- Establishing a system of domiciliary visits by specialised nurses and dedicated counters will be set up at the level of primary health care centres and hospitals to cater for the needs of the elderly and disable persons
- Decentralisation of ophthalmology services
- Setting up of a second Cardiac Surgery Centre; a Vascular Surgery Unit for the treatment of complex vascular diseases and prevention of amputations; and a new Cancer Centre
- Elaboration of a new HIV/AIDS Action Plan 2015-2020
- Decentralisation of the Methadone Substitution Therapy services will be decentralised for the benefit of the patients and the community at large.
- Implementation of a National E-Health project aiming at improving the quality of service delivery across all public health institutions will be implemented.
- Reviewing of legislations - Medical Council, Dental Council and Pharmacy Acts to be more responsive to the needs and challenges of the health sector
- Introducing new legislations - Pharmacy Council Bill and the Health Professionals Bill, to recognise and regulate allied health professionals.
- Enacting a Private Health Institution legislation to regulate the private health sector.

The national health sector response in terms of progress **in the six WHO leadership priorities**, is to be highlighted.

Universal Health Coverage



Pursuit of Universal Health Coverage is at the centre of Human development in Mauritius as the country demonstrates a true model of welfare state and characterized by a wide array of social protection schemes, including free health care from primary to curative tertiary services.

Total Health Expenditure amounted to 4.9% of Gross Domestic Product in 2011 compared to 3.7% in 2000. Over the same corresponding period (2000-2011) Per capita public expenditure on health (at average exchange rate in US\$) rose from US\$ 146 to US\$ 450.

Over the last decade there has been a general upward trend towards seeking health care in the private sector. This is reflected with the increasing share of Private Health Expenditure (PHE) of Total Health Expenditure (THE) from 48% in 2000 to 51.8% in 2011. Only a small fraction of total expenses is pre-paid and most are out-of-pocket payments (OOP). OOP accounted for 91.5% of total PHE in 2011 (compared to 74.6% in 2000); conversely Private prepaid insurance accounted for 8.3% of total PHE in 2011 (compared to 1.7% in 2000). The increasing overreliance on direct payments at the time people need and access care in private health institutions may have major equity implications and be perceived as a major barrier to universal coverage. The high reliance on out-of-pocket payments can lead to catastrophic health expenditures, which occur when health care costs exceed a household's ability to pay. Households facing catastrophic health spending out of health pocket payments in Mauritius (as health expenditure accounting for at least 40% of the income remaining after subsistence needs have been met) was estimated at 9% in 2003. The incidence of catastrophic health expenditure may have changed since in view that the share of OOP of THE has risen.

According to the last survey on Households OOP Expenditure on Health, 14% of the households have members covered by a health insurance. 20% of the households had the insurance premium paid by the company in which members of the household worked. 35% paid their premiums themselves and in the remaining 45%, payments were made by both the household and the employer.

Improving efficiency:

As Hospital Services in Mauritius consume the lion's share of the national health care budgets, representing more than 70% of total health spending, the MOHQL endeavours to have strong control and influence on the resources and expenditure at hospital level. In this perspective with Technical support from WHO, Cost Centres have been developed at the main Service Delivery Areas of all five Regional hospitals to ensure that resources are used equitably and efficiently. In the same vein, an Efficiency Gains Programme (EGP) is underway to ensure cost effective utilization of public funds in the health sector without compromising on quality of care and services. Activities include reducing overtime for both medical and paramedical personnel, reducing operational costs and review of fees paid by the private health stakeholders for the purchase of goods. Future plans are to extend these activity areas to catering, transport management, management of pharmaceutical and nonmedical supplies, payment of overtime, clinical practice guidelines and protocols and use of ICT (e-health). It is forecasted that inclusion of these new service areas would generate efficiency savings and gains worth Rs 400 million.

International Health Regulations



A rapid assessment of core capacities in compliance with IHR (2005) revealed that a number of core capacities have been achieved. Among the significant incremental progress made are revision of legislations/ regulations; scaling up surveillance; elaboration of a national communication protocol and drafting of an intersectoral plan of action for IHR.

However, gaps still remain the following core areas of Surveillance under article 5 and Public health Response under article 13. Some of the components of the Integrated Disease Surveillance and Response (IDSR) strategy and event based surveillance process are yet to be finalized with adaptation and contextualization of protocols and Standard Operating Procedures (SOPs)..

Mauritius has applied for a further extension until 15 June 2016 to fully attain the core capacities. The core focus of the implementation plan to ensure IHR Core Capacity compliance is developing protocols and SOPs for intersectoral communication, events based surveillance and Points of Entry. The recent Ebola Virus Disease outbreak constituting a PHEIC has prompted MOHQL to invest in setting up specialized isolation units to manage highly infectious diseases. Recent guidelines have revealed the need to reinforce other components of Infection prevention and Control in Healthcare settings as well as strengthening the capacity of regional Rapid Response Teams. Upgrading of laboratory infrastructure commensurate with biosecurity level P3 as well as construction of isolation wards with negative pressure especially in the event of air borne transmissible infectious diseases are urgent priorities.

Another area requiring strengthening of core capabilities is food safety. The core objectives of the National Food Safety Action Plan are reinforcing mechanisms for detecting and responding to foodborne diseases and food contamination with focus on the protection of health and food safety risk management. To that effect addressing gaps and capacity building pertaining to food business, inspection needs and priority problems,; SOPs for diligent risk-based food inspection services; plans and mechanisms to respond to food safety events , among others, are critical.

Access to essential, high-quality, effective and affordable medical products



There is no written National Medicines Policy document in Mauritius. On the other hand, a national clinical laboratory policy exists and the elaboration of a strategic plan for the national health laboratory is indicated. Access to essential medicines/technologies as part of the fulfillment of the right to health, is recognized in the constitution or national legislation

Availability: As medicines are provided free of charge in the public sector availability of originator medicines is 0%, while availability of the Lowest Priced Generic (LPG) medicines is 68.6 %.⁶ Availability in the private sector is higher for originator medicines but lower for the LPG (55.7% for originator and 54.9% for generics). Pricing of originators and generics in the private sector expressed as a ratio of the national price to the international price are approximately 19.3 and 6, respectively.

Affordability : Affordability of medicines is measured in terms of the number of days' of wages necessary to purchase a particular treatment for a specific condition. The wage considered is that paid to the lowest paid government worker in Mauritius. Specific data collected for the survey underlying this profile examined the number of days' wages required to purchase treatment with co-trimoxazole for a child respiratory infection; this was calculated to be 0 and 0.4 days' wages for the purchase of originator medicines by public and private patients respectively. In comparison, the purchase of generic medication necessitates also 0 days' wages for public patients and 0.4 for private patients.

Existing laws regulating medicines and the practice of pharmacy in Mauritius are not integrated but rather contained in several distinct legislations. These do not comply with international best practices and pose difficulties in enforcement due to conflicting interpretation. It is essential that these legislations be extensively reviewed and that an appropriate legal framework be set up in the following areas: Pharmacovigilance and Adverse Drug Reporting; Control of substandard and counterfeit medicines; Trade (import and export) of pharmaceutical products; and Setting up of a National Drug Regulatory Authority. Stringent regulations are required in terms of Licensing to operate pharmacies; Registration of pharmaceutical products; Inspection of pharmacies; and Control of Dangerous Drugs.

The establishment of a national medicines regulatory agency within the context of a revised legislation guiding practice of pharmacy is an urgent priority. The proposed national medicines regulatory agency should regulate

⁶ WHO/HAI pricing survey(2008)

all medicinal substances as well as medical devices. These include medicines, vaccines, biologicals, herbal remedies, Ayurveda medicines, cosmetics, medical devices (e.g. condoms, gloves, syringes etc.) as well as “controlled drugs”

Mauritius is, since 2014, a full member of the WHO Programme for International Drug Monitoring together with all the benefits associated with the WHO Programme including access to Vigibase, the only global ICSR database. However an urgent priority for sustainable and efficient pharmacovigilance is development of a well articulated communication and crisis management plan for pharmacovigilance in Mauritius. This constitute the basic requirements expected of any national pharmacovigilance centre.

There is no national Essential Medicines list (EML). On the otherhand, the formulary of the Ministry of Health & Quality of life, which is a Government-approved selective list (for use in public institutions only), is based on the WHO concept of Essential Drugs. This list which is regularly updated satisfies the priority health care needs of the population. They are selected on the basis of disease prevalence, evidence on efficacy and safety, and comparatively cost-effectiveness.

The above list, last updated in 2007, is being used for public sector procurement. There is a committee responsible for the selection of products on this national list.

Quality Assurance and Control of medicines and other pharmaceutical commodities are entrusted to the Government Analyst Division. However, testing is restricted to only 70 products.

Generic substitution at the point of dispensing in public sector facilities is allowed but not in the private health facilities.

Social, economic and environmental determinants



A Human Development Index (HDI) of 0.737 places Mauritius well above the Sub-Saharan African average of 0.437, and ranked 80th in 2013.

.The Household Budget Survey of 2012 classified 9.4% of the population as relatively poor against 7.9% in 2007. Poverty is predominantly rural (12.4%) and disproportionately prevalent on Rodrigues island (40%) where livelihoods are derived from subsistence agriculture and fishing. Further, with the country's Gini coefficient rose from 0.388 in 2006 to 0.413 in 2012 prompting a rise in income inequity.

Extreme poverty as defined by the UN for MDG purposes (US\$ 1.0 per day or US\$ 1.25 in PPP terms) is insignificant in Mauritius. The country remains with less than 1 percent of its population living in extreme poverty over more than one decade. The relatively low level of poverty is attributable to socially inclusive policies, high economic growth, a welfare state with universal free health care and education, social transfers such as non-contributory pension scheme

Investing in human capital is at the core of national socio-economic agenda. Investing in education and health, promoting gender equality, child development and family welfare, supporting and empowering vulnerable groups, providing social aid and assistance to the elderly and other people in need, are considered as critical to human welfare and essential to sustained economic and social development.

Life-skills training are delivered to people of deprived regions to help rebuild the human and social capital. The training sessions deal with subjects such as teenage pregnancy, substance abuse, alcoholism, family planning

Inequalities by socioeconomic status exist in NCD risks, especially by level of education, type of occupation, income and ethnicity. Among the most significant variable associated with diabetes is the number of years of education after adjusting for age, sex, history of family diabetes, and ethnicity. Those with 13 or more years of education have 53% lower odds of having diabetes compared with those with 0-3 years of education. Likewise, Compared with those with 0-3 years of education, the odds of being hypertensive are 50% lower among those with 13 or more years of education. The concentration index of diabetes and hypertension by education is -0.11 and -0.12, respectively. Thus, reflecting a higher concentration of diabetes and hypertension among those of low education. The association between the risk of hypertension and socioeconomic status shows an increased risk for those of lower socioeconomic status. Those with low incomes had the highest prevalence of hypertension (50%) and the lowest prevalence was among the wealthiest (29%).

The prevalence of Metabolic Syndrome (MetS), which is as high as 36%, is significantly associated with age, education, income, occupation and the district of residence. The prevalence of MetS among those 20-29 years old is 12.6%, and increases to about 63% among those aged 70 years and older. As the years of education

increase, the prevalence of MetS decreases. Those with 0-3 years of education have the highest prevalence rate at 56% compared with 23% among those with 13 or more years of education. The pattern for income follows that of education, showing that those with higher incomes have lower prevalence of MetS. Although literacy levels are quite high in Mauritius, there is still more that can be done using education as an intervention tool to prevent NCDs and control MetS

The low birth weight rate in a population is a good proxy of that includes long-term maternal malnutrition, ill health and poor health care. The prevalence of low birth weight is estimated to be at 25.5 % among the poor households compared to 19.2% registered in government hospitals. It has been also found that 5.8 % of children aged less than 5 years were not vaccinated in the poor households compared to 1 % at national level. Evidence abounds that the prevalence of asthma and mental diseases is higher among the poor households 20.9 % from asthma and other chronic respiratory diseases and 16.4 % from mental diseases. The comparative figures at national level were 13.8 % and 5.7 %, respectively.

Noncommunicable diseases



While Mauritius has not developed a National Plan for Prevention and Control of NCDs it has adopted the 2008-2013 Action Plan of the Global Strategy for the Prevention and Control of Non-communicable Diseases developed by WHO

In view that NCDs constitute over 85% of the burden of diseases and the need to provide a comprehensive response Mauritius has opted to develop distinct National Action Plans for the three of the main causative and modifiable risk factors - tobacco use, unhealthy diet, lack of physical activity. The national Plan of Action on Nutrition includes, amongst others, dietary guidelines for healthy nutrition, fruit and vegetable promotion initiatives and regulation of the sale of foodstuffs on school premises

A National Diabetes Services Framework and National Action Plan for Cancer Control and Prevention have been developed and implemented. The implementation of a National Service Framework for Diabetes (NSFD) is well underway. The fourteen standards of the NSFD aim, inter alia, to prevent people from getting diabetes, prevent people with diabetes from getting complications and enabling people with complications from diabetes to live as normal a life as possible. A notable and landmark achievement at country level to strengthen and orientate health systems to address the prevention and control of NCDs and the underlying social determinants through people-centred primary health care and universal health coverage is the setting up of a Diabetes and Vascular Health Centre. The Diabetes and Vascular Health Centre manages a live register of people with Diabetes, provides Diabetic Retinopathy Screening Service and a Diabetic Foot Care service. Through continuous improvements of ophthalmological services as well as Diabetic Retinopathy Screening, there has been a marked decrease in the referral rate of Vitreoretinal Surgery to less than 30% since 2008. The focus of the Diabetic Foot Care Service is on Prevention, Treatment of active disease and Management of diabetic ulcers and prevent re-ulceration as lower extremity amputations in persons with diabetes rose from 319 to 454 in 2012, representing a 42 % rise. The Diabetes and Vascular Health Centre is supporting capacity building of nurses in diabetes care in collaboration with the Mauritius Institute of Health. This is partly addressing the lack of appropriately trained human resources, such as diabetologists, diabetes specialist nurses, podiatrists, primary care physicians trained in chronic disease management to deal effectively with the control of the NCDs

An International Advisory Committee (IAC) has been set up by Government to advise and oversee the strategy for prevention and control of diabetes, cardiovascular and other related diseases.

Implementation of an Action Plan for Cancer Control (2010-2014) is underway and interventions aim at public education to reduce the morbidity and mortality due to cancer; promoting early detection of cancer; providing adequate therapy and effective palliative care service.

The reports of the National Cancer Registry constitute an invaluable tool for monitoring trends in the incidence and mortality of various tumours. In the same vein, a comprehensive evaluation whether the common cancers in the country are being detected at an earlier stage or are less frequent, as a result of increased cancer awareness and primary prevention is a priority.

National response for Tobacco Control is in line with the Framework Convention for Tobacco Control. A new comprehensive National Action Plan (NAP) for Tobacco Control Action Plan (2015-2018), comprising both demand-reduction and supply-reduction measures is being finalised. The vision of the NAP is to create a tobacco-free society, by promoting individual and community responsibility and sustain political commitment for the prevention and reduction of tobacco use through multi-sectoral participation in tobacco control. The goal of the Plan is to reduce the health, economic and social consequences of tobacco use. The new plan will build on the experiences and outcomes of the 2008-2012 NAP. The 2008-2012 NAP on Tobacco Control aimed at

preventing tobacco use, promoting smoking cessations and reducing exposure to secondary to environmental tobacco smoke.

In 2010 the Public Health Act were reviewed and new regulations with important focus on banning tobacco advertising and campaigns; banning smoking in public places; restricting sales and distribution of tobacco products (as well as making sale of tobacco products unlawful) ; imposing health warning signals as part of new packaging requirements were promulgated and enforced. These new regulations are in line with the WHO Framework Convention for Tobacco Control (FCTC).

In the same breadth to prevent and control the harmful use of alcohol amendments were brought in 2009 to the Public Health Act to regulate the availability of alcoholic products (including reasonable limitations on the distribution of alcohol and operation of alcohol outlets) and marketing of alcoholic beverages.

The last NCD survey(2009) 56% of Mauritians (65.8% of women and 45.7% of men) reported doing no moderate or vigorous leisure time physical activity at all. In view of the strong association of low physical activity with Diabetes, IHD and cancer, implementation of the National Action Plan on Physical Activity (2011 - 2014) is being scaled up.

Prevention of NCDs is driven only to a limited extent by the health sector alone. The major challenge is to have effective multi-sectoral actions such as the development of an environment including work environment conducive to healthy lifestyles, strict control of agents driving unhealthy lifestyles such as the fast food industry.

Mauritius has a robust vital registration systems which record deaths with sufficient completeness to allow estimation of all-cause death rates. Furthermore morbidity data is reliable as the medical record system at hospital based level is well established and based on the latest classifications of diseases (ICD 10).

To complement the Health Information System, the Ministry of Health & QL runs periodic national surveys, at 5-6 years interval, since 1986 to monitor the trends in Diabetes and other risk factors of NCDs (behaviourally modifiable and metabolic/ physiological risk factors). Other risk factors surveys have been carried out on an adhoc basis and baseline data. These include salt / sodium intake, tobacco use and fruit and vegetable consumption. To align with with the Political Declaration on NCDs adopted by the UN General Assembly in 2011 and WHO NCD Global monitoring framework there will be need to invest in the setting up of a comprehensive – integrated surveillance system. National targets and indicators need to be developed and based on national situations whilst taking into account, as appropriate, the comprehensive global monitoring framework and the set of voluntary global targets, building on guidance provided by WHO. These will allow better focus on efforts to address the impacts of NCDs and to assess the progress made in the prevention and control of noncommunicable diseases and their risk factors and determinants though implementation of national strategies and plans.

Health-related Millennium Development Goals (MDGs)



The engagement of the state through the release of three successive progress Status Report (2002, 2010 and 2013) demonstrates the high priority of MDGs in the political agenda.

Overall Mauritius is well on track to achieving the health related MDGs except for Maternal Mortality Rate. The maternal mortality ratio has followed an upward trend from 28 per 100,000 live births in 2000 to 73 per 100,000 live births in 2013. The annual % change in MMR is +7.6% for the period 2000-2013 compared to -8.8% for the period 1990-2000.

Under-five mortality rate decreased from 23 per 1,000 live births in 1990 to 18 in 2000 and is presently at 14.5 in 2013. Congenital anomalies are the main cause of death (22.3%) while septicaemia and infections specific to the peri-natal period is the second most important cause. Infant Mortality Rate for the Republic of Mauritius decreased from 20 per 1,000 live births in 1990 to 16 in 2000; it stood at 12.1 in 2013. Appropriate policies and institutional frameworks have been put in place to sustain progress towards attaining the MDG targets, including :

- Strengthening of Maternal and Child Health Care including through the implementation of the National Sexual and Reproductive Health Action Plan;
- Enhancing the Expanded Program on Immunisations against vaccine preventable diseases;
- The scheme for the physical presence of specialists, including paediatricians, gynaecologists and anaesthetists in the 5 Regional Hospitals on a 24-hour basis, rather than being on call;
- Clinical guidelines for the provision of comprehensive emergency obstetric and neonatal care have been reviewed and the role of midwives strengthened through continuous education;
- Setting up of neonatal ICU at Nehru Hospital (in addition to that of SSRN and Victoria Hospitals)

Sexual and reproductive health and MCH services are integrated into the general health services and are provided free of charge through a network of accessible Health care delivery institutions at the primary, secondary and tertiary levels. A national SRH policy has been developed with well articulated policy statements and strategies on priority areas such as Safe Motherhood; Infant and Child health; STIs/ HIV/ AIDS and Gender.

2.2 Development cooperation, partnerships and contributions of the country to the global health agenda

Partnership and development cooperation

Rising Per Capita Income coupled with the favorable health indicators impacted on Mauritius eligibility for external aid especially for the health sector during the last decade. In 2000 external resources for health accounted for 1.4% of total health expenditure. However, for the last five year period (2007 -2011) average external resources for health improved to 2.4% of total health expenditure.

The health partners for Mauritius include: GFATM, UN agencies, development banks and a few bilateral donors.

The Ministry of Finance & Economic Development is mandated to coordinate grants and technical assistance and ensure its monitoring and evaluation. There is no formal sector-wide approach (SWAp) mechanism in place to align and harmonize technical and financial support between the government and all the potential partner organizations in the health sector.

The civil society and Non –governmental organizations (mostly national) are actively engaged in a number of public health issues (HIV /AIDS, Diabetes, Cancer and Hepatitis). Tax incentives provided as part of the national Corporate Social Responsibility (CSR) Programme have boosted the financial support of the private sector and non state actors partnership to social development projects, including health.

Collaboration with the UN system at country level

There are 3 UN agencies with “resident” presence in the country , namely United Nations Development Programme (UNDP), World Health Organization (WHO), the newest addition to the team being the International Organization on Migration(IOM).

The other agencies which have programmes in the country other but with “ non–resident” presence comprise the United Nations Population Fund (UNFPA), Food and Agriculture Organization (FAO), International Atomic Energy Agency (IAEA), the International Fund for Agricultural Development (IFAD), International Labour Organization (ILO), Joint United Nations Programme on HIV/AIDS (UNAIDS), United Nations Educational, Social and Cultural Organization (UNESCO), United Nations Industrial Development Organization (UNIDO), United Nations Entity for Gender Equality and the Empowerment of Women (UN Women), United Nations Office on Drugs and Crime (UNODC), United Nations Office for Project Services (UNOPS), United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP), United Nations Human Rights Office of the High Commissioner for Human Rights (UN OHCHR), and the United Nations Environment Programme (UNEP). The World Bank and African Development Bank are physically present and non –health related sectoral programmes.

The first and unique United Nations Development Assistance Framework (UNDAF) to be developed for Mauritius covered the period 2001-2003. A subsequent UNDAF is yet to be elaborated as with the transfer of the UNICEF and UNFPA in December 2003 to Madagascar, Mauritius is since classified by UNDG as 'Category C / non-harmonized cycle' countries. Such a classification implies that a CCA/UNDAF process is not a requirement. Instead its relevance is left to the appreciation of the UN Country Team.

At the UN Retreat held in 2011 (Seychelles), the UNCT for Mauritius agreed to work towards implementing the “Delivering as One” (DaO) programme in Mauritius, in a gradual and theme-based approach, based on the UNCT’s comparative advantages. The overarching aim is for the DaO programme to target strategically selected thematic areas where joint UN technical assistance would have a high impact. The DaO will be piloted over a period of two years before an evaluation to decide the modalities regarding a formal DaO programme.

It was then unanimously agreed that Health would constitute a core theme. A draft Results matrix framework based has been developed with desired result to promote healthy nation by ensuring healthy lives and promoting well-being for all at all age. the main focus of the present UN Results Matrix Framework will be targeting the Health Risk factors for NCDs, strengthening the fight against HIV / AIDS and sustained prevention, treatment and support of substance abuse. The three distinct outcomes are:

Outcome 1: Containing preventable and avoidable burden of morbidity, mortality and disability resulting from NCDs and promoting healthy lifestyles with a view that populations attain the highest attainable standards of health, well-being and productivity at every age

Outcome 2: The spread of the HIV epidemic is contained both in the community and in prisons, and the conditions are in place for the spread to be reversed in the Republic of Mauritius

Outcome 3: Sustaining prevention and treatment and support of substance abuse, including the abuse of narcotic drugs and harmful use of alcohol.

While WHO will act as the Convenor for the Health Results group, leadership responsibilities were entrusted to respective agencies as follows : NCDs (WHO) ; Sexual and Reproductive Health (UNFPA) and HIV/AIDS (UNAIDS); and Substance Abuse (UNODC).

Notwithstanding that the workplan was neither endorsed nor finalized, some activities have been implemented and expected outputs faring well.

The UNCT's contribution should not be seen solely in terms of financial resources, but much more in terms of its ability to promote new ideas, research initiatives, policy dialogue and advocacy, assistance for capacity building, sharing best practices and lessons learnt , support for research and data analysis.

The UN agencies that are currently working in Mauritius and having health-related programmes are UNDP, UNFPA and IAEA. Focus of health partners work are described below:

UN agencies	Areas of interventions
IAEA	<ul style="list-style-type: none"> • Human Resources Development in Support of Upgrading the Radiotherapy Department at Victoria Hospital • Monitoring of Obesity, Insulin Resistance and Cancer Risk in Women • Establishing Hybrid Nuclear Medicine Imaging for Better Management of Non-Communicable Diseases
UNDP	<ul style="list-style-type: none"> • Unfinished MDGs agenda and HIV issues
UNFPA	<ul style="list-style-type: none"> • Increase national capacity to deliver integrated sexual and reproductive health services • Increase national capacity to strengthen enabling environments, increase demand for and supply of modern contraceptives and improve quality family planning services that are free of coercion, discrimination and violence • Increase national capacity to conduct evidence-based advocacy for incorporating adolescents and youth and their human rights/needs in national laws, policies, programmes, including in humanitarian settings • Strengthen engagement of civil society organisations to promote reproductive rights and women's empowerment, and address discrimination, including marginalised and vulnerable groups, people living with HIV and key populations • Increase availability of evidence through cutting-edge in-depth analysis on population dynamics, sexual and reproductive health, HIV, and their linkages to poverty eradication and sustainable development • Strengthen capacity for the formulation and implementation of rights-based policies that integrate evidence on population dynamics, sexual and reproductive health, HIV, and their links to sustainable development
UNAIDS	<ul style="list-style-type: none"> • Provide technical support to the NACs to address HIV prevention needs of MARPS by new evidence informed national HIV prevention strategy • Facilitate the expanded packages of services for PWID on basis of harm reduction programmes • Support the development of the Investment case, Surveillance of key populations, Size and HIV estimation and HTC informs response and resource prioritization • Provide technical support to scale-up community led testing and treatment programs for increased uptake of testing and treatment services and adherence • Support the generation of Strategic information to inform the full range of epidemic priorities with appropriate disaggregation of key populations • Provide technical support to organize civil society dialogues and

	consultations to support civil society coordination of advocacy strategies, engagement in national processes, and prioritisation of actions.
Global Fund	<ul style="list-style-type: none"> Strengthen prevention strategy for key populations

The UN system in Mauritius has very limited capacity both at the level of funding and human resources, to engage in major development projects but there are certain areas where their intervention could have critical impact. UN agencies have been very active in the fields of women and child rights, health and reproductive rights, education and the environment.

Global Health Initiative

The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) is the only global health initiative that the health sector in Mauritius has benefitted from over the last decade. Within the framework of the eighth round of funding by GFATM, around 4 M Euros were disbursed as at end December 2014.

2.3 Contributions of the country to the global health agenda

Mauritius is a strong supporter of the Framework Convention on Tobacco Control (FCTC) and is among the first 15 countries to ratify the convention. Substantial strides have been accomplished at national level in tobacco control and complying with the FCTC. Mauritius emerges as a leader in the Region, and shares its valuable experiences with other countries. The pictorial warnings developed by Mauritius in line with articles of the FCTC have been adopted by several countries.

The present HIV National Strategic Framework is guided by the UN Political Declaration for HIV AIDS which Mauritius is signatory,

3. REVIEW OF WHO COOPERATION OVER THE PAST CCS CYCLE

The agreement for the provision of technical advisory assistance between WHO and the Government of Mauritius entered into force in October 1970. The physical representation of WHO at country level dates back to January 1980. There has since been a fruitful cooperation between the country and the World Health Organization, and the country has been one of the best performers in the development of the health sector.

Consistency between CCS priorities over the cycles

The three strategic priorities for the second Mauritius CCS, covering the period 2008-2013, are:

- Building individual and global health security
- Tackling the determinants of health (behavioural, social and environmental) through sustainable multi-sectoral action
- Strengthening health systems and equitable

The CCS priorities are consistent with the national priorities of the Health Master Plan 2006–2015 and the WHO country collaborative programmes spanning over three bienniums - 2008–2009, 2010–2011 and 2012–2013. The CCS priorities were aligned and addressed most of WHO Strategic Objectives of the Medium term Strategic Plan (MTSP).

Table 3 shows the linkage between the six priorities in the CCS and the Strategic Objectives of the MTSP.

Country cooperation strategy priorities 2008-2013	Strategic objectives 2008-2013
<p>A. Building individual and global health security</p> <p>A.1: To strengthen the control and prevention of new HIV infection and provide a continuum of comprehensive care to all PLWHIV in order to mitigate the impact of the HIV epidemic on the population at large</p> <p>A.2: To support and sustain national capacity building of competencies required by the International Health Regulations for alert and response systems in epidemics and other public health Emergencies</p> <p>A.3 To build national capacity to ensure better detection, assessment and response to major epidemic and pandemic-prone diseases</p>	SO 1 ,SO 2, SO 11
<p>B. Tackling the determinants of health (behavioural, social and environmental) through sustainable multi-sectoral action</p> <p>B.1: To promote healthy lifestyles and cost-effective primary and secondary care interventions for prevention and control of major NCDs and injuries, and for mental health promotion</p>	SO 3,SO 6, SO 7, SO 9
<p>C. Strengthening health systems and equitable access</p> <p>C.1: To strengthen health system capability so as to adopt a resultsbased approach for effective policy-making in line with the spirit of the Programme-Based Budgeting and Medium-term Expenditure Framework</p> <p>C.2: To enhance the planning, provision (with focus on equitable access) of essential medical products, services and technologies of assured quality and responsiveness to users</p>	SO 10, 11

The budget for activities for technical strategic objectives (1- 11) was US\$ 914,000for the 2008-09 biennium, US\$ 769,000 for the 2010–11 biennium and US\$ 873,000 for the 2012-13 biennium.

Figure 2 shows the degree of focus per strategic objective for the bienniums 2008–09, 2010-11 and 2012-13 respectively, in relation to budget allocation. Strategic objective 1 – “prevention and control of

communicable diseases” has had the highest degree of focus of the work of WHO country office, with an allocation of 15.9% of the total budget. This was followed by Strategic Objective 10 “ *improving health services through better governance, financing, staffing and management, informed by reliable and accessible evidence and research*” and Strategic Objective 3 “ *health during the life course*”, accounting for 14.9% and 14.2%, respectively.

Some voluntary contribution was also available, amounting to 10 of the total available resources over the three biennium.

Figure 1: Mapping the Mauritius WHO CCS2008-2013 to the strategic objectives (SOs) of the MTSP, workplans 2008-09, 2010-11 and 2012-13 – percentage (%) of total budget for activities allocated to strategic objectives 1 – 11



