Mauritius

Premduth Burhoo, Deowan Mohee and Leelmanee Moussa

Executive Summary

Since 1999, Mauritius has made significant progress in tobacco control, and with new and improved legislation in 2008, Mauritius has emerged as one of the regional leaders in tobacco control. It has even emerged into a world leader in areas such as prohibiting corporate social responsibility (CSR) activities and compelling the inclusion of very large graphic warning labels on cigarette packages (65% of the package's largest sides). This progress has been important to address high prevalence rates which, though on the decrease generally, remain very high in some groups (the rate for adult male daily smokers as of 2009 remains greater than 32%).

There is clear support for tobacco control at the highest levels in the government. The Ministry of Health and the Attorney-General's office have been particular leaders. The tobacco control civil society movement, led by ViSa, is small but very active and a crucial watch dog of both the industry and the government's efforts to combat tobacco use. Currently, the tobacco control community is seeking to assess the successes and challenges of the recent legislative and regulatory changes, including the always demanding task of enforcement.

In general, the newest regulations are more than FCTC-compliant across most areas including advertising, sponsorship and promotion; labelling and packaging; and smoke-free places. Though not a part of the latest legislation, a tobacco-specific taxation strategy has a preliminary foothold, and remains an area ripe for further development.

Mauritius[1]

Population 2009 (World & Africa Ranking):	1,284,264 (154, 41)
Geographical Size (World Ranking):	2040 sq km (187)
GDP and Ranking (Purchasing Power Parity):	$15.27 Billion US Dollars, 133 (2008)
GDP Real Growth Rate 2006-08:	5%
GDP per Capita (World Ranking):	$12,000 US Dollars, 91 (2008)
Main Industries:	food processing (largely sugar milling), textiles, clothing, mining, chemicals, metal products, transport equipment, nonelectrical machinery, tourism
Languages:	Creole 80.5%, Bhojpuri 12.1%, French 3.4%, English (official but spoken by less than 1% of population), other 3.7% (2000 Census)
Official Development Assistance (ODA) – Total commitments/disbursements – 2007 (gross):	171.2/94.2 Current USD Millions, 2007
ODA as a percent of GDP:	1.38805%
Largest Donors (disbursements):	France 57.6, EU 28.1, Japan 5.4, UNDP 1.3
Tobacco Production in Volume and Rank (2007):	316 tons, tobacco unmanufactured, (#107 in World)
Tobacco Exports:	Cigarettes: 99 Tons at $40,626 per ton (# 5 country export; Tobacco unmanufactured: 214 tons at $4,888 per ton (#15 country export)
Tobacco Imports:	cigarettes 963 tons at $19,947 per ton (#6 country import)

Brief Description of Political System

Type:	Mauritius is a parliamentary democracy and has been one of the most stable democracies in Africa.
Executive:	2010 – Prime Minister (PM) Navinchandra Ramgoolam is the head of government. President Anerood Jugnauth is the chief of state.
Cabinet:	The Council of Ministers is appointed by the president on the recommendation of the PM.
Legislature:	There is a unicameral National Assembly made up of 70 seats – 62 seats are elected and 8 seats are appointed to represent minority groups. In 2010, the Alliance Sociale (coalition that includes MLD, MMSM, MR, MSD, PMXD) has 38 seats and the Mauritian Militant Movement (MMM)/ Militant Socialist Movement (MSM) has 22 seats.
Judiciary:	Supreme Court

[1] Sources: CIA World Factbook https://www.cia.gov/index.html; except Organization of Economic Cooperation and Development for development assistance statistics, and FAOSTAT for tobacco production.

Prevalence

Summary: *Though on the decline, smoking prevalence rates remain high (>30% for men) in Mauritius. Youth smoking is lower than adult rates at 14%. Also, second-hand smoke is a major concern, particularly with young people with well over half of all young people reporting consistent exposure.*

Smoking prevalence rates in Mauritius are among the highest in Africa – approximately one out of every three male adults smokes regularly. However, the prevalence rate (particularly among males) has been decreasing since 1987 as a result of intensive non-communicable disease (NCD) awareness campaigns and the new regulations under the initial Public Health Act of 1999. The principal prevalence statistics come from the Non-Communicable Disease Surveys (NCD Survey – conducted roughly every 5 years), the Global Youth Tobacco Survey (GYTS), the Global School-based Student Health Survey (GSHS), and the World Health Survey (WHS). The Ministry of Health and Quality of Life (MOH&QL) would like to integrate tobacco use data into the National Health Information System, but this remains to be implemented.

In terms of adult rates, according to the 2003 WHS, 32.1% of males are daily smokers with an additional 10.5% of males who are occasional smokers (n = 3888). Among females, the prevalence of daily smokers is 1% and 1.8% for occasional smokers.

The time-series data from the NCD surveys offer more information and demonstrate the decrease; the data also roughly corroborate the findings of the WHS. Prevalence has decreased from a high of 57.9% amongst males in 1987 to 35.9% in 2004. For women, the rate decreased from 7% in 1987 to a low of 3.3% in 1998, before rising to 5.1% in 2004 (this recent increase could perhaps be explained by the increasing prevalence among adolescent women who over time have become the adult population surveyed). The rate of prevalence among the total population decreased from a high of 30.7% in 1987 to 18% in 2004. The final results of NCD survey 2008 are awaited to confirm the decreasing trend.

Table 1: Prevalence Rates – NCD Surveys

Year	Total Prevalence	Male Prevalence	Female Prevalence
1987	30.7%	57.9%	7%
1992	24.3%	47.3%	4.8%
1998	20.2%	42%	3.3%
2004	18%	35.9%	5.1%

In addition to overall rates, some of the existing survey data – particularly from the WHS – demonstrate how smoking prevalence and use is stratified based on urban/rural, age, and income breakdowns. According to the WHS (2003), in urban settings, smoking prevalence is 17.5%, and in rural settings, smoking prevalence is 15.3%. By age, overall prevalence rates are as follows:

Table 2: Prevalence rates by age groups

Age group	Prevalence
18-29 yrs	14.7%
30-44 yrs	18.2%
45-59 yrs	17%
60-69 yrs	17.1%
70-79 yrs	9.6%
> 80 yrs	6.2%

The breakdown from the WHS by socioeconomic status demonstrates a notable pattern: smoking prevalence clearly decreases with income. Prevalence rates by lowest to highest income quintile are: Q1: 21.6%; Q2: 18.9%; Q3: 17.2%; Q4: 12.9%; and Q5: 12.5%. In addition, it was noted by the ATSA team that "almost 20% of smokers spent more than MUR 300/week on tobacco products. The modal income for the survey sample was MUR 4000-6000/month (suggesting that some households could be spending as much as 30% of their income on tobacco)." Clearly the economic impact of tobacco consumption is being felt by the citizens of Mauritius, and almost certainly the heaviest part of that burden is falling on the lower socioeconomic groups.

The WHS 2003 also gives information on average daily consumption of tobacco by adults. These statistics exist stratified by gender, residence, economic quintile and age, but one of the key points is that males across categories generally consume between 8 and 10 cigarettes per day, while females consume 5.5 cigarettes per day. The only notable exception is males 60-69 years-old who consume an average of 13.4 cigarettes per day.

In terms of youth smoking, according to the 2008 GYTS, smoking prevalence (smoked on 1 or more days of the 30 before the survey) among 13-15 years old on the island of Mauritius was 20.3% for boys and 7.7% for girls, and 13.7% overall. This is a decline from the earlier 2003 GYTS, when rates were 21.6% for males and 8.5% of females, and 14.8% of all students. Notably, the 2003 GYTS noted slightly higher rates on the island of Rodrigues (particularly among females): 26.6% of males, 13.6% of females, and 19.7% overall. An additional survey, the GSHS, was conducted in 2007 for students on the island of Mauritius and it revealed that 23.1% of males, 8.5% of females, and 15.4% of all students were current smokers.

However, the overall consumption level among students is much lower than the general population. In 2008, 36.6% of those who report being smokers, smoke less than 1 cigarette per day, 32.8% smoke one cigarette per day, 22.9% smoke 2-5 cigarettes per day, and 7.7% smoke 6 or more cigarettes per day.

The GYTS 2008 and 2003, and the GSHS 2007, also provide data on adolescent exposure to second-hand smoke. In 2008, 36.1% of students reported living in homes where others smoked in their presence. Though the measures are not identical, this statistic is comparable to 2003 when 33.9% of never-smokers and 69.6% of current smokers reported exposure to tobacco smoke in their homes. In 2008, 73.6% reported exposure to

second-hand smoke in places outside their homes. In 2003, 60.4% of never smokers and 88.8% of current smokers reported exposure to tobacco smoke in public places. Males and females in Mauritius are nearly equally exposed to these dangers. In addition, the GSHS 2007 results corroborate the GYTS findings, reporting that 77% of students reported people smoking in their presence on one or more days during the previous week.

The GYTS also contains information on advertising, promotion and sponsorship. The GYTS 2003 reports that the main sources for pro-tobacco messages for school adolescents aged 13-15 years are the television, foreign magazines, newspapers and the internet. In 2008, over half of the respondents saw a pro-tobacco advertisement in a newspaper or magazine in the previous month. Fortunately, 84.9% of respondents reported seeing an anti-smoking media message in the same time frame.

In terms of cigarette accessibility for youth, despite the prohibition of the sale of cigarettes to minors as per the Public Health (Restrictions on Tobacco Products) Regulations of 1999, the GYTS 2003 showed that over half of respondents buy their cigarettes directly from shops. Some factors reported by the survey that led to cigarettes being accessible to minors include: sale of loose cigarettes, proximity of points-of-sale to their place of residence, and offers of free cigarettes by tobacco representatives.

Some cessation and treatment data are also available from the GYTS. In 2003, approximately 11% of current smokers in Mauritius (aged 13-15) had developed a dependence on tobacco (signified by smoking a cigarette first thing upon waking up). In 2003, about two-thirds of current youth smokers had tried to stop in the last year but failed to quit; that proportion dropped to 58.5% in 2008. In 2003, 41.2% of smokers did receive advice to quit from a professional or programme, while in 2008, 76.1% reported receiving help at some time to quit (though exact details of the professional or programmatic intervention are not elucidated). In December 2008, a pilot smoking cessation clinic became operational in the public health sector. The MOH&QL plans to open such clinics in multiple regions of the country in 2010. In addition, the Adventist Church, sometimes offers group therapy for quitting smoking called "Plan de Cinq Jours."

Finally, the health consequences of smoking have been tracked in the healthcare system. According to the MOH&QL, "Seven percent of the burden of disease in Mauritius is attributable to tobacco-related diseases, principally vascular disease, cancers and chronic obstructive pulmonary diseases."

Politics of Tobacco

Summary: *The politics of tobacco in Mauritius are framed in large part by a national government that is supportive of tobacco control. The Ministry of Health & Quality of Life has been a major proponent of the initial 1999 tobacco control legislation and the subsequent regulations in 2008 that buttressed the original law. There is also evidence of support from other key parts of government including the Prime Minister's and Attorney-*

General's offices. Civil society has played a pivotal role in pushing for better policy and holding actors to account. The key in Mauritius will be for tobacco control advocates in and out of government to maintain the momentum that has been generated in the decade since the first legislation was implemented.

Overall context

Politically, Mauritius is a somewhat exceptional African case in that the highest levels of the executive branch including the Prime Minister, the Minister of Health and Quality of Life, and the Attorney-General demonstrate *active* support for tobacco control. Furthermore, there appears to be momentum within particularly the MOH&QL to take action on tobacco control.

The following quote from Prime Minister Dr. the Honourable Navinchandra Ramgoolam, G.C.S.K., from March 12th, 2009 (Mauritius Independence Day) demonstrates this commitment to tobacco control and to the newest legislation particularly:

> "The Public Health (Restrictions on Tobacco Products) Regulations have recently been promulgated. Contrary to what some may think, this is not a measure that restricts liberty. It is meant to free you from a scourge that was becoming far too widespread and wrecking innocent lives. Smoking, far from being a liberating act of defiance, is the first step to an addiction that enslaves you and destroys your health. Smoking is neither cool nor smart. Be resolute in resisting the pressure of your peers who would lead you astray.

Mauritius began implementing in 2009 the National Action Plan on Tobacco Control 2008-2012 with the main objective to reduce tobacco-related mortality and morbidity by **preventing the use of tobacco products, promoting cessation and protecting individuals from exposure to second-hand smoke.** Since February 2009, the government – led by the MOH&QL – has started a national awareness campaign on the new regulations through mass media and other channels.

Also, a National Committee on Tobacco Control has been set up to advise government, particularly the MOH&QL, on policy matters relating to tobacco control, and to coordinate and monitor the implementation of the National Action Plan on Tobacco Control. The committee is comprised of representatives of government organizations (including the MOH&QL, the Ministry of Finance, the Ministry of Agro Industry, Food Production and Security, etc.), parastatal bodies and non-governmental organizations. The industry has sought – unsuccessfully – to have one of their representatives on the Committee. The Committee is chaired by the Director of Health Services in charge of the prevention desk at the MOH&QL. The Committee typically meets two or three times per year.

The Mauritian Government is committed to strong tobacco control. In addition to the National Action Plan on Tobacco Control, new FCTC-compliant tobacco regulations

were passed to implement the Action Plan. The main new tobacco control policies presently being implemented include:

(1) Introduction of pictorial warning labels.
(2) Laws to limit environmental tobacco smoke
(3) Complete ban on advertising, promotion and sponsorship.
(4) Elimination of product descriptors such as „light' or „mild' brands
(5) Prohibition of sale of loose cigarette sticks and packages being sold must contain 20 cigarettes.
(6) Strengthening of regulations for sale of tobacco to minors.
(7) Control on illicit trade

The Cabinet of Ministers which meets on a weekly basis under the chairmanship of the Prime Minister is briefed by the Minister of Health and Quality of Life on all matters relating to tobacco control as and when necessary. The new regulations also went through the Cabinet of Ministers and not through the Parliament because the Public Health (Restrictions on Tobacco Products) Regulations 2008 fall under the Public Health Act already approved by Parliament (in 1999). Once the regulations were approved by the Cabinet, the Minister of Health and Quality of Life has used his power/prerogative to promulgate them.

Civil society organizations, particularly ViSa, have so far made significant contributions to the gains that have been achieved in tobacco control. They contributed in the preparation of policy documents through valuable comments, and strongly advocated for the implementation of the new policies. Some other non-governmental organizations that lend support to the cause include Link to Life (Cancer Support Group) and the Heart Foundation, amongst others. Link to Life is a cancer patients group that provides counseling, support and health information to its members and the public at large through cancer awareness talks and exhibitions at schools, youth clubs, municipal halls, public and private workplaces on request. The Heart Foundation organizes anti-tobacco awareness campaigns among the public through talks, walks and pamphlets.

The tobacco industry, and its distributors and vendors/retailers, remain problematic and antagonistic toward tobacco control (see discussion later in this section). Tobacco growers may also be problematic due to their alleged anticipated loss in revenue resulting from a decrease in tobacco sales, though the number of growers is rapidly declining for a number of reasons. Notably, growers are guaranteed both price and volume floors by the government (through the Tobacco Board) and BAT to sell their leaf crop, so these policy changes should not affect them.

The actual tobacco regulatory body is the Tobacco Board. The Minister of Agro Industry is responsible for appointing the eight members of the board, which includes a representative from the tobacco growers, the Ministry of Finance, and the Prime Minister's office; and one or two representatives from the tobacco industry. According to the Board, its responsibilities include: 1) fixing the grades of leaf tobacco; 2) fixing the purchase and sale prices of those grades; 3) purchasing leaf tobacco produced in the

country according to the approved grading system; 4) processing and selling leaf tobacco to the manufacturer; 5) managing the Statutory Funds established under the Act; 6) licensing the import of leaf tobacco, manufactured tobacco and tobacco products; and 7) ensuring that every packet of imported cigarettes bears an approved Health Warning Clause. The Board also offers the following incentives: 1) interest-free loans for the purchase of equipment and repairs of sheds and barns under the Mechanisation and Inputs Fund; 2) interest-free credit facilities for the purchase of inputs; 3) a Best Growers' Award Scheme to annually reward the three best performing growers for each type of tobacco; 4) purchase of leaf tobacco at a negotiated price, and; 5) cash payment to tobacco growers on delivery of leaf. Considering this information provided by the Board, balancing these responsibilities and incentives with public health concerns must be challenging.

ATSA Initiatives in Mauritius

Beginning in April 2008, Mauritius has been participating in the African Tobacco Situation Analysis (ATSA) initiative of the International Development and Research Centre (IDRC) and Bill and Melinda Gates Foundation (BGMF). Following a baseline assessment of the current tobacco control situation in May/June 2008, a number of priority areas were identified where there is need for thorough systematic and action research:

(1) Surveillance, monitoring and evaluation of tobacco control
(2) Tobacco cessation
(3) Smoke-free public and workplaces

ATSA Action #1: To evaluate the impact of graphic health warnings on the population

It is important for tobacco control policies to be accompanied by rigorous evaluation. Quality evaluation research would provide not only concrete evidence for the effects of policies, but also have the potential to inform future policies. The ATSA team proposes to examine the patterns of smoking behaviour and evaluate national level tobacco control policies in Mauritius. The new regulations and action plan are innovative as Mauritius is the first country in Africa to display pictorial warning labels on cigarette packages. The results of the policy evaluation in Mauritius can also be shared with other countries in the region to assist their own evidence-informed policy planning.

This study is a prospective cohort survey consisting of a minimum of two waves. Wave 1 was conducted between April-May 2009. The objectives were:

(1) To measure the effectiveness of current text health warnings.
(2) To determine the prevalence of smoking in the population.
(3) To evaluate the level of support for cessation programs and smoke free initiatives among smokers and non-smokers.

In December 2008, contact was established with the International Tobacco Control (ITC) Evaluation Project at the University of Waterloo (Canada) in view of collaboration and technical support for carrying out the study. Initial personal contact with the ITC Team was made during the World Conference on Tobacco or Health, held in Mumbai in March 2009. After agreeing to collaborate, discussions centered on the planning and implementation of different stages of the survey. Study proposal and survey instruments were finalized after regular conference calls and exchanges of emails.

At the request of the ITC Team, the Mauritius ATSA team broadened the scope of the study by agreeing to the application of the complete (Wave 1) ITC questionnaire in Mauritius, with additional financial support from the ITC Policy Evaluation Project. In other words, in addition to questions on health warnings, the whole set of questions that cover other FCTC domains (similar to ITC surveys conducted in other countries) were also included.

Widening the scope of the study will result in an opportunity to evaluate more broadly and holistically tobacco control policies in Mauritius. Thus, the next wave of the survey will not only evaluate the impact of the new graphic warnings and other measures with respect to packaging, but also support for and compliance with the new smoke-free legislation and support for proposed cessation clinics.

In order to gauge the efficacy of the new regulations – i.e. compare the new to the old – the ATSA team moved quickly to conduct Wave 1 interviews before June 1st, 2009. Beginning in June, eight new rotating graphic pictorial warnings were supposed to be displayed on cigarette packages, though in reality the widespread introduction of the new labels was effective only in October of 2009 as existing stocks had to be cleared.

A total of 1750 households were enumerated to establish an accurate sampling frame, from which a total of 600 smokers and 240 non-smokers aged 18 years and older were drawn and surveyed using a face-to-face survey interviewing methodology. The IDRC sponsored the visit of two representatives from the ITC Evaluation Project Team, University of Waterloo to provide training to the data collection team and supervise sample interviews in Mauritian households.

The next Wave of the survey is scheduled in 2010. Participants in Wave 1 of the survey will be re-contacted to respond to the Wave 2 questionnaire. It is expected to have an attrition rate of 5-10% for which replenishment is being considered. Such time-series, cohort design is expected to measure policy impact in more fine-grained, individual-level ways, as compared to a repeat cross-sectional design (i.e. different samples of participants).

Subject to the findings, additional waves may also be conducted to evaluate the impact of specific tobacco control policies that will be implemented in the subsequent five years.

ATSA Action #2: To support the joint MOH&QL/WHO smoking cessation initiative

For this action, the MOH&QL, partly in collaboration with the Mauritius Institute of Health (MIH) and the University of Mauritius, is executing two studies:

A. Health professionals survey in Mauritius: Knowledge, Attitudes, Beliefs and Practices (KABP) with respect to tobacco use and smoking cessation.
B. An assessment and strengthening of the existing Health Information System regarding tobacco use among NCD patients attending public health institutions.

A: Health professionals survey in Mauritius: Knowledge, Attitudes, Beliefs and Practices (KABP) with respect to tobacco use and smoking cessation

The objectives of this survey are:

(i) to determine tobacco use among health professionals working in the public health sector of Mauritius
(ii) to explore their knowledge, attitudes, beliefs and practices with respect to tobacco use and smoking cessation
(iii) to assess their skills and training needs in smoking cessation techniques

The MOH&QL is collaborating with the Mauritius Institute of Health (MIH) and the University of Mauritius in the implementation of this survey of health professionals. Since the MOH&QL is the ultimate user of this research, it is the key stakeholder for this action. The MIH is playing a central role in the implementation of the survey by providing logistics and other support. A stratified random sample of 350 registered doctors, specialists, dentists, nurses and midwives has been drawn from lists of health care staff working in the five health regions of Mauritius, providing a cross-sectional sample.

B: An assessment and strengthening of the existing Health Information System regarding tobacco use among NCD patients attending public health institutions.

The objectives of this second study are:

(i) To assess the present health information system regarding data collection, compilation and analysis on tobacco use by NCD patients of the public health system.
(ii) To strengthen the existing health information system regarding tobacco use by NCD patients.

The MOH&QL is the key government ministry in terms of this initiative. However, in addition, the Health Statistics Unit and the Medical Records Division are the two core elements of the Health Information System. The following three paragraphs outline the role of the specific agencies and departments in information collection, and neatly demonstrate how many actors are involved in the successful implementation of such a survey, and/or any related future data gathering that is tobacco-related.

The Health Statistics Unit, headed by the Chief Health Statistician, is responsible for the collection, compilation and analysis of data, and the presentation and dissemination of information relating to most aspects of health. The information generated in the Health Statistics Unit comes from the raw data that are collected from the various health institutions (hospitals, health centres, health offices, private clinics, etc). The mode of transmission of the data is through pre-designed forms and electronic format. The data received in the unit are edited for completeness and accuracy, and analyzed. The information generated is disseminated through weekly bulletins, monthly reviews and annual reports.

The Medical Records Division has the responsibility to collect, compile and present data pertaining to most types of services offered in hospitals. The Division is headed by the Medical Record Organizer, and the staff of the Medical Records Cadre mainly compiles health service data from all hospitals and health centres (the records staff is responsible to record and maintain patients' medical files). Medical records staff posted in each hospital are generally the first point of contact with patients attending hospitals and provide a round-the-clock service. An accurate record-keeping process allows the collection of useful epidemiological and health care-related information.

Besides these two health-related entities for the survey, this ATSA action draws upon the assistance from all major health providers. In Mauritius, the public health delivery system comprises 13 hospitals (including 5 specialized hospitals), 26 Area Health Centres, 2 Mediclinics and 127 Community Health Centre. In the private sector, there are 13 private clinics. Finally, two other health entities that will or are playing a role in this action are the Non-Communicable Disease (NCD) Secretariat, which is based at each of the 5 regional hospitals and collects and compiles data on NCD patients in their respective health regions, and the National Cancer Registry, which collects data on cancer patients.

ATSA Action #3: To support smoke-free initiatives in public and workplaces

Building on the recent national awareness campaign on the new tobacco control regulations, the Mauritius ATSA team has called for a strengthened effort on all aspects of smoke-free regulations, particularly using strategic activities to target specific groups. Together with the implementation of the smoke-free regulations, there is a need for rigorous monitoring of the smoke-free policy. Therefore, the team has proposed monitoring compliance by assessing the quality of indoor air through second-hand smoke (SHS) level measurements in public and workplaces. This action will provide evidence as to what extent the new regulations are making all indoor places and workplaces (including cafes, bars, nightclubs and restaurants) 100% smoke-free.

The watchdog NGO, ViSa, has observed, for example, that some venues, particularly higher-end, mostly tourist-focused, establishments such as nightclubs and five-star hotels do not comply fully with the smoke-free regulations. Whether authorities are

overlooking their non-compliance because of the economic importance of these businesses, this effort should illuminate any such violations.

A smooth implementation of the smoke-free regulations requires a multi-sectoral approach politically, including particularly the Mauritius Institute of Health, the Ministry of Environment, the Ministry of Labour, Industrial Relations and Employment, the MOH&QL (including the following units: Health, Information, Education and Communication, Occupational Health and Health Inspectorate), and the private sector.

The Flying Squad of the Health Inspectorate Unit has been instrumental in smoke-free enforcement, and plays a central role in all monitoring efforts. Furthermore, the regular Police Force and the Environmental Police also constitute an important ally for their role in an effective implementation and enforcement of the regulations.

It is also important to emphasize the involvement in advocacy effort of civil society organizations like ViSa, Link to Life (Cancer Support Group), and the Heart Foundation amongst others, which are playing key roles in the public awareness side of the smoke-free policies.

Major employers and labour organizations need to be engaged in terms of understanding smoke-free work places. At this point, it is not clear how supportive (or unsupportive) these groups will be of enforcement of the policy/regulations. Key groups include the Trade Unions, the Mauritius Employers' Federation, the Manufacturing Sector (particularly textile factories), and the owners of business premises.

Notably, a small handful of businesses have been taking anti-tobacco initiatives on their own. For example, Moulins de la Concorde, a food production company employing more than 150 people, has implemented not only strict regulations on tobacco use for contamination and security (e.g. fire) reasons, but also provides direct health assistance to his employees. The company sets aside smoking areas away from other employees and the actual work environment, actively promotes a non-smoking lifestyle and facilitates meetings for employees who are smokers to quit.

Although so far the tobacco industry has not shown open/explicit resistance regarding the implementation of smoke-free regulations, it is anticipated that it will act in less-than-obvious ways to undermine the new policies out of concern for their ultimate impact on sales. In addition, the tobacco control proponents are concerned about the reaction from the hospitality and entertainment industry, the vendors/retailers and owners of restaurants and night clubs

For this study, written approval from the MOH&QL was sought to facilitate access to 60 hospitality venues namely cafés, bars, restaurants and nightclubs. A team of researchers from the Flying Squad of Health Inspectorate was trained by two experts from Public Health Agency (Barcelona, Spain) to assess second-hand smoke exposure by measuring particulate matter concentration (PM 2.5) and nicotine concentration (using second-hand

smoke passive samplers). The Global Smokefree Partnership helped to link these organizations.

Tobacco Industry

Summary: *The tobacco industry in many ways appears to be on the decline in Mauritius. Manufacturing has moved off-shore, tobacco leaf cultivation is at an all-time low and corporate social responsibility (CSR) activities have been regulated out of existence. The strength of the industry, however, should not be underestimated. There is anecdotal evidence that the industry maintains strategies that seek to circumvent smoke-free laws and advertising and promotion bans.*

Tobacco manufacturing is on the decline in Mauritius. The number of cigarette sticks manufactured in Mauritius decreased dramatically between 2002 and 2007; the decrease is explained by British American Tobacco's (BAT) decision to delocalize its factory to Kenya. All cigarettes and other tobacco products sold on the local market are now imported from countries like Kenya and South Africa. Notably, however, the sale of cigarettes on the local market increased slightly – in line with the population – from 998 million sticks in 2001 to 1014 million sticks in 2006.

The Ministry of Agro Industry reports that the domestic production of leaf tobacco has declined from 556 tonnes in 2001-2002 to 296 tonnes in 2005-2006, and the acreage under cultivation has decreased from 395 hectares in 2000-2001 to 291 hectares in 2005-2006. There are 278 registered growers (growing both 2-season Virginia Flue Cured and 1-season Amarello Air Cured) with a labour force of 1400, of whom, 75% are women, and 0% are children. The main reasons for the decrease in leaf cultivation are described as: inefficient/inactive growers; unwillingness to take over succession; climatic hindrances; lack of financial resources; and the high cost of production.

Recently, the industry's corporate social responsibility (CSR) programmes have been under siege as a result of the new legislation. British American Tobacco has noted in its Annual Report that the Public Health (Restrictions on Tobacco Products) Regulations of 2008 will restrict "tobacco companies from engaging in any form of Corporate Social Responsibility Programmes. Accordingly all corporate social investments undertaken by British American Tobacco in Mauritius have been stopped. These included the undergraduate Scholarship Scheme which has seen 86 students enrolled in University, since 2000 and the food baskets programme that has been recognized for the support it provided to deserving households."

In a negative development in early 2009, the tobacco industry took advantage of a loophole in the Public Health (Restrictions on Tobacco Products) Regulations 2008 by importing a very large stock of cigarettes (and presumably other tobacco products) prior to the entering into force of the labeling regulations on June, 1st 2009. According to the New Regulations (Regulation 9), labeling requirements do not apply to cigarettes or cigars imported before the regulations entered into force in November 2008. It was

estimated that the supply that the tobacco industry imported early was to last distributors and retailers in Mauritius until at least December 2009. Furthermore, though warnings appeared quickly on the least popular brand, "Dunhill Menthol," and the premium brand by Benson and Hedges, as of early 2010, the most popular brand by Matinée still did not have compliant warnings.

Inventory of Existing Laws and Regulations

Summary: *Tobacco control law is framed by the landmark Public Health Act of 1999 that put into place many key tobacco control provisions related to all major areas including advertising, smoke-free and labeling. The subsequent regulations in 2008 help to reinforce what the legislation started.*

The 2008 tobacco control regulations have improved already strong legislation from 1999. The Public Health Act of 1999 provided some basic restrictions and a first major step to future restrictions, but the improvements in the Public Health Act of 2008 are vast and substantive, and in almost complete conformity with the World Health Organization's Framework Convention on Tobacco Control (the FCTC, and exceed basic compliance in several cases). The FCTC was signed by Mauritius on 17 June 2003 and ratified on 17 May 2004; the new legislation demonstrates Mauritius' commitment to its treaty obligations.

On 28 November 2008, Mauritius passed new regulations on tobacco known as the Public Health (Restrictions on Tobacco Products) Regulations 2008. These regulations entered into force as of 1 March 2009, except for the labeling requirements, which entered into force as of 1 June 2009. In Mauritius, laws are adopted by the Parliament, and regulations (like those on tobacco products) are adopted by administrative bodies (i.e. government ministries). The legislative and regulatory process in Mauritius is that the Public Health Act was adopted by Parliament in 1999, and then the new tobacco regulations in 2008 were adopted by the MOH&QL, which fall under the Public Health Act that Parliament adopted initially nine years earlier.

Until very recently, the Public Health (Restrictions on Tobacco Products) Regulations of 1999 governed the following aspects of tobacco in Mauritius: 1) advertising, promotion and sponsorship, 2) sale to minors, 3) smoking in enclosed public places, and 4) packaging and labeling. There has been marked improvement in the 2008 regulations regarding these aspects of tobacco control. As far as the contents of tobacco products are concerned, the tobacco regulations of 2008 do not allow the display on cigarette packages of the tar or nicotine content of cigarettes or their carbon monoxide yield. These provisions did not exist in the 1999 tobacco regulations."

Also, wide-reaching education campaigns were run by the government (with support of various NGOs) to inform the public, businesses, and distributors about these new regulations in advance of them entering into force. The government also provides limited funding, roughly Rs 250,000, to ViSa, the tobacco control advocacy organization. There

is, however, no earmarked line item in the budget or a plan to dedicate any of the revenue generated by tobacco taxation to awareness-type programs, or a permanent tobacco control unit.

According to most stakeholders, compliance and enforcement have been an issue in the past in Mauritius. The fines for non-compliance range between Rs 5,000 and Rs 10,000 upon first conviction, and up to 12 months in prison for those on a third or subsequent conviction. It is not clear how much of a deterrent these punishments are. The MOH&QL has set up an enforcement committee which has the responsibility to ensure that a proper enforcement plan is established. The enforcement committee is holding regular meetings to monitor enforcement and the Health Inspectorate and the Police are conducting compliance checks in public places and business. A project submitted to the Bloomberg Initiative by the MOH&QL has been accepted and funds will soon be available to promote 100% smoke-free environments in Mauritius, including enforcement of the smoke-free regulations.

The changes in the 2008 regulations compared to the 1999 regulations are highlighted in the tables below (the FCTC core areas are in their own sections after this initial general discussion).

Table 3: Comparison of 1999 and 2008 legislations in non-core areas

1999 Legislation	2008 Legislation
1. Illicit Trade	
No mention	- Mention country of origin on package - Package to carry statement: "sale allowed in Mauritius only" - Fixing of excise stamp on package
2. Sale to minors	
No person shall sell cigarette to minors	- No sale to and by minors - Sale of package of 20 cigarettes only; no sale of single or loose cigarettes - No sale by automatic vending machines - No sale of sweets, toys etc in the form of cigarettes - Seller to display prohibition sign - Seller to look for evidence of age - Conspicuous signs prohibiting sale of tobacco products to minors (under 18). -

Advertising, Promotion and Sponsorship

Summary: *As a result of both the 1999 and 2008 legislations, there is a total ban on tobacco advertising, promotion and sponsorship in Mauritius. The 2008 law is more elaborate and explicit than the 1999 law.*

The 2008 legislation helps to close some of the loopholes left open by the more general legislation of 1999 as shown in Table 4 below.

Table 4: Comparison of Advertising, Promotion and Sponsorship Regulations

1999	2008
- Bans advertising, promotion and sponsorship	- Bans advertising, promotion and sponsorship (including anything associated with a tobacco product). - Bans offer or supply of tobacco products free of charge, at discounted price, as a prize, pursuant to a lottery or otherwise. - The 2008 regulations imply that all Corporate Social Responsibility (CSR) activities such as scholarships, charitable giving, etc. by tobacco companies

One of the most exciting positive new developments is the ban on CSR activities. As described above in the industry section, BAT has seriously curtailed its charitable giving.

The industry, as always, has been seeking clever ways to circumvent the new legislation. One method has been to use the actual holding racks in retail establishments as "advertisements." In some cases, particularly in large supermarkets, the racks – though not technically advertisements – are prominent. Also, according to ViSa, they have been tracking anecdotal accounts of young people in universities and at parties being paid to share their cigarettes.

Since the passing of the new tobacco regulations in 2008, more vigilance has been noted among tobacco advocates regarding all aspects of tobacco control and in particular the activities of the tobacco industry. The MOH&QL is regularly informed of the tactics of the industry to circumvent the law and also on non-compliance by businesses. The media also reports regularly on non-compliance by businesses. Thus, authorities are under pressure from the media, NGOs and advocates from within the government for increased enforcement measures. This is definitely leading towards renewed action by the enforcement sectors to increase compliance.

Packaging and Labeling

Summary: *The 2008 legislation codifies some of the most stringent warning labels in the world including the obligation to cover 65% of tobacco packaging with the warning. Moreover, the legislation obligates both rotating text and pictorial warnings. The only recent concern was the industry's massive stockpiling of old, non-compliant packages in the country in order to circumvent temporarily the new regulations. However, the supply of these packages was not expected to last much longer than the end of 2009.*

Table 5: Comparison of Packaging and Labeling

1999	2008
- Single text message: "Smoking causes cancer, heart disease and bronchitis" - Permanently displayed	- 8 rotating pictorial health warnings with text and pictures - Colour, size and position regulated: o Pictorial health warnings occupy 60% of the front surface area with a French text message and 70% of the back surface area with an English text message. This amounts to an average of 65% of the principal surface areas being covered with pictorial health warnings. o The sides of the cigarette packages carry text warnings in English and French on 65% of the surface areas. o Statement "Sale allowed in Mauritius only" on cigarette packs, an affixed excise stamp, and, in English and French, the country where the cigarettes were manufactured. o No false or misleading messages on packages (e.g. "mild" or "low tar," etc.)

One of the interesting unintended consequences of the new rotating warnings is that cartons come with 10 packs and there are eight different warnings. Advocates have expressed concern that there is no way to verify which warnings go into a carton – where in an ideal circumstance, all the packs in a carton would have a different graphic warning for increased effect.

Smoke-free Policies

Summary: *The new 2008 legislation provides for very strict controls on smoke-free places including nearly all public places, and also private workplaces. The ATSA team is concerned about compliance and this is the reason for choosing monitoring as one of the actions.*

The table below illustrates the differences between the old and new legislation in terms of smoke-free.

Table 6 – Comparison of Smoke-free Policies between 1999 and 2008

1999	2008

- No smoking in: o Health care institutions o Educational institutions o Sport premises o Public transport o Office premises o Place of work intended for use by the public o Public places like lifts, museums, post office, police station o While preparing, serving or selling food for/to the public	- No smoking in (See complete list in First Schedule): o an indoor area open to the public o an indoor workplace (excluding an area demarcated for that purpose) o a public conveyance o outdoor premises of health and educational institutions. o outdoor sport premises o recreational public places like gardens except beaches. o cafes, bars, night clubs and restaurants o all public transport including bus stands and bus stations o while preparing, serving or selling food for/to the public o while driving or traveling in a private vehicle carrying passengers. - "No smoking" signs to be placed conspicuously in public places - Colour and size of signs regulated. - Owner/person responsible to take reasonable steps to prevent smoking

The ATSA team argues that the existing efforts in support of smoke-free policies have to be strengthened and sustained by other strategic activities targeting specific groups. Together with the implementation of the smoke-free regulations, they argue that there is a need for rigorous monitoring of the smoke-free policy. Therefore, the ATSA team has proposed monitoring compliance by assessing the quality of indoor air through SHS level measurements in public and workplaces. This effort would provide strong evidence as to what extent the new regulations are making all indoor places and workplaces (including cafes, bars, nightclubs and restaurants) 100% smoke-free.

Compliance has always been high in certain sectors such as public transport. As indicated above, with increased vigilance of tobacco advocates and the establishment of an enforcement committee in the Ministry of Health, proper monitoring mechanism for enforcement has been created and will contribute to increase the level of compliance of the legislation. The MOH&QL is keen to repeat air quality monitoring in different locations and at regular intervals to ensure compliance of the law.

Taxation

Summary: *There are some existing specific tobacco-related taxes, but they do not appear to be designed in any way as a deterrent for tobacco use.*

As of May 2008, there is an import tax of 15% of the cigarette price that has been imposed on all tobacco, and a custom excise duty of MUR 2,200 applies per thousand cigarette sticks. A final tax of 15% of the total of both aforementioned taxes plus the base cost of cigarettes is also applied prior to sale.

Changes in tax rates on tobacco products are imposed almost annually by the Minister of Finance, which has fairly regularly led to an increase in price. In the 2010 budget year, however, there was no revision of taxes on tobacco products. Additional advocacy is required to convince ministers to impose higher taxes on tobacco, particularly in a regular, codified manner. However, such advocacy requires solid data showing that the price of tobacco is not prohibitive enough to reduce consumption. The ATSA team in Mauritius is highly conscious of this fact and is contemplating a study to calculate the peak level of tobacco taxation that will help to reduce consumption among smokers.

Finally, there is advocacy on the part of some tobacco control proponents that a certain amount of tobacco tax (2 or 3%) should be earmarked to secure funding for tobacco control programs as well as other health promotion activities. However, a policy decision to this effect remains to be taken. The recent global economic downturn has not created the supportive environment for this earmarking.

Tobacco Control Community

Government:

Ministry of Health and Quality of Life:

1) Mr. D. Gaoneadry - Principal Assistant Secretary, one of the 3 focal persons for tobacco control.

2) Ms. V. Pitchamootoo – Health Information Education and Communications Officer, one of the 3 focal persons for tobacco control, ATSA team member.

3) Dr A. Deelchand - Ag. Director Health Services, one of the 3 focal persons for tobacco control.

4) Mr. S. Beharee – Head of the Flying Squad of the MOH&QL in charge of enforcement of the tobacco control legislation.

Mauritius Institute of Health:

1) Dr. J.C. Mohith - Executive Director - Administrator of ATSA Mauritius Project.

2) Mr P. Burhoo – Research Officer/Senior Research Officer, ATSA Mauritius Project Leader

3) Mrs. L. Moussa - Research Officer/Senior Research Officer, ATSA Team Member

International Organization:

1) Mr. D. Mohee – Health Information and Promotion Officer, World Health Organization; ATSA team member

Academic:

1) Dr (Mrs.) M.F. Lan Cheong Wah, Senior Lecturer, University of Mauritius, ATSA team member

Civil Society:

1) VISA
   - Mrs V. Leclézio (President VISA), ATSA Team member

2) Heart Foundation

3) Link to Life (Cancer Support Group)