#### The International Tobacco Control Policy Evaluation Project



### ITC Mauritius National Report

**MAY 2010** 



Promoting Evidence-Based Strategies to Fight the Global Tobacco Epidemic







Ministry of Health and Quality of Life, Republic of Mauritius





# Results from the ITC Mauritius Survey Project Mauritius National Report

#### **Suggested Report Citation**



#### Message

It is a pleasure for me, as Minister of Health and Quality of Life to be associated with the publication of the National Report of the International Tobacco Control (ITC), following a study carried out to evaluate the progress achieved in the implementation of key policies regarding tobacco control in Mauritius. The battle against tobacco use is a very tough one against powerful lobbies from the tobacco industry.

The Government of Mauritius, however, is determined to keep this fight against tobacco use high on its agenda. The war has already been waged and we shall leave no stone unturned to implement projects and programmes to curb down the use of tobacco products in Mauritius. For this, we are working under the close guidance of the World Health Organization (WHO) and in collaboration with partners such as the University of Waterloo, Canada and the African Tobacco Situational Analysis Initiative as well as the University of Mauritius and the VISA which is a local NGO.

Mauritius has signed and ratified the WHO Framework Convention on Tobacco Control. All our actions regarding tobacco use are thus formulated and developed according to the WHO guidelines and principles. In this respect, our tobacco policies are geared towards monitoring tobacco use and prevention, protecting people from tobacco smoke, providing help and support to quit smoking, warning the population about the danger of tobacco and enforcing bans on tobacco advertising, promotion and sponsorship.

In fact, the Public Health (Restrictions on Tobacco Products) Regulations 2008 form part of a comprehensive framework aiming at translating our policies into actions to deal with problems relating to tobacco use in Mauritius. A National Action Plan on Tobacco Control is also already being implemented.

The ITC Mauritius Study is an important milestone in the tobacco control policies in Mauritius. There was need to evaluate the actions already initiated and assess whether the targets were met. Weaknesses had also to be identified to ensure that timely actions are taken to deal with emerging challenges.

The National Report of ITC reveals that the population at large has become more conscious of the ill-effects of tobacco use. In addition, it has expressed satisfaction on the measures taken. Further, people have shown their willingness to support and improve these intervention programmes.

We are encouraged to note that smoking in public places has taken a downward trend. There is already evidence of a significant reduction in the importation of tobacco products in the country. Our target, however, remains to make of Mauritius a smoke-free island.

The solution to the devastating effects of tobacco use is in our hands, but as pointed out by Mahatma Gandhi, "We must become the change we want to see". With the results obtained so far we are confident to have the full support of the community to make this change happen.

We look forward to continue our collaboration with the ITC Researchers and other collaborators on this important tobacco initiative.

S. Hanomanjee (Mrs)

"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."

Prime Minister Dr. the Honourable Navinchandra Ramgoolam, G.C.S.K. March 12, 2009 (Mauritius Independence Day)

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"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."

Prime Minister Dr. the Honourable Navinchandra Ramgoolam, G.C.S.K. March 12, 2009 (Mauritius Independence Day)



#### ITC POLICY EVALUATION PROJECT

The International Tobacco Control Policy Evaluation Project (the ITC Project) is a multi-country prospective cohort study designed to measure the psychosocial and behavioural impact of key policies of the World Health Organization Framework Convention on Tobacco Control (FCTC). This report presents results of Wave 1 of the ITC Mauritius Survey – a face-to-face survey of a nationally representative sample of 598 smokers and 239 non-smokers conducted during April and May 2009. The Wave 1 Survey was conducted approximately two months after the implementation of Phase 1 of the Public Health (Restrictions on Tobacco Products) Regulations (2008). These regulations strengthened existing policies on smoking in public places and advertising, promotion, and sponsorship of tobacco products. Other measures included a ban on the sale of tobacco to minors and by minors; a ban on the display of tar and nicotine content or carbon monoxide yield on packs; and measures to reduce the illicit trade of cigarettes.

#### **ITC Mauritius Survey Team**

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#### **Funding for ITC Mauritius Project**

- International Development Research Center (IDRC)
- Ontario Institute for Cancer Research (OICR)

#### **ITC Mauritius National Report**

The preparation of this Report was coordinated by Janine Ouimet and Lorraine Craig with the collaboration of Katherine McEwen and Pete Driezen, University of Waterloo.

#### **BACKGROUND**

#### The ITC Project Surveys

The International Tobacco Control Policy Evaluation Project (the ITC Project) is the first-ever international cohort study of tobacco use. Its overall objective is to measure the psychosocial and behavioural impact of key national level policies of the WHO Framework Convention on Tobacco Control (FCTC). The ITC Project is a collaborative effort with international health organizations and policymakers in 20 countries (see back cover) so far, inhabited by more than 50% of world's population, 60% of the world's smokers, and 70% of the world's tobacco users. In each country, the ITC Project is conducting annual (approximately) longitudinal surveys to assess the impact and identify the determinants of effective tobacco control policies in each of the following areas:

- Health warning labels and package descriptors
- Pricing and taxation of tobacco products
- Tobacco advertising and promotion

- Smoke-free legislation
- Education and support for cessation

All ITC Surveys are developed using the same conceptual framework and methods, and the survey questions are designed to be identical or functionally equivalent in order to allow strong comparisons across countries. The ITC Project aims to provide an evidence base to guide policies enacted under the FCTC, and to systematically evaluate the effectiveness of these legislative efforts.

#### The ITC Mauritius Survey

In 2009, researchers from the Mauritius Institute of Health (MIH) partnered with researchers from the World Health Organization, and the Mauritius Ministry of Health and Quality of Life in collaboration with the University of Waterloo to create the ITC Mauritius Survey. One of the main goals of the ITC Mauritius Survey is to evaluate the effectiveness of new Public Health (Restrictions on Tobacco Products) Regulations.¹ These Regulations were passed on November 28, 2008 and were implemented in two phases. Phase 1 regulations, which were implemented as of March 1, 2009, included:

- a ban on smoking in public indoor and outdoor areas, hospitality venues, recreational venues, and in private vehicles carrying passengers; smoking restrictions in workplaces with provision for designated smoking areas;
- a ban on the sale of tobacco to minors and by minors;
- a ban on advertising, promotion, and sponsorship of tobacco products (with the exception of internet advertising), including a ban on display of tobacco products at point of sale except duty free shop at airports;
- measures to reduce the illicit trade of cigarettes; and
- an increase on the penalties for failures to adhere to the tobacco control regulations.

Phase 2 regulations, which were implemented on June 1, 2009, focused on cigarette packaging, and included:

- the first-ever implementation of pictorial health warnings in the African Region;
- a ban on descriptors such as 'light', 'mild', or 'low tar' on packages;
- a ban on the display of tar and nicotine content or carbon monoxide yield on packs; and
- a ban on the sale of single cigarettes or loose cigarettes and packages of less than 20 cigarettes.

Wave 1 of the ITC Mauritius Survey was conducted between April 20 and May 24, 2009, after the implementation of the majority of the policies in the Public Health (Restrictions on Tobacco Products) Regulations 2008, but before the implementation of the Phase 2 regulations, including pictorial health warnings and smoking cessation clinics. The Wave 2 Survey is planned for August 2010.

There are three specific evaluation objectives:

- 1. To evaluate the impact of pictorial health warning labels (implemented in October, 2009);
- 2. To evaluate the impact of smoke-free initiatives in public places and work places, and to assess adherence to the strengthened enforcement (enacted in 2009); and
- 3. To assess public support for and to evaluate the effectiveness of forthcoming cessation clinics in Mauritius (planned for 2010).

A total of 1,750 households randomly selected from 60 Enumeration Areas were enumerated to establish an accurate sampling frame from which survey participants were randomly drawn. A total of 598 smokers and 239 non-smokers aged 18 years and older were surveyed via face-to-face interviews.

This report presents findings from the Wave 1 ITC Mauritius Survey of smokers and non-smokers approximately two months after the implementation of Phase 1 of the Public Health (Restrictions on Tobacco Products) Regulations. The intent is to provide a detailed picture of the tobacco control policy landscape in Mauritius and describe smokers' and non-smokers' beliefs, attitudes, and behaviours in relation to recently strengthened tobacco control policies.

1. Mauritius Government (2008). The Public Health Act. Regulations made by the Minister under sections 193 and 194 of the Public Health Act. Government Notice No. 263 of 2008.

#### **KEY FINDINGS**

#### 1. Mauritian smokers have very negative opinions about smoking, and more than three-quarters have plans to quit.

Almost one-third of adult men (18 years and older) in Mauritius smoke (32.4%), and only 2.6% of adult women smoke. This represents a significant decrease since 1998 when 42.1% of males and 3.2% of females were smokers.\* Nearly all smokers in Mauritius (91%) are daily smokers. However, Mauritius has a very low average cigarette consumption among daily smokers – 9.9 cigarettes per day – the second lowest average consumption rate among ITC countries.

The majority of Mauritian smokers (87%) have a negative opinion of smoking – the second highest of all ITC countries – and most smokers (77%) want to quit.

#### 2. Mauritian smokers are nearly unanimous in wanting the government do more to help them quit, and they are interested in accessing services from new smoking cessation clinics.

Mauritians strongly support further assistance from the government in helping them to quit smoking. 92% of smokers 'agree' or 'strongly agree' that the government should do more to help smokers quit – the highest level of support among 7 ITC countries that were asked this question. In fact, the large majority of smokers (85%) and non-smokers (96%) agreed that they would support a total ban on tobacco products within 10 years, if the government provided assistance such as cessation clinics to help smokers quit.

At the time of the survey, Mauritian smokers were largely unaware that the Mauritius Government had plans to open new smoking cessation clinics – only 27% of smokers were aware that cessation clinics would be launched in 2010. However, survey results show that 78% of smokers are interested in visiting a smoking cessation clinic (32% are 'very interested', 27% are 'somewhat interested', and 19% are 'a little interested'). Smokers think that the following forms of quitting support would be 'very' or 'extremely' helpful: one-on-one counselling (52%), quitting courses (50%), cheaper and easily available stop-smoking medications (46%), and telephone quitlines (31%).

#### 3. Complete smoking bans in public places are strongly supported by both Mauritian smokers and non-smokers.

On March 1, 2009, Mauritius implemented a smoke-free law banning smoking in all indoor public places, including hospitality venues such as restaurants, tea rooms, and bars/pubs. A partial ban was implemented in workplaces, allowing for designated smoking rooms. In addition, **Mauritius became the first country in the world to ban smoking in cars with passengers** (some other jurisdictions have

banned smoking in cars with children). The ITC Mauritius Wave 1 Survey indicates that the majority of smokers and non-smokers 'support' or 'strongly support' these laws 2 to 3 months after their introduction. Smokers most strongly support bans on smoking in cars (90%), followed by restaurants/tea rooms (86%), workplaces (84%), and bars/pubs (74%). Support for these measures is even higher among non-smokers (93%, 94%, 92%, and 92%, respectively).

# 4. Smoking in restaurants and tea rooms has decreased dramatically 2 to 3 months after the ban. With strong compliance and enforcement, similar decreases are expected over time in bars and pubs.

Before the smoking ban, 61% of smokers noticed people smoking in restaurants or tea rooms, and 88% of smokers noticed people smoking in pubs and bars. Two to three months after the smoking bans, among those who visited these venues after the bans (42% of smokers visited a restaurant or tea room and 26% of smokers who visited a bar or pub), 18% reported that people were smoking inside a restaurant and 40% reported the presence of smoking in bars/pubs. From experiences in other ITC countries with smoke-free laws, it is likely that, with enforcement, these smoking prevalences measured at only 2 months after the introduction of the law will continue to decrease over time.

\*Cox HS, Williams JW, de Courten MP, Chitson P, Tuomilehto J, Zimmet PZ (2000). Decreasing prevalence of cigarette smoking in the middle income country of Mauritius: questionnaire survey. British Medical Journal 321(7257):345-349.







**From** experiences in other ITC countries with smokefree laws. it is likely that, with enforcement, the smoking prevalences measured at only 2 months after the introduction of the law will continue to decrease over time.

#### 5. The smoke-free laws may be having a favourable effect on reducing smoking.

Almost one-third of smokers who allow smoking in their homes (31%) report smoking fewer cigarettes since the new regulations came into effect; only 11% report smoking more. About half (51%) of smokers have a complete ban on smoking in their homes and 28% allow smoking in some indoor areas. Of 49% of smokers who still allow smoking in their home, 44% are intending to make their homes totally smoke-free within the next year.

## 6. Mauritian smokers were ready for pictorial warnings; in fact, two-thirds of smokers want more health information on cigarette packs – the highest of any other ITC country.

The ITC Mauritius Wave 1 Survey was conducted prior to the implementation of pictorial health warnings (after June 1, 2009). The findings suggest that the former text-only warning labels had limited effectiveness; however, they are a source of information for 71% of smokers. Just over half (58%) of smokers 'often' or 'very often' noticed warning labels on cigarette packs during the month prior to the survey. Less than one-quarter of smokers in Mauritius (24%) reported that the text-based health warnings on cigarette packages made them think about the health risks of smoking 'a lot'. Only 14% of smokers stated that the text-based health warnings made them 'a lot' more likely to quit smoking. In fact, 66% of smokers and 87% of non-smokers agreed that there should be more health information on Mauritian health warnings—the highest level among 15 ITC countries.

#### 7. The majority of Mauritians are aware of mass media anti-smoking messages.

The Wave 1 survey findings indicate a high level of awareness of media messages on the dangers of smoking and the benefits of quitting. The majority of smokers and non-smokers in Mauritius had noticed anti-smoking advertisements in the past 6 months. Among smokers, messages were noticed most on poster billboards (80%), on television (78%), on the radio (73%), and on cigarette packs (71%).

# 8. Mauritius has among the lowest percentage of smokers who 'notice things that promote smoking' of 14 ITC countries. This suggests that Mauritius' strong policies banning tobacco advertising, promotion, and sponsorship are working.

Since 1999, the Mauritius government has taken strong steps to ban tobacco advertising, promotion, and sponsorship, including a ban in March 2009 on the offer or supply of free or discounted tobacco products, and a ban on the display of tobacco products at point of sale (with the exception of airport duty free shops). Only 5% of Mauritian smokers reported 'often' noticing things designed to encourage smoking or which make them think about smoking – the 2nd lowest level among 14 ITC countries. Despite the longstanding ban, between 6 to 21% of smokers or non-smokers report being exposed to some kind of tobacco advertising or promotion in the past 6 months. In-store advertisements (15% and 21%, for smokers and non-smokers respectively) were the most common source suggesting that new regulations banning point of sale advertising and promotion may require more time to be implemented fully and should be expanded to include airport duty free shops.

#### 9. Price is a reason to quit for two-thirds of Mauritian smokers.

Although there has not been any change in taxation policies in Mauritius, the ITC Mauritius Survey points to the importance of price in tobacco use. 69% of all smokers 'strongly agree' or 'agree' that they spend too much money on cigarettes. Nearly two-thirds (64%) of smokers who plan to quit agree that price is a reason to think about quitting.

# IMPLICATIONS FOR TOBACCO CONTROL IN MAURITIUS

- Provide resources for strong implementation of smoke-free laws and remove provisions for designated smoking areas
- 2. Continue full implementation and enforcement of pictorial warning labels
- 3. Provide strong enforcement of point of sale advertising bans and expand the law to include airport duty free shops
- 4. Consider an increase in price and taxation of tobacco products
- 5. Fully implement and strongly promote the services of new smoking cessation clinics

The ITC Mauritius Wave 1 Survey findings indicate that patterns of smoking in Mauritius and attitudes of smokers and non-smokers are favourable for strong tobacco control interventions:

- the smoking rate (in cigarettes per day) is low;
- attitudes toward smoking are negative, even among smokers;
- a high proportion of smokers have tried to quit and have a strong interest in quitting; and
- there is near unanimous support for stronger governmental support for cessation.

These findings converge to create an environment whereby further tobacco control initiatives are likely to have a strong impact.







# Mauritius has taken significant steps to fulfill its obligations under the FCTC and has implemented some of the most progressive tobacco policies in Africa.

- World Health Organization. (2008). WHO
   Report on the Global Tobacco Epidemic, 2008:
   The MPOWER package. Geneva, World Health
   Organization.
- 3. Burhoo P, Mohee D, Moussa L (2010). Country Synthesis of Tobacco Control Situation Analysis, Mauritius. Pre-publication version. 2010-03-10. http://www.idrc.ca/en/ev-152233-201.1-DO\_ TOPIC.html
- International Tobacco Control Policy
   Evaluation Project (2010). ITC Mauritius
   Wave 1 Technical Report. http://www.itcproject.
   org/projects/mauritius

# THE TOBACCO LANDSCAPE IN MAURITIUS

This section provides an overview of tobacco use and tobacco control policies in Mauritius at the time of the Wave 1 ITC Mauritius Survey. Mauritius has become a world leader for tobacco control in Africa. The WHO Framework Convention on Tobacco Control (FCTC) was signed by Mauritius in June 2003 and ratified in May 2004. Mauritius has taken significant steps to fulfill its obligations under the FCTC. In 2007, the Mauritius government, in collaboration with the World Health Organization and several other stakeholders, developed a National Action Plan on Tobacco Control 2008-2012. The main objective of the Action Plan is to reduce tobacco-related mortality and morbidity by preventing the use of tobacco products, promoting cessation, and protecting the population from exposure to environmental tobacco smoke. Mauritius passed the Public Health (Restrictions on Tobacco Products) Regulations 2008, which updated 1999 policies on smoking in public places; packaging and labeling of tobacco products; tobacco advertising, promotion, and sponsorship; and illicit trade. The Wave 1 ITC Mauritius Survey provides an assessment of the majority of policies in the new Regulations approximately two months after their implementation (with the exception of new pictorial warnings; a ban on 'light', 'mild', and 'low tar' package descriptors; and a ban on the sale of single cigarettes which were implemented after the Wave 1 Survey).

#### **Smoking Prevalence**

Tobacco is the single most preventable cause of death in the world today.<sup>2</sup> 2008 smoking prevalence estimates in Mauritius were 40.3% for men and 3.7% for women between the ages of 25 and 74 years – among the highest smoking prevalence rates in Africa.<sup>3</sup> The ITC Mauritius Wave 1 Survey found that 32.4% of adult men (18 years and older) in Mauritius smoke, and 2.6% of adult women smoke.<sup>4</sup> These smoking prevalence estimates are comparable with those for 2008; differences may be attributable to differences in survey methodology.

#### **Tobacco Control Policies**

The FCTC, the world's first public health treaty, addresses the global tobacco epidemic through a variety of measures to reduce tobacco demand and supply, including price and taxation (Article 6), exposure to tobacco smoke (Article 8), packaging and labeling of tobacco products (Article 11), tobacco advertising and sponsorship (Article 13), and cessation and treatment (Article 14). With 168 member Parties as of April 2010, the FCTC is one of the most successful treaties ever established.

Mauritius has taken significant steps to fulfill its obligations under the FCTC and make the necessary amendments to its tobacco legislation. Mauritius has implemented some of the most progressive tobacco policies in Africa. The Public Health (Restrictions on Tobacco Products) Regulations 2008, came into force in two phases. Regulations to strengthen policies on smoking in public places; and tobacco advertising, promotion, and sponsorship were implemented on March 1, 2009. Regulations on pictorial warning labels, packaging descriptors, and the sale of single cigarettes followed on June 1, 2009. The following section summarizes the tobacco control policies in Mauritius at the time the ITC Mauritius Wave 1 Survey (April 20 to May 24, 2009), organized according to the tobacco control domains of the FCTC .

# Public Health (Restrictions on Tobacco Products) Regulations 2008

#### March 1, 2009 (Pre-Wave 1)

- Total ban on advertising, promotion and sponsorship, with the exception of the internet
- Ban on product display at point of sale
- No tobacco products offered for free or at a discounted price
- Smoke-free policy strengthened to include public indoor & outdoor areas, hospitality venues, recreational venues, and private vehicles carrying passengers; designated smoking areas still permitted in workplaces, and smoking permitted outdoors in some venues
- No vending machine sales
- No sale of tobacco to minors, or by minors (under 18 years)
- No sale of sweets or toys in the form of cigarettes

#### June 1, 2009 (Post-Wave 1)

- 8 rotating graphic pictorial warning labels
- No descriptions such as 'light', 'mild', or 'low tar' permitted on packages
- Packages must not display the tar or nicotine content or the carbon monoxide yield
- No sale of single cigarettes; only packages of 20 cigarettes sold

#### **Product Labeling**

Article 11 of the FCTC stipulates that each Party shall adopt and implement effective packaging and labeling measures. New Article 11 Guidelines recommend pictorial warnings on at least 50% of the package and call for key requirements for the content, position, and size of warnings.

The packaging and labeling of tobacco products in Mauritius was a major focus of the 2008 Regulations. Since 1999, health warning labels on cigarette packages in Mauritius had one text-based message reading "smoking causes cancer, heart disease and bronchitis". Mauritius was the first nation in the African Region to implement pictorial health warning labels—a set of 8 rotating images appearing on the front and the back of packs, in both English (occupying 70% of back) and French (occupying 60% of front) in 2009. These labels are among the largest in the world. Text messages also appear on 65% of the side of packs in both French and English.<sup>5</sup>

Furthermore, as per the 2008 Regulations, misleading descriptors on cigarette packages such as 'light' and 'mild' are not permitted; cigarette packages must not display the tar or nicotine content or the carbon monoxide yield; the sale of single/loose cigarettes was banned – cigarette packages must contain 20 cigarettes; and distributors of tobacco products must not obscure any part of the warnings.

The official date of implementation for the provisions related to packaging and labeling of tobacco products was June 1, 2009. The first pictorial warning labels were reported to be in public circulation on October 17, 2009.

5. See Mauritius' Pictorial Health Warning Label images on-line the Tobacco Labeling Resource Centre website. http://www.tobaccolabels.ca/currentl/mauritiu

In 2009, **Mauritius** was the first nation in the **African Region** to implement pictorial health warning labels – a set of 8 rotating images appearing on the front and back of packs, in both English (occupying 70% of back) and French (occupying 60% of front).







#### **Pricing and Taxation**

Increasing taxes on tobacco products is considered to be one of the most effective components of a comprehensive tobacco control strategy, particularly among young people. Article 6 of the FCTC obligates countries that have ratified the treaty to adopt pricing and taxation measures that reduce tobacco consumption such as sales restrictions and limitations on international travelers importing tax and duty free tobacco products.

Mauritius does not manufacture any tobacco products locally. This means that 100% of the cigarettes sold to consumers in Mauritius are imported from other countries. An import tax of 15% of the cigarette price is imposed on all tobacco. A custom excise duty of Rs 2,200 (\$72.50 US) applies per thousand cigarette sticks and a final tax of 15% of the total of both aforementioned taxes plus the base cost of cigarettes is applied prior to sale. In addition, in an effort to curb illicit trade, an affixed excise stamp must appear on cigarette packages.

#### **Smoke-Free Policies**

Article 8 requires the adoption of effective measures to provide protection from exposure to tobacco smoke. The 1999 Regulations included a provision that banned smoking indoors in health care institutions, educational institutions, sports premises, public transportation, office premises or workplaces open to the public, public places (museums, post office, etc.), as well as when preparing, serving, or selling food to the public. In 2008, the Regulations were revised to be more comprehensive and now include: indoor and outdoor premises of health and educational institutions, indoor and outdoor sporting premises, any public conveyance, bus stands and stations, any indoor workplace (excluding designated smoking areas), any indoor area open to the public, recreational public places like gardens (except beaches), cafés, bars, night clubs, and restaurants, while preparing, serving or selling food for/to the public, and while driving or travelling in a private vehicle carrying passengers. "No smoking" signs (with regulated colour, size, and text font) have been placed in public places.

#### Education, Communication, Training, and Public Awareness

Under Article 12, Parties must promote and strengthen public awareness of tobacco control issues through education and public awareness programs on the health risks of tobacco consumption and the benefits of cessation, and provide public access to information on the tobacco industry.

Mauritius has made efforts to increase public awareness and communication about the harmful effects of exposure to tobacco smoke and the use of tobacco products. In addition to an ongoing public education campaign, the government launched campaigns to raise awareness of the new regulations through mass media and other channels in February 2009. As part of their Action Plan, the Mauritius government has also planned to organize awareness-raising and advocacy sessions in order to bring consensus and support amongst key stakeholders for the implementation and enforcement of the smoke-free policy.

Mauritius has become a world leader for tobacco control in Africa. Public health leaders at The Ministry of Health and Quality of Life and the Mauritius Institute of Health (MIH), together with other members of the public health community from Mauritius are continuing to develop progressive tobacco control policies.

#### **Tobacco Advertising, Promotion, and Sponsorship**

Article 13 of the FCTC requires Parties to implement effective measures against tobacco advertising, promotion, and sponsorship. Guidelines for Article 13 recommend a comprehensive ban on tobacco advertising, promotion, and sponsorship (or apply restrictions that are as comprehensive as possible). Included among the recommended measures are bans on: cross-border advertising, promotion and sponsorship; display of tobacco products at points of sale; tobacco product vending machines; internet sales; and attractive packaging and product features.

A ban on tobacco advertising and promotion, as well as a ban on sponsorship by tobacco companies, has been in place in Mauritius since 1999. Effective as of March 1, 2009, the regulations were made more comprehensive to include a ban on the offer or supply of tobacco products free of charge or at a discounted price. The display of tobacco products at point of sale was also banned, with the exception of airport duty free shops in Mauritius and Rodrigues.

#### **Cessation and Treatment**

Article 14 of the FCTC promotes the implementation of programs for smoking cessation, including programs for diagnosing, counselling, preventing, and treating tobacco dependence, as well as facilitating accessible and affordable treatments.

Reduction measures concerning tobacco dependence and cessation efforts include a pilot smoking cessation clinic implemented in December 2008 by the Ministry of Health and Quality of Life in Mauritius. Cessation clinics are expected to appear nationwide in 2010.

#### Illicit Trade in Tobacco Products

To curb illicit trade of tobacco products in Mauritius, the 2008 Regulations included a provision that requires the country of origin to be noted on cigarette packages. Packages must also carry the statement "sale allowed in Mauritius only" and the Excise (Amendment) Regulations 2008 of the Excise Act prescribes that an excise stamp be affixed.

#### Sales to and by Minors

The sale of tobacco to minors in Mauritius has been illegal since 1999; however, the sale of tobacco by minors was made illegal in March 2009. To discourage the uptake of smoking by youth, the sale of single or 'loose' cigarettes is now banned, and packages being sold must contain 20 cigarettes (as described earlier). The sale of tobacco through vending machines was prohibited and any person selling tobacco must seek out evidence of legal age. The seller of tobacco must also display a prohibition sign. The sale of sweets, toys, etc., in the form of cigarettes has also been banned.

#### Penalties for failures to adhere to the Public Health (Restrictions on Tobacco Products) Regulations 2008

Penalties for failures to adhere to the conditions of the smoke-free laws include the following: at first conviction, a fine of not less than MUR 5,000 and not more than MUR 8,000; at second conviction, a fine of not less than MUR 8,000 and not more than MUR 10,000; and at third or subsequent conviction, an imprisonment for a term not exceeding 12 months.

The Ministry of Health and Quality of Life implemented a pilot smoking cessation clinic in December 2008. Clinics are expected to appear nationwide in 2010.

**Effective** March 1, 2009, **Mauritius** banned the offer or supply of discounted or free of charge tobacco products and banned the display of tobacco products at point of sale, with the exception of airport duty free shops.

#### **METHODS**

#### **OVERVIEW**

The International Tobacco Control Policy Evaluation Project (the ITC Project) is an international research collaboration across 20 countries – Canada, United States, United Kingdom, Australia, Thailand, Malaysia, South Korea, China, Mexico, Uruguay, New Zealand, France, Germany, the Netherlands, Bhutan, France, Brazil, India, Bangladesh, and Mauritius. The primary objective of the ITC Project is to conduct rigorous evaluation of the psychosocial and behavioural effects of nationallevel tobacco control policies of the Framework Convention on Tobacco Control (FCTC). The ITC Project is conducting large-scale annual prospective cohort surveys of tobacco use to evaluate FCTC policies in countries inhabited by half of the world's smokers. Each ITC Survey includes key measures for each FCTC policy domain that are identical or functionally similar across the 20 countries to facilitate crosscountry comparisons. The evaluation studies conducted from the ITC Surveys take advantage of natural experiments created when an ITC country implements a policy: changes in policy-relevant variables in that country from pre- to post-policy survey waves are compared to other ITC countries where that policy has not changed. This research design provides high levels of internal validity, allowing more confident judgments regarding the possible causal impact of the policy. For description of the conceptual model and objectives of the ITC Project, see Fong et al. (2006)6; for description of the survey methods, see Thompson et al. (2006).7

The International Tobacco Control Policy Evaluation Project in Mauritius (the ITC Mauritius Project) was created in 2009 to rigorously evaluate the psychosocial and behavioural effects of Mauritian tobacco control legislation and national-level smoking cessation clinics, using methods that the ITC Project has employed in many other countries throughout the world. The project objective is to provide an evidence base to guide policies enacted under the FCTC and to systematically evaluate the effectiveness of these legislative efforts.

The ITC Mauritius Survey was a face-to-face survey conducted by trained interviewers from the Mauritius Institute of Health. The survey sample consisted of a nationally representative cohort of adult Mauritian smokers and non-smokers (aged 18 years and older) who were surveyed from April 20 to May 24, 2009. The Wave 1 cohort consisted of 837 (598 smoker and 239 non-smoker) respondents who each completed a face-to-face interview. This cohort will be recontacted for subsequent Waves. The next Wave of the ITC Mauritius Survey is planned for August 2010.



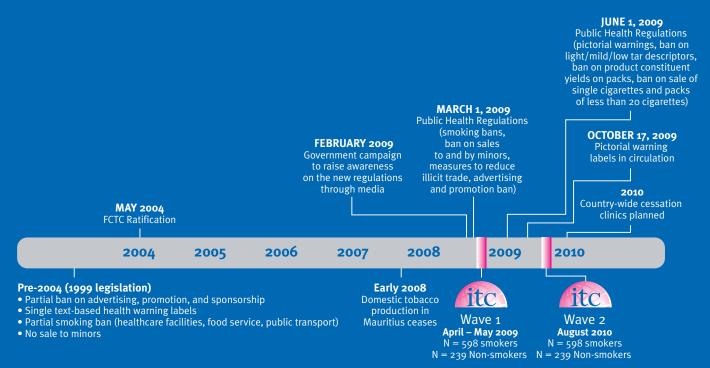
The Wave 1 survey was conducted in April-May 2009 to precede the implementation of two major tobacco control initiatives (1) the official release of the pictorial health warnings on cigarette packages (on June 1, 2009), and (2) the implementation of smoking cessation clinics in 2010. The Wave 1 survey was conducted two months after the implementation of Phase 1 of the 2008 Regulations, which included a provision for more comprehensive smoke-free policies, and thus, provided a picture of Mauritians' responses and collective support levels for the new policies. Figure 2 presents an overview of the ITC Mauritius Survey timeline in relation to Mauritian tobacco control policy initiatives.

<sup>6.</sup> Fong GT, Cummings KM, Borland R, Hastings G, Hyland A, Giovino GA, Hammond D, Thompson ME (2006). The conceptual framework of the International Tobacco Control (ITC) Policy Evaluation Project. Tob Control;15 (Suppl III):iii3-iii11.

<sup>7.</sup> Thompson ME, Fong GT, Hammond D, Boudreau C, Driezen P, Hyland A, Borland R, Cummings KM, Hastings G, Siahpush M, MacKintosh AM, Laux FL (2006). Methods of the International Tobacco Control (ITC) Four Country Survey. Tob Control;15 (Suppl III):iii12-iii-18.

Figure 1.

Mauritius' Tobacco Policy Timeline in Relation to the ITC Mauritius Surveys



#### Sampling design

The ITC Mauritius Survey is a prospective longitudinal study of Mauritian smokers and non-smokers that uses a face-to-face survey mode to collect data from respondents. The multi-cluster sampling frame was designed in collaboration with the Mauritius Central Statistics Office to ensure random selection of households within strata defined by the nine geographic districts spanning the island. The urban-rural population split in Mauritius is 43% urban and 57% rural. The stratification by district provided similar urban-rural representation in the study sample. Mauritius is divided into 3,600 enumeration areas (EAs), each with about 100-125 households. The study sample was selected from 60 EAs with probability proportional to size within strata. In each EA, 50 households were selected at random to be sampled. A maximum of three respondents per household was allowed.

A total of 1,750 households were enumerated to establish an accurate sampling frame from which survey participants would be drawn. A cohort of 598 smokers and 239 non-smokers aged 18 years and older were surveyed in Wave 1. Further information on the sampling design, construction of sampling weights, and cooperation and response rates is provided in the ITC Mauritius Technical Report which is available at http://www.itcproject.org/projects/mauritius.

#### **Characteristics of the Sample**

Survey fieldwork was conducted by interviewers hired by the Mauritius Institute of Health. Smokers were defined as having smoked more than 100 cigarettes in their lifetime and at least once in the past 30 days. Table 1 summarizes the demographic characteristics of the adult cohort (aged 18 years and older) included in Wave 1 of the ITC Mauritius Survey.

Table 1. Demographic characteristics of the Wave 1 ITC
Mauritius Survey Sample

	Smokers N = 598		Non-smokers N = 239	
	Frequency	%	Frequency	%
Gender				
Male	562	94.0	66	27.6
Female	36	6.0	173	72.4
Age				
18-24	47	7.9	19	7.9
25-39	184	30.8	83	34.7
40-54	227	38.0	82	34.3
55+	140	23.4	55	23.0
Annual household in	come (MUR)			
<15,000	421	70.4	146	61.1
15,000-25,000	110	18.4	61	25.5
25,000->50,000	58	9.7	25	10.5
Not Stated	9	1.5	7	2.9
Education				
Up to Form 4	433	72.4	140	58.6
SC/HSC/Vocational	130	21.7	81	33.9
Degree or higher	35	5.9	18	7.5
Marital status				
Married	451	75.4	152	63.6
Divorced or Separated	19	3.2	18	7.5
Widowed	17	2.8	30	12.6
Single	111	18.6	39	16.3

The ITC Mauritius Survey was a face-to-face survey conducted by trained interviewers from the Mauritius Institute of Health. The Wave 1 cohort consisted of 837 (598 smoker and 239 non-smoker) respondents.

#### **Content of the ITC Mauritius Survey**

The ITC Mauritius Survey was developed by the project team with members from both Mauritius and Waterloo, Ontario, Canada. The survey methods and a large proportion of the survey questions were adapted from standardized protocols and surveys used in ITC surveys conducted in 19 other countries around the world. In the ITC Mauritius Survey, each participant who was categorized as a smoker (those who smoked more than 100 cigarettes in their life, and had smoked at least once in the past 30 days) was asked to respond to the following types of survey items:

#### **Smokers responded to questions on:**

- 1. **Smoking Behaviour and Cessation.** Smoking history and frequency, as well as current smoking behaviour and dependence, and quitting behaviours;
- 2. **Knowledge and Basic Beliefs About Smoking.** Knowledge of the health effects of smoking and important beliefs relevant to smoking and quitting, perceived risk, and perceived severity of tobacco-related diseases;
- 3. **Tobacco Control Policies.** Awareness of, impact of, and beliefs relevant for each of the FCTC demand reduction policy domains (warning labels, taxation/price, advertising/promotion, smoke-free bans, light/mild);
- 4. **Other important psychosocial predictors** of smoking behaviour and potential moderator variables (e.g., attitudes, normative beliefs, self-efficacy, intentions to quit);
- 5. **Individual difference variables relevant to smoking** (e.g., depression, stress, time perspective);
- 6. **Demographics** (e.g., age, gender, marital status, education, occupation).

Participants who were categorized as non-smokers were asked to respond to similar survey items, with the exception of the smoking- and cessation-relevant questions.

The ITC Mauritius Survey was first developed in English. Two versions of the survey were created: one each of a smoker and non-smoker questionnaire. The surveys were translated into Mauritian Creole by team members at the Mauritius Institute of Health. The translated surveys were then reviewed by a committee composed of five members who were bilingual in English and Creole and who also had experience in population surveys. Nuances in wording were discussed and resolved by this bilingual committee. This method of translation is generally favored over traditional double translation methods. The survey took an average time to complete of 60 minutes for smokers and 30 minutes for non-smokers. A full copy of the Wave 1 Survey is available on the ITC Project website at www.itcproject.org.

#### WHAT THIS REPORT CONTAINS

This ITC Mauritius National Report provides an overview of key findings from the Wave 1 Survey conducted during April to May 2009, with a focus on assessing Mauritians' adherence to and support for the recently-implemented comprehensive smoke-free regulations. Further objectives of the Wave 1 Survey included establishing baseline measurements for future evaluation of the new pictorial health warnings and further efforts to enhance the smoke-free regulations. Survey results are discussed within the current context of tobacco control in Mauritius.

The purpose of this report is to inform tobacco control policy development across key policy domains of the WHO Framework Convention for Tobacco Control. Cross-country comparisons are provided for illustrative purposes using ITC Survey results from all ITC countries.

All figures present weighted point estimates with corresponding 95% confidence intervals. Point estimates presented in this report exclude item-specific non-responses; the only exceptions to this rule are for income, knowledge-based questions (where "Don't know" is considered a valid response), or where otherwise explicitly indicated.

All frequencies represent adult smokers and non-smokers aged 18 years and older.

More detailed information on survey frequencies, non-response, weighted point estimates, and 95% confidence intervals for ITC Mauritius Survey data cited in this report can be found in the document "Appendix: Frequency Tables for Mauritius National Report". This document is freely available for download at: http://www.itcproject.org/keyfindi.

#### **FINDINGS**

#### **SMOKING AND QUITTING BEHAVIOUR**

While the prevalence of smoking in Mauritius is the highest reported in the African region, the majority of Mauritians smoke fewer than 10 cigarettes per day—among the lowest of all ITC countries. The vast majority of Mauritian smokers have a negative opinion of smoking overall and regret having started smoking. Findings from the ITC Mauritius Survey suggest that Mauritian smokers, for the most part, have a high degree of readiness to quit smoking, relative to other ITC countries.

Almost two-thirds of Mauritian smokers have tried to quit in the past, and more than three-quarters have plans to quit in the future. The most important reasons that Mauritians cite for wanting to quit include: setting an example for children, concern for personal health, concern about the effect of cigarette smoke on non-smokers, as well as information about health risks.

#### Daily cigarette consumption

According to the WHO Report on the Global Tobacco Epidemic, 2009, Mauritius has the highest age-standardised prevalence of smoking in Africa among adult male daily smokers of cigarettes.<sup>8</sup> Almost one third of adult men (18 years and older) in Mauritius smoke (32.4%), and only 2.6% of adult women smoke. These smoking prevalence estimates are comparable with those from the 2004 Mauritius Non-Communicable Diseases Survey, which found 35.9% of males and 5.1% of females were smokers. Caution should be applied in making comparisons because of differences in survey methods.

Nearly all smokers in Mauritius (91%) are daily smokers. However, Mauritius has a very low average cigarette consumption among daily smokers – 9.9 cigarettes per day, the third lowest average consumption rate among ITC countries. 91% of female daily smokers and 76% of male daily smokers smoke 10 or less cigarettes per day. 9% of female daily smokers and 20% of male daily smokers smoke between 11 and 20 cigarettes per day.

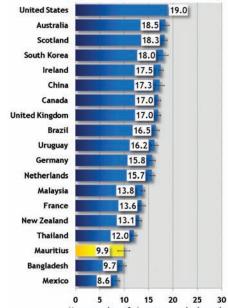
#### Level of addiction

Two-thirds of smokers (66%) reported being either 'addicted' or 'very addicted' to cigarettes. This is the second lowest percentage across 17 ITC countries, with self-reported addiction ranging from 33% in China to 97% in Canada. More than one-third (36%) of Mauritian smokers 'disagree' or 'strongly disagree' that smoking is addictive.

#### Regret of smoking

The majority of Mauritian smokers regret smoking. More than three-quarters (78%) of smokers 'agree' or 'strongly agree' that if they had to do it over again, they would not have started smoking.

Fig 2. Mean number of cigarettes smoked per day in daily smokers, by country



Mean number of cigarettes smoked per day Thailand, Ireland, and Scotland data 2006. Malaysia data 2006/07. Canada, Australia, US, UK, and China data 2007/08.

Mexico, South Korea, and France data 2008. New Zealand and Uruguay data 2008/09. Netherlands, Mauritius, Germany, Bangladesh, and Brazil data 2009.

Fig 3. Number of cigarettes smoked per day in daily smokers, by gender

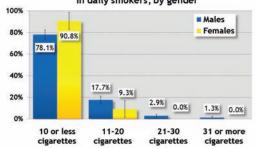
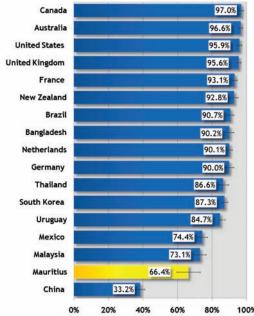


Fig 4. Percentage of smokers who consider themselves 'somewhat' or 'very' addicted to cigarettes, by country



China data 2007/08. Thailand, and Malaysia data 2008. South Korea, Mexico, and France data 2008. Australia, Canada, UK, US, New Zealand, and Uruguay data 2008/09. Netherlands, Mauritius, Germany, Bangladesh, and Brazil 2009.

<sup>8.</sup> World Health Organization. (2008). WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER package. Geneva, World Health Organization.

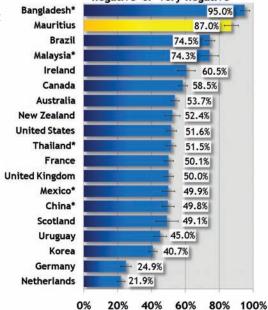
The vast majority of Mauritian smokers have negative attitudes towards smoking and a high degree of readiness to quit smoking.

#### Mauritians' opinions of smoking

The ITC Mauritius Survey shows that the vast majority of respondents have negative attitudes towards tobacco. 87% of smokers and 99% of non-smokers reported that smoking is 'bad' or 'very bad' – the second highest level among 19 ITC countries.

Approximately two-thirds of Mauritian smokers and non-smokers (65% and 66% respectively) either 'agree' or 'strongly agree' that Mauritian society disapproves of smoking.

Fig 5. Percentage of cigarette smokers whose overall opinion of smoking is 'negative' or 'very negative'



Thailand, Ireland and Scotland data 2006. Malaysia data 2006/07. Mexico, Korea, and France data 2008. China, Canada, US, UK and Australia data 2007/08. Uruguay and New Zealand data 2008/09. Brazil, Bangladesh, Mauritius, Netherlands, and Germany data 2009. Response options were 'Bad' or 'Very Bad'.

#### **Quit intentions**

Findings from the ITC Mauritius Survey suggest that Mauritian smokers, for the most part, have a high degree of readiness to quit smoking. Almost one-quarter of Mauritian smokers (22%) are planning to quit within the next 6 months, and more than three-quarters of Mauritian smokers (77%) are planning to quit sometime in the future. Of smokers who are planning to quit, 46% report wanting to quit 'a lot' and 31% want to quit 'somewhat'.

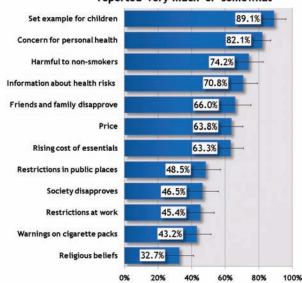
Almost two-thirds of smokers in Mauritius (65%) have ever tried to quit; and 38% have tried to quit in the last year.

More than half of smokers (58%) anticipate that in one year, at the time of the Wave 2 ITC Mauritius Survey, they will smoke less than they did at Wave 1.

#### Reasons for quitting

Smokers think about a variety of reasons to quit smoking. Among smokers who are planning to quit, the most important reasons to quit were: (1) to set an example for their children (89%), (2) concern for their personal health (82%), (3) concern about the effect of cigarette smokers on non-smokers (74%), (4) in response to advertisements or information about the health risks of smoking (71%), (5) because their families want them to quit (66%), and (6) because of the price (64%).

Fig 6. Smokers' opinions: 'Which reasons made me think of quitting smoking?' Percentage who reported 'very much' or 'somewhat'



#### PROTECTION FROM EXPOSURE TO TOBACCO SMOKE

On March 1, 2009, Mauritius implemented a smoke-free law banning smoking in all indoor public places, including hospitality venues such as restaurants, tea rooms, and bars/pubs. A partial ban was implemented in workplaces, allowing for designated smoking rooms. In addition, Mauritius became the first country in the world to ban smoking in cars with passengers (some other jurisdictions have banned smoking in cars with children). The ITC Mauritius Survey provides an initial assessment of the effectiveness of the law at 2 to 3 months after its introduction.

#### Support for the smoking bans

The ITC Mauritius Wave 1 Survey indicates that the majority of smokers and non-smokers 'support' or 'strongly support' these laws 2 to 3 months after their introduction. Smokers most strongly support bans on smoking in cars (90%), followed by restaurants/tea rooms (86%), workplaces (84%), and bars/pubs (74%). Support for these measures is even higher among non-smokers (92%, 94%, 93%, and 92%, respectively).

#### Compliance with the smoking bans

Smokers and non-smokers report that compliance with the recent bans on smoking in hospitality venues is moderate at best. Of the 42% of smokers (n=254) who had visited a restaurant or tea room since the ban on March 1, 2009, only 63% reported that restaurants were totally enforcing the smoke-free law. Of the 26% of smokers (n=165) who had visited a bar/pub since the ban on March 1, 2009, less than half (44%) reported that bars/pubs were totally enforcing the smoking ban.

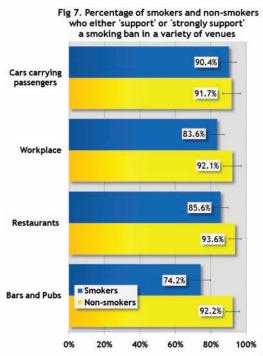
#### Restaurant/tea room smoking ban

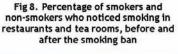
Of the smokers who had been in a restaurant after the ban, 18% reported having observed other people smoking inside restaurants/tea rooms after the ban compared to 61% who reported that they had noticed other people smoking in restaurants/tea rooms on their last visit before the ban. 13% of non-smokers reported that they noticed smoking in restaurants/tea rooms after the ban, compared to 51% before the ban. In addition, 11% of smokers reported that they themselves had smoked inside the restaurant/tea room after the ban, compared to 47% who reported that they had smoked inside the restaurant/tea room during their last visit before the smoke-free ban.

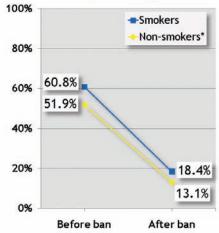
Of those smokers who had been to a restaurant/tea room after the ban on March 1, 2009, at least three quarters (78%) stated that they continued to visit restaurants the same amount after the ban as they did before the ban; and 81% stated that they spent the same amount of time in a restaurant after the ban as they did before the ban.

Based on ITC survey findings in Ireland and France, where only 2% of smokers noticed smoking in restaurants approximately 9 months after their bans, it is expected that the prevalence of smoking in restaurants in Mauritius will continue to decrease.

Smoking in restaurants and tea rooms has decreased dramatically. Less than 20% of smokers noticed smoking in these venues 2 to 3 months after the ban.







# Mauritian smokers and non-smokers have among the highest levels of support for a complete ban on smoking in the workplace across all ITC countries.

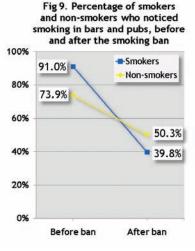
#### Bar/pub smoking ban

88% of smokers and 78% of non-smokers report that there were people smoking inside the bar before the ban. Only 6% of non-smokers and 28% of smokers have visited a bar since the smoking ban. At their last visit, 50% of non-smokers and 40% of smokers noticed people smoking inside the bar. 22% of smokers smoked in the bar on their last visit.

50% of smokers and 71% of non-smokers visit pubs the same amount as they did a year ago.

From experiences in other ITC countries with smoke-free laws, it is likely that, with enforcement, these smoking prevalence estimates, measured at only 2 months after

the introduction of the law, will continue to decrease over time.



#### Public transportation smoking ban

Smoking in public transit has been banned in Mauritius since 1999; however, the Public Health (Restrictions on Tobacco Products) Regulations 2008 increased the penalties for failure to adhere to the regulations and banned smoking in bus stations and stands.

75% of smokers and 87% of non-smokers have used public transportation since the ban. Only 9 % of these smokers and 6% of these non-smokers have seen people smoking on public transportation the last time they used it.

78% of smokers and 67% of non-smokers report that smoke-free laws on public transit are being totally enforced.

#### Workplace smoking ban

As a provision of the Public Health (Restrictions on Tobacco Products)
Regulations 2008, smoking was banned in indoor areas in workplaces, with the exception of designated smoking areas, on March 1, 2009.

93% of non-smokers and 84% of smokers either 'support' or 'strongly support' a complete ban on smoking in the workplace. This is among the highest levels of support found across the ITC countries.

Before the new workplace policies, smoking was completely banned in 32% of smokers' workplaces. Smoking was permitted only in designated smoking rooms in 34% of smokers' workplaces. One third of smokers (34%) had no rules or restrictions in their workplaces. 51% of non-smokers and 58% of smokers reported that the smoking policy in their workplace changed on or around March 1, 2009.

22% of non-smokers and 29% of smokers who worked indoors or partially indoors reported noticing people smoking in indoor areas at their workplaces within the month prior to completing the survey (after the March 1, 2009 workplace smoking policy); and 24% of smokers who worked indoors, reported that they, themselves, had smoked at work.

From experience in other ITC countries with smoke-free laws, it is likely that, with enforcement, smoking prevalences in key venues such as bars and pubs, measured at only 2 months after the introduction of the law will continue to decrease over time.

#### Smoking in the home

Contrary to an argument often made about smoke-free laws, smoking in the home did not increase.

Half (51%) of all smokers in Mauritius have a complete ban on smoking in their homes, while 28% allow smoking in some indoor areas. 44% of smokers who allow smoking in their home are intending to make their homes totally smoke-free within the next year.

In fact, the smoke-free laws may be having a favourable effect on reducing smoking overall. One-third of smokers (31%) report smoking fewer cigarettes inside the home since the new regulations came into effect. More than half (58%) report smoking about the same amount. Only 11% report smoking more cigarettes inside the home.

#### Smoking ban in cars

Smoking while driving or travelling in private vehicle carrying passengers was banned as of March 1, 2009. Mauritius is the first country in the world to pass a smoking ban in cars carrying any passengers (all other jurisdictions, countries with bans on smoking in cars prohibit doing so with children). Mauritians are highly supportive of this policy. 90% of smokers and 92% of non-smokers either 'support' or 'strongly support' the smoking ban in cars with passengers in them. Among Mauritians who own a car, 77% of smokers and 87% of non-smokers do not allow any smoking in their car.



Contrary to an argument often made about smoke-free laws, smoking in the home did not increase – in fact, one-third of smokers report smoking fewer cigarettes inside the home and more than half report smoking about the same amount in the home.





#### PRODUCT LABELING

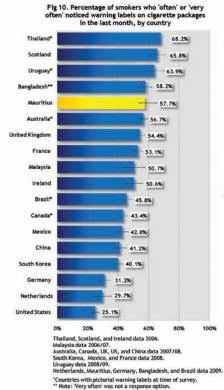
The ITC Mauritius Wave 1 Survey was conducted prior to the implementation of pictorial health warnings (after June 1, 2009) and the ban on brand descriptors such as 'light', 'mild', or 'low tar'. Since 1999 (up to 2009) health warning labels on tobacco packages had one text-only message reading "smoking causes cancer, heart disease and bronchitis". The findings below refer to the impact of the former text-only warning labels and provide the baseline for the evaluation of the new pictorial warning labels, which will be conducted in the Wave 2 Survey beginning in August 2010.

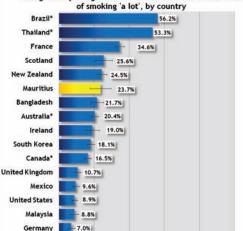
#### Awareness of health warnings

More than half of smokers (58%) reported noticing the text-only health warnings on cigarette packages either 'often' or 'very often' in the past month—the 5th highest among 18 countries.

#### Impact of health warnings

Less than one-quarter of smokers in Mauritius (24%) reported that the text-based health warnings on cigarette packages made them think about the health risks of smoking 'a lot', and another 34% reported that health warnings led them to think about the risks 'a little'. Only 14% of smokers stated that the text-based health warnings made them 'a lot' more likely to guit smoking. 22% of smokers reported that the textbased health warning labels had stopped them from having a cigarette at least once in the past month, and 13% reported that they took steps to avoid seeing the textonly health warnings.





China

Uruguav'

Netherlands

6.9%

6.8%

Fig 11. Percentage of smokers who said that warning labels on cigarette packages made them think of the health risks

Thailand, Scotland, and Ireland data 2006. Malaysia data 2006/07. Australia, Canada, UK, US, and China data 2007/08. South Korea, Mexico, and France data 2008. w Zealand and Uruguay data 2008/09. therlands, Mauritius, Bangladesh, Germany, and Brazil 2009.

\*Countries with pictorial warning labels at time of survey.

#### Support for enhanced health warnings

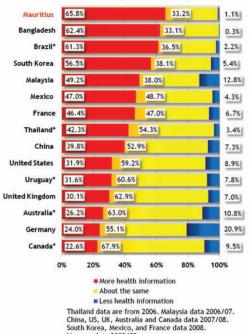
The ITC Mauritius Wave 1 Survey assessed text-only health warning labels on cigarette packages that were in circulation prior to the implementation of pictorial health warnings (after June 1, 2009). Since 1999 (up to 2009) health warning labels on tobacco packages had one text-based message reading "smoking causes cancer, heart disease and bronchitis". At the time when cigarette packs only provided text warning labels, Mauritians reported wanting more information about the health risks of smoking to appear on cigarette warning labels. In fact, 66% of smokers and 87% of non-smokers agreed that there should be more health information on Mauritian health warnings—the highest among 15 ITC countries.

Less than one-quarter of both smokers (20%) and non-smokers (23%) were aware that, at the time of survey, new graphic health warnings were actually being planned for release in the near future.

#### Perceptions of brand descriptors

As of June 1, 2010, misleading descriptors of cigarette brands such as 'light' and 'mild' were banned in Mauritius according to the 2008 Public Health Regulations. The ITC Wave 1 Survey measured smokers' perceptions of light and mild cigarettes before the ban. One-quarter of smokers (26%) 'agreed' or 'strongly agreed' that light cigarettes are less harmful than regular cigarettes. 38% of smokers 'agreed' or 'strongly agreed' that light cigarettes are smoother on the throat and chest. The ITC Wave 2 survey will measure whether there are changes in these false perceptions after misleading packaging descriptors are banned.

Fig 12. Cigarette smokers' opinions on whether there ould be more, less, or the same amount of hea information on cigarette packages, by country



China, US, UK, Australia and Canada data 2007/08.
South Korea, Mexico, and France data 2008.
Uruguay data 2008/09. Brazil, Mauritius, Bangladesh and Germany data 2009.

\*Countries with graphic warning labels at time of survey

#### TOBACCO ADVERTISING, PROMOTION, AND SPONSORSHIP

A ban on tobacco advertising, promotion, and sponsorship has been in place in Mauritius since 1999. In March 2009, regulations were strengthened to include a ban on the offer or supply of tobacco products free of charge or at a discounted price; and the display of tobacco products at point of sale was also banned (with the exception of airport duty free shops). In the 2008 legislation, penalties for failure to adhere to the regulations were also increased.

#### Impact of the ban on tobacco advertising and promotion

Only 5% of Mauritian smokers reported 'often' noticing things designed to encourage smoking or which make them think about smoking – the 2nd lowest level among 14 ITC countries. Despite the longstanding ban, between 6 to 21% of smokers or non-smokers report being exposed to some kind of tobacco advertising or promotion in the past 6 months. In store advertisements (15% and 21%, for smokers and non-smokers, respectively) were the most common source. This suggests that the new regulations, which ban point of sale advertising and promotion, may require more time to be implemented fully and may need to be expanded to include airport duty free shops.

Survey findings thus demonstrate that although tobacco advertising in Mauritius is relatively infrequent, it remains present despite the ban. However, the strengthened Public Health (Restrictions on Tobacco Products) Regulations 2008 had only been in effect for two months at the time of the survey. Wave 2 of the ITC Mauritius Survey (in August 2010) will measure the impact of the tobacco control measures at 14 months after the 2008 Regulations came into force.

#### Impact of the ban on sponsorship by the tobacco industry

One important objective of the Public Health (Restrictions on Tobacco Products) Regulations 2008 was to explicitly prohibit the sponsorship of events, activities, or initiatives (e.g., providing scholarships), by the tobacco industry. Within the past 6 months, only a small minority of smokers (6%) and non-smokers (12%) had noticed tobacco industry sponsorship including clothing or other items (3% of smokers; 6% of non-smokers), university student scholarships (3% of smokers, 5% of non-smokers), and music or sporting events (1% of smokers, 4% of non-smokers).

Mauritians continue to notice people smoking in the entertainment media. 52% of non-smokers and 56% of smokers report that that they 'often' see smokers in movies, TV programs, and magazines. Article 13 of the FCTC specifies that a comprehensive ban on tobacco advertising, promotion, and sponsorship should cover traditional media (print, television, and radio) and all media platforms, including the Internet, mobile telephones and other new technologies as well as films. Guidelines for Article 13 indicate that Parties should require anti-tobacco advertisements at the beginning of any media products that depict tobacco products and implement a ratings or classification system to ensure that young people are not exposed to tobacco-related images.

'often' or 'very often' noticed the promotion of smoking Brazil 40.5% Thailand 25.6% Malaysia 19.2% Netherlands 18.8% Germany 18.1% **United States** 14.6% France 14.4% China\* 14.3% New Zealand 10.6% Australia 7.0% United Kingdom 6.9% Canada 6.8% Mauritius\* 5.1% South Korea 0% 10% 20% 30% 40%

Fig 13. Percentage of smokers who

Thailand data are from 2006.
Malaysia data are from 2006/07.
Australia, Canada, UK, US, and China data are from 2007/08.
South Korea, Mexico, and France data 2008.
New Zealand data are from 2008/09.

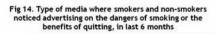
Netherlands, Germany, Brazil, and Mauritius data are from 2009. \*Response options did not include 'very often'.

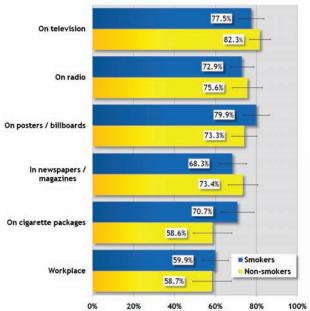
Despite the longstanding ban on tobacco advertising and promotion, Mauritians continue to be exposed to tobacco advertising and promotion in stores and in the media. The ban on display of tobacco products and point of sale should be expanded to include duty free shops.

#### **EDUCATION, COMMUNICATION, AND PUBLIC AWARENESS**

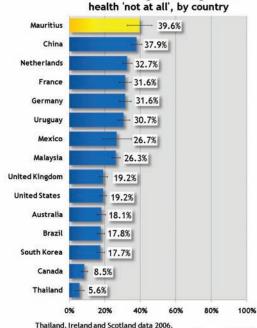
Mauritius has made efforts to increase public awareness and communication about the harmful effects of exposure to tobacco smoke and the use of tobacco products. In addition to the ongoing public education campaign, a government campaign to raise awareness of the new regulations through mass media and other channels began in February 2009.

The Wave 1 survey findings indicate a high level of awareness of media messages on the dangers of smoking and the benefits of quitting. The majority of smokers and non-smokers in Mauritius had noticed anti-smoking advertisements in the past 6 months. Among smokers, messages were noticed most on poster billboards (80%), on television (78%), and on the radio (73%). It is important to note that cigarette packs were identified as a source of anti-smoking information by 71% of smokers.





#### Fig 16. Percentage of smokers who believe smoking has damaged their

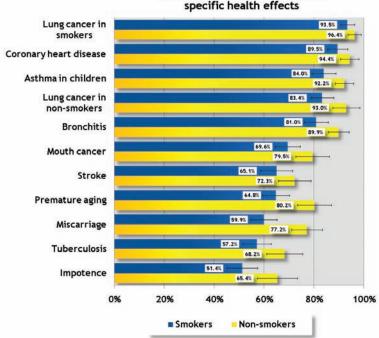


Malaysia data 2006/07. Mexico, South Korea and France data 2008. China, Canada, US, UK and Australia data 2007/08. Uruguay, and New Zealand data 2008/09. Brazil, Mauritius, Netherlands, and Germany data 2009.

#### Knowledge of the harms of smoking

The ITC Survey measures smokers' and non-smokers' awareness of a range of smoking-related health effects. Compared to non-smokers, a smaller percentage of smokers were aware of each health effect. Smokers were most aware that smoking causes lung cancer (94%), coronary heart disease (90%), asthma in children (84%), lung cancer in non-smokers (83%), and bronchitis (81%). More than 90% of non-smokers were aware of these health effects. Smokers were less aware of mouth cancer (70%), stroke (65%), premature aging (65%), miscarriage (60%), tuberculosis (57%), and impotence (52%).

Fig 15. Percentage of smokers and non-smokers who believe that smoking causes specific health effects



#### Perceptions of the health risks

Mauritian smokers have a lower perception of the harm to personal health caused by smoking compared to other ITC countries. More than one-third (40%) of Mauritian smokers think that smoking has not damaged their health at all – the highest percentage of 15 ITC countries. More than half (57%) of smokers are 'not at all' or 'a little worried' that smoking will damage their health in the future. 47% of smokers 'agree' with the statement that smoking is no more risky than other things and an additional 6% of smokers 'strongly agree'. More than half (54%) of smokers 'never' or 'once in a while' thought about the danger of smoking in the last month. 60% of smokers 'never' or 'once in a while' thought about the harm in the last month. Although many smokers are not worried about smoking-related harm to their own health, almost all smokers (92%) think that smoking is 'not good for your health'.

#### SMOKING CESSATION ASSISTANCE

The Mauritius Government has made a commitment to support smoking cessation. A pilot smoking cessation clinic was opened in December 2008, with plans to open additional cessation clinics in 2010.

The ITC Mauritius Survey Wave 1 assessed smokers' experiences with cessation services, as well their attitudes towards smoking cessation clinics. This baseline information will later be compared with smokers' responses at Wave 2, after the implementation of the clinics, to evaluate the impact of this initiative.

#### Use of cessation assistance

41% of Mauritian smokers reported that it is 'somewhat hard' or 'very hard' for smokers to get help with quitting from health professionals or quit smoking advisors. Of 26% of smokers who visited a doctor or health professional in the 6 months prior to the survey, more than half (57%) received advice to quit smoking. Less than 10% received other forms of assistance such as a referral to another service to help them quit (8%), a pamphlet or brochure on how to quit (7%), or other quitting information (5%). 5% of smokers who did not visit a doctor in the last six months, received advice or information about quitting from a clinic, a hospital, or a smoking-cessation clinic.

#### Support for national smoking cessation clinics

The majority of smokers (92%) and virtually all non-smokers (98%) 'agree' or 'strongly agree' that the government of Mauritius should do more to help smokers quit. Although only 27% of smokers were aware of the Mauritius Government's plans to open smoking cessation clinics, more than three-quarters of smokers (77%) were interested in visiting cessation clinics: 32% of smokers were 'very interested', 27% were 'somewhat interested', and 18% were 'a little interested'. Smokers think that the following types of services would be most helpful for smokers who want to quit: one-on-one counselling (52%), a course on how to quit (50%), affordable and easy to obtain stop-smoking medications (46%), a telephone help service (31%), and pamphlets or brochures about how to quit (25%).

The majority of smokers (85%) and non-smokers (96%) are in favour of a total ban on tobacco products within 10 years if the government provides assistance such as cessation clinics to help smokers quit.

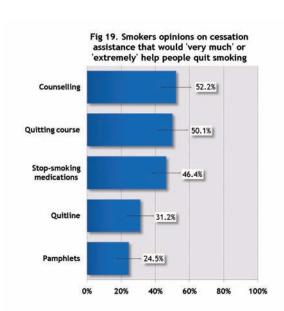


Fig 17. Type of cessation assistance recieved by smokers who visited a doctor or health professional in the last 6 months

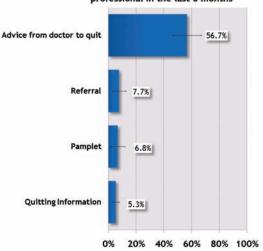
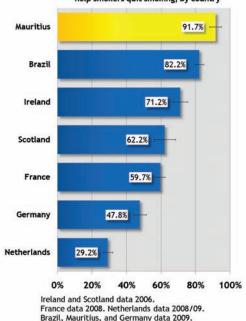


Fig 18. Percentage of smokers who 'agree' or 'strongly agree' the government should do more to help smokers quit smoking, by country



#### PRICE AND TAXATION

Tax is an important component of a comprehensive tobacco control program. In fact, higher taxes and tax equalization across different forms of tobacco use (e.g., equalizing tax on factory-made cigarettes and loose tobacco used for roll-your-own cigarettes) is widely accepted as the most powerful tobacco control policy intervention.

Although there has not been any change in taxation policies in Mauritius, the ITC Mauritius Survey results highlight the importance of price in tobacco use. Nearly two-thirds (64%) of smokers who plan to guit currently state that the price of cigarettes is a reason to think about quitting, and 69% of smokers agree that they spend too much money on cigarettes. Half of smokers (51%) thought about the money spent on cigarettes in the month prior to the survey.

#### Price as a factor in brand and form of tobacco purchased Survey results

The majority of smokers purchase cigarettes at a local shop (84%). Supermarkets (12%) and restaurants or tea rooms (2%) were the next most common locations. Most smokers (72%) purchased a pack of cigarettes as their last purchase. At the time of their last purchase of cigarettes, most smokers (72%) purchased a pack of cigarettes and 27% purchased single or loose cigarettes.

Brands were mainly chosen by smokers for their taste (83%), high quality (79%), because they are the same as their friends' brand (63%), or their popularity (58%). Price was a reason for choosing a brand for 37% of smokers.

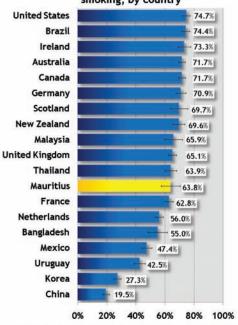
#### Price as a reason to quit

64% of smokers think that the price of cigarettes is a reason to quit smoking.

#### Concerns about money spent on cigarettes

Wave 1 of the ITC Mauritius Survey shows that many Mauritian smokers are concerned about the cost of smoking. 69% of smokers 'agree' or 'strongly agree' that they spend too much money on cigarettes. 16% of smokers make a special effort to buy cheaper cigarettes. 21% of smokers spent money on cigarettes that would have been better spent on food or household essentials.

Fig 20. Percentage of smokers who think price is a reason to quit smoking, by country



Thailand, Ireland, and Scotland data 2006. Malaysia data 2006/07. Mexico, Korea, and France data 2008. China, Canada, US, UK, and Australia data 2007/08. Uruguay and New Zealand data 2008/09 Brazil, Bangladesh, Mauritius, Netherlands, and Germany data 2009.

Increasing tobacco taxes is universally recognized as the most effective policy instrument to reduce tobacco consumption.9

The ITC **Mauritius** highlight the importance of price in tobacco control - nearly two-thirds of smokers who plan to quit state that price of cigarettes is a reason to quit.

> 9. World Health Organization. (2008). WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER package. Geneva, World Health Organization.

#### IMPLICATIONS OF THE FINDINGS

The ITC Mauritius Survey Wave 1 findings indicate that patterns of smoking in Mauritius and attitudes of smokers and non-smokers are favourable for strong tobacco control interventions. The smoking rate (in cigarettes per day) is low, attitudes toward smoking are negative, even among smokers, and a high proportion of smokers have tried to quit and have a strong interest in quitting. There is near-unanimous support for stronger governmental support for cessation. These findings converge to create an environment whereby further tobacco control initiatives are likely to have a strong impact:

#### Provide resources for strong implementation of smoke-free laws and remove provisions for designated smoking areas

The strengthening and broadening of the smoke-free laws in Mauritius has, from this initial assessment after only two months, been reasonably successful. Prevalence of smoking in key venues has been reduced and smokers and non-smokers are supportive of the laws. From the experience of ITC countries that have implemented smoke-free laws, it is reasonable to predict that with strong enforcement of the new smoking bans and ongoing public education on the benefits of the bans, the effectiveness of the smoke-free law in Mauritius will continue to increase. Guidelines for Article 8 of the FCTC require all indoor workplaces and public places to be 100% smoke-free, with no exceptions. The Mauritian Government should strengthen smoke-free laws to completely ban smoking in all indoor workplaces and public places. The ITC Wave 2 survey will continue to assess the prevalence of smoking in key venues to determine whether further reductions in smoking prevalence will be realized approximately 14 months after implementation of the bans.

#### Continue full implementation and enforcement of pictorial warning labels

The ITC Mauritius Wave 1 Survey, conducted prior to the introduction of new pictorial warnings, demonstrates that the majority of smokers are seeking more information on cigarette packages. ITC evaluation studies of pictorial warning labels in Canada, Thailand, Mexico, Australia, New Zealand, Uruguay, and Brazil predict that the introduction of larger warning labels with graphic images in Mauritius will be a powerful mechanism for educating the public on the harms of smoking and will motivate thoughts and action toward quitting. The Wave 2 survey, to be conducted in August 2010, will provide a rigorous evaluation of the effectiveness of this policy measure.

#### Provide strong enforcement of point of sale bans and expand the law to include airport duty free shops

The strong advertising, promotion, and sponsorship bans implemented by the Mauritian government are working well. Continued vigilance must be applied in this domain, given findings from other countries suggesting that strong comprehensive bans work much better than partial bans. The Mauritian government should consider expanding the ban on display of advertising at point of sale to airports.

#### Consider an increase in price and taxation of tobacco products

Tax is an important component of a comprehensive tobacco control program. In fact, higher taxes and tax equalization across different forms of tobacco use (e.g., equalizing tax on factory-made cigarettes and loose tobacco used for roll-your-own cigarettes) is widely accepted as the most powerful tobacco control policy intervention. Although taxation policies have not changed in Mauritius, the experience of every country in which tobacco taxes have been increased demonstrate the power of strong and specific tobacco taxes to reduce consumption and prevalence.

#### Fully implement and strongly promote the services of new smoking cessation clinics

Mauritian smokers agree that the types of services offered at new smoking cessation clinics would be effective in helping smokers to quit. Few smokers were aware of these forthcoming services and the rate of physician referrals to other services for smoking cessation assistance is low. The Mauritian government needs to increase awareness of these services among smokers and physicians through media campaigns. Quitline information on packs would be an effective way of promoting these services as studies conducted in Brazil, the UK, the Netherlands, and Australia show significant increases in call volumes to national telephone quitlines after contact information was included in package warnings.

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#### The International Tobacco Control Policy Evaluation Project

## The ITC Project

**Evaluating the Impact of FCTC Policies in...** 

20 countries • 50% of the world's population 60% of the world's smokers • 70% of the world's tobacco users

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