



Contents lists available at ScienceDirect

Preventive Medicine

journal homepage: [www.elsevier.com/locate/ypmed](http://www.elsevier.com/locate/ypmed)

## Tracking and tracing tobacco products in Kenya

Hana Ross

Room 3.17 School of Economics Building, Middle Campus, University of Cape Town, Rondebosch, Cape Town 7700, South Africa

### ARTICLE INFO

#### Article history:

Received 29 January 2017  
 Received in revised form 20 April 2017  
 Accepted 22 April 2017  
 Available online xxx

#### Keywords:

Tobacco  
 Taxation  
 Administration

### ABSTRACT

This report evaluates the effectiveness of various measures to control the size of illicit cigarette trade in Kenya. It is based on a literature review, a review of conference proceedings/materials, online searches, and analyses of data from the National Statistical Office of Kenya, ERC, and Euromonitor. I used both published and grey literature, official government reports, and online news articles.

In response to the presence of illicit cigarettes in the market in the early 2000s, Kenya adopted numerous measures to reduce tobacco tax evasion, with varying degrees of success. The latest solution involving a tracking and tracing system accompanied by electronic cargo monitoring of export seems to be the most effective, as it reduced the size of the illicit cigarette market and increased tax revenue. In addition, it seems to be more resistant to tampering.

The experience of Kenya highlights the importance of consistency and comprehensiveness of the system addressing tax evasion, because piecemeal measures have only short-term effects.

© 2017 Elsevier Inc. All rights reserved.

### 1. Introduction

Tobacco tax evasion and avoidance can diminish the effectiveness of tobacco taxation as a public health measure, because they generally make tobacco products more affordable, thus stimulating demand. In addition, they deprive the government of tax revenue.

Since the early 2000s, Kenya has been dealing with multiple forms of tobacco tax evasion including undeclared domestic production, unaccounted-for exports, undeclared imports of raw tobacco and finished products, counterfeited products, and under-declared tax values (Ngeywo and Kenya Revenue Authority, 2012; ERC Group, 2009). The Kenya Anti-Counterfeit Agency (ACA) estimated that in 2011 illicit cigarette trade deprived the country of about KES 70 billion (US\$ 790 mil) taking into account tax revenue, job, and investment losses (Muchangi, 2012).

Estimates of the illicit cigarette market in Kenya vary greatly (Table 1). ERC reports that illicit cigarettes accounted for 20%–26% of the total cigarette market in 2007 (Ngeywo and Kenya Revenue Authority, 2012; ERC Group, 2009, 2015), but it revised this estimate to 12% in 2010 (ERC Group, 2010) and to 11% in 2012 (ERC Group, 2015). Euromonitor published an even wider range of estimates. It claimed that the share of illicit cigarettes in Kenya reached 11.3% in 2006 (Nargis, 2012) but this 2006 estimate was subsequently revised to 30.3% (Euromonitor International, 2016a), almost 3-times as much. Clearly, the latest Euromonitor's estimates are outliers compared to the estimates reported by ERC, the tobacco industry (BAT), and the

Kenya Revenue Authority (KRA). An academic or a peer-reviewed estimate of the size of the illicit trade in Kenya does not exist.

This article describes the measures taken by the Kenyan authorities to deal with tobacco tax evasion and their impact on legal cigarette sales and tobacco tax revenue.

### 2. Methods

I conducted a literature review, online searches, and reviewed conference proceedings/materials. I obtained and analyzed data from the National Statistical Office of Kenya, ERC, and Euromonitor. I used both published and grey literature, official government reports, and online news articles.

Given that excise revenue depends both on legal sales and the tax rate/structure, I focus primarily on changes in legal cigarette sales as an indicator of the effectiveness of a track and trace (T&T) system. Legal sales is also a function of prevalence, population growth, and income. Real per capita GDP growth in Kenya during the time period of interest (2003–2015) has been quite stable, between 2 and 3% a year (with the exception of a retraction by 1% in 2008). The same is true for population growth – an annual increase of about 3% (Kenya National Bureau of Statistics, 2012). The smoking prevalence among males has declined from 23% in 2004 to 17% in 2013, about 0.6% annually. The smoking prevalence among females is negligible (0.04% in 2013 (KNBS, 2014, 2010; Central Bureau of Statistics, CBS [Kenya] et al., 2004)). If we assume that these three parameters have a relatively stable impact on changes in legal sales, any abrupt changes in the size of the licit market are likely to reflect more control over that market.

E-mail address: [hana.ross@uct.ac.za](mailto:hana.ross@uct.ac.za).

<http://dx.doi.org/10.1016/j.ypmed.2017.04.025>  
 0091-7435/© 2017 Elsevier Inc. All rights reserved.

Please cite this article as: Ross, H., Tracking and tracing tobacco products in Kenya, *Prev. Med.* (2017), <http://dx.doi.org/10.1016/j.ypmed.2017.04.025>

**Table 1**

Kenya: size of illicit cigarette trade market as % of total cigarette market 2006–2015. Sources: (ERC Group, 2009; ERC Group, 2010; Nargis, 2012; Kenya National Bureau of Statistics (KNBS), 2016; Kenya National Bureau of Statistics (KNBS), 2009; Kenya National Bureau of Statistics (KNBS), 2014; Kenya National Bureau of Statistics, 2012; KNBS, 2014; KNBS, 2010; Central Bureau of Statistics (CBS) [Kenya] et al., 2004).

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
ERC 2009		20.0								
ERC 2010					12.0					
ERC 2015		26.0					11.0			
BAT			8–12		12.0	20.0	8.0			
EM 2013	11.3	11.5	11.8	12.4	12.9	13.5	13.5			
EM 2014								14.0		
EM 2015	12.7	12.9	13.3	13.6	13.9	14.0	10.8	10.8	10.8	
EM 2016	30.3	30.7	31.3	32.0	32.4	32.6	26.5	26.5	26.6	26.6
KRA								12.0		

Notes: ERC = ERC Group; BAT = British American Tobacco; EM = Euromonitor International; KRA = Kenya Revenue Authority.

### 3. Results

To deal with growing concerns about the illicit cigarette market, Kenya introduced paper tax stamps in 2003 (Muthaura, 2013). The stamps had a serial number, a unique identifier for a particular type of cigarette, came in two colors for filter and non-filter cigarettes, and served as proof of payment. Thanks to these measures, monthly excise tax revenue in 2003 increased from KES 230 to 350 million (Ngeywo and Ministry of Finance, 2013) and legal cigarette and cigar sales increased by 52% from 2003 to 2004 (Fig. 1).

However, the tax stamps were easy to counterfeit or steal, had to be counted manually, and could not be linked to a particular brand/quantity of production. It soon became obvious that this was not an adequate method to control the illicit cigarette market (Muthaura, 2013). The size of the legal market began to shrink again from 2005 (Fig. 1).

In 2008 the Kenya Revenue Authority (KRA) proposed to implement a T&T system (Ross, 2015). Given the lengthy process of selecting a provider, KRA decided in 2010 to implement a set of temporary measures. These involved tax stamp verification at four points in the supply chain, improved licensing controls, importer registration, and an overhaul of the accounting system to better track cigarette production. Newly established tax enforcement units (Ngeywo and Kenya Revenue Authority, 2015) conducted periodic checks on production to determine how many production lines were active, what raw materials were being

used, and to compare input material with the actual output (Muthaura, 2013). These measures increased the cost of the tax stamp regime by KES 66.5 million (US\$ 750,000) a year (Wahome, 2015), which was covered by a 2% fee on total audited revenue paid by the industry, but also increased legal cigarette and cigar sale by 67% (Fig. 1).

In July 2011 Kenya introduced a single specific tax regime, which reduced tax evasion related to false declaration of the number of cigarettes produced in various tax categories (Ngeywo and Kenya Revenue Authority, 2012; Nargis et al., 2015). However, the excise tax on the mid-price brands such as the most popular Sportsman went down by 45% in real value (Fig. 1). The tax revenue first declined in 2011 (by 9%) and then increased by 14% in 2012, with only 0.7% and 3% increases in legal sales in 2011 and 2012, respectively (Fig. 1). Thus, the 2011 tax reform generated some extra revenue and a higher tax yield per cigarette. This, combined with an increase in the size of the legal cigarette market, points to a possible reduction in the size of the illegal cigarette market.

To complement the controls over domestic cigarette production, KRA launched an electronic cargo tracking system (ECTS) in 2010 to track cigarettes produced for export and cigarettes in transit. Export vehicles are secured by radiofrequency ID (RFID) electronic seals to ensure that items intended for export exit the country and reach the intended destination before excise and VAT taxes are refunded. The system relies on an electronic cargo tracking system complemented by GPS/GPRS technologies (Ngeywo and Kenya Revenue Authority, 2012), which enables sending and receiving data about the location of the vehicle at any time via digital cellular communication (Ngeywo and Kenya Revenue Authority, 2012). Any deviation in excess of 50 m on either side of the cargo route or tampering with the seal generates an alert (Ngeywo and Kenya Revenue Authority, 2012). Once the truck is loaded, information is transmitted to the relevant authority in the importing country, which then sends confirmation to the Kenyan authorities upon receiving the goods (Muthaura, 2013). ECTS reduced the number of checkpoints, the associated staffing needs, insurance costs thanks to improved security (Ngeywo and Kenya Revenue Authority, 2012), and allowed the revenue authorities to screen out companies that claim abnormally high tax refunds on exports (Ngeywo and Ministry of Finance, 2013; Ngeywo, 2012). As a result of implementing ECTS, exports from Kenya to Eritrea, Cote d'Ivoire, Sudan, and Mali (United Nations, 2015) were discontinued, some companies ceased to export cigarettes, and three tobacco factories were closed due to their failure to sell/distribute only duty-paid products (Ngeywo and Kenya Revenue Authority, 2012).

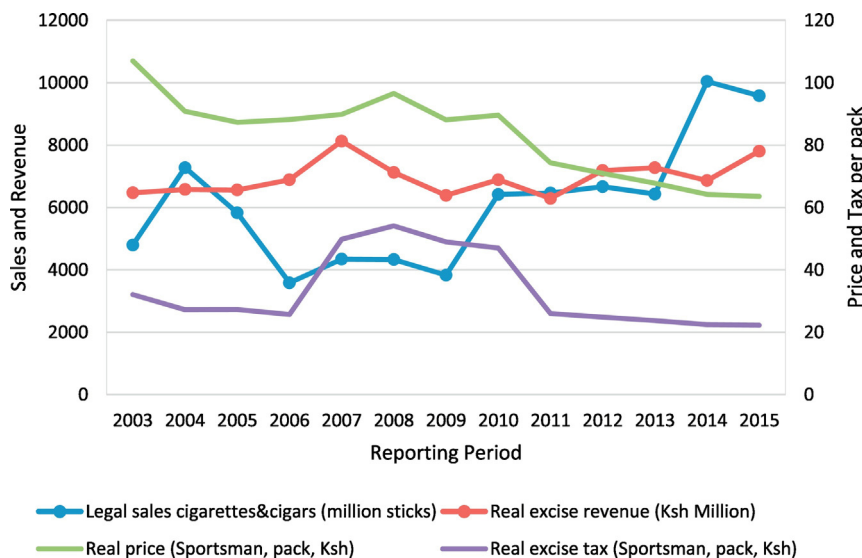


Fig. 1. Cigarettes in Kenya 2003–2015: legal sales, excise revenue, price & tax. Source: Kenya National Bureau of Statistics, Economic Survey 2015 and 2016 (Gazette, 2015).

Download English Version:

<https://daneshyari.com/en/article/8693748>

Download Persian Version:

<https://daneshyari.com/article/8693748>

[Daneshyari.com](https://daneshyari.com)