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# **Tobacco Tax in African Countries**

**WP # 04/2018**

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**Series Editor 2018: Deepa Iyer, Research Director (UK), CDI**  
**Publisher: Cambridge Development Initiative, Cambridge, UK**

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# Tobacco Tax in African Countries

*Camila Franco-Restrepo*

## **ABSTRACT**

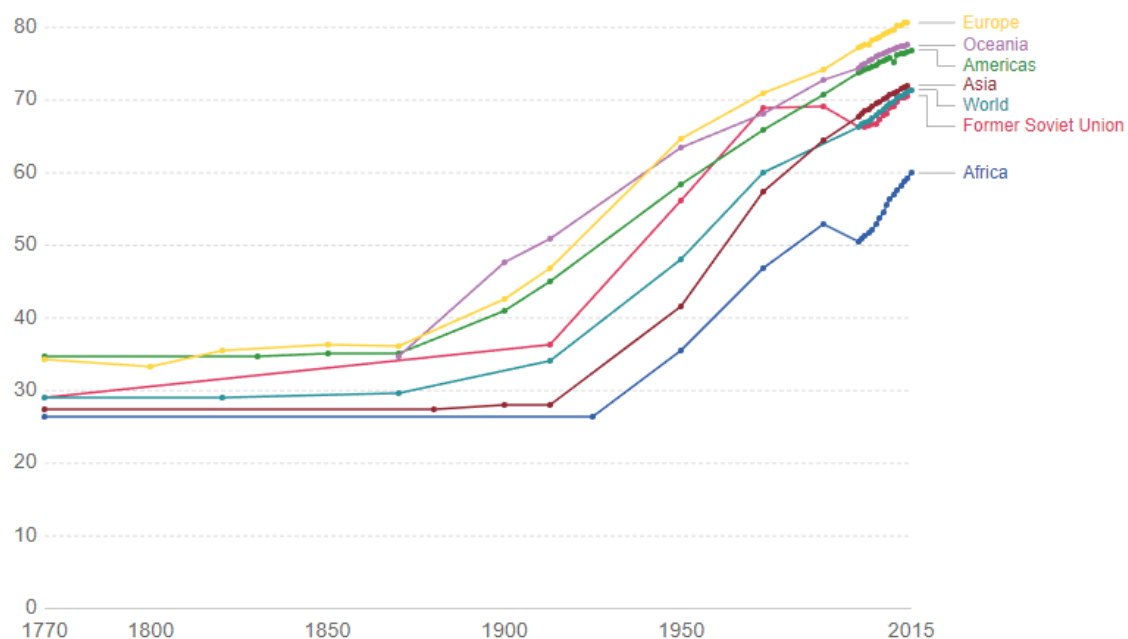
Non-communicable diseases caused by tobacco consumption, are increasingly becoming the leading cause of mortality in low and middle-income countries (LMIC). Tax policies have been encouraged by World Health Organization (WHO) as the most effective method of reducing risk factors associated with tobacco consumption. LMIC in the Americas and Asia have experienced significant improvements in implementing antitobacco policies while Africa presents a comparatively lower compliance level. As these chronic pathologies have a stronger effect on the poorest segment of communities, this paper examines the policy of increasing tobacco taxes in Africa. The paper argues that each country should evaluate what is the best structure for the tax and what institutions should be committed in this policy implementation to avoid collateral effects like the increase of smuggling or the interference of the tobacco industry. Strong systems of information are a necessary condition to the success of the measure. Similarly, raising tobacco taxes should be in the context of a comprehensive anti-tobacco initiative which involves free-smoke environments, bans to marketing and sponsorship, and package warning messages.

**Key words:** Tobacco, Africa, Non-communicable diseases, Information asymmetry

## I. Introduction

Over the last century, the average life expectancy has dramatically increased globally as depicted in Figure 1. Although there is growth in the number of years lived across all the regions, there are also important differences. While Europe shows the highest and most sustained growth, Africa has the lowest absolute values and a significant breaking point in 1990. Other regions where most of the developing countries are located, Asia and the Americas, have experienced a sustained growth to reach significantly improved levels. With this ‘catching up’ in the life expectancy, developing countries face a phenomenon known as the aging of their population. The reasons are many: fewer wars and conflict; an improvement in the social determinants of health such as sanitation, housing, and nutrition; and a systematic improvement in the access to health care and better medical treatments, among others (Cutler, Deaton, & Lleras-Muney, 2006).

**Figure 1. Life expectancy since 1770**



Source: <https://ourworldindata.org/life-expectancy>

Innovation in health and distribution of medical technologies in low-income communities have been crucial in changing their epidemiological and demographic profile. According to Lomborg (2006), the most cost-effective policies to reduce poverty and increase life expectancy are the interventions to reduce under-nutrition, the subsidies for malaria and combination treatment, an expanded immunization coverage, deworming and tuberculosis treatment. These policies have been implemented extensively in most of these developing countries which has reduced mortality rates and the incidence of infectious diseases. Demographically, the shift has been towards aging population, and epidemiologically from environmental factors such as unsafe water and sanitation, to behavioural risks such as malnutrition, tobacco, traffic accidents, and violence.

Because of the slow transition in most of the developing countries from environmental to behavioural risk factors, the priority of policies in public health has been communicable diseases with noncommunicable diseases (NCD) relegated to a second place. Nevertheless, the core of public health measures remains prevention as opposed to cure. Therefore, anticipating the effects of the aging in the population is a task that all health authorities must regard especially for long-term transformation of culture and individual habits.

In this context, cardiovascular diseases and neoplasm gain importance as the causes of death in low and middle-income countries (LMIC). Tax policies have been encouraged by organizations like World Health Organization (WHO) as the most effective method of reducing risk factors like tobacco consumption. LMIC in the Americas and Asia have experienced significant improvements in implementing antitobacco policies while Africa presents a comparatively lower compliance of the Framework convention on tobacco control by WHO. As these chronic pathologies have a stronger effect on the poorest segment of communities, this paper examines the policy of increasing tobacco taxes in Africa. In the first part, a brief description of the demographic and epidemiologic transition in developing countries will be summarized with a special focus on Africa. In the second part, the study will expose the advantages and challenges of tobacco tax as the most effective measure of public policy.

## **II. Epidemiological and Demographic Transition**

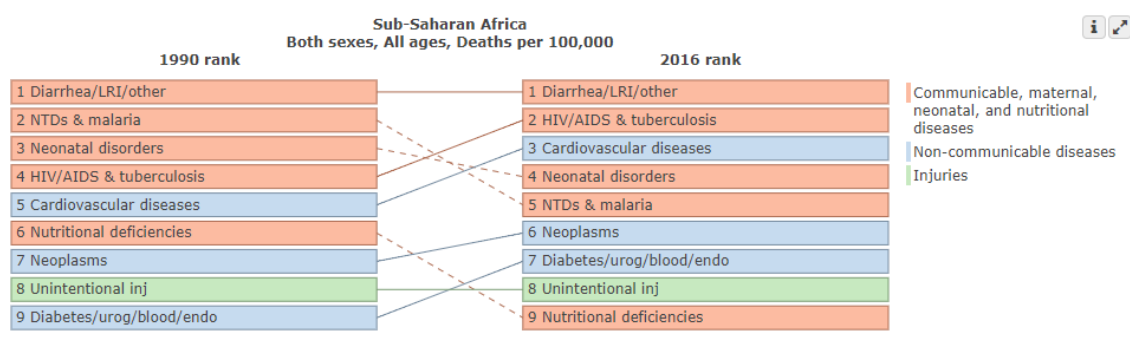
In order to understand the phenomena behind increase in the life expectancy, it is necessary to elaborate two related concepts - demographic transition and epidemiological transition. These frameworks have been used in order to study mortality and morbidity, mainly in western countries, and to a lesser extent, in developing countries where the lower access to information and evidence has not facilitated it (Vallin, 2006). Demographic transition is a concept used to describe the transitions associated with fertility and mortality while the epidemiological transition is more concerned about the patterns of disease occurrence and the causes of death. Although there are important differences between them, both variables are strongly tied in the analysis of the development of human populations.

The epidemiological theories have established some transition regimes in which countries and populations are categorized. However, as Kuate (2014) claims, developing countries, especially the ones located in Sub Saharan Africa, have not been easily categorized in either group. The main reason is the lack of reliable information about the milestones in their epidemiological and demographic evolution (Kuate, 2014).

Over the last decades, countries in Sub-Saharan Africa have experienced social and political changes that mark a difference in their demographic transition when compared to other regions globally. The high prevalence and incidence of HIV/AIDS is one of the differentiating characteristics as Africa accounted for about 70 per cent of the new HIV infections in the world since the 1990s. Over the last decade, the severity of the problem has reduced thanks to the expanded use of antiretroviral therapies (ART). Similarly, in terms of other communicable diseases, vaccine rates have 50-90 per cent of coverage in Africa, that has accounted for the increase in the life expectancy and the decrease of the infant mortality as well as influencing other key indicators.

Because of the low prevalence of communicable diseases, Kuate (2014) remarks that in the epidemiological horizon, chronic diseases, accidents, and mental illness would be the health priority in most of the African countries in the coming decades. In non-western countries, communicable diseases have dropped from being responsible for 42.1 per cent of all deaths in 1970 to 19.4 per cent in 2015 while neoplasm (cancer) and circulatory disorders increased from 21.6 per cent to 48.9 per cent in during the same period (Kuate, 2014). According to the Global Action Plan for the prevention and control of NCD, the global burden for these diseases will increase in the world in Africa by 27 per cent (World Health Organization, 2013). In the case of Sub-Saharan Africa, Figure 2 is illustrative. The noncommunicable diseases have a larger share of the total of deaths where as cardiovascular diseases, neoplasm and diabetes, have low absolute values, but higher relative shares as causes of mortality, compared to 26 years ago.

**Figure 2. Causes of Mortality in Sub-Saharan Africa**



Source: The Institute for Health Metrics and Evaluation (IHME) available at <https://vizhub.healthdata.org/gbd-compare/>

### III. Tobacco Tax in Africa

Having seen the extent to which NCDs are becoming more important in the developing world, WHO has called the attention of LMICs to accelerate the pace of implementing preventive policies for noncommunicable diseases as they impose a double burden for the poorest. On one hand, the burden of having a chronic disease has direct effect on the individual's welfare, but on the other, chronic diseases have negative impact on the likelihood of tackling poverty. One example is the regressive effects of obesity on low-income workers as concluded by a systematic review by Goettler, Grosse and Sonntag (2017). The study finds that obesity is linked to a decrease in productivity as a consequence of absenteeism at work. Absenteeism reduces the likelihood of remaining in employment in addition to being eventually hired since the direct and indirect costs are higher for employers (Goettler, Grosse, & Sonntag, 2017).

Additionally, to talk about the prevention of NCD is vital in developing countries in terms of health infrastructure. Health infrastructure is precarious in most of the LMIC and sustained financial mechanisms that help the poorest segment to access expensive treatments are absent. As a result, the likelihood of getting treated for an NCD is significantly lower in the global south than in a developed country. (World Health Organization, 2017)

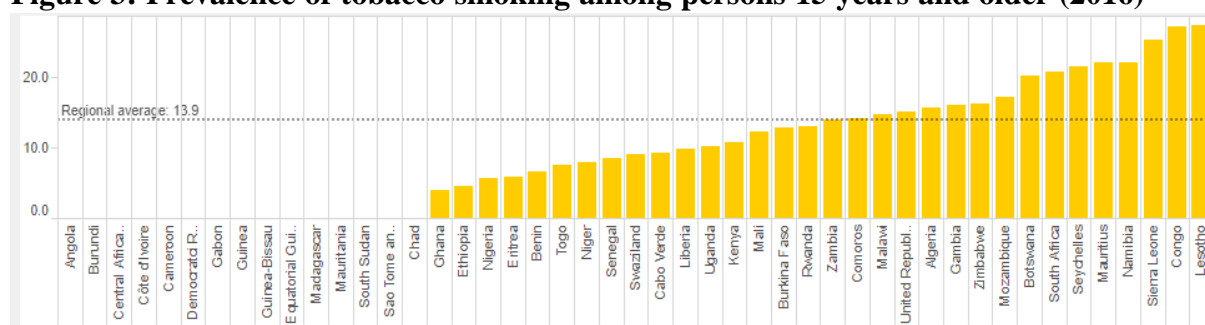
In this context, the prevention through the change of behaviour becomes an important policy perspective. A general agreement among health professionals is that tobacco use, lack of physical activity, abuse of alcohol, and poor diet are the most common risk factors for NCDs. To modify these risk factors, there are some established procedures which have been successful in developed countries. The WHO has been recommending the implementation of some ‘best buy’ interventions such as higher taxes to tobacco, alcohol, and sugar-sweetened beverages (SSB); restrictions on exposure to risk factor advertising; reduced salt intake and more physical activity among other measures (World Health Organization, 2013).

One of the strongest and most successful policies of public health is given under the Framework Convention on Tobacco Control (FCTC). This framework encourages the governments to implement six strategies summarized in the acronym MPOWER. To Monitor, to Protect people from tobacco smoke, to Offer help to quit tobacco use, to Warn about dangers, to Enforce bans on advertising, promotion and sponsorship, and to Raise taxes are the components of MPOWER.

This study is an attempt to focus on the last measure ‘Raise taxes’ as a viable method of preventing NCDs. Despite the fact that it is the most cost-effective measure preventing throat, mouth, lung cancer, coronary heart disease and stroke, and chronic obstructive pulmonary disease (COPD); this is the least embraced policy by the member states of WHO (World Health Organization, 2017).

‘Sin tax’ matters even if countries have varying prevalence rates of tobacco use. For example, while there are countries like Panamá with a prevalence of tobacco use of 6 per cent, it is possible to find countries like Indonesia where the prevalence is 39.5 per cent. The landscape of Africa is quite varied as well. From the 54 countries, about 18 countries do not report prevalence of tobacco while there are 8 countries whose prevalence are closer or higher than the world average (21.9%): Botswana (20.1%), South Africa (20.7%), Seychelles (21.4%), Mauritania (22.0%), Namibia (22.0%), Sierra Leone (25.1%), Congo (27.0%) and Lesotho (27.2%). Other important cases are Malawi (14.6%), Tanzania (15.0%), Algeria (15.6%), Gambia (16%), Zimbabwe (16.2%), and Mozambique (17%) which have a higher prevalence than the regional average.

**Figure 3: Prevalence of tobacco smoking among persons 15 years and older (2016)**



Source: World Health Organization available at <http://apps.who.int/gho/data/node.sdg.3-a-viz?lang=en>

In addition to the prevalence rates of use, prices of cigarettes in the region are not high and do not tend to increase as expected. Since 2008, cigarettes are less affordable in countries like Gambia, Madagascar, Mozambique, and Zimbabwe, while in Cape Verde, Cameroon, Cote d'Ivoire, Democratic Republic of Congo, Kenya, Mali, Rwanda, Nigeria Swaziland, and Tanzania, they are less expensive. This is result of not having significant taxes. Although the recommendation of the WHO is an excise tax of at least 70 per cent of the consumer price, only three African countries follow such policies (Madagascar, Seychelles, and Mauritius). Similarly, less than 20 per cent of the countries present a high level of compliance in advertising and marketing bans, and most of the countries do not have a policy of smoke-free environments (World Health Organization, 2017).

Nevertheless, there are some countries like the Gambia that exemplify a better compliance of the tobacco initiative, particularly by improving the tax structure. Before 2013, the Gambia had one of the lowest cigarette prices in the region because of a low tariff. In 2013, the base of the tax shifted from the weight of cigarettes to the number of sticks. Furthermore in 2016, the tax was increased aiming to reach the regional average price. Under these conditions, it was estimated that the tax share is around 63 per cent of the retail price which is closer to the WHO recommendation. Narguis *et al* (2018) concludes that the tax increase in 2014 in Gambia brought several outcomes such as decrease in the import volume of cigarettes and increase of revenue from excise tax collection that raised GMD 30.35 million (Narguis, y otros, 2018)

Therefore, countries that embrace the tax could expect two positive outcomes: the number of deaths averted for the chronic diseases and fiscal revenues. The health impact is higher in the poorest countries as the relative affordability of the cigarettes is higher for this segment (the elasticity of price-quantity is higher). For example, some studies calculate that 41 countries that adopted the MPOWER measures between 2007 and 2010 could expect a reduction of 14.8 smokers and 7.4 premature deaths (Levy, Ellis, Mays, & Huang, 2013) .

#### **IV. Challenges of Information Asymmetry**

In terms of the best practices, there are some general recommendations made by the WHO. Tobacco tax should be a 'specific excise' of at least 70 per cent of the retail price of cigarette. Second, the taxation should be simple and cover all tobacco products to discourage substitution for other products equally harmful. Perhaps, the most important recommendation is to accompany the tax with legal and effective enforcement, especially, to reduce the risk of smuggling. This last point is crucial in the African context where fiscal systems are still developing, and smuggling is a potential risk that reduces the impact of the measure.

The point about smuggling and illegal traffic must be considered independently by local authorities. At this point, it is worth observing the political economy of tobacco taxes. The low prevalence of tobacco use in Africa and the strong policies in the rest of the world leave this region as one of the new niches for tobacco industry (Husain, McLeod, & Ramandraibe, 2016). The interference of the industry in the process of decision and implementation of prevention measure is stronger in developing countries, especially because of economic 'benefits' that tobacco industry allegedly brings to vulnerable countries. There are examples of a strong presence of industry lobbyists in the congress



promoting the argument that higher taxes imply higher levels of smuggling (Garcia, Villar, & Iunes, 2017).

The best tool that countries have for fighting the industry's arguments and to improve the implementation of tobacco taxes is to strengthen the information systems. Precarious information system negatively affects tax implementation in significant ways. This might be the main challenge that African countries have on the horizon (Kuate, 2014). Without epidemiological information is impossible to detect the speed with which chronic diseases become more relevant. Also, it is harder to account for the impact of these measures on the number of deaths averted and years of 'good' life gained. Information is also necessary to track the fiscal revenues and the changes in the volume of cigarettes and tobacco derivatives to adjust policies.

## **V. Conclusion**

The demographic and epidemiological profile of developing countries is demanding a strategic preventive action from governments. Every day in the developing world, fewer people are dying of infectious diseases and more people of chronic diseases. Although in Africa this transition has been significantly slower, the trend is the same as the rest of the world. The population is aging and noncommunicable diseases are now in the epidemiological horizon. These diseases are influenced by behaviour, then the main public policy measures involve changing habits. Historically, the most cost-effective strategy has been to increase the price of cigarettes significantly and tobacco derivatives through a higher tax, thereby aiming to reduce its affordability.

Although there are some general recommendations by WHO, each country should evaluate what is the best structure for the tax and what institutions should be committed in this policy implementation. This is important in avoiding collateral effects like the increase of smuggling or the interference of the tobacco industry. Strong systems of information are a necessary condition to the success of the measure. Similarly, raising tobacco taxes should be in the context of a comprehensive anti-tobacco initiative which involves free-smoke environments, bans to marketing and sponsorship, and package warning messages.

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**Citation:** Franco-Restrepo, C. (2018). Tobacco Tax in African Countries. CDI Working Paper Series WP 04/2018, Cambridge: Cambridge Development Initiative.

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