TOBACCO CONTROL
AS AN ACCELERATOR FOR THE
SUSTAINABLE DEVELOPMENT GOALS

SIERRA LEONE
KEY MESSAGES

Tobacco impedes the 2030 Agenda for Sustainable Development and Sierra Leone’s Medium-Term National Development Plan 2019-2023, including priorities on human capital, growth, governance, financing and leaving no one behind.

Each year tobacco use kills 3,300 Sierra Leoneans, causes widespread illness and disability, and costs the national health system SLL 108 billion, undermining universal health coverage. Tobacco use is associated with increased severity of disease and death in hospitalized COVID-19 patients.

Over a quarter of tobacco-related deaths in Sierra Leone are in the poorest fifth of the population. Out-of-pocket healthcare expenditures on tobacco-attributable diseases were SLL 45 billion in 2017, impacting poverty and inequalities. Sierra Leonean 13- to 15-year-olds use tobacco at alarming rates and youth are being targeted by the tobacco industry, including near schools.

Tobacco use costs Sierra Leone’s economy SLL 404 billion each year, or 1.5 percent of its 2017 GDP. These enormous avoidable losses are from premature death, disease and disability from tobacco use which are sapping workforce productivity and the Government budget.

Tobacco production and the littering of cigarette butts together damage arable land, waterways, beaches and air, threatening Sierra Leone’s food security, drinking water, tourism and climate. In the country 841 tonnes of cigarette butts and packaging waste end up as toxic rubbish each year.

Implementing the WHO Framework Convention on Tobacco Control WHO FCTC can mitigate the harms of tobacco and advance the SDGs in Sierra Leone. However, Sierra Leone has the lowest treaty implementation rate in all of Africa, despite becoming a Party over a decade ago.
KEY MESSAGES

The FCTC 2030 project is an opportunity for Sierra Leone to partner with the Secretariat of the WHO FCTC, UNDP and WHO to build on recent progress and strengthen treaty implementation in line with Agenda 2030 and national priorities. The Ministry of Health and Sanitation is committed but effective tobacco control requires whole-of-government and whole-of-society support.

To assist in these collaborative efforts, this brief details how tobacco control intersects with each of the 17 SDGs and their corresponding sectors. Specifically for the Sierra Leonean context, it provides key facts as well as recommendations to deliver shared gains across sectors and actors.

Sierra Leone should consider these recommendations as it strengthen its tobacco control and broader development efforts. An active national multisectoral committee on tobacco control and a strong multisectoral tobacco control plan can help set priorities, responsibilities and resources.

Immediate priorities for Sierra Leone to protect its population are to urgently pass strong and comprehensive tobacco control legislation, increase tobacco taxes, and implement the Tobacco Control Investment Case recommendations for Sierra Leone in full.

_Strengthening WHO FCTC implementation is a specific target (3.a) under Sustainable Development Goal 3 on health and well-being for all. Its implementation in Sierra Leone would help save the lives of the 3,330 Sierra Leoneans lost to tobacco-related diseases each year, mostly from cancers, diabetes, heart disease and other non-communicable diseases (NCDs)._
1. BACKGROUND AND CONTEXT

The 2030 Agenda for Sustainable Development and the pledge to leave no one behind are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. Both Agenda 2030 and Sierra Leone’s Medium-Term National Development Plan 2019-2023 are comprehensive and ambitious, requiring integrated or “accelerator” approaches that can advance multiple objectives simultaneously. The WHO Framework on Convention on Tobacco Control (WHO FCTC), the international and legally binding treaty to which Sierra Leone became a Party in 2009, is one such approach.

Strengthening WHO FCTC implementation is a specific target (3.a) under Sustainable Development Goal 3 on health and well-being for all. Its implementation in Sierra Leone would help save the lives of the 3,330 Sierra Leoneans lost to tobacco-related diseases each year, mostly from cancers, diabetes, heart disease and other non-communicable diseases (NCDs). It would also mitigate HIV and tuberculosis (TB) burdens, strengthen maternal and child health, and advance universal health coverage. Emerging global evidence indicates the potential of WHO FCTC implementation to address COVID-19 (Box 1).

Box 1. COVID-19 and tobacco use – rapid scoping review

People living with pre-existing NCDs, including those caused by tobacco use, are more vulnerable to becoming severely ill with COVID-19 [1]. According to the WHO, smokers have up to a 50 per cent higher risk of developing severe disease and death from COVID-19 [2]. Although likely related to severity [3]–[5], there is currently no evidence to quantify the risk to smokers of infection by SARS-CoV-2 or of hospitalization with COVID-19 in the peer-reviewed literature [10]. More generally, tobacco smoking is detrimental to the respiratory immune system, and leads to increased vulnerability to respiratory infectious diseases including Middle East respiratory syndrome [7]–[9]. Well-designed population-based studies are, however, necessary to address questions about hospitalization, COVID-19 severity and the risk of infection by SARS-CoV-2 among smokers [10].

2 This box is based on the WHO, UNDP and UN NCD Task Force brief, Responding to non-communicable diseases during and beyond the COVID-19 pandemic. Available at: https://www.who.int/publications/i/item/WHO-2019-nCoV-Non-communicable-diseases-Policy_brief-2020
3 SARS-CoV-2 refers to the novel coronavirus, COVID-19 refers to SARS-CoV-2-associated disease.
The WHO FCTC is not just a primary means to improve health and well-being; it is a major tool to advance broader sustainable development. In 2017, UNDP and the Secretariat of the WHO FCTC used an SDG interaction modelling framework published in *Nature* to map how WHO FCTC implementation interacts with the SDG targets. Through desk review of empirical literature and consultation with technical experts, linkages were documented. The study found that WHO FCTC implementation interacts positively with 67 targets (35 enabling, 30 reinforcing and two indivisible), neutrally with 99 targets (99 consistent), and negatively with only three targets (three constraining).\(^4\)

**Figure 1. WHO FCTC interaction scores (averages) for all 17 goals**\(^5\)

This brief undertakes a similar analysis specifically for Sierra Leone, building on the findings of the Tobacco Control Investment Case for the country conducted in 2019 (Box 2) to consider how tobacco control can advance Sierra Leone’s social, economic and environmental goals in line with its Medium-Term National Development Plan 2019-2023 and Agenda 2030.

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4 In the model, negative, neutral and positive interactions are assigned numerical scores based on a seven-point ordinal scale (ranging from -3 to 3 and including zero) to capture the relationship, including magnitude and direction, of interaction. For example, a score of 3 denotes that two targets are inextricable such that achievement of one itself leads to achievement of the other (‘indivisible’), whereas a score of -3 represents targets for which progress on one renders it impossible to achieve the other (‘cancelling’). Meanwhile, a score of 0 depicts targets that are ‘consistent’, meaning that one objective does not significantly interact with the other.

5 The average interaction scores were calculated to produce a high-level sense of WHO FCTC-SDG interactions; they are not meant to be prescriptive in terms of where to devote efforts.
Box 2. Key findings from the Tobacco Control Investment Case for Sierra Leone

- Over 3,300 lives are lost annually due to tobacco-related diseases with over a quarter in the poorest fifth of the population, of these deaths nearly 70 percent are premature and over 900 result from exposure to secondhand smoke (between the ages of 30 to 70).

- Tobacco use costs Sierra Leone SLL 404 billion each year, 1.5 percent of its 2017 GDP. This includes SL 108.4 billion in healthcare expenditures and SLL 295.5 billion in lost productivity from premature mortality, disability and workplace smoking breaks.

- Investing in six proven WHO FCTC interventions can save nearly 20,000 lives and avert SLL 1.9 trillion in economic losses by 2033. For every one SLL invested in tobacco control, Sierra Leone would receive SLL 26 in economic returns.

The brief provides narratives and key facts on how tobacco impedes sustainable development in Sierra Leone. It also offers recommendations for what many ‘non-health sectors’ can do in response, in collaboration with the Ministry of Health and Sanitation, each other, parliamentarians, the UN system, civil society and other partners. Tobacco taxation (WHO FCTC Article 6) is an example. It generates government revenue for development financing in addition to improving health equity and reducing burdens on health systems and economies. The Tobacco Control Investment Case for Sierra Leone demonstrated that improved tobacco taxation would deliver SLL 107 in economic returns for every SLL 1 invested.

Box 3. Tobacco control in the Addis Ababa Action Agenda

Paragraph 32: “...We recognize, in particular, that, as part of a comprehensive strategy of prevention and control, price and tax measures on tobacco can be an effective and important means to reduce tobacco consumption and health-care costs and represent a revenue stream for financing for development in many countries.”

Though implementing the WHO FCTC is a powerful means for Sierra Leone to improve present and future conditions, implementation in the country remains low.

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6 Increase tobacco taxation to reduce the affordability of tobacco products (WHO FCTC Article 6); Enforce bans on smoking in all public places to protect people from tobacco smoke (WHO FCTC Article 8); Mandate that tobacco products carry health warnings that cover 50 percent of the packaging, and regularly rotate warning labels to maintain the warning’s salience (WHO FCTC Article 11); Implement plain packaging of tobacco products (WHO FCTC Article 11: Guidelines for implementation); Increase the frequency and coverage of mass media campaigns (WHO FCTC Article 12); and Implement and enforce a comprehensive ban on all forms of tobacco advertising, promotion and sponsorship (WHO FCTC Article 13).

7 Because poorer populations and youth are most sensitive to price changes in tobacco products, and thus most likely to reduce consumption, quit or never start in response to them, tobacco taxes improve equity and protect vulnerable populations.
Of major concern are alarming rates of tobacco use among Sierra Leone’s youth – 20 percent of boys and 24 percent of girls aged 13-15 use tobacco – and tobacco industry advertising to children, including near schools.

In light of these challenges, Sierra Leone applied to and was selected for the FCTC 2030 project and is one of 24 countries worldwide receiving intensive support from the Secretariat of the WHO FCTC, UNDP and WHO to accelerate treaty implementation to advance the SDGs. Tobacco control has broad governmental support including from the Ministry of Trade and Industry and the Ministry of Finance. Sierra Leone has also demonstrated recent concrete progress:

- It has recently revisited its draft tobacco control law and aligned it to the WHO FCTC.
- The Investment Case has reinvigorated the national multisectoral committee on tobacco control.
- It has recently raised excise taxes on cigarettes (though there remains significant room for further increases and to extend to all tobacco products).

Sierra Leone should use this brief to build on this progress and advance treaty implementation urgently. Priorities are to pass strong and comprehensive tobacco control legislation, increase tobacco taxes (including a robust strategy to combat illicit trade), and implement the Tobacco Control Investment Case recommendations for Sierra Leone in full. The national tobacco control coordination mechanism and tobacco control strategy can help set additional priorities, responsibilities and resources in line with the recommendations set forth.
2. IDENTIFYING LINKS ACROSS THE SUSTAINABLE DEVELOPMENT GOALS

Accelerating progress on SDG target 3.a demands integrated tobacco control efforts that consider interactions with other sustainable development goals and targets to deliver mutual benefits. For this, ‘non-health’ sectors of government must be provided evidence on the relevance of tobacco control not just to health, but to their own sector-specific accountabilities as well as overarching national priorities. For Sierra Leone, a summary of relevant WHO FCTC interactions across the 2030 Agenda is presented in Table 1 (positive WHO FCTC interactions with the SDGs — summary narrative, key facts and recommendations).8

The purpose of this table and analysis is to provide insights for national SDG planning and policies, and for strengthening partnerships across sectors where there are mutually beneficial gains to be had. The table is also useful for Sierra Leone to consider as it prepares for, responds to and mitigates the impacts of COVID-19, given interactions between tobacco use and the pandemic.


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GOAL 1:
END POVERTY IN ALL ITS FORMS EVERYWHERE.

Tobacco control can help accelerate poverty alleviation efforts.

This is because tobacco use results in premature death and disability, with breadwinners exiting the labour market in the prime of their lives, and caregivers — often women and girls — denied the opportunity to stay in school or productive employment. Treating diseases associated with tobacco use can result in catastrophic out-of-pocket medical expenditures especially for the poor, trapping families in a ‘vicious cycle’ of poverty and poor health. In every region of the world the poor who are most likely to use tobacco, have reduced access to critical prevention and treatment services, and endure lower levels of access to education and other health communications opportunities. Meanwhile, spending on tobacco can divert a significant percentage of household resources from food, education, and other investments that can lift people out of poverty. Pro-poor tobacco control policies can confront the debilitating tobacco-poverty dynamic, especially when combined with adequate social protection and universal health coverage, including access to tobacco cessation support.
KEY FACTS

- Over a quarter of the 3,300 lives lost in Sierra Leone each year due to tobacco-related diseases are among the poorest fifth of the population [12].

- Adult male and female smoking is more prevalent in the poorest fifth of the population (27 percent and 23 percent, respectively) compared to the wealthiest fifth (7 percent and 12 percent, respectively) [12].

- Sierra Leone citizens spend SLL 45 billion annually to treat tobacco-related disease; the tobacco control measures in the Investment Case would save citizens SLL 209 billion over 15 years.

- Tobacco production in Sierra Leone has decreased significantly since the 1990s [14]. Tobacco growing frequently entails debt-bonded labour and farmers are often exploited, trapping them in poverty.

- Money spent on tobacco, alcohol and narcotics represented on average 10.2 percent of household budget in Sierra Leone [11]. This is money not spent on resources that can improve health and well-being, food security, education and other areas to lift people out of poverty.

RECOMMENDATIONS

- Ensure population-wide tobacco control strategies reach the poor and that the poor have affordable access to health services including tobacco cessation support.

- Examine and promote the socio-economic and equity dimensions of tobacco control, including tobacco taxation, building on the Tobacco Control Investment Case.

- Ensure tobacco control measures are incorporated as part of national poverty reduction and development strategies.

- Ensure graphic warnings and other measures on packaging and labelling of tobacco products are clear to those with lower literacy, in line with WHO FCTC Article 11.

- Prevent any resurgence in tobacco farming. Where tobacco farming remains, fund programs to support shift to alternative livelihoods in line with WHO FCTC Articles 17 and 18.
GOAL 2:
END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE.

TOBACCO CONTROL HELPS TACKLE THE PROBLEM OF HUNGER. HOUSEHOLD EXPENDITURE ON TOBACCO PRODUCTS, AND OUT-OF-POCKET MEDICAL COSTS FOR TOBACCO-RELATED ILL-HEALTH, IS MONEY NOT INVESTED IN FOOD AND NUTRITION.

Current smokers are more likely to be food-insecure than non-smokers, including in wealthier countries [22], [43]. Moreover, tobacco cultivation eats up large swaths of land which could otherwise support sustainable food production systems. About 90 percent of commercial tobacco leaf is grown in the Global South, often in countries where undernourishment and child labour continue to pose challenges [41]. Shifting from tobacco cultivation to land use that provides nutrient-dense calories is a significant opportunity, one which can be achieved through the WHO FCTC’s emphasis on supporting tobacco farmers to engage in economically viable alternatives.
KEY FACTS

• In 2018, around 3 million Sierra Leoneans were food-insecure, representing nearly half (43.7 percent) of the population. Spending on tobacco products increases this insecurity [13].

• For the cost of a single packet of Marlboro cigarettes, Sierra Leoneans could purchase four kilograms of rice or eight kilograms of cassava [13].

• Tobacco farming threatens food and nutrition security as well sustainable agriculture and livelihoods. Tobacco production in Sierra Leone has decreased significantly since the 1990s [14]. In 2014 there were fewer than 1,000 metric tonnes of tobacco produced in Sierra Leone with less than 0.01 percent of agricultural land devoted to tobacco cultivation [15]. While tobacco farming is currently low, any resurgence must be prevented.

RECOMMENDATIONS

• Examine and promote the impact of tobacco control on increasing household income available to be spent on food, for example, implementing a ban on single cigarette stick sales to reduce affordability.

• Integrate tobacco control into strategies to ensure affordable access to nutritious foods, such as reallocating farming land used for tobacco to healthy foods and offering subsidies to farmers to produce health-promoting foods such as fruits and vegetables.

• Do not provide incentives to grow tobacco, such as subsidies, protect against tobacco industry interference in policymaking and take other steps to prevent any resurgence in tobacco farming. Where tobacco farming remains, fund programs to support shift to alternative livelihoods (including farming food commodities) in line with WHO FCTC Articles 17 and 18.

• Offer vocational training for youth in farming families on alternatives to tobacco farming.

• Recognize the potential of tobacco tax revenue to fund school meals and cash transfer programmes.
GOAL 3:
ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES.

ACCELERATED IMPLEMENTATION OF THE WHO FCTC IS ESSENTIAL FOR VIRTUALLY ALL SDG 3 TARGETS, WHICH IS WHY IT IS A “MEANS OF IMPLEMENTATION” UNDER THE HEALTH GOAL.

Tobacco use causes premature death, disease and disability from NCDs. It increases the risk of tuberculosis (TB) infection and worse outcomes for TB and HIV by weakening patients’ immunity. Smoking during pregnancy is associated with stillbirth, lower birth weights, and sudden infant death syndrome (SIDS), and smoking and harmful use of alcohol tend to cluster in individuals. Environmental pollutants from tobacco manufacturing and air pollution from smoking cause adverse health outcomes. Tobacco control can reduce these impacts while providing revenue for universal health coverage through taxation. Efforts to integrate responses to tobacco and other health targets, within and outside the health sector, would help Sierra Leone advance national tobacco control and broader SDG efforts.
KEY FACTS

- Sierra Leone became a Party to the WHO FCTC in 2009 but implementation has not adequately progressed [17] and implementation remains low [29].

- Tobacco kills more than 3,300 Sierra Leoneans annually, 68 percent of deaths premature [12]. In 2017, tobacco use accounted for 12 percent of premature deaths (aged between 30-70 years old) from NCDs [12] which account for 33 percent of all deaths in Sierra Leone [18].

- Sierra Leone has the highest adult male tobacco use prevalence in Sub-Saharan Africa [19]. Forty-three percent of men and 11 percent of women use tobacco in Sierra Leone [20].

- Seventy-four percent of Sierra Leoneans, most non-smokers, are exposed to secondhand smoke in the home and 69 percent in the workplace [21]. Secondhand smoke exposure causes 900 deaths in Sierra Leone annually [12].

- In 2017, Sierra Leoneans spent SLL 45 billion in out-of-pocket (OOP) healthcare expenditures on tobacco-attributable illnesses [12].

- On 31 May 2018 during World No Tobacco Day in Sierra Leone, the Ministry of Health and Sanitation coordinated a symposium and health fair at the National Stadium in Freetown. The event highlighted the health impacts of tobacco use [23].

- Tuberculosis is the third leading source of tobacco-attributable deaths in Sierra Leone [12]. Tobacco contributes to TB [24], and HIV burdens [28], maternal and child health challenges [25], and smoking is associated with increased severity of disease and death in hospitalized COVID-19 patients [26].

- Accelerating healthcare delivery, a key aim of Sierra Leone’s Medium-Term National Development Plan 2019-2023 [27], can be advanced through tobacco taxation.

RECOMMENDATIONS

- Drive national efforts to fully implement the WHO FCTC, prioritizing Tobacco Control Investment Case recommendations to adopt, implement and enforce a comprehensive tobacco control law; strengthen multisectoral engagement in tobacco control; and increase tobacco taxes comprehensively (with a robust strategy to combat illicit trade).

- Ensure health sector strategies, both broad and issue-specific, integrate tobacco control where appropriate; ensure tobacco control strategies integrate other health issues in turn.

- Engage community leaders to spread awareness on the harmful effects of tobacco.

- Increase access to and use emerging technologies, such as mobile apps and social media, to raise awareness of the dangers of tobacco and provide support for never starting, reducing use and/or quitting, with an emphasis on reaching youth.

- Design other support programmes for smoking cessation among vulnerable populations including the poor, youth and street children (in line with WHO FCTC Article 14).

- Articulate the power of tobacco taxes for development financing and advocate use of revenue for tobacco control and universal health coverage.
GOAL 4: ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL.

A QUALITY EDUCATION INCLUDES ACCESSIBLE MESSAGES ON HOW CHILDREN CAN LEAD HEALTHY, PRODUCTIVE LIVES, AND SHOULD PROVIDE A SAFE ENVIRONMENT FREE FROM RISKS SUCH AS SECONDHAND SMOKE AND TOBACCO ADVERTISING.

Supporting schools to create tobacco-free environments can help protect children (and teachers), shift social norms, and enhance education. Tobacco control also helps keep children in school: (1) when families are healthier, children are not forced to drop out of school to take care of a sick relative or to find work to make up for lost wages; (2) household spending on tobacco products, and expenditures in response to tobacco-related ill-health, is money not used to support children’s education; and (3) for tobacco-growing families, children are often kept from school to work. Adding to the list of interactions is the fact that adolescent smoking (on the rise in many countries) is associated with attention deficits and increased risk of cognitive impairment later in life [37]. University students who use tobacco may have lower academic scores than those who do not use tobacco. Teachers’ smoking is a strong influencing factor for smoking by students [38]. By making teachers and parents sick, tobacco can take away important educational resources for children.
KEY FACTS

- In Sierra Leone 19 percent of male students and 12 percent of female students have tried smoking cigarettes [30].
- There are no bans on smoking in schools, education facilities or universities in Sierra Leone [29].
- Forty-five percent of young people aged 13-15 do not believe secondhand smoke is harmful [30].
- The tobacco industry targets children and youth in Sierra Leone with advertising and promotions, often close to schools [31].
- Fifty-seven percent of students report exposure to secondhand smoke outside their homes [30].
- In Sierra Leone, 42.4 percent of men with no education smoke cigarettes, compared to 30.5 percent with primary school education and 12.1 percent with a secondary education or higher. Among women, these numbers are 6 percent, 4.3 percent and 1.7 percent respectively [32].

RECOMMENDATIONS

- Urgently protect children from tobacco and engage youth in tobacco control including as messengers to families and communities (WHO FCTC Article 12).
- Implement legislation to require smoke-free educational facilities and ensure enforcement (WHO FCTC Article 8)
- Support and train teachers to promote non-smoking and tobacco control literacy among students and families (WHO FCTC Article 12).
- Develop tobacco prevention and support programmes for both students and teachers such as tobacco cessation support and ensure out-of-school children are also reached.
GOAL 5:
ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS.

TOBACCO CONTROL MEASURES THAT ADDRESS GENDER-SPECIFIC RISKS – AS REQUIRED UNDER ARTICLE 4.2(D) – CAN ADVANCE GENDER EQUALITY.

While in most LMICs men consume tobacco products at higher rates than women, tobacco use is rising rapidly among women and girls, largely as a result of targeted tobacco industry campaigns that associate smoking with female empowerment and gender equality. Women are not only exposed to sex-specific health risks from tobacco, including related to tobacco use during pregnancy, but also bear a disproportionate burden of secondhand smoke exposures. Power inequities in the home and workplace, as well as low levels of empowerment, are impediments to changing this dynamic. Women and girls are also disproportionately caregivers for sick relatives, interrupting their educational and work opportunities. Meanwhile, even as women account for over half of all deaths from NCDs globally, NCDs are still often misconstrued as being of greater importance for men, leading to critical delays in diagnosis and treatment for women. Strengthened tobacco control can help close gaps in gender-related policy, programmes and research, while countering the tobacco industry’s self-serving appropriation of female empowerment and masculinity [39].
KEY FACTS

- Smokeless tobacco use is much higher (over four times) amongst women in Sierra Leone than men (12.1 percent of women aged 15-49, 2.9 percent of men aged 15-59). However cigarette smoking is much lower amongst women than men. Over 4 percent of women aged 15-49 smoke compared to 28 percent of men aged 15-59 [29].

- Sierra Leonean girls aged 13-15 use tobacco at higher rates than same-aged boys (24 percent of girls versus 20 percent of boys) [30].

- Smoking during pregnancy in Sierra Leone (5 percent) is more than double the prevalence in other countries in West Africa [25].

- Sierra Leone has the highest adult male tobacco use prevalence in Sub-Saharan Africa [19].

RECOMMENDATIONS

- Engage men, boys, women and girls of different ages and backgrounds in tobacco control research and programming.

- Identify gender-specific tobacco risks, such as smoking for men and chewing for women, and develop gender-specific strategies for more effective prevention and cessation.

- Incorporate tobacco control in gender equality strategies and as part of maternal, child and women’s health responses.

- Support community-based health education programmes at district level, engaging traditional healers, midwives and other influencers.

- Develop and implement awareness and advocacy programmes for families to create the culture of smoke-free homes.
GOAL 6: ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL.

TOBACCO CONTROL SUPPORTS CLEAN WATER AND SANITATION BECAUSE CIGARETTE BUTTS ARE THE MOST WIDELY LITTERED PRODUCT GLOBALLY, OFTEN DUMPED INTO OUR PLANET’S OCEANS, LAKES AND OTHER WATER SOURCES.

Meanwhile, tobacco production is not only water-intensive but also disperses chemicals into nearby waterways [60], [61]. Without considering the “environmental life cycle of tobacco” and its impacts on pollution, hazardous waste disposal, and inefficient water use, efforts to achieve clean water and sanitation will be both less comprehensive and less effective [see 46].
KEY FACTS

- Tobacco waste contains over 7,000 toxic chemicals that pollute waterways in addition to air and land [33] – about half of Sierra Leoneans have no access to basic clean drinking water [34] and 84 percent do not have adequate sanitation [35].

RECOMMENDATIONS

- Ensure that environmental strategies and standards pay attention to tobacco pollutants and prohibit the littering of tobacco butts and packets around drinking water, lakes and oceans.

- Implement strategies to prevent and reduce the littering of cigarette butts in oceans, lakes and other water sources such as the use of disposal bins.

- Invest in innovative ways to recycle cigarette butts, such as combining them with bitumen (a material used in asphalt) to be used as building material.

- Ensure that solid waste management mechanisms allow for the separation of waste at the source, so that cigarettes do not end up polluting waterways.

- Set up ‘Cigarettes Butts Campaigns’ among students to inform children of the toxins released from cigarette butts into waterways and engage youth activists in tobacco control.

- Treat municipal wastewater to be clean enough for dispersal into waterways.
Tackling tobacco would also advance better and safer working conditions, while helping to diversify economies. Pathways include smoke-free spaces for workers and leveraging workplaces as a platform to deliver health messaging as well as counselling and services. Tobacco control also supports families to shift from tobacco growing, and the debt-bonded and child labour it often entails, to alternative economic activities that can be more lucrative and do not harm growers’ health. Indeed, nicotine toxicity from handling tobacco leaves (i.e. green tobacco illness) undermines the well-being of farm workers, particularly children, minority and migrant workers [45], [84]. Cigarette manufacturers and leaf buying companies often exploit farmers to obtain profits from below-cost leaf [69], [70], with frequent sustained debt a result [6].
KEY FACTS

- Tobacco use costs Sierra Leone SLL 404 billion each year (1.5 percent of GDP in 2017) including SLL 108 billion in healthcare expenditures and SLL 296 billion in lost productive capacities due to premature mortality, disability and workplace smoking [12].

- It is projected that over the next 15 years, without scaled-up tobacco control, nearly 50,000 Sierra Leonean citizens will die from tobacco-attributable diseases, including 70 percent prematurely, and the country will lose nearly SLL 5 trillion in tobacco-attributable economic losses [12].

- Implementing and enforcing proven WHO FCTC measures from the Tobacco Control Investment Case for Sierra Leone, including bans on smoking in all public places to protect people from tobacco smoke, would save 20,000 lives and SLL 2 trillion in economic losses [12].

- Given the above, tobacco control can advance priorities in Sierra Leone’s Medium-Term National Development Plan 2019-2023 on human capital development and growth [27].

RECOMMENDATIONS

- Ensure tobacco control and health are included in national economic growth plans and policies.

- Implement a ban on smoking in all public places including workplaces and facilities to maintain public health (WHO FCTC Article 8).

- Ensure policy coherence for health, trade and foreign direct investment.

- Provide livelihood support for local sellers, farmers, and workers in the tobacco sector to transition to alternative vocations (WHO FCTC Article 17).
Access to information and communications technology is also relevant to tobacco control. In an increasingly connected world, the marketing of tobacco products has only grown more global and more nuanced. Tobacco control advocates must continue to fight fire with fire, capitalizing on emerging platforms (e.g. social media) and disciplines (e.g. behavioural sciences) to raise awareness, support cessation, and unmask tobacco industry tactics (a strategy that can increase people’s autonomy and instill in them a sense of social justice). WHO’s mobile health (mHealth) programme, for example, leverages the ubiquity of mobile technologies to support a range of tobacco control objectives, from smoke-free places to cessation and training of health workers [see 67].
KEY FACTS

- Sierra Leone has no laws on the sale or regulation of e-cigarettes [36], no bans on tobacco advertising, promotion or sponsorship [15], no national smoking cessation services [15] and, between 1 July 2016 and 30 June 2018, no anti-tobacco mass media campaigns were run [29].

- In 2008, 66 percent of students surveyed had seen tobacco billboards in the past 30 days and 53 percent had seen cigarette ads in newspapers and magazines [30].

- Radio is the most widely accessed broadcasting system in Sierra Leone (81 percent) [40].

- Eighty-three percent of Sierra Leoneans have access to a mobile phone and 53 percent own one. More than half of phone owners do not have app or internet capability on their phones and 13 percent use phones for social messaging [40].

RECOMMENDATIONS

- Pass legislation banning all forms of tobacco advertising, promotion and sponsorship (WHO FCTC Article 13).

- Regulate e-cigarettes for example by including them in tobacco control legislation.

- Strengthen research capacity on tobacco control including with respect to impacts and opportunities across sectors and the use of emerging technologies.

- Introduce a national quitline service and make smoking cessation services available and affordable to all (WHO FCTC Article 14).

- Use radio to convey the harmful effects of tobacco and promote tobacco cessation, and pilot health messaging through SMS/text messaging.
LMICs already endure 87 percent of the world’s premature mortality from NCDs, with the poorest and most marginalized disproportionately affected. Various forms of social disadvantage and deprivation – stress, isolation, unsafe neighbourhoods and limited recreation, for example – are associated with greater vulnerability to smoking, which leads back to inequitable conditions [6]. Meanwhile, the tobacco industry is increasingly targeting LMICs and vulnerable populations in their marketing strategies, and disadvantaged groups face difficulties accessing essential health services and information. Tobacco control can close gaps, for example tobacco taxes are proven to reduce consumption most among the poor, thus reducing inequities in smoking and its impacts, especially when revenues from taxes are reinvested into disadvantaged communities. Improved health from tobacco control can confer important opportunities in education, labour and other domains which can further reduce inequalities.
KEY FACTS

• Over a quarter of Sierra Leone’s tobacco-related deaths are in the poorest fifth of the population [12].

• In Sierra Leone, tobacco use is more common among men with no education (45 percent use tobacco) than among men with primary education (32 percent) and secondary education or higher (13 percent). The same pattern is seen in women [42].

• Tobacco use is more prevalent in rural versus urban areas (36 percent vs 15 percent for men and 10 percent vs 6 percent for women) [42].

• Over one-third of the 385 deaths that would be averted due to the cigarette tax increase modelled in the Tobacco Control Investment Case for Sierra Leone will be among the poorest 20 percent of the population [12].

RECOMMENDATIONS

• Enact strong measures to protect against tobacco industry interference in policymaking (WHO FCTC Article 5.3) and targeted advertising to vulnerable populations (WHO FCTC Article 13).

• Expand research on equity dimensions of tobacco control, building on the Tobacco Control Investment Case, and use findings to promote tobacco control in line with efforts to reduce poverty and inequalities, protect vulnerable populations and leave no one behind.

• Prioritize vulnerable populations in tobacco control policymaking for example by reinvesting revenue from taxation into pro-poor policies, such as universal health coverage and other social protection measures.
GOAL 11:
MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE.

TOBACCO SMOKE DIMINISHES AMBIENT AIR QUALITY SUCH THAT, WITHOUT APPROPRIATE TOBACCO CONTROL MEASURES, THE SAFETY OF HOUSING, WORKPLACES, TRANSPORT SYSTEMS AND PUBLIC SPACES IS COMPROMISED.

While exposure to ambient fine particular matter (PM2.5) from air pollution increases everyone’s risk of dying from cardiovascular disease and lung cancer, the risk is higher for smokers because PM2.5 combines synergistically with cigarette smoking for mortality (i.e. the elevated risk is greater than the mere sum of the individual exposures) [71], [72]. With the majority of the global population now living in urban areas, local governments are presented with a challenge and responsibility to protect and enhance the lives of entire city populations. Through the lens of tobacco control, local governments worldwide are showing initiative and leadership which, in turn, can shape national standards. Examples include smoke-free cities and raising of tobacco excise taxes, with the latter not just important for reducing health inequities but also for sustainably financing municipal priorities.
KEY FACTS

- As of July 2019, Sierra Leone was still one of the few countries in the world with no restrictions or laws banning tobacco smoke exposure, including in relation to health and educational facilities, public transport and workplaces [16].
- Tobacco use in Sierra Leone’s urbanized Western region which contains the capital, Freetown, is significantly lower than in its other three regions (7 percent vs 20 percent) [12].

RECOMMENDATIONS

- Implement and enforce a complete ban on smoking in public places (WHO FCTC Article 8).
- Ensure that tobacco smoke is labelled an environmental pollutant, that the tobacco industry is labelled a polluting industry and that tobacco control is included in environmental policies.
- Develop and launch campaigns on Smoke Free Homes/Cities for individuals, families and communities, highlighting especially vulnerable populations such as children, women, poorer populations and other groups exposed to smoke (WHO FCTC Article 12).
- Raise awareness of the synergistic effect between tobacco smoke and indoor use of non-clean fuels, particularly biomass.
Cigarette butts are the most discarded item globally and when improperly disposed of, release microplastics, heavy metals and other chemicals. While exposure to ambient fine particular matter (PM2.5) from air pollution increases everyone’s risk of dying from cardiovascular disease and lung cancer, the risk is higher for smokers because PM2.5 combines synergistically with cigarette smoking for mortality (i.e. the elevated risk is greater than the mere sum of the individual exposures) [71], [72]. Tobacco control, among other things, encourages countries and individual farmers to shift from tobacco production toward activities that are friendlier to people and planet, while supporting tobacco users to quit or reduce consumption and non-users to never start.
KEY FACTS

- Each year Sierra Leone has 841 total tonnes of cigarette butt and packaging waste – 304 tonnes due to cigarette butts and 537 tonnes due to packaging [45].

- Common agricultural practices related to tobacco farming, especially in low- and middle-income countries, lead to deforestation and soil degradation. Tobacco plants require large quantities of chemicals such as pesticides [46].

- While tobacco production has significantly decreased in Sierra Leone since the 1990s, it still exists on a small scale [47] and any resurgence must be prevented.

RECOMMENDATIONS

- Pass legislation eliminating single-use filters – including any biodegradable varieties – to reduce plastic contamination.

- For the remaining tobacco growers in Sierra Leone, provide support for economically viable alternative activities (WHO FCTC Article 17).

- Protect the environment and the health of persons (WHO FCTC Article 18) by considering and responding to the impact of tobacco agriculture on deforestation, land and soil degradation, and growers’ health and well-being.

- Encourage sustainable production by not providing subsidies for tobacco production, instead using subsidies to promote sustainable alternatives.
GOAL 13:  
TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS.

TOBACCO CONTROL AND CLIMATE ACTION ARE MUTUALLY REINFORCING.

The WHO FCTC, in particular Article 18, calls for the protection of the environment in addition to human health. This is largely because growing and curing tobacco is a proximate cause of deforestation worldwide [73], [74], with several negative impacts including increased greenhouse gas emissions (e.g. carbon dioxide and methane), global warming and changes in rainfall, and irreversible biodiversity loss [75], [76]. In other words, tobacco farming is a uniquely destructive and aggressive environmental force [44], [41]. Tobacco causes environmental damage through its entire life cycle “from cradle to grave”, or perhaps more accurately, to the many graves of its users [60]. Whether through supply-side measures such as supporting alternative economic livelihoods for tobacco growers (WHO FCTC Article 17), or demand reduction measures (WHO FCTC Article 6, 8, 11, 12, 13 and 14), WHO FCTC implementation can help tackle a major threat to the planet and raise awareness around climate change. Likewise, implementation of the UN Framework Convention on Climate Change (UNFCCC) including the 2015 Paris Agreement [77] can support tobacco control. For example, action under Article 4(d) of the UNFCCC – concerning the management, enhancement and conservation of biomass, forests, oceans and other ecosystems – would benefit from considering tobacco and its environmental impacts.
KEY FACTS

- Sierra Leone is vulnerable to and already experiencing the effects of climate change [48], for example the increased rainfall and extreme storms that contributed to the deadly landslide in Freetown in 2017 [49].
- The Environment Protection Agency of Sierra Leone introduced a National Climate Change Strategy and Action Plan in 2015 [50].
- Sierra Leone ratified the Paris Agreement on Climate Change in 2016 [51] and has committed to sustain low emission levels until 2035 or to be carbon-neutral by 2050 [52].

RECOMMENDATIONS

- Act as a WHO FCTC leader by demonstrating to other Parties the health, environment and climate benefits of refraining from tobacco farming alongside broader tobacco control efforts.
- Consider tobacco and its environmental impacts in the implementation of the UN Framework Convention on Climate Change (UNFCCC), including the 2015 Paris Agreement.
- Support alternative economic livelihoods for tobacco growers (Article 17) to help tackle the threat to the planet and raise awareness around climate change.
- Liaise with other UN agencies, working together to reduce the impact of tobacco on climate change.
The majority of the nearly 6 trillion cigarettes smoked each year are littered, and the filter on cigarettes is comprised of plastic ingredients which are particularly harmful to beaches and oceans. Among the substances found in cigarette butts are arsenic, lead, nicotine and ethyl phenol, all of that leach into aquatic environments [46]. Cigarette butt leachate kills aquatic life, for example marine and freshwater fish [78]. Moreover, pesticides and agrochemical residues from tobacco growing pollute nearby waterways, jeopardizing not just clean water (see Goal 6) but also the welfare of aquatic organisms. If tobacco control means a reduction in both cigarettes smoked and tobacco grown, then it also means a major threat to life below water is confronted. Working with the UNEP can help address the issues of tobacco litter in water sources. For example, the UNEP Global Initiative on Marine Litter which organizes and promotes activities addressing marine litter.
The World Bank notes Sierra Leone’s tourism potential, including its excellent beaches and islands [53]. The 841 tonnes of cigarette butts and packaging waste that end up as toxic rubbish each year [15] detract from this beauty and potential.

Tobacco waste contains over 7,000 toxic chemicals that pollute not just air – with tonnes of carcinogenic, greenhouse effect-causing gases – but also land, sea and waterways [33].

Chemicals including nicotine, arsenic and heavy metals that leach from discarded cigarettes into water are toxic to fish [60]. Fish accounts for 75 percent of animal protein intake in Sierra Leone [54].

Introduce tobacco-free beaches as part of preserving the natural environment while encouraging and promoting sustainable tourism.

Prevent the littering of cigarette butts on beaches and provide systems to collect this waste.

Introduce measures to reduce single use plastics including bans and levies.
GOAL 15:
PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS.

TOBACCO CONTROL CAN IMPROVE LIFE ON LAND BECAUSE TOBACCO FARMING IS LAND-INTENSIVE AND FREQUENTLY USES LARGE AMOUNTS OF CHEMICAL FERTILIZERS, PESTICIDES, GROWTH REGULATORS AND WOOD FOR FLUE-CURING.

Tobacco crops strip soil of nutrients such as nitrogen, phosphorus and potassium to a greater extent and faster than other major food and cash crops [46], [79]. Clearing land for tobacco growing cuts into forest reserves, as do tobacco-related forest fires. Taken together, tobacco production disrupts the ecosystem and leads to soil and land degradation including deforestation [see 79]. Tobacco control, in particular supporting economic alternatives to tobacco growing, can help restore biodiversity and protect land resources while advancing other important development objectives, for example increased food security.
KEY FACTS

• While tobacco farming is now low in Sierra Leone, some tree cover has been lost due to historic tobacco farming. Between 2000 and 2018 tree cover decreased by 25 percent [55].

• Supporting economic alternatives to tobacco growing restores biodiversity and protects land resources while advancing other development objectives, for example food security.

RECOMMENDATIONS

• Include tobacco control in land conservation and environmental protection strategies and plans.

• Support remaining tobacco farmers to transition to alternative livelihoods (WHO FCTC Article 17).

• Ensure that farmers do not return to tobacco farming.
GOAL 16:

PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS.

TOBACCO CONTROL REQUIRES GOOD GOVERNANCE TO FULFIL THE WHO FCTC’S GENERAL OBLIGATIONS, INCLUDING THE DEVELOPMENT AND IMPLEMENTATION OF COMPREHENSIVE MULTISECTORAL NATIONAL TOBACCO CONTROL STRATEGIES AS WELL AS THE ESTABLISHMENT OR REINFORCEMENT OF NATIONAL COORDINATING MECHANISMS FOR TOBACCO CONTROL.

Advancements in meeting these obligations can promote a range of broader governance objectives in turn, including: enhanced capacities for intersectoral engagement and conflict of interest management; greater transparency and accountability; reduced corruption and stronger protection against undue interference in policymaking (e.g. from the tobacco industry); and progress in combating organized crime (e.g. with respect to the illicit trade of tobacco products). Tobacco control has already shown to be a concrete entry point for strengthening the legislative and oversight capacities of lawmakers and parliamentarians [see 80, 81].
Sierra Leone has set up a new national multisectoral tobacco control task force with representatives from a wide range of ministries, departments and agencies, non-governmental organizations, civil society organizations and religious leaders [56].

The Ministry of Health has approved a National Tobacco Control Strategic Plan 2018-2022 [56].

The tobacco industry has used intimidating tactics such as lawsuits against African countries that have implemented tobacco control laws, similar to those Sierra Leone is preparing [57], but Uganda and other countries have triumphed [58].

Litigation support for countries to tackle tobacco is available including through litigation funds from Bloomberg Philanthropies as well as the Bill and Melinda Gates Foundation.

Tobacco industry corporate social responsibility exploits the need for investment in social development to influence government policymaking. Internal documents show the industry claiming credit for preventing a proposed tobacco advertisement ban in Sierra Leone in 1996 [59].

Sierra Leone loses an estimated SLL 6 billion per year in tax revenue (40 percent of the total annual tobacco tax revenue) due to illegal cigarette smuggling [62]. It has implemented substantial fines and has the right to seize property in case of illegal tobacco smuggling [62].

Tax and price differences between countries are less influential on illicit trade than other factors such as weak governance/lack of high-level commitment, weak customs and excise administration, corruption and complicity of cigarette manufacturers [63].

Use the National Task Force to strengthen whole-of-government and whole-of-society engagement in tobacco control, prioritizing the draft tobacco control law, implementing the Tobacco Control Investment Case recommendations, and delivering the national tobacco control strategy.

Become a Party to the Protocol to Eliminate Illicit Trade in Tobacco Products.

Develop and implement codes of conduct and other specific measures to protect against tobacco industry interference in policymaking in line with WHO FCTC Article 5.3.

Pass legislation compelling tobacco companies to disclose and report all expenditure on marketing, retailer incentives, corporate social responsibility activities, philanthropy, lobbying and political contributions.
GOAL 17: STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT.

CALLS FOR A ‘NEW GLOBAL PARTNERSHIP’ AND POLICY COHERENCE ARE HIGHLY PERTINENT TO TOBACCO CONTROL BECAUSE ALL SECTORS HAVE A FUNDAMENTAL RESPONSIBILITY TO PROTECT THE RIGHT TO HEALTH.

Trade agreements must preserve national policy space to implement strong tobacco control measures that protect this right to health, for example plain packaging laws and access to affordable health technologies including nicotine replacement therapy. Win-wins are possible because tobacco can hurt businesses overall, when factors such as reduced productive capacities and increased health insurance premiums – not just sales – are considered. Moreover, tobacco taxation, and the intersectoral collaboration it requires, enhances domestic capacity for tax and other revenue collection. Tobacco control efforts also leverage and promote South-South and Triangular Cooperation.
• On average, there has been no change in cigarette affordability in Sierra Leone between 2008 and 2018 [31]. This continues to put Sierra Leonean youth at risk, considering nearly a quarter of adolescents (ages 13-15) use tobacco [30].

• There is significant disparity between countries in Africa in WHO FCTC implementation [17].

• Sierra Leone proposed an excise tax of 30 percent on all tobacco products [64] as part of the 2017 Finance Act [64], and this was subsequently passed [65]. Excise taxes are a relatively accessible source of revenue, simple to implement and compatible with most tax systems. In Sierra Leone, excise tax revenues total less than 1 percent of GDP [66].

• With the FCTC 2030 project, Sierra Leone has UN support to scale up excise taxes and increase revenues among broader tobacco control action [82].

RECOMMENDATIONS

• Move forward with plain packaging of tobacco products (WHO FCTC Article 11 and 13 guidelines) and access to affordable health technologies for cessation (WHO FCTC Article 14).

• Play an active and constructive role in the WHO FCTC Conference of Parties meetings.

• Use tobacco control focal points and the national coordinating mechanism for policy coherence between tobacco control, trade and broader development (WHO FCTC Article 5).

• Ensure tobacco excise taxes account for at least 70 percent of the retail price for all tobacco products, in line with WHO FCTC Article 6 guidelines.

• Consider investing tobacco tax revenues in health, UHC and other social protections.
Sierra Leone is not spared tobacco’s far-reaching development harms. Every year 3,330 Sierra Leoneans are lost to tobacco-related diseases. More than 900 of these lives lost are due to exposure to secondhand smoke, 68 percent of deaths are premature among individuals under age 70, and over a quarter of deaths are among the poorest fifth of the population. The high human costs of tobacco use are only one part of the story. Each year, tobacco use is costing Sierra Leone SLL 403.9 billion, equivalent to 1.5 percent of its GDP in 2017. It is exacerbating inequalities, deepening poverty, and compounding environmental damage.

Strengthened implementation of the WHO FCTC is a specific target in the SDGs because its benefits extend across the social, economic and environmental dimensions of Agenda 2030. With many health and development challenges and limited resources, Sierra Leone should use the WHO FCTC as a tool to advance multiple health and development goals simultaneously. This brief demonstrates how this can be done, identifying opportunities for alignment of tobacco control and broader development efforts.

As part of the FCTC 2030 project, Sierra Leone has committed to make tobacco control a national priority [68]. The Ministry of Health and Sanitation is strongly committed but cannot tackle the issue alone; support is required from other sectors and actors including parliamentarians. The Government of Sierra Leone should work with the Secretariat of the WHO FCTC, UNDP, WHO, the UN country team and other partners as a priority.
NEXT STEPS

• **Pass strong and comprehensive tobacco control legislation and invest in compliance.** Key measures include banning single stick cigarette sales, direct and indirect tobacco marketing and smoking in public places and workplaces, and joining the Protocol to Eliminate Illicit Trade in Tobacco Products.

• **Strengthen multisectoral engagement in tobacco control.** There should be stronger coordination and collaboration across different sectors as tobacco control is beneficial to all sectors.

• **Increase tobacco taxes, applying a uniform rate to all tobacco products and including an escalator to account for changes in affordability.** Tobacco taxation along with a robust strategy and systems to combat illicit tobacco trade can help prevent the loss of tax revenue and the loss of lives. Revenue generated can be used to invest in health and finance further development strategies.

The national multisectoral tobacco control task force and national tobacco control strategy can help set priorities, responsibilities and resources in line with the recommendations of this brief.

Agenda 2030 and Sierra Leone’s Medium-Term National Development Plan 2019-2023 were ambitious before COVID-19 and that ambition remains. Tobacco control can drive broad social, economic and environmental progress while helping to combat the pandemic and increase fiscal space. Sierra Leone should urgently implement the WHO FCTC in full to improve the present and future conditions of its people and country.

*This brief was based on research conducted by Edward Cuzner, Annie McDougall and Charlie Pitcairn. Design by Zsuzsanna Schreck.*
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