

DISCUSSION PAPER

THE WHO FRAMEWORK  
CONVENTION ON  
TOBACCO CONTROL  
AN ACCELERATOR FOR  
SUSTAINABLE DEVELOPMENT



Copyright© UNDP  
All rights reserved  
May 2017

**Disclaimer**

The views expressed in this publication are those of the authors and do not necessarily represent those of UNDP or the Convention Secretariat, WHO FCTC.

United Nations Development Programme  
One United Nations Plaza, New York, NY, 10017, USA.

DISCUSSION PAPER

.....

# THE WHO FRAMEWORK CONVENTION ON TOBACCO CONTROL

## AN ACCELERATOR FOR SUSTAINABLE DEVELOPMENT

.....



.....

# TABLE OF CONTENTS

.....

ACKNOWLEDGEMENTS .....	5
EXECUTIVE SUMMARY .....	6
I. BACKGROUND AND CONTEXT .....	8
II. IDENTIFYING LINKS ACROSS THE SUSTAINABLE DEVELOPMENT GOALS .....	15
III. RECOMMENDATIONS .....	27
CONCLUSION .....	35
APPENDIX 1: ADDITIONAL RESOURCES .....	37
APPENDIX 2: SEVEN-POINT SCALE OF SDG INTERACTIONS .....	39
REFERENCES .....	40

## List of figures, tables and boxes

<b>Figure 1.</b>	Attention in SDG design fora – tobacco-related terms versus comparators . . . . .	<b>13</b>
<b>Figure 2.</b>	WHO FCTC interaction results for SDGs 1 – 4 . . . . .	<b>17</b>
<b>Figure 3.</b>	WHO FCTC interaction scores (averages) for all 17 goals . . . . .	<b>18</b>
<b>Table 1.</b>	WHO FCTC interactions with the ‘non-health’ SDGs - summary narrative and key facts . . . . .	<b>19</b>
<b>Box 1.</b>	Tobacco and NCDs in SDG 3 . . . . .	<b>11</b>
<b>Box 2.</b>	Tobacco control in the Addis Ababa Action Agenda . . . . .	<b>12</b>
<b>Box 3.</b>	Underscoring the relevance of the WHO FCTC for sustainable development at COP7 . . . . .	<b>14</b>
<b>Box 4.</b>	The importance of identifying and promoting unifying themes for tobacco control . . . . .	<b>18</b>
<b>Box 5.</b>	What is ‘MAPS’ and why does it matter for tobacco control? . . . . .	<b>30</b>

---

# ACKNOWLEDGEMENTS

---

This report was authored by Roy Small and Natalia Linou of the United Nations Development Programme (UNDP), under the overall guidance of Douglas Webb of UNDP. The report benefitted enormously from inputs and contributions of: Vera da Costa e Silva, Andrew Black, Rodrigo Santos Feijo, Guangyuan Liu and Maria Carmen Audera-Lopez of the Secretariat of the World Health Organization Framework Convention on Tobacco Control (Convention Secretariat, WHO FCTC); Mandeep Dhaliwal, Dudley Tarlton, Kazuyuki Uji, Lika Gamgebeli, Suvi Huikuri, and Juana Cooke of UNDP; Francis Thompson and Ryan Forrest of the Framework Convention Alliance

(FCA); and Deborah Arnott of Action on Smoking and Health (ASH). The report was conceived and commissioned by the Convention Secretariat and the HIV, Health and Development Group of UNDP.

The report was published with the generous funding of the Government of the United Kingdom of Great Britain and Northern Ireland, represented by its Department of Health, as part of a five-year project, 'Strengthening tobacco control by supporting implementation of the WHO Framework Convention on Tobacco Control in low- and middle-income countries.'

# EXECUTIVE SUMMARY

In September 2015, United Nations Member States adopted the 2030 Agenda for Sustainable Development, making a commitment to achieve 17 Sustainable Development Goals (SDGs) ranging from eradicating extreme poverty, to combating climate change, to promoting peaceful and inclusive societies. For the first time, a specific target on tobacco control was included (Target 3.a), positioning implementation of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) as key to sustainable development. This was done in recognition not only of the tremendous health toll of tobacco use, but also of the social, economic, and environmental impacts of tobacco use and production on individuals, families, communities and countries.

The evidence is staggering:

- without adequate investment in tobacco control it is estimated that up to 1 billion people could die from tobacco-related disease during this century;
- tobacco use costs the global economy over a trillion USD annually, due to medical expenses and lost productivity; and
- the environmental impacts, due to deforestation and soil degradation from tobacco growing as well as water and soil pollution from pesticide use and cigarette littering, are of growing concern.

Recognizing the global commitment of the 2030 Agenda to ‘leave no one behind’, the inequitable burden of tobacco, both within and between countries, is particularly troubling. Within countries the poorest and most marginalized are more likely to consume tobacco and at younger ages, and to be exposed to second-hand smoke. Between countries, tobacco use is rising rapidly in

many low- and middle-income countries (LMICs). Already, 87 percent of the 17 million people who die prematurely (i.e. before age 70) from an NCD each year live in LMICs. In line with its 2016-2021 HIV, Health and Development Strategy, ‘Connecting the Dots’, UNDP’s work on tobacco control, in partnership with the Convention Secretariat and others, focuses on strengthening governance to address inequalities and social exclusion that drive poor health.

While governments will undoubtedly face tough resourcing and implementation decisions to achieve the ambitious 2030 Agenda and to ensure that they reach those furthest behind first, this new development paradigm offers an opportunity to rethink the way we tackle health and development challenges together. The 17 SDGs are explicitly ‘integrated and indivisible’, requiring governments to critically address policy incoherence and to identify win-wins across development and health targets. To support policy makers in this endeavour, this Discussion Paper reviews and synthesizes available evidence on the development threats posed by tobacco production and consumption (see Table 1), and the obligation of Parties to the WHO FCTC for a whole-of-government approach to tobacco control. The paper’s overarching purpose is to support the acceleration of tobacco control efforts as part of broader SDG implementation, by encouraging national and local priority setting and planning, co-benefit analysis of tobacco control with other development aims, and incentive conflict identification and management. The paper can also be helpful for advocates and the scientific community to generate greater awareness of the different narratives and entry-points for effective engagement with non-health sector stakeholders.

The Discussion Paper provides four broad recommendations, as well as suggested action areas under each, which can support WHO FCTC Parties, development partners, civil society, academia and other stakeholders to accelerate tobacco control and sustainable development in an integrated manner.

Specifically, the recommendations call on:

- 1 National coordinating mechanisms and tobacco control focal points to promote inclusion of the WHO FCTC within SDG implementation plans, and identify sectors where the potential win-wins across mandates are strongest for deeper partnerships;
- 2 Development partners to invest in building the capacity of different stakeholders across government and civil society to advocate for, support, and monitor progress on tobacco control as part of SDG implementation efforts;
- 3 All stakeholders to identify and address key opponents to tobacco control, and remind those 'neutral' of their obligations to remove any policy incoherence; and
- 4 Development partners to support Parties to invest in new mechanisms, modalities, and technologies for enhanced tobacco control.

While these recommendations will likely be relevant throughout the 2030 Agenda period (2015-2030), they are particularly important now, during the initial country-level planning phases of SDG domestication. Integration of the WHO FCTC in national plans of action for implementing the SDGs will be critical. Since 2012, UNDP and the Convention Secretariat have collaborated to help countries establish tobacco control as a sustainable development priority. This Discussion Paper builds on this partnership and ongoing work as part of a five-year project, FCTC 2030, on 'Strengthening tobacco control by supporting implementation of the WHO Framework Convention on Tobacco Control in low- and middle-income countries' implemented with funding from the Government of the United Kingdom of Great Britain and Northern Ireland.

With tobacco killing over 7 million people every year, costing the world economy nearly 2 percent of its gross domestic product, and stripping land and soil of their viability, the case is clear: implementing the WHO FCTC is a powerful means for countries to improve the lives of their citizens, achieve the SDGs, and better the conditions and future of their country.

---

# I. BACKGROUND AND CONTEXT

---



## Tobacco, health and development

In September 2015, the United Nations (UN) General Assembly adopted the 2030 Agenda for Sustainable Development, the world's ambitious vision including 17 Sustainable Development Goals (SDGs) to guide action across the three pillars of sustainable development: social, economic and environmental. Strengthened tobacco control was explicitly included as a global development target (3.a) in recognition of the enormous, avoidable burdens that tobacco use inflicts on health and health systems, killing over seven million people per year [1] and threatening sustainable development everywhere. Tobacco use is rising rapidly in many low- and middle-income countries (LMICs), contributing to a growing epidemic of non-communicable diseases<sup>1</sup> (NCDs) and health inequities. Of the 17 million people who die prematurely (i.e. before age 70) from an NCD each year, an estimated 87 percent are in LMICs [2]. Without adequate investment in tobacco control it is estimated that up to 1 billion people could die from tobacco-related disease during this century [7].

.....

**Tobacco is not just one of the world's most pressing health concerns – virtually no major development objective is spared from tobacco's extensive harms.**

.....

Each year tobacco use costs the global economy nearly 2 percent of its gross domestic product (GDP), due to medical expenses and lost productive capacities from premature death and disease [3,111]. Impacts are also felt at the household level. Tobacco-related medical expenditures, often out-of-pocket, can drive vulnerable households into poverty, or force individuals to forgo life-saving care altogether [4]. Poor health robs wage earners of the ability to provide for their families. Unpaid

care work rises for women and girls, with the latter risking being pulled out of school to care for sick or disabled relatives [5]. Tobacco farming – itself health-harming – often relies on unlawful or exploitative labour, including child labour, and contributes to environmental degradation [6]. Virtually no major development objective is spared from tobacco's extensive harms. Recognizing this, as well as the WHO FCTC's inclusion in Agenda 2030, the theme of World No Tobacco Day 2017 is "Tobacco – a threat to development".

Tobacco use, like other behavioural risk factors for NCDs<sup>2</sup>, is linked to various forms of social disadvantage and deprivation, with the poorest and most marginalized more likely to consume tobacco and at younger ages, and to be exposed to second-hand smoke [7]. Though individual behaviour change efforts are important, comprehensive tobacco control responses also require broader reforms in social, economic and environmental contexts and policies (i.e. action on 'social determinants'). Globalization of trade, rapid expansion of targeted and manipulative industry marketing, and increased social acceptability of smoking have combined powerfully to steer LMICs, and vulnerable populations within them, toward greater tobacco consumption [7]. LMICs have lower capacities to respond to the growing burden of NCDs, while contending with a host of concurrent challenges, including ongoing infectious disease burdens which are also worsened by tobacco use [7-8]. Integrated responses are needed alongside disease-specific ones, both within and outside the health sector. UNDP's work on tobacco and NCDs promotes effective and inclusive governance for health, as articulated in its HIV, Health and Development Strategy 2016-2021 [85]. It contributes to UNDP's mission to help eradicate poverty and reduce inequality and exclusion, and supports countries to mainstream and implement Agenda 2030.

1 Mainly cancers, diabetes, cardiovascular disease and chronic respiratory illness.

2 Harmful use of alcohol, physical inactivity and unhealthy diet.

## The WHO Framework Convention on Tobacco Control (WHO FCTC)

In 2003, the World Health Assembly (WHA) adopted the WHO FCTC, an international and legally binding treaty negotiated under the auspices of the World Health Organization (WHO). The treaty, which came into force in 2005, addresses the demand and supply-side aspects of tobacco as well as overarching governance elements. Its comprehensive approach extends beyond the health sector to encompass, for example, trade, tax, education, justice and law enforcement, environment and agriculture [12]. The WHO FCTC is an evidence-based treaty that sets out obligations on Parties to implement proven, cost-effective tobacco control measures. This implementation requires engagement and participation across government, and the involvement of a range of stakeholders. Measures include: raising tobacco excise taxes; legislating for smoke free spaces; banning tobacco advertising, promotion and sponsorship; supporting tobacco growers and workers on alternative economic activities; labelling tobacco packaging with effective health warnings; and protecting public health policies from tobacco industry interference [14]. Importantly, the Convention acknowledges the interrelationship between tobacco and development and makes connections to relevant UN covenants and conventions that protect populations, including those on human rights, particularly the right to health.<sup>3</sup>

.....

**A major impediment to WHO FCTC implementation has been poor intersectoral coordination and low public and government awareness of tobacco control as a development issue.**

.....

As the first treaty to ever be adopted under Article 19 of the World Health Organization's Constitution, and the first binding agreement on an issue related to NCDs, the WHO FCTC is groundbreaking for global public health. Implementation amongst the treaty's 180 Parties<sup>4</sup> has progressed steadily since the Convention came into force, and some countries have experienced marked success in curbing tobacco use [15].<sup>5</sup> More broadly, the treaty has demonstrated the potential for global regulations to set public health norms, mobilize resources and increase transparency, while giving the Convention Secretariat, WHO, UNDP and other development partners a strong platform for assessing needs, providing technical assistance, supporting legislative enactment, and facilitating cooperation between and amongst Parties [16]. Despite successes, however, the treaty has yet to reach its full potential. Limited administrative and technical capacity, inadequate financial resources, and pervasive interference by the tobacco industry<sup>6</sup> have contributed to insufficient and uneven implementation between countries and regions<sup>7</sup> [15,17]. Another major impediment has been poor intersectoral coordination together with low public and government awareness of tobacco control as a development issue that has implications far beyond health.

## Tobacco control in the Sustainable Development Goals

The adoption of the 2030 Agenda for Sustainable Development signified an evolving development paradigm. The SDGs replace and build upon the Millennium Development Goals (MDGs; 2000-2015), with significant differences. The most apparent difference is scope. The SDGs, now explicitly

3 The preamble to the WHO FCTC recalls Article 12 of the International Covenant on Economic, Social and Cultural Rights. It also recalls: the WHO Constitution; the UN Convention on the Rights of the Child; and the UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)[12].

4 As of May 2017.

5 A study spanning 126 countries confirms that implementation of key demand-reduction measures of the WHO FCTC is significantly associated with declines in smoking prevalence, with anticipated reductions in tobacco-related morbidity and mortality [57].

6 Article 5.3 of the WHO FCTC is on industry interference in policymaking. The 2014 report of the Convention Secretariat to the Conference of the Parties (COP) on Article 5.3 states: "In spite of the progress made in implementation of Article 5.3, Parties have reported that they still consider tobacco industry interference with public policies on tobacco control to be the most important barrier they face to treaty implementation" [65].

7 Progress has also been uneven between different Articles, with average implementation rates varying from less than 20 percent to 88 percent [15].

recognized as integrated, consist of 17 goals and 169 targets, compared to the 8 goals and 18 targets of the MDGs. Geographic focus is another distinction. The MDGs concentrated on the developing world, whereas the SDGs are universal in application, committed to by all UN Member States regardless of income level, and place increased emphasis on global public goods and achieving development synergies.<sup>8</sup> Moreover, the 2030 Agenda commitment to 'leave no one behind' and reach those furthest behind first is a clear call to focus on equity within and across countries.

The SDGs also include issues, such as tobacco and NCDs, which were notably omitted from the MDGs.<sup>9</sup> Goal 3 on health contains an NCD-specific target on reducing premature mortality from NCDs (3.4). Strengthened implementation of the WHO FCTC (3.a) features as a means of implementation, alongside investments in vaccines, immunizations, and access to medicines, health financing, and preparedness for global health crises. Tobacco control can support progress on many of the other SDG 3 targets, and vice-versa. For example, tobacco use increases the risk of latent tuberculosis (TB), active TB, and TB recurrence after successful treatment [9-10] to the point where up to one in five deaths from TB globally would be avoided if people did not smoke [11]. Smoking can also cause further illness in people living with HIV, including bacterial pneumonia and AIDS-related dementia [21].

The tobacco and NCD targets within the SDGs build on preceding high-level political momentum for addressing NCDs and their risk factors, headlined by the UN General Assembly's High-Level Meeting on NCDs in September 2011.<sup>10</sup> Inclusion of tobacco control specifically was promoted for several years

### BOX 1. Tobacco and NCDs in SDG 3

**'Ensure healthy lives and promote well-being for all at all ages'**

#### Target 3.a

Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate

#### Target 3.4

By 2030, reduce by one third premature mortality from NCDs and promote mental health and well-being



before Member States adopted the 2030 Agenda, including through various efforts of the Framework Convention Alliance (FCA), the Non-communicable Disease Alliance (NCDA), NGO partners and allied government missions. Many countries advocated for the WHO FCTC to be specifically included in the SDGs.

Meanwhile, price and tax measures on tobacco (WHO FCTC Article 6) are recognized in the Addis Ababa Action Agenda of the Third International Conference on Financing for Development [23] as an important means to reduce tobacco consumption and associated costs, while bringing governments substantial revenue to finance development.

8 According to the outcome document of UN Summit for the adoption of the post-2015 development agenda, "The interlinkages and integrated nature of the Sustainable Development Goals are of crucial importance in ensuring that the purpose of the new Agenda is realized." This has been raised in other contexts [19]. The MDGs, by contrast, have been critiqued for framing its goals and targets in a vertical and non-integrative manner, resulting in fragmented approaches [18].

9 Some have argued that the omission of many health priorities from the MDGs, including NCDs, has hindered not just equitable progress on those priorities but also the MDGs themselves [20]. Evidence supports this argument [21,22].

10 The resulting Political Declaration recognized NCDs as a global health concern and a threat to social and economic development, including the MDGs. It also called upon WHO, in coordination with other UN system agencies, to support national efforts on WHO FCTC implementation [24].

## BOX 2. Tobacco control in the Addis Ababa Action Agenda

### Paragraph 32

“We note the enormous burden that non-communicable diseases place on developed and developing countries. These costs are particularly challenging for small island developing States. 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.**”

### Paragraph 77

“Parties to the World Health Organization Framework Convention on Tobacco Control will also **strengthen implementation of the Convention in all countries, as appropriate**, and will support mechanisms to raise awareness and mobilize resources.”



The significance of tobacco taxation for development financing cannot be under-stressed; for example, just one year following implementation of the Philippines’ 2012 ‘Six Tax Reform bill’ which covers tobacco products, the revenue boost of USD 1.2

billion from the new tax structure allowed health coverage to be expanded to more than 45 million Filipinos [66]. The Philippines experience highlights how strengthened tobacco control can advance universal health coverage on multiple fronts – in this case, the tobacco taxes deliver sustainable financing, reduce health expenditures, address health inequities, and support health-promoting social values and environments.

## What next for tobacco control?

Inclusion of the WHO FCTC within the SDGs is a major step toward reducing the devastating health and development impacts of tobacco. Together, targets 3.a and 3.4 have the potential to raise awareness of tobacco as a key sustainable development issue, commit national governments and other stakeholders to tackle tobacco for the next 15 years, intensify and harmonize tobacco control efforts, and mobilize resources for WHO FCTC implementation, thus better aligning health financing priorities with epidemiological burdens.<sup>11</sup> That the WHO FCTC is captured in Agenda 2030 as a ‘means of implementation’ recognizes its potential, as an international treaty supported by the binding obligation of domestic legislation, to accelerate sustainable development progress, particularly in developing countries.

But these benefits of inclusion are by no means guaranteed with 17 goals and 169 targets vying for limited resources. Indeed, UNDP’s recent analysis of the attention given to tobacco control in Agenda 2030 design processes [25] confirms that WHO FCTC inclusion in the SDGs is an opportunity that must actively be seized. UNDP’s analysis examined different categories of inputs into Agenda 2030, finding that tobacco and tobacco control were mentioned and presented far less frequently than comparator health terms (see Figure 1), and that the

<sup>11</sup> In the dialogue leading up to the 2011 High-level Meeting on NCDs, the exclusion of any specific reference to NCDs within the MDGs was cited as having had a prohibitive effect on garnering resources to tackle NCD risk factors, such as tobacco use.

overwhelming majority of tobacco mentions did not specifically reference the WHO FCTC.<sup>12</sup> In the global thematic reports, for example, tobacco-related terms were mentioned less than all other search terms, and were the only search terms for which all mentions were confined to the consultation on health. Most striking, the WHO FCTC was never mentioned in any national consultation final reports, despite the fact that 63 of 72 available national consultation final reports (88 percent) were submitted by countries that are Parties to the Convention. There is a clear risk that without strengthened, coordinated and effective advocacy efforts, tobacco control could be overlooked during the next 15-year development cycle, especially at the country level, compared to other leading health and development threats. Given the impact of tobacco on health and development, this would be an enormous lost opportunity.

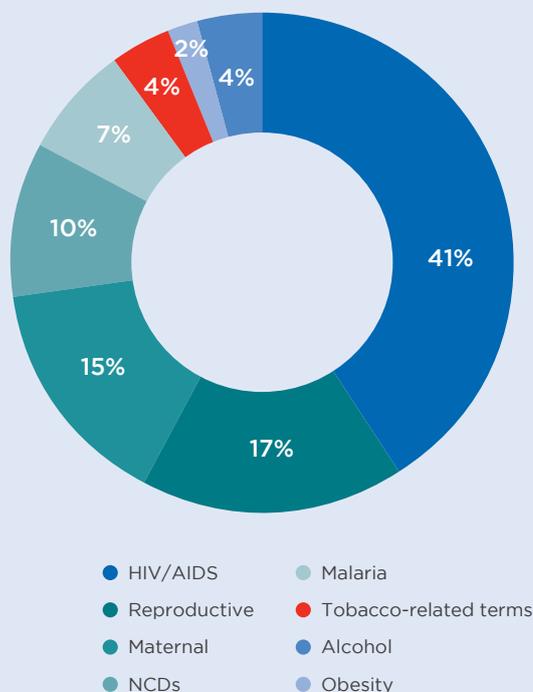
.....

**Without strengthened, coordinated and effective advocacy efforts, tobacco control could be overlooked during the next 15-year development cycle.**

.....

Clearly, inclusion of the WHO FCTC in the 2030 Agenda will not, on its own, ensure greater attention and investments for tobacco control. Strategies and support are needed to ensure Target 3.a is achieved. In the development community, talk of high impact win-win interventions that can accelerate progress across multiple SDGs predominates. Whether in relation to poverty and inequity reduction, decent work and economic growth, environmental sustainability, development financing or otherwise, tobacco control is central to all strands of development – social, economic and environmental. Governments must be supported

**FIGURE 1. Attention in SDG design fora – tobacco-related terms versus comparators**



to routinely consider and address the interactions between tobacco and other sustainable development priorities and, accordingly, to treat WHO FCTC implementation as an obligation for not just health but all relevant sectors. Critical will be ensuring inclusion of the WHO FCTC in national development planning and any other SDG implementation and domestication processes. The UNDP-Convention Secretariat 2014 Discussion Paper on Development Planning and Tobacco Control [26] is a foundation for this work, while the present Discussion Paper offers a comprehensive analysis of how WHO FCTC implementation interacts with other SDG

12 Specifically, UNDP consulted: (i) 27,970 online submissions to the platform [www.worldwewant2030.org](http://www.worldwewant2030.org), a collation of the views and priorities of people and organizations around the world; (ii) 72 reports of national consultations, led by UN Resident Coordinators and UN Country Teams (UNCTs) with support from the UN Development Group (UNDG); (iii) 9 reports of global thematic consultations organized around themes ranging from inequality to health to conflict and fragility; and (iv) 5 high-level UN synthesis reports of discussions. A keyword search was conducted for terms relating to tobacco, the WHO FCTC and comparator health issues historically included in development discourse. Recorded for each category of inputs were either the number of documents which contained one or more search term or the number of times each search term appeared within each document. Percentages, or relative 'shares of attention', were then calculated by dividing the composite score for each search term by the total score of all search terms combined [25].

targets. This paper’s overarching purpose is to support tobacco control efforts as an accelerator for sustainable development in the Agenda 2030 era, by activating national and local priority setting

and planning, co-benefit analysis of tobacco control with other development aims, and incentive conflict identification and management.

**BOX 3. Underscoring the relevance of the WHO FCTC for sustainable development at COP7**

The seventh session of the Conference of the Parties (COP) took place in November 2016 in India. In Decision FCTC/COP7(29), the ‘Delhi Declaration’, the COP called on Parties “to actively pursue the achievement of SDG Target 3.a and strengthen the implementation of the WHO FCTC”, and requested the Convention Secretariat “to take the lead in coordinating support to Parties to this effect in collaboration with WHO and other intergovernmental organizations, and to make all efforts to promote additional related targets including but not limited to gender equality and reduced inequalities” [96].

Notably, Decision FCTC/COP7(27) requests the Convention Secretariat to: “work with UNDP, WHO and other partners in the UNDG to embed support of the implementation of the WHO FCTC throughout Parties’ national efforts to achieve the SDGs, including by integrating WHO FCTC implementation in national priorities in the development of the United Nations Development Assistance Frameworks” [40].



---

## II. IDENTIFYING LINKS ACROSS THE SUSTAINABLE DEVELOPMENT GOALS

---



Accelerating progress on Target 3.a demands integrated tobacco control efforts which 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. Some of the links between tobacco, NCDs and the SDGs have been captured in a number of publications including by WHO, FCA, NCDA, the American Cancer Society (ACS) and the World Lung Foundation (WLF) (see Appendix 1). To complement and build upon these offerings, UNDP undertook a deeper analysis for this Discussion Paper by (i) mapping and scoring how stronger WHO FCTC implementation (Target 3.a) interacts with each SDG target; and (ii) undertaking a thorough desk review of empirical literature to document some of the strongest linkages identified in the mapping.

The mapping exercise used an SDG interaction modelling framework that was published in *Nature* [27]. In the framework, 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 which are ‘consistent’, meaning that one objective does not significantly interact with the other.<sup>13</sup> Indeed, the interaction framework digs deeper than the generic notion that the SDGs are ‘indivisible’ to recognize that, in fact, only some SDG targets are truly ‘indivisible’, and for others there are benefits and tradeoffs of differing magnitude.

Our analysis, especially the comprehensive review of empirical literature, distinguished between verifiable counteracting goals and targets (i.e. evidence-backed interactions) versus fallacious industry arguments for imputed ‘counteractions.’ An example is the myth that raising tobacco taxes will harm, rather than help, economies. While the tobacco industry has been known to argue that raised taxes will decrease government revenue, our review of the evidence shows otherwise [67].<sup>14</sup> As such, Target 3.a scored positively with Target 17.1 (on strengthening domestic resource mobilization). The analysis also examined bidirectional links because such links create demand amongst sectors to engage in tobacco control, and depicting health benefits only is not enough to meaningfully increase levels of cross-sectoral engagement. The mapping of WHO FCTC interactions with the targets of SDGs 1 – 4 is presented in Figure 2 for illustrative purposes (see next page).

Overall, the results suggest that WHO FCTC implementation interacts positively with 67 targets (35 enabling, 30 reinforcing and 2 indivisible), neutrally with 99 targets (99 consistent), and negatively with only 3 targets (3 constraining). Not surprisingly, with tobacco a leading behavioural risk factor for NCDs, Target 3.a scores as ‘indivisible’ with Target 3.4 on reducing premature mortality from NCDs. The results reveal quite clearly that, due to real constraints as well as perceived ones, special attention to policy coherence is needed with respect to Goals 8 (e.g. reducing youth unemployment while recognizing the links between tobacco growing, child labour and unsafe working conditions) and 17 (e.g. promoting universal and non-discriminatory trade as well as increasing the exports of developing country markets, while preserving national capacities to protect population health and reducing the global supply of tobacco).

<sup>13</sup> Please see Appendix 2 for the full methodology including illustrative examples.

<sup>14</sup> For example, between 1993 and 2009, South Africa increased total taxes on cigarettes from 32 percent to 52 percent of the retail price, experiencing sizable reductions in tobacco use and also a nine-fold increase in government tax revenues [68].

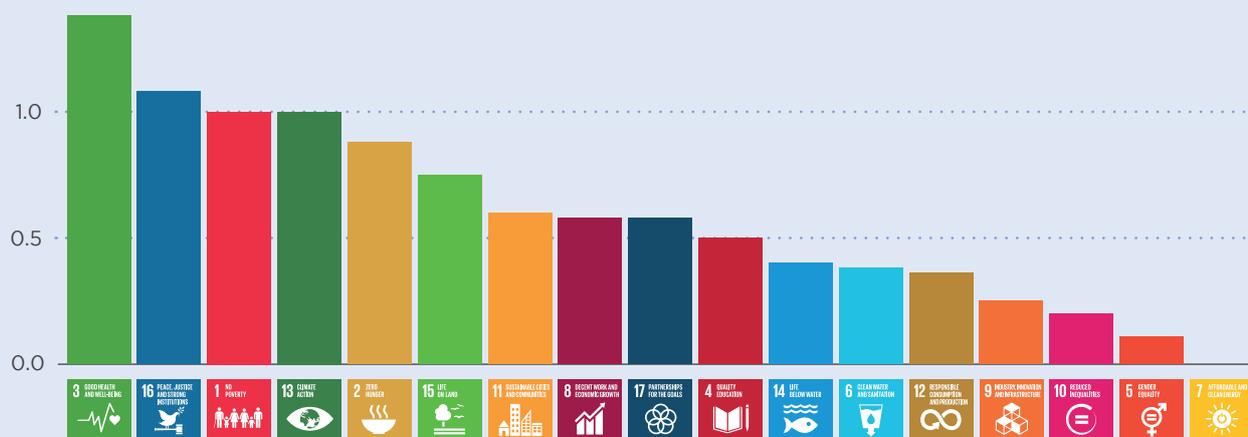
**FIGURE 2. WHO FCTC interaction results for SDGs 1 – 4**

	-3	-2	-1	0	1	2	3
	Cancelling	Counteracting	Constraining	Consistent	Enabling	Reinforcing	Indivisible
<b>1 NO POVERTY</b>	<b>NO POVERTY</b>						
1.1					1		
1.2						2	
1.3				0			
1.4				0			
1.5					1		
1.a						2	
1.b					1		
<b>2 ZERO HUNGER</b>	<b>ZERO HUNGER</b>						
2.1						2	
2.2						2	
2.3					1		
2.4					1		
2.5				0			
2.a				0			
2.b				0			
2.c					1		
<b>3 GOOD HEALTH AND WELL-BEING</b>	<b>GOOD HEALTH AND WELL-BEING</b>						
3.1				0			
3.2					1		
3.3						2	
3.4							3
3.5						2	
3.6				0			
3.7				0			
3.8						2	
3.9						2	
3.a							3
3.b					1		
3.c						2	
3.d				0			
<b>4 QUALITY EDUCATION</b>	<b>QUALITY EDUCATION</b>						
4.1					1		
4.2					1		
4.3				0			
4.4				0			
4.5				0			
4.6				0			
4.7					1		
4.a					1		
4.b				0			
4.c					1		

To produce a high-level sense of WHO FCTC-SDG interactions, average interaction scores were calculated for each goal. Specifically, these goal averages were calculated by adding the WHO FCTC interaction scores for each goal’s targets, then dividing by the number of targets for that goal.

Figure 3 presents these scores, which are not meant to be prescriptive in terms of where to devote efforts. In fact, that positive average interaction scores were calculated for 16 of the 17 SDGs is a testament to the numerous entry points for win-win approaches between specific WHO FCTC articles and SDG targets.

**FIGURE 3. WHO FCTC interaction scores (averages) for all 17 goals\***



\* 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.

A summary of relevant WHO FCTC interactions across the 2030 Agenda is presented in Table 1 (next page). 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 analysis is perhaps most useful as a tool to stimulate and guide in-country, cross-sectoral dialogue; dialogue which links tobacco control to priorities for non-health sectors of government as well as to over-

arching, unifying national narratives. For example, in some countries the national focus will be around economic growth and job creation, in others around child protection, and in others the greening of policies. Not all WHO FCTC-SDG interactions will necessarily be applicable, and thus persuasive, to all actors. Rather, Table 1 articulates an arsenal of connections which can be deployed strategically based on identified national priorities, to increase investment in, and whole-of-government buy-in of, tobacco control.

**BOX 4. The importance of identifying and promoting unifying themes for tobacco control**

Whether for malaria, HIV, or tobacco, complex health and development challenges require multisectoral action, and that relevant stakeholders are incentivized to engage. Audience-specific messaging is critical, for example making the economic argument to ministries of commerce, but a collective narrative that frames the objectives of all sectors can further boost policy coherence. In the health domain, overriding themes such as human rights, national security, economic development, equity, including gender equality, and sustainability have all been promoted with varying degrees of success [33]. These frames are options for tobacco control depending on national context, but the SDGs present a host of other potentially effective unifying themes for tobacco control. Chief amongst these are financing for development, reducing inequities of all kinds and ‘leaving no one behind.’ Identifying persuasive global and national narratives for tackling tobacco and NCDs will also be critical to increase donor engagement [34].

**TABLE 1. WHO FCTC interactions with the ‘non-health’ SDGs - summary narrative and key facts<sup>15</sup>**



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 are those 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 messaging opportunities. Meanwhile, spending on tobacco can divert a significant percentage of household resources from food, education, and other investments which 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**

- Of the world’s one billion smokers, close to 80 percent live in LMICs [14].
- Globally, each year 100 million people are driven into poverty due to out-of-pocket health spending [4].
- In India alone, tobacco consumption impoverished roughly 15 million people in 2004-2005 [64].

- In Thailand, low-income families spend 13.6 percent of their annual income on tobacco products, a proportion five times greater than what high-income Thai families spend [60].
- To purchase ten of the cheapest cigarettes to smoke each day, a smoker in Zambia must expend 18.2 percent of the national median income [53]; in Georgia this number, while smaller, is still a sizable 4.2 percent [54].



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 [28,61]. 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 [59]. 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**

- According to 2013 data, a Sri Lankan could purchase 83 servings of rice and 65 slices of bread for the price of just one average pack of cigarettes [7].
- In Bangladesh, an estimated 10.5 million malnourished persons could have an adequate diet if money currently spent on tobacco instead went toward food, with the lives of 350 children saved each day [56].

- It has been estimated that 10 to 20 million malnourished people worldwide could be fed if food crops were grown instead of tobacco [58].
- Land use for tobacco production, which could otherwise be devoted to growing food crops, is expanding in Zambia (a top tobacco producing country) – even as the 2013 Global Hunger Index classifies the situation in Zambia as “alarming” [6].

<sup>15</sup> The table builds upon preceding summary analyses of tobacco, NCDs and development undertaken by FCA, NCDA, WHO, ALS, and WLF. Resources from these organizations are presented in Appendix 1, together with prior related offerings from UNDP and the Convention Secretariat.



A quality education includes accessible messaging around how children can lead healthy, productive lives, and should provide a safe-environment free from risks such as second-hand 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 [55].

KEY FACTS

- In Bulgaria, Egypt, Indonesia, Myanmar and Nepal, low-income households spend 5–15 percent of their disposable income on tobacco, often surpassing income spent on education [21]. In Viet Nam, smokers spent 3.6 times more on tobacco than on education in 2003 [62].
- According to a 2011 analysis, approximately 1.3 million children (14 and under) are

engaged in tobacco farming worldwide, with 500,000 in India alone [63]. Some 10-14 percent of children from tobacco growing families are out of school because of working in tobacco fields [7].

- In Nepal 19 percent of students aged 13-15 use non-cigarette tobacco products (2010-2011 data) [7].



Tobacco control measures which 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 amongst women and girls, largely as a result of targeted tobacco industry campaigns which 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 second-hand smoke exposures. Power inequities

in the home and workplace, as well as low levels of empowerment, are impediments to changing this dynamic. Meanwhile, even as women account for over half of all deaths from NCDs globally, NCDs are still often misconstrued as being of greater import 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.

KEY FACTS

- According to data from 2008-2010, in China 53 percent of women of reproductive age were exposed to second-hand smoke at work and 65 percent at home, raising their risk of pregnancy complications such as stillbirths and infant death. In Viet Nam, second-hand smoke exposure in the home is 72 percent [74]. Globally, second-hand smoke accounted for 886,000 deaths in 2015 [1].

- While just two countries in the world have more women smokers than men smokers, 24 countries now have more girls who smoke compared to boys [7].
- Water pipe use among Jordanian girls (students) has doubled between 2008 and 2011, from about 25 percent to nearly 50 percent [7]. In Zambia, girls (students) are now more likely to use tobacco than boys (students) [75].

## 6 CLEAN WATER AND SANITATION



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 [84] but also disperses chemicals into

nearby waterways. Without considering the "environmental life cycle of tobacco" [see 76] 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.

### KEY FACTS

- In 2014, 2,248,065 discarded cigarette butts were picked up from beaches and water edges across 91 countries [80].
- Arsenic, lead, nicotine and ethyl phenol are leached from discarded butts into aquatic environments and soil, with not yet quantified implications for the quality of drinking water [76-77]. Even unsmoked filters are toxic to water and life below it [77].
- In the Nueva Segovia department of Nicaragua, where most tobacco farms are close to important rivers, researchers found pesticide contamination in both the superficial aquifer and deep groundwater [78-79]. Studies in Brazil have found excessive agrochemical residues in waterways near tobacco farming communities [81-83].

## 8 DECENT WORK AND ECONOMIC GROWTH



Tobacco control can help avoid the tangible productivity and GDP losses which result from premature mortality, sick leave, and unwell workers who remain on the job but perform below capacity. 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 which 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 [76,78]. Cigarette manufacturers and leaf buying companies often exploit farmers to obtain profits from below-cost leaf [6,86], with frequent sustained debt a result [7].

### KEY FACTS

- The cost of tobacco to the global economy is estimated to be more than USD 1 trillion per year, approximating 2 percent of global GDP [3,7,111].
- Up to half of all tobacco-related deaths occur during the prime productive years (age 35-69)[21,88].
- Smokers are significantly more likely to be absent from work or to call out sick [see 71-73]. In the UK, smokers are 33 percent more likely to be absent from work and take 2.7 additional sick days per year on average, costing the UK approximately 1.4 billion pounds annually [71].
- In Egypt, approximately 61 percent of indoor workers are exposed to second-hand smoke on the job. Some 59 percent of all these workers are non-smokers [90].
- Tobacco farmers in Kenya who switched to growing bamboo enjoyed rates of return that were 300 percent higher compared to tobacco growing [91]. Less than one in five tobacco farmers in Indonesia report tobacco farming to be profitable [92].



Research optimization is an important element of tobacco control, particularly for uncovering cost-effective tobacco treatment interventions which can be widely disseminated with strong uptake. 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 which 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 94].

## KEY FACTS

- In Egypt, close to 20 percent of adults who smoke either do not believe or do not know that smoking causes stroke; approximately 15 percent do not believe or know that second-hand smoke causes heart disease [7].
- In 2015, there were over 7 billion mobile cellular subscriptions in the world, up from less than 1 billion in 2000 [93], suggesting new opportunities for ensuring people have

access to information and cessation support.

- In India, WHO launched a national mCessation service in English and Hindi in January 2016. Nearly 2 million tobacco users have registered for the service, which provides tailored SMS (including instant advice on coping) based on users’ habits and background. An impact evaluation is underway [95].



Tobacco use widens inequalities within and amongst countries, not just in terms of health outcomes but across development dimensions. 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 [7]. 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 amongst 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

- In Uruguay, where smoking rates are highest among the poor, 35 percent of adults in the poorest quarter of the population smoke compared to nearly half that (19.6 percent) in the wealthiest quarter [97].
- In Madagascar, smokeless tobacco use in men is over 30 percent among those with no education compared to under 5 percent among those with higher education [7].
- Nearly one-third of the UK’s ten million smokers have a mental health condition [132].
- Industry marketing has been labelled ‘predatory’ as it takes direct aim at the culture and lifestyles of youth and lower socioeconomic groups. In Paraguay, 89

percent of youth (13–15 years old) noticed tobacco advertising on billboards during the last 30 days (according to 2012 data) [7].

- In the UK, compared to the general population, young lesbian, gay and bisexual people are more likely to smoke, start smoking at a younger age, and smoke more heavily [99]. The tobacco industry targets the LGBT community, ethnic minorities and youth with menthol versions of their products [100].
- In Thailand, the Asian Development Bank estimates that 60 percent of the deaths averted from a 50 percent tobacco price increase would be in the poorest third of the population, who would pay just 6 percent of the increased taxes [98].

11 SUSTAINABLE CITIES AND COMMUNITIES



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. 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

- In Bangladesh, smoking prevalence is significantly higher among men in slums (59.8 percent) compared to men in non-slums (46.4 percent)[102].
- Globally 570,000 children under five die each year from respiratory infections, such as pneumonia, that are attributable to indoor and outdoor air pollution and second-hand smoke [103].
- In Timor-Leste, 66 percent of youth (age 13-15) are exposed to tobacco smoke at home, while 70 percent are exposed in enclosed public places [101].
- In Turkey, households with a smoker devote nearly 8 percent of their monthly budget to smoking, resulting in their spending 9 percent less on utilities, housing and food compared to non-smoking households [105].
- In 2008, Mexico City implemented a smoke-free law covering restaurants, bars and nightclubs. The ban did not harm city business; in fact, economic evidence suggests a positive impact on restaurants' income, employees' wages, and levels of employment [104].

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Tobacco control can enhance responsible consumption and production because the "environmental life cycle of tobacco" [see 76], if not fundamentally altered, will continue to generate tons of waste (literally) and to release thousands of chemicals into the planet's air, water and soil. Moreover, 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)[108-109]. Tobacco control, among other things, encourages countries and individual farmers to shift from tobacco production toward activities which are friendlier to people and planet, while supporting tobacco users to quit or reduce consumption and non-users to never start.

KEY FACTS

- As the most discarded waste item worldwide, cigarette butts amount to 1.69 billion pounds of toxic trash each year – equivalent in weight to 177,895 endangered African elephants [7].
- WHO notes, "In 1995, it was estimated that global tobacco manufacturing produced over 2,000,000 tonnes of solid waste, 300,000 tonnes of non-recyclable nicotine-containing waste and 200,000 tonnes of chemical waste" [76,106].
- Indoor PM concentrations from smoking have been found to be up to 10-fold higher than PM concentrations from diesel car exhaust [107].



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 [135,139], 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 [136-137]. In other words, tobacco farming is a uniquely destructive and aggressive environmental force [59,114]. Whether through supply-side measures such as supporting alternative economic

livelihoods for tobacco growers (Article 17), or demand reduction measures such as tobacco cessation support (Article 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 [140] 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

- Tobacco farming causes up to 5 percent of global deforestation, with 200,000 hectares of natural woody biomass loss each year and LMICs burdened significantly. A 1999 analysis found tobacco farming causes almost one-fifth of China’s deforestation [144].
- Tobacco growing “may be up to 10 times more aggressive” than all other factors in deforestation (e.g. maize farming) combined [114]. In Zimbabwe and the Philippines, curing has been reported as the leading usage for indigenous wood in rural areas [138,141].
- If all trees in the tropics were cut down, the global temperature could increase by 0.7 degrees (because the ‘cooling effect’ of

- rainforests would be lost) [137].
- In 2006, 200 climate change experts warned that, each year, deforestation accounts for 25-30 percent of greenhouse gas emissions globally [143]. More recent estimates which show reductions in the *percentage* of GHG contributions from deforestation can be misleading, in part because total emissions from all sources including fossil fuels (i.e. the denominator) have risen [145].
- Evidence suggests that, dating to the 1950s, tobacco and oil companies have employed the same public relations firms, research institutions and researchers to obscure the negative impacts of their respective industries on health and environment [142].



Tobacco control can reduce marine pollution and toxicity, thus improving aquatic life. 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. Amongst the substances found in cigarette butts are arsenic, lead, nicotine and ethyl phenol, all of which leach into aquatic environments [76]. Cigarette

butt leachate kills aquatic life, for example marine and freshwater fish [110]. 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.

KEY FACTS

- Some 4.5 trillion cigarette butts are littered each year [110].
- According to the 2015 International Coastal Clean-up Report, cigarette butts are the most common single debris item collected, representing 15 percent of the total pieces of debris collected worldwide [80].
- The leachate from one cigarette butt

- placed into one litre of water will kill half of all marine and freshwater fish which come in contact with it [110].
- Among the pesticides used in tobacco growing is chloropicrin, a lung-damaging agent that was used as a tear gas in World War I and is toxic to fish and other organisms [7].



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 [76,112]. 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 112]. 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

- In Kenya, over one quarter of tobacco workers showed pesticide poisoning [112-113]. And tobacco-related environmental problems identified in the 1990s [112,118] – including soil erosion, changing of local streams from permanent to seasonal, water pollution and deforestation – were still visible in 2009 [119].
- Tobacco cultivation is to blame for 2-4 percent of deforestation globally, even though it accounts for less than 1 percent of the world’s agricultural land use [114]. In

- Bangladesh, 30 percent of deforestation is related to tobacco manufacturing [115].
- Zambia has one of the highest deforestation rates in the world (250,000 – 300,000 hectares per year)[see 116-117] and is also is a top-ten country in terms of percentage of arable land devoted to tobacco production [7].
  - In countries such as Canada, cigarettes are responsible for some of the most destructive forest fires in history [120].



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 policy making (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 121-122].

KEY FACTS

- As of 2015, 53 percent of sub-Saharan African Parties to the WHO FCTC had a national coordinating mechanism for tobacco control in place, falling below the 67 percent global rate reported in 2014 [123].
- Over two-thirds of the 130 WHO FCTC Parties that submitted a 2014 report affirmed that they have taken steps to prevent tobacco industry interference in policymaking – a 13 percentage point

- increase from 2012; however, Parties continue to consider tobacco industry interference to be the most important barrier they face to treaty implementation [65].
- According to Transparency International’s Corruption Perceptions Index 2016, over two-thirds of the 176 countries and territories examined fall below the midpoint of the scale (with 0 representing highly corrupt and 100 very clean) [125].



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 which protect this right, 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.

- A 2017 WHO and UNDP joint report finds that the total annual economic cost of tobacco use to China in 2014 was USD 57 billion, a 1000 percent increase from the year 2000. By increasing the retail price of cigarettes by 50 percent (and sustaining future price increases), China would avert 20 million premature deaths and 8 million cases of impoverishment over 50 years – while generating an additional USD 66 billion in tax revenue annually [126].
- The Philippines generated USD 3.9 billion in incremental excise tax revenues during the first three years of its Sin Tax Reform Law, with 80 percent of these revenues

from the law’s tobacco component [127]. The Philippines uses the additional tobacco tax revenue to finance universal health coverage and to support alternative livelihoods for tobacco growers [128].

- In 2016 Uruguay triumphed in court against Phillip Morris International in relation to health warnings on cigarette packaging, adding to the case law in support of public health policies over private financial interests. In addition to dismissing Phillip Morris’s claims, the International Centre for Settlement of Investment Disputes ordered the company to provide Uruguay USD 7 million for legal expenses incurred [see 129].

An important takeaway from Table 1, beyond the number of entry points for progressing tobacco control and development simultaneously, is that the core business of ‘non-health’ sectors can benefit tobacco control even where initiatives do not have an explicit tobacco control or health component. For example, the Global Environment Facility, in partnership with UNDP, has supported farmers in Tanzania to shift from growing tobacco to growing tomatoes [69]. While the stated goal is to reduce labour intensity and increase profitability within broader efforts to support biodiversity, carbon

emission reductions and positive land use change, the health benefits are clear. The routine integration of feasible health and tobacco-related indicators into such projects (e.g. nicotine poisonings averted) would support co-benefit analysis, planning and financing while pointing the way towards effective local SDG solutions. Health-focused projects must likewise consider feasible development impacts.

The next section provides recommendations for capitalizing on the interactions between the WHO FCTC and sustainable development.

---

## III. RECOMMENDATIONS

---



The interaction analysis presented in Section II depicts concrete links between tobacco control and many other development priorities, creating significant space for integrated efforts across government sectors, UN agencies and other stakeholders. But high impact win-win opportunities will simply not be realized if a 'business as usual' approach to tobacco control prevails. This section contains four broad recommendations, each with suggested action areas, which can support Parties, development partners<sup>16</sup>, civil society, academia and other stakeholders to accelerate tobacco control and sustainable development in an integrated manner, and to strengthen policy coherence. While these recommendations will likely be relevant throughout the Agenda 2030 period (2015-2030), they are particularly important now, during the initial country-level planning phases where the global SDGs are being translated into national plans and policies.

**1 National coordinating mechanisms and tobacco control focal points, under the leadership of treaty coordinating bodies, should promote inclusion of the WHO FCTC within SDG implementation plans, and identify sectors where the potential win-wins across mandates are strongest for deeper partnerships.**

**A. Foster strong partnerships within the health sector itself.** Though the SDG-interaction analysis focused on the 'non-health' sectors, the low hanging fruit is to capitalize on the connections between the WHO FCTC and virtually all other targets under SDG 3. Examples include targets 3.2 (deaths in children under five), 3.3 (TB and

HIV), 3.4 (NCDs), 3.5 (harmful use of alcohol), 3.8 (universal health coverage) and 3.9 (air pollution). Stakeholders focusing on SDG 3 targets other than WHO FCTC implementation should be supported to recognize the relevance of tobacco control to accelerating achievement of their objectives. For example, the Global Fund is increasingly recognizing the impacts of NCDs on HIV, TB and malaria – and thus the relevance of NCDs to its core programming [8]. Meanwhile, emphasis on aligning approaches to address a broader grouping of risky behaviours – comprising tobacco use, unhealthy diet, unsafe sex, harmful use of alcohol and narcotic drug abuse – is increasing.<sup>17</sup> Serious consideration of how to integrate responses to tobacco and other health targets, both within and outside the health sector, would provide additional entry points for global and national tobacco control efforts while potentially unlocking needed resources.

**B. Promote tobacco taxes as a development financing solution.** The Addis Ababa Action Agenda recognizes tobacco taxation (WHO FCTC Article 6) for its potential to improve health, avert the costs of poor health, and generate significant revenue for development financing. With Agenda 2030 being broad and ambitious, and with resources limited in a context of increased domestication of development financing,<sup>18</sup> the opportunity could not be greater to advance raised tobacco excise taxes as a proven, cost-effective [38] means to increase resource flows.<sup>19</sup> Using these additional resources for tobacco control activities which deliver direct benefits to non-

<sup>16</sup> Including intergovernmental organizations, bilateral and multilateral development banks, and economic integration organizations.

<sup>17</sup> The World Bank notes that the social and economic consequences of risky behaviours, which are often imposed onto others, tend to be more prevalent in poor communities and can reverse development progress [29].

<sup>18</sup> The price tag of implementing the SDGs has been estimated in the range of 3.3 to 4.5 trillion dollars per year, collectively, with a funding shortfall of 2.5 trillion dollars in developing countries [130] – which donors are not inclined to make up on their own.

<sup>19</sup> Guidance exists on how to design and enforce tobacco excise taxes, for example from the International Monetary Fund [133]. Notably, the World Bank and International Monetary Fund have recently joined forces to prepare a "Tobacco Taxation Module" as part of their joint Tax Policy Assessment Framework, which aims to strengthen Member States' tax systems in light of the Addis Ababa Action Agenda [134].

health sectors could expand cross-sectoral support for implementation, and more actively engage ministries of planning, finance and economy. Moreover, success in this area could open the door for greater consideration and implementation of other WHO FCTC articles for development.

**C. Promote increased attention to the gender aspects of tobacco control.** UNDP's analysis of tobacco control within Agenda 2030 design processes, described in Background and Context, found a dearth of tobacco-related references to women and girls. This glaring lack of attention, if unaddressed, will hold back global and national tobacco control efforts and achievement of the SDGs broadly. As highlighted in Table 1, women and girls are taking up smoking at alarming rates, particularly in LMICs and in part because of manipulative marketing which associates smoking with female empowerment.<sup>20</sup> Women and girls also face heightened exposures to second-hand smoke, including because of gender power imbalances which constrain their capacity to negotiate smoke-free spaces. And in their care-taking roles they are often pulled out of school or from formal employment because of the NCD epidemic. Meanwhile, the majority of tobacco users are still men, and this population too endures targeted and manipulative marketing, for example campaigns which associate smoking with masculinity. Tobacco control measures that address gender-specific risks are needed,<sup>21</sup> as are surveillance systems which systematically disaggregate

data by sex, age, and vulnerable groups such that trends among key demographics are not obscured [49]. Tobacco control advocates and those focused on gender equality should align agendas and approaches.

**D. Where appropriate, demonstrate the relevance of Article 17 on alternative livelihoods, and Article 18 on environmental protection, to sustainable development.** Many countries derive revenue from growing, processing, managing and exporting tobacco. Such revenue must be weighed carefully against the social, economic and environmental harms tobacco inflicts upon individuals and societies. Encouragingly, some tobacco-producing countries are shifting crop production away from tobacco toward new sources of revenue. Such shifts can deliver widespread benefits to societies; they can provide workers with higher rates of return, increase food security, reduce industry exploitation of labour, keep children in school, protect the environment and, of course, improve health. Recognizing and reiterating these cross-SDG benefits can spur attitudinal and policy changes around tobacco production. Tobacco-producing countries must be supported with technical guidance to transition, including from other WHO FCTC Parties. Innovative sources of financing alternative livelihoods, such as dedicating a portion of domestic tobacco tax revenues or using development impact bonds, should be explored.<sup>22</sup> Industry-backed front groups that include tobacco growers' associations must be excluded from policymaking, and legitimate ones included.

20 The preamble to the WHO FCTC notes the "increase in smoking and other forms of tobacco consumption by women and young girls worldwide" and refers to the Convention on the Elimination of Discrimination against Women and its implications for tobacco control.

21 Article 4 of the WHO FCTC acknowledges "the need to take measures to address gender-specific risks when developing tobacco control strategies" [12]. FCTC/COP7(12), 'Addressing gender-specific risks when developing tobacco control strategies', notes concern that "...the lack of evidence on the gender-specific effect of tobacco control policies challenges Parties' full implementation of the WHO FCTC and the Sustainable Development Goals (SDGs)..." [131].

22 FCTC/COP7(10) on economically sustainable alternatives to tobacco growing (in relation to Articles 17 and 18 of the WHO FCTC) decides to "urge the international community to support mobilization of resources to promote economically viable alternatives to tobacco growing and workers" [39].

**2 Development partners should invest in building the capacity of different stakeholders across government and civil society to advocate for, support, and monitor progress on tobacco control as part of SDG implementation efforts.**

- A. Ensure the UN System is ‘fit-for-purpose’ and empowered to meet demand for country support on tobacco control.** The number of country requests to the UN System on NCDs and tobacco control is high and growing.<sup>23</sup> These focus on technical assistance, normative guidance and multisectoral coordination support. They are accruing amidst increasing country requests for support on other emerging priorities now codified in the SDGs. To meet this demand, the UN system must re-evaluate the appropriateness of vertical approaches, organizational structures which continue to reflect MDG priorities, and ingrained modes of working [31]. Both within and across agencies, strengthened policy coherence is of paramount import, such that the goals of one unit or agency accelerate rather than counteract or negate those of another. Encouragingly, there are visible efforts to balance specialization with general support services and to optimize inter-agency collaboration. The UNDG’s Mainstreaming, Acceleration and Policy Support (MAPS) approach to SDG implementation is a significant advancement in this regard, as is the UN Inter-Agency Task Force on the Prevention and Control of NCDs. But for NCDs and tobacco control, technical and financial resources are not, at this time, matching demands for in-country assistance.

**BOX 5. What is ‘MAPS’ and why does it matter for tobacco control?**

MAPS - Mainstreaming, Acceleration and Policy Support - is the dedicated common UN approach under the auspices of the UNDG to support SDG implementation in countries. *Mainstreaming* is the support given to governments as they ‘land’ the agenda at national and local levels, incorporating it into their strategies, plans, and budgets, while strengthening their data systems. *Acceleration* means steering resources towards high-impact areas capable of advancing multiple goals and targets at once. It also means carefully considering and managing trade-offs between goals and targets, and identifying and overcoming barriers to speed up progress. Finally, *Policy Support* concentrates on ensuring that the full spectrum of skills and technical support within the UN development system is available to countries and provided in a timely, coordinated and demand-driven manner at lowest possible cost. The MAPS approach, including its country missions, is a concrete opportunity to advocate and discuss the WHO FCTC-SDG interactions presented in Table 1 with national stakeholders. Critical for tobacco control is inclusion in SDG planning and financing frameworks, national development plans, poverty reduction strategy papers, and UN support documents including UNDAFs.

<sup>23</sup> For example, NCD or FCTC ‘investment cases’ have been requested in over 40 countries as at May 2017 (see also recommendation 2D).

**B. Build the capacity of civil society to advocate for tobacco control in SDG implementation processes.**

The FCA and NCDA do admirable work in bringing together civil society organizations, framing tobacco and NCDs as development issues, and holding Member States (and the UN System) accountable to achieving national and global commitments. Tobacco control's inclusion in Agenda 2030 is an opportunity to empower civil society organizations and strengthen their efforts, including by increasing focus on the interactions between tobacco use, its sequelae and adverse implications for sustainable development. Conceptualization and awareness raising of tobacco control as cross-cutting and integral to priorities such as poverty and inequality reduction, decent work, economic growth, and sustainable consumption [32] can catalyze civil society constituencies and social movements to converge, just as it can spur intersectoral action. The global HIV response has demonstrated the powerful potential of civil society in public health advocacy and service provision, offering many lessons for generating a shared identity backed by a multi-institutional, multi-constituency, and multi-issue response.

**C. Invest in monitoring Target 3.a, including through the development of metrics complementary to the official indicator.**

The official indicator for Target 3.a is 'Age-standardized prevalence of current tobacco use among persons aged 15 years and over.'<sup>24</sup> WHO and the WHO FCTC Convention Secretariat are co-custodians of data for Target 3.a, with WHO responsible for collecting and analyzing data on the aforementioned indicator and the Convention Secretariat responsible for collecting information on compliance with treaty obligations [13,87].

Indeed, the agreed indicator for Target 3.a is not a direct measure of WHO FCTC implementation. A composite means of tracking implementation – which includes specific attention to the development dimensions of tobacco – is of potential value. Possible inputs include selected indicators or summary data from Party reports, which themselves could be strengthened or modified in light of the SDG reporting process, for example by incorporating additional indicators on levels of WHO FCTC integration into development planning documents. Tobacco affordability data, readily available, could also be considered, as this data often indicates progress (or lack thereof) on a number of WHO FCTC articles [70]. The process of comprehensive indicator development should be inclusive of the Convention Secretariat, WHO, UNDP, UNDESA and other development partners, and grounded in COP requests. Experts in both tobacco control and indicator development should be consulted, to discuss data availability and/or methodological requirements for new data collection. The comprehensive indicator could be beta-tested in select countries to validate its value-added and to refine it as appropriate.

**D. Develop and implement a standardized methodology for costing WHO FCTC implementation and assessing return on investment (ROI).**

The WHO FCTC includes a suite of cost-effective tobacco control policies. But uneven implementation of the treaty underscores that the mere existence of these policies is not sufficient – ministries of health must be supported with the tools needed to make a convincing business case for investing in tobacco control, to speak directly to the economic sectors of government on their own terms. Decision COP6(17) invites WHO, UNDP and the World Bank to work together

24 The indicator development process can be viewed here: <http://unstats.un.org/sdgs/iaeg-sdgs/>

on precisely this support. The case should be three-fold and include the costs of inaction, the costs to implement a set of country-specific tobacco control ‘best buys’, and an ROI analysis. Identifying short-term returns (to the extent possible) is paramount for ensuring political buy-in, while standardization and rigour are important for cross-country comparison and greater confidence in results. Coherence with NCD investment case methods would help countries align their responses and identify relevant policies that link the tobacco control and NCD prevention agendas.

.....

“Globally, the cost of inaction in relation to NCDs – estimated in the trillions of dollars – is now recognized as a risk requiring action in all countries, and one that extends well beyond the health sector alone.”

- Post-2015 National Consultation of Bangladesh [42]

.....

**3 All stakeholders – Parties, development partners, civil society, academics and affected populations – should identify and address key opponents to tobacco control, and remind those ‘neutral’ of their obligations to remove any policy incoherence.**

**A. Prioritize the protection of public health (and sustainable development) from tobacco industry interference in policymaking.**

Tobacco and other health-harming products introduce an unprecedented level of

‘commercial’ determinants of health, in which certain multi-national corporations stand to gain from the status quo [35,36]. Where government sectors are not clear about the development dimensions of tobacco control, not sensitized to truth-filtered evidence, and do not regularly engage transparently with each other, they are particularly susceptible to industry’s influence. Parties to the WHO FCTC consistently report tobacco industry interference with public policies on tobacco control to be the most important barrier they face to treaty implementation [15].<sup>25</sup> Implementing Article 5.3 to firewall industry influence requires a multi-faceted approach, starting with strengthened implementation of Article 5.2a<sup>26</sup> and including South-South and Triangular Cooperation (SSTrC), establishment of new industry interference monitoring centres, and tools to assess industry interference, for example the SEATCA Tobacco Industry Interference Index [37]. Strengthened, coordinated and effective advocacy will be critical. Also important are anti-corruption efforts, greater engagement with parliamentarians and legislative oversight mechanisms, and leveraging behavioural science not just for individuals but for institutional behaviour change.<sup>27</sup>

**B. Reinforce the message that national-level tobacco control commitments are a whole-of-government responsibility.**

By becoming Parties to the WHO FCTC, 180 Parties are legally obliged to implement the treaty’s provisions. These same country Parties have also made a number of other mutually supporting commitments, including (in chronological

25 The 2014 WHO report on Article 5.3 to the COP includes examples of industry interference tactics cited by Parties [65].

26 Article 5.2a states: “Towards this end, each Party shall, in accordance with its capabilities: establish or reinforce and finance a national coordinating mechanism or focal points for tobacco control.”

27 Behavioural insights is an emerging area which, in part, examines how people and institutions react (or do not react) to different prompts. It has shown particularly effective in helping to solve “last mile challenges” for sustainable development [30]. For example, in Papua New Guinea, UNDP has teamed with PNG’s department of finance to launch a “Phones against corruption” initiative, which, through SMS messaging, provides civil servants with an anonymous and free mechanism for reporting corruption cases. By end June 2016, approximately 29,164 SMS were received from 8,827 different users, and 251 cases of alleged corruption were under investigation by the Internal Audit and Compliance Division [41].

order); the 2011 Political Declaration on NCDs; the 2014 Outcome Document of the high-level meeting of the General Assembly on the comprehensive review and assessment of the progress achieved in the prevention and control of NCDs; the Addis Ababa Action Agenda on Financing for Development; and the 2030 Agenda for Sustainable Development. Importantly, each of these frames tobacco clearly as an issue for sustainable development, and thus commits not just health ministries to act but entire governments and societies. During SDG priority setting and planning at national level, Parties should be reminded of these commitments, together with the development dimensions of tobacco and the range of guidance and technical support tools now at their disposal to facilitate coordinated, integrated responses.<sup>28</sup> Most important is identifying and addressing potential policy incoherence.

#### 4 Development partners should support Parties to invest in new mechanisms, modalities, and technologies for enhanced tobacco control.

##### A. Promote and facilitate South-South and Triangular Cooperation for tobacco control.

By emphasizing information exchange and cooperation<sup>29</sup> as well as global and regional policy coherence, the WHO FCTC encourages Parties to support each other in confronting similar challenges. In response to the COP,<sup>30</sup> UNDP and the

Convention Secretariat have scaled up support to SSTRc for tobacco control in recent years, with results spanning all regions. Moreover, UNDP's South-South Unit has ensured inclusion of SSTRc for tobacco control within SSMART for SDGs [44] – a global marketplace matching demand and supply in development solutions to address the SDGs. This provides a firm foundation to scale up SSTRc for tobacco control and development, in line with Goal 17's broader call for capacity building through North-South, South-South and Triangular collaboration. Perhaps South-South and Triangular Cooperation's greatest tobacco control potential is in helping vulnerable countries to reduce the time-lag often seen between tobacco's devastating consequences, on the one hand, and comprehensive policy responses, on the other<sup>31</sup> [47,48]. With some countries described as the "smoking equivalent of a ticking time-bomb", where smoking rates are rising dramatically but the epidemiological impacts have not yet fully manifested due to the time lag between smoking, disease and death [45-46], the stakes for sustainable development are particularly high.

##### B. Explore new methods and technologies to better protect and engage youth.

Globally, most people start smoking before the age of 18, and almost a quarter of these smokers begin smoking before the age of ten [50]. To support youth to quit, reduce or never start tobacco consumption, behavioural insights could be leveraged, for example by

28 Examples include: direct in-country support to strengthen multisectoral governance, including by building the capacities of ministries of health to make the economic argument for tobacco control; the 2014 UNDP-Convention Secretariat Joint Discussion Paper on Development Planning and Tobacco Control [26]; the 2016 UNDP-Convention Secretariat Joint Discussion Paper on Tobacco Control Governance [123]; and other UNDP and partner products listed in Appendix 1.

29 Article 22 is on "Cooperation in the scientific, technical and legal fields and provision of related expertise." Additionally, Article 5.2(b) calls in part for countries to cooperate with other Parties in developing appropriate policies for preventing and reducing tobacco consumption, nicotine addiction and exposure to tobacco smoke.

30 Decision FCTC/COP4(19) [124] requests the Convention Secretariat to actively engage with UNDP and other institutions and networks mentioned in FCTC/COP/4/18 (the Report of the Convention Secretariat on South-South cooperation and implementation of the WHO FCTC [89]) on SSTRc for implementation of the WHO FCTC.

31 A comprehensive policy response in some leading countries – including Australia, Canada, Finland, Norway, Sweden, New Zealand and the UK – took 20-30 years to develop, despite problems from tobacco arising decades earlier [48 citing 47]. Many of the countries now most at risk do not have policy environments that are similarly conducive to comprehensive tobacco control [46-47].

associating abstinence with taking a stand against manipulative and unfair industry practices.<sup>32</sup> Meanwhile, the development and implementation of innovative tobacco control measures must harness the younger generation’s “acute sense of urgency, passion,

connectivity, and media capabilities” [52]. Youth can also uniquely mobilize to hold governments accountable, and extend pro-health messaging to peers, families and communities. Evidence indicates that youth are more primed than ever to be allies in the fight against tobacco.<sup>33</sup>



32 This approach has worked in the context of healthy eating [43]. Tobacco companies continue to employ sophisticated marketing tactics designed to reach youth, such as placing advertisements at children’s eye level [51].

33 Not only was tobacco use a major concern for youth within Agenda 2030 design processes, but also 78.3 percent of students across all regions think smoking should be banned in all public places [50].

.....

# CONCLUSION

.....



The SDGs will steer countries' health and development efforts from now through 2030. Inclusion of the WHO FCTC within the 2030 Agenda is a potential game-changer, much like the treaty itself. But the Agenda is ambitious, and resources are too limited for success to be expected as a matter of course. Strengthened capacities are needed across the board – from governments to the UN System, from civil society to academia – for integrated efforts that capitalize on key SDG synergies across tobacco control and other targets. Traditional health-focused tobacco control narratives need an 'SDG reboot.'

Strong and sustained multisectoral coordination for tobacco control is integral to implementation of virtually all WHO FCTC articles. The architects of the WHO FCTC recognized this when they conceived the treaty over a decade ago, classifying governance elements – under Article 5 – as a general obligation for Parties. Agenda 2030 requires that institutions have the capacity to effectively and transparently identify synergies, manage intra-governmental incentive conflicts, promote policy coherence, improve information sharing, and engage in co-benefit analysis, planning and resource allocation [35]. While the international health architecture is still largely concerned with health-sector specific responses,<sup>34</sup> Parties' requests for multisectoral governance structure support have been steady and clear. The Convention Secretariat, UNDP and WHO have ramped up support in recent years accordingly, through SStrC support as well as through the development of knowledge products and practical tools replete with country examples and recommendations (see Appendix 1).

Integration of tobacco control into national and local planning and financing to address the SDGs is critical for driving coherent action. UN Country Teams, just like government sectors, can consider the strong connections between tobacco control and other accountabilities. Parties must support each other to design and implement effective policies, and to push back hard against industry interference. Innovative approaches need leveraging, whether in behavioural insights, anti-corruption, or joining up previously unlinked constituencies. Tobacco taxation must come to be viewed as a go-to solution for domestic financing challenges, and development partners must come to see current levels of support as vastly misaligned with health and development burdens as well as country demand. This Discussion Paper, and its analysis of interactions across goals and targets, demonstrates how tobacco control can be an accelerator for sustainable development, and identifies opportunities for better advocacy and alignment of efforts.

The clarion call of the 2030 Agenda is to leave no one behind. But what often gets lost is that those currently left behind are there through no fault of their own. Rather, they are often behind because they have endured the consequences of social, political and economic policy choices – choices which sometimes have unforeseen or unintended impacts. With tobacco killing over 7 million people every year, costing the world over a trillion USD in medical expenses and lost productivity, and causing extensive damage to the environment, the case is clear - implementing the WHO FCTC is a powerful means for countries to improve the lives of their citizens, and to better the conditions and future outlook of their country.

34 With notable exceptions such as the Inter-American Development Bank's increased support to multisectoral action for health.

---

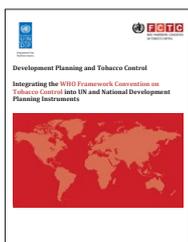
# APPENDIX 1: ADDITIONAL RESOURCES

---



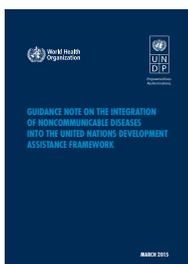
## **Discussion Paper: Tobacco Control Governance in sub-Saharan Africa: Implementing Article 5.2(a) of the WHO FCTC**

Based on an in-depth review of WHO FCTC Party reports and internal government documents from select countries, as well as a wide set of key informant interviews with focal points, members of NCMs and civil society leaders, the report provides a clear set of recommendations to guide future efforts to strengthen or establish strong, dedicated tobacco control governance mechanisms that can facilitate multisectoral coordination and action, while protecting against tobacco industry interference in policymaking.



## **Development Planning and Tobacco Control: Integrating the WHO Framework Convention on Tobacco Control into UN and National Development Planning Instruments**

UNDP and the Convention Secretariat jointly produced this report to reflect the urgent need to integrate WHO FCTC implementation into countries' health and development plans and ensure its inclusion in the UN System response as articulated through the UN Development Assistance Frameworks (UNDAFs), which are the strategic programme frameworks jointly agreed between governments and the UN system outlining priorities in national development.



## **UNDP/WHO Guidance Note on Integrating NCDs into UNDAFs (English and French)**

The Guidance stresses the importance of engaging with all parts of government and society when integrating NCDs into UNDAFs. The Guidance is structured along the four main steps of UNDAF development: (i) building the roadmap; (ii) conducting a country analysis; (iii) strategic planning; and (iv) monitoring and evaluation. It recognizes the importance of 'Delivering as One' and encourages countries to work with the UN System to capitalize on the strengths and comparative advantages of the different members of the UN family.



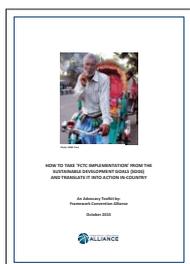
## **What Government Ministries Need to Know about Non-communicable Diseases**

This set of briefs produced by WHO and UNDP provide policy and decision makers across government with information on how NCDs impact their sector, and the proactive steps they can take to respond to the NCD challenge while advancing their own objectives and accountabilities.



### Health Promotion in the Sustainable Development Goals

UNDP and WHO produced this set of four policy briefs to discuss how different aspects of health promotion – healthy cities, action across sectors, social mobilization, and health literacy – can support ‘win-wins’ for health and sustainable development in the context of Agenda 2030.



### How to Take ‘FCTC implementation’ from the Sustainable Development Goals (SDGs) and Translate it into Action In-Country

This advocacy toolkit produced by the FCA provides tobacco control advocates with resources for promoting stronger tobacco control in the Agenda 2030 era. The toolkit not only includes country examples and data of tobacco-SDG interactions, but also contains: sample press releases and opinion articles which tobacco control advocates can tailor and send to officials and the media; links to official documents and research; and lessons learned from tobacco control advocates over the years, particularly regarding efforts to integrate tobacco control into national development plans.



### Tobacco: a Barrier to Sustainable Development

This factsheet, developed by the FCA, WLF, NCDAC and Campaign for Tobacco-Free Kids, stresses that reducing tobacco use is critical to each of the SDGs. It provides SDG-by-SDG global and national examples.



### NCDs Across the SDGs – a Call for an Integrated Approach

The NCDAC produced this infographic to demonstrate how action on NCDs and their risk factors, including tobacco use, intersects with multiple other SDG priorities. The infographic can be a driver of integrated approaches, policy coherence, and multisectoral coordination.



### The Tobacco Atlas (Fifth Edition)

Produced by the American Cancer Society and World Lung Foundation, the Tobacco Atlas provides a compelling and accessible compilation of available data on tobacco and its impacts (social, economic and environmental). In addition to the PDF, the Tobacco Atlas can be accessed through an interactive website, [www.tobaccoatlas.org](http://www.tobaccoatlas.org), where users can navigate the full spectrum of global and national graphics, tables and data which the Atlas offers.

# APPENDIX 2: SEVEN-POINT SCALE OF SDG INTERACTIONS

[FROM REFERENCE 27]

## GOALS SCORING

The influence of one Sustainable Development Goal or target on another can be summarized with this simple scale.

Interaction	Name	Explanation	Example
+3	Indivisible	Inextricably linked to the achievement of another goal.	Ending all forms of discrimination against women and girls is indivisible from ensuring women's full and effective participation and equal opportunities for leadership.
+2	Reinforcing	Aids the achievement of another goal.	Providing access to electricity reinforces water-pumping and irrigation systems. Strengthening the capacity to adapt to climate-related hazards reduces losses caused by disasters.
+1	Enabling	Creates conditions that further another goal.	Providing electricity access in rural homes enables education, because it makes it possible to do homework at night with electric lighting.
0	Consistent	No significant positive or negative interactions.	Ensuring education for all does not interact significantly with infrastructure development or conservation of ocean ecosystems.
-1	Constraining	Limits options on another goal.	Improved water efficiency can constrain agricultural irrigation. Reducing climate change can constrain the options for energy access.
-2	Counteracting	Clashes with another goal.	Boosting consumption for growth can counteract waste reduction and climate mitigation.
-3	Cancelling	Makes it impossible to reach another goal.	Fully ensuring public transparency and democratic accountability cannot be combined with national-security goals. Full protection of natural reserves excludes public access for recreation.

# REFERENCES

1. GBD 2015 Risk Factors Collaborators. Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. *The Lancet* 2016; 388:1659–724.
2. WHO Factsheet on Noncommunicable Diseases. 2017. Available at: <http://www.who.int/mediacentre/factsheets/fs355/en/>
3. U.S. National Cancer Institute and WHO. 2016. The Economics of Tobacco and Tobacco Control. National Cancer Institute Tobacco Control Monograph 21. NIH Publication No. 16-CA-8029A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; and Geneva, CH: World Health Organization.
4. Xu, K, et al. Protecting households from catastrophic health spending. *Health Aff* 2007; 26(4):972-983.
5. See UNDP. 2013. Addressing the Social Determinants of Noncommunicable Diseases. Available at: <http://www.undp.org/content/undp/en/home/librarypage/hiv-aids/discussion-paper--addressing-the-social-determinants-of-noncommu.html>
6. Hu T, and Lee, AH. Tobacco control and tobacco farming in African countries. *J Public Health Policy* 2015; 36(1):41-51.
7. Eriksen, M, et al. 2015. The Tobacco Atlas: Fifth Edition. American Cancer Society and World Lung Foundation. Available at: [http://3pk43x313ggr4cy0lh3tctjh.wpengine.netdna-cdn.com/wp-content/uploads/2015/03/TA5\\_2015\\_WEB.pdf](http://3pk43x313ggr4cy0lh3tctjh.wpengine.netdna-cdn.com/wp-content/uploads/2015/03/TA5_2015_WEB.pdf)
8. GF/B33/11. Global Fund support for co-infections and co-morbidities.
9. Basu, S, et al. Projected effects of tobacco smoking on worldwide tuberculosis control: mathematical modelling analysis. *BMJ* 2011; 343:d5506.
10. Yen, Y-F, et al. Smoking increases risk of recurrence after successful anti-tuberculosis treatment: a population-based study. *Int J Tuberc Lung Dis* 2014; 18(4):492-498.
11. NCD Alliance. 2011. Putting noncommunicable diseases on the global agenda: NCD Alliance briefing paper: NCDs, tobacco control, and the FCTC. Available at: [http://www.fctc.org/images/stories/NCDs\\_tobacco\\_brief\\_June11.pdf](http://www.fctc.org/images/stories/NCDs_tobacco_brief_June11.pdf)
12. WHO Framework Convention on Tobacco Control. A56/8. World Health Organization (WHO); 2003.
13. WHO FCTC. 2017. Ottawa: WHO and the Secretariat become co-custodians of SDG target 3.a. Available at: <http://www.who.int/fctc/mediacentre/news/2017/who-and-convention-secretariat-become-cocustodian-sdg-target-3-a/en/>
14. WHO Factsheet on Tobacco. 2017. Available at: <http://www.who.int/mediacentre/factsheets/fs339/en/>
15. Convention Secretariat. 2016. 2016 Global Progress Report on implementation of the WHO Framework Convention on Tobacco Control. Available at: [http://www.who.int/fctc/reporting/2016\\_global\\_progress\\_report.pdf?ua=1](http://www.who.int/fctc/reporting/2016_global_progress_report.pdf?ua=1)
16. Gostin, LO. Non-communicable diseases: Healthy living needs global governance. Comment in *Nature* 2014; 511(7508):147-149.
17. A/FCTC/COP/5/17. 2012. South-South and triangular cooperation for implementation of the WHO Framework Convention on Tobacco Control. In: Conference of the Parties to the WHO Framework Convention on Tobacco Control, fifth session. Seoul, Republic of Korea; 2012.
18. UN System Task Team on the Post-2015 UN Development Agenda. 2012. Realizing the Future We Want for All. Pp.8-9. Available at: [http://www.un.org/millenniumgoals/pdf/Post\\_2015\\_UNTTreport.pdf](http://www.un.org/millenniumgoals/pdf/Post_2015_UNTTreport.pdf)
19. Hawkes, C and Popkin, BM. Can the sustainable development goals reduce the burden of nutrition-related non-communicable diseases without truly addressing major food system reforms? Commentary in *BMC Med* 2015; 13:143. Available at: <http://www.biomedcentral.com/1741-7015/13/143/>

20. UNDG. 2013. The Global Conversation Begins: Emerging views for a new development agenda. Available at: <http://sustainabledevelopment.un.org/content/documents/841global-conversation-begins-web.pdf>
21. WHO. 2004. The Millennium Development Goals and Tobacco Control: An Opportunity for Global Partnership. Available at: [http://www.who.int/tobacco/publications/mdg\\_final\\_for\\_web.pdf](http://www.who.int/tobacco/publications/mdg_final_for_web.pdf)
22. NCD Alliance. The Millennium Development Goals and Non-Communicable Diseases. Available at: [http://ncdalliance.org/sites/default/files/rfiles/The%20MDGs%20and%20NCDs\\_0.pdf](http://ncdalliance.org/sites/default/files/rfiles/The%20MDGs%20and%20NCDs_0.pdf)
23. A/RES/69/313. Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda). Resolution Adopted by the General Assembly on 27 July 2015. Available at: [http://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/69/313&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/69/313&Lang=E)
24. United Nations, 'Resolution adopted by the General Assembly: Political Declaration of the High-Level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases', A/RES/66/2, United Nations, New York, 24 January 2012. Available at: [http://www.who.int/nmh/events/un\\_ncd\\_summit2011/political\\_declaration\\_en.pdf](http://www.who.int/nmh/events/un_ncd_summit2011/political_declaration_en.pdf)
25. Small, R, Linou, N, Webb, D, and Dhaliwal, M. (in press). 'Tobacco control in the Sustainable Development Goals: a precarious inclusion?' *The Lancet*.
26. UNDP and Convention Secretariat. 2014. Development Planning and Tobacco Control: Integrating the WHO Framework Convention on Tobacco Control into UN and National Development Planning Instruments. Available at: <http://www.undp.org/content/undp/en/home/librarypage/hiv-aids/development-planning-and-tobacco-control--integrating-the-who-fr.html>
27. Nilsson, M, Griggs, D and Visbeck, M. Policy: Map the interactions between Sustainable Development Goals. *Nature* 2016; 534: 320-322.
28. Malone, R, and Yang, JS. Tobacco: a threat to development? *Tob Control* 2017; 26:241-242.
29. World Bank. 2013. Risky behaviours constitute growing threat to health. Available at: <http://www.worldbank.org/en/news/press-release/2013/11/20/risky-behaviors-growing-threats-global-health>
30. Kumpf, B. 2016. Solving last mile challenges: the potential of behavioural insights for the 2030 Agenda. Available at: <http://www.undp.org/content/undp/en/home/blog/2016/11/7/Solving-last-mile-challenges-The-potential-of-behavioural-insights-for-the-2030-Agenda-.html>
31. Buse, K and Hawkes, SJ. Health post-2015: evidence and power. *The Lancet* 2013; 383(9918).
32. Hill, PS, et al. How can health remain central post-2015 in a sustainable development paradigm? *Global Health* 2014; 10:18.
33. UNDP and Roll Back Malaria. 2013. Multisectoral Action Framework for Malaria. Available at: <http://www.undp.org/content/undp/en/home/librarypage/hiv-aids/multisectoral-action-framework-for-malaria-.html>
34. Allen, L. Why is there no funding for non-communicable diseases? *Journal of Global Health Perspectives* 2016; Oct 16. Edition 1.
35. Buse, K, and Hawkes, S. Health in the sustainable development goals: ready for a paradigm shift? *Globalization and Health* 2015; 11:13.
36. Chan, M. 2011. The Rise of Chronic Noncommunicable Diseases: An Impending Disaster. Opening Remarks at WHO Global Forum. Russian Federation, Moscow; 2011.
37. Assunta, M, and Dorotheo, EU. SEATCA Tobacco Industry Interference Index: a tool for measuring implementation of WHO Framework Convention on Tobacco Control Article 5.3. *Tob Control* 2016; 25:313-318.
38. Chaloupka, FJ, Yurekli, A, and Fong, GT. Tobacco taxes as a tobacco control strategy. *Tob Control* 2012; 21:172-180.
39. Decision FCTC/COP7(10). 2016. Economically sustainable alternatives to tobacco growing (in relation to Articles 17 and 18 of the WHO FCTC). Available at: <http://www.who.int/fctc/cop/cop7/Documentation-Decisions/en/>
40. Decision FCTC/COP7(27). 2016. Contribution of the Conference of the Parties to achieving the noncommunicable disease global target on the reduction of tobacco use. Available at: [http://cdrwww.who.int/fctc/cop/cop7/FCTC\\_COP7\\_27\\_EN.pdf](http://cdrwww.who.int/fctc/cop/cop7/FCTC_COP7_27_EN.pdf)
41. UNDP. Papua New Guinea: Phones against corruption. Available at: <http://www.asia-pacific.undp.org/content/rbap/en/home/ourwork/development-impact/innovation/projects/png-phone-against-corruption.html>
42. Bangladesh Post 2015 National Consultation. Available at: <http://www.worldwewant2015.org/node/370989>

43. Bryan, CJ, et al. Harnessing adolescent values to motivate healthier eating. *PNAS* 2016; 113(39):10830-10835.
44. SSMART FOR SDGs. Available at: <http://global-ssmart.org/>
45. Thun, M, et al. Stages of the cigarette epidemic on entering its second century. *Tob Control* 2012; 21(2):96-101.
46. Cairney, P. 2012. Global Tobacco Control. Blog post. Available at: <https://paulcairney.wordpress.com/2012/11/06/global-tobacco-control/>
47. Cairney, P, Studlar, DT, and Mamudu, HM. 2012. Global Tobacco Control: Power, Policy, Governance and Transfer. Palgrave Macmillan. Available at: <http://www.palgrave.com/page/detail/global-tobacco-control-paul-cairney/?isbn=9780230200043>
48. Cairney, P, and Mamudu, HM. 2013. The WHO Framework Convention for Tobacco Control (FCTC): What would have to change to ensure effective policy implementation? Available at: [https://paulcairney.files.wordpress.com/2013/09/cairney-mamudu-2013-implementing-the-ctc\\_-\\_insights-from-public-policy.pdf](https://paulcairney.files.wordpress.com/2013/09/cairney-mamudu-2013-implementing-the-ctc_-_insights-from-public-policy.pdf)
49. Amos, A, et al. Women and Tobacco: a call for including gender in tobacco control research, policy and practice. *Tob Control* 2012; (21):236-243.
50. Warren CW, et al. Global Youth Tobacco Surveillance, 2000-2007. *CDC Morbidity and Mortality Weekly Report*. 2008; 57:(SS-1).
51. Campaign for Tobacco-Free Kids. 2016. Tobacco Marketing that reaches Kids: Point-of-sale Advertising and Promotions. Available at: <https://www.tobaccofreekids.org/research/factsheets/pdf/0075.pdf>
52. Yach, D. The origins, development, effects, and future of the WHO Framework Convention on Tobacco Control: a personal perspective. *The Lancet* 2014; 383(9930):1771-1779.
53. Eriksen, M, et al. 2015. The Tobacco Atlas: Fifth Edition. American Cancer Society and World Lung Foundation. Country Fact Sheet for Zambia. Available at: <http://www.tobaccoatlas.org/country-data/zambia/>
54. Eriksen, M, et al. 2015. The Tobacco Atlas: Fifth Edition. American Cancer Society and World Lung Foundation. Country Fact Sheet for Georgia. Available at: <http://www.tobaccoatlas.org/country-data/georgia/>
55. Goriounova, NA, and Mansvelder, HD. Short- and long-term consequences of nicotine exposure during adolescence for prefrontal cortex neuronal network function. *Cold Spring Harb Perspect Med*, 2012; 2(12):a012120.
56. Efroymson, D, et al. Hungry for tobacco: an analysis of the economic impact of tobacco consumption on the poor in Bangladesh. *Tob Control* 2001; 10:212-217.
57. Gravely, S, et al. Implementation of key demand-reduction measures of the WHO Framework Convention on Tobacco Control and change in smoking prevalence in 126 countries: an association study. *The Lancet* 2017; 2(4):e166-e174.
58. Barry, M. The influence of the US tobacco industry on the health, economy, and environment of developing countries. *New Eng J Med* 1991; 324:917-9.
59. Leppan, W, Lecours, N, and Buckles, D. Eds. Tobacco control and tobacco farming: Separating myth from reality. International Development Research Center. New York: Anthem Press; 2014.
60. SEATCA. 2008. Status of tobacco use and its control – Thailand report card.
61. Kim, JE, and Tsoh, JY. Cigarette smoking among socioeconomically disadvantaged young adults in association with food insecurity and other factors. *Prev Chronic Dis* 2016; 13:E08.
62. Le, TT, Thang, TD, and Dihn, B. 2006. Tobacco over education: an examination of the opportunity losses for smoking households. Poster presentation. The 13th World Conference on Tobacco OR Health.
63. Otañez, M, and Glantz, SA. Social responsibility in tobacco production? Tobacco companies use green supply chains to obscure the real costs of tobacco farming. *Tob Control* 2011; 20(6): 403-411.
64. John, RM, et al. Counting 15 million more poor in India, thanks to tobacco. *Tob Control* 2011; 20:349-352.
65. FCTC/COP/6/16. 2014. Implementation of Article 5.3 of the WHO FCTC: evolving issues related to interference by the tobacco industry. Report of the Convention Secretariat. Available at: [http://apps.who.int/gb/fctc/PDF/cop6/FCTC\\_COP6\\_16-en.pdf](http://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6_16-en.pdf)

66. WHO. 2015. "Sin Tax" expands health coverage in the Philippines. Available at: <http://www.who.int/features/2015/ncd-philippines/en/>
67. WHO. 2015. WHO Report on the Global Tobacco Epidemic, 2015: Raising Taxes on Tobacco. Available at: [http://www.who.int/tobacco/global\\_report/2015/en/](http://www.who.int/tobacco/global_report/2015/en/)
68. Campaign for Tobacco-Free Kids. 2012. Tobacco Tax Success Story: South Africa. Available at: [http://global.tobaccofreekids.org/files/pdfs/en/success\\_SoAfrica\\_en.pdf](http://global.tobaccofreekids.org/files/pdfs/en/success_SoAfrica_en.pdf)
69. UNDP. 2016. Turning point: from tobacco to tomatoes. Available at: <http://www.tz.undp.org/content/tanzania/en/home/presscenter/articles/2016/10/24/turning-point-from-tobacco-to-tomatoes.html>
70. FCA. 2015. To measure the SDGs' progress, UN should track tobacco affordability. Available at: <http://www.fctc.org/fca-news/opinion-pieces/1351-to-measure-sdgs-progress-un-should-track-tobacco-affordability>
71. Weng, SF, Ali, S, and Leonard-Bee, J. Smoking and absence from work: systematic review and meta-analysis of occupational studies. *Addiction* 2013; 108(2):307-319.
72. Halpern, MT, et al. Impact of smoking status on workplace absenteeism and productivity. *Tob Control* 2001; 10:233-238.
73. Tsai, SP, et al. Workplace smoking-related absenteeism and productivity costs in Taiwan. *Tob Control* 2005; 14:i33-i37.
74. Caixeta, RB, et al. Current tobacco use and second-hand smoke exposure among women of reproductive age – 14 countries, 2008-2010. *MMWR Morb Mortal Wkly Rep* 2012; 61(43):877-882.
75. WHO. 2011. Global Youth Tobacco Survey 2011, cited in International Tobacco Control Policy Evaluation Project. 2014. ITC *Zambia National Report*. Available at: [http://www.itcproject.org/files/ITC\\_ZambiaNR-ENG-FINAL-web\\_May2014.pdf](http://www.itcproject.org/files/ITC_ZambiaNR-ENG-FINAL-web_May2014.pdf)
76. Novotny, TE, et al. The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption. *Bull World Health Organ* 2015; 93:877-880.
77. Novotny, TE, and Slaughter, E. Tobacco product waste: an environmental approach to reduce tobacco consumption. *Curr Environ Health Rep* 2014; 1(3):208-216.
78. Riquinho, DL, and Hennington, EA. Health, environment and working conditions in tobacco cultivation: a review of the literature. *Cien Saude Colet* 2012; 17(6):1587-1600.
79. Nicaragua. Organización Panamericana de la Salud. Efectos sanitarios y ambientales derivados del uso de plaguicidas en el cultivo del tabaco en el municipio de Jalapa. Manáguá: Organización Panamericana de la Salud; 2001.
80. Ocean Conservatory. 2015. International Coastal Cleanup Report 2015.
81. Gonçalves, CS, et al. Qualidade da água numa microbacia hidrográfica de cabeceira situada em região produtora de fumo. *Revista Brasileira de Engenharia Agrícola e Ambiental* 2005; 9:391-9.
82. Griza, FT, et al. Avaliação da contaminação por organofosforados em águas superficiais no município de Rondinha/Rio Grande do Sul. *Quim Nova* 2008; 31:1631-5.
83. Bortoluzzi, EC, et al. Contaminação de águas superficiais por agrotóxicos em função do uso do solo numa microbacia hidrográfica de Agudo. *Revista Brasileira De Engenharia Agrícola e Ambiental* 2008; 10:881-7.
84. Mekonnen, MM, and Hoekstra, AY. The green, blue and grey water footprint of crops and derived crop products. *Hydrology and Earth System Sciences* 2011; 15:1577-1600.
85. UNDP. 2016. HIV, Health and Development Strategy 2016-2021. Available at: <http://www.undp.org/content/undp/en/home/librarypage/hiv-aids/hiv--health-and-development-strategy-2016-2021.html>
86. McKnight, RH, and Spiller, HA. Green tobacco sickness in children and adolescents. *Public Health Rep* 2005; 120(6):602-606.
87. Joint statement by WHO and the Secretariat of the WHO Framework Convention on Tobacco Control. Delivered at the 5th meeting of the Inter-agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs), 28-31 March 2017, Ottawa, Canada 30 March 2017. Available at: <https://unstats.un.org/sdgs/files/meetings/iaeg-sdgs-meeting-05/Joint%20statement%20by%20WHO%20and%20the%20Secretariat%20of%20the%20WHO%20Framework%20Convention%20on%20Tobacco%20Control.pdf?ua=1>
88. Peto, R. Tobacco – the growing epidemic. *Nature Medicine* 1999; 5:15-17.

89. FCTC/COP/4/18. 2010. South-South cooperation and implementation of the WHO Framework Convention on Tobacco Control. Report of the Convention Secretariat. Available at: [http://apps.who.int/gb/fctc/PDF/cop4/FCTC\\_COP4\\_18-en.pdf](http://apps.who.int/gb/fctc/PDF/cop4/FCTC_COP4_18-en.pdf)
90. WHO. 2010. GATS Fact Sheet: Egypt, 2009. CDC and WHO. <http://www.emro.who.int/images/stories/tfi/documents/GATS%20FS%20EGY%202009.pdf?ua=1>
91. Omari, MP. 2009. A cost-benefit analysis of substituting bamboo for tobacco: a case study of South Nyanza, Kenya. Available at: <http://www.tobaccotobamboo.org/Publications/Publications%20in%20Journals%20and%20Book%20Chapters/My%20Thesis-examinable%20draft.pdf>
92. Anindita, E. 2015. Tobacco farming no longer profitable, survey finds. The Jakarta Post, 30 October 2015. Available at: <http://www.thejakartapost.com/news/2015/10/30/tobacco-farming-no-longer-profitable-survey-finds.html>
93. ITU. 2015. ICT Facts & Figures. Available at: <https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2015.pdf>
94. WHO. Mobile health (mHealth) for tobacco control. Available at: <http://www.who.int/tobacco/mhealth/en/>
95. WHO and WHO FCTC Convention Secretariat. 2016. Brief: Promoting Health and Saving Lives by Reducing Tobacco Use – How the World Health Organization supports Parties to implement the WHO FCTC.
96. Decision FCTC/COP7(29). 2016. Delhi Declaration. Available at: [http://www.who.int/fctc/cop/cop7/FCTC\\_COP7\\_29\\_EN.pdf?ua=1](http://www.who.int/fctc/cop/cop7/FCTC_COP7_29_EN.pdf?ua=1)
97. World Bank. 2014. Promoting Healthy Living in Latin America and the Caribbean: Governance of Multisectoral Activities to Prevent Risk Factors for Noncommunicable Diseases. Bonilla-Chacín, ME, ed. Available at: <http://documents.worldbank.org/curated/en/859871468017359105/pdf/832770PUB0Prom00Box382079B00PUBLIC0.pdf>
98. Asian Development Bank. 2012. Tobacco Taxes: a Win-Win Measure for Fiscal Space and Health. Available at: <https://www.adb.org/sites/default/files/publication/30046/tobacco-taxes-health-matters.pdf>
99. Corliss, HL, et al. Sexual-orientation disparities in cigarette smoking in a longitudinal cohort study of adolescents. *Nicotine Tob Res* 2013; (1)213-22.
100. Moodie-Mills, AC. 2011. Flavored disease and death for minorities: why the FDA must ban menthol cigarettes. Center for American Progress, Health Care. Available at: <https://www.americanprogress.org/issues/healthcare/reports/2011/05/12/9668/flavored-disease-and-death-for-minorities/>
101. WHO. GYTS: Timor-Leste (Ages 13-15). 2013. [http://www.searo.who.int/tobacco/data/tls\\_gyts\\_factsheet\\_2013.pdf?ua=1](http://www.searo.who.int/tobacco/data/tls_gyts_factsheet_2013.pdf?ua=1)
102. Khan, MH, et al. Prevalence and correlates of smoking among urban adult men in Bangladesh: slum versus non-slum comparison. *BMC Public Health* 2009; 9:149.
103. WHO. 2017. The cost of a polluted environment: 1.7 million child deaths a year, says WHO. Available at: <http://who.int/mediacentre/news/releases/2017/pollution-child-death/en/>
104. Guerrero López, CM, et al. The economic impact of Mexico City's smoke-free law. *Tob Control* 2011; 20:273-278.
105. San, S, and Chaloupka, F. The impact of tobacco expenditures on spending within Turkish households. *Tob Control* 2016; 25:558-563.
106. Novotny, TE, and Zhao, F. Consumption and production waste: another externality of tobacco use. *Tob Control* 1999; 8(1):75-80.
107. Ivernizzi, G, et al. Particulate matter from tobacco versus diesel car exhaust: an educational perspective. *Tob Control* 2004; 13:219-221.
108. Turner, MC, et al. Interactions between cigarette smoking and ambient PM2.5 for cardiovascular mortality. *Environ Res* 2017; 154:304-310.
109. Turner, MC, et al. Interactions between cigarette smoking and fine particulate matter in the risk of lung cancer mortality in Cancer Prevention Study II. *Am J Epidemiol* 2014; 180(12):1145-1149.
110. Slaughter, E, et al. Toxicity of cigarette butts, and their chemical components, to marine and freshwater fish. *Tob Control* 2011; 20: i25-i29.
111. Goodchild, M, Nargis, N, and d'Espaignet, ET. Global economic cost of smoking-attributable diseases. *Tob Control* Published Online First: 30 January 2017. doi: 10.1136/tobaccocontrol-2016-053305
112. Lecours, N, et al. Environmental health impacts of tobacco farming: a review of the literature. *Tob Control* 2012; 21:191-196.

113. Ohayo-Mitoko, et al. Acetylcholinesterase inhibition as an indicator of organophosphate and carbamate poisoning in Kenyan Agricultural Workers. *Int J Occup Environ Health* 1997; 3:210-20.
114. FCTC/COP/3/11. 2008. Study group on economically available alternatives to tobacco growing (in relation to Articles 17 and 18 of the Convention). Available at: [http://apps.who.int/gb/fctc/PDF/cop3/FCTC\\_COP3\\_11-en.pdf](http://apps.who.int/gb/fctc/PDF/cop3/FCTC_COP3_11-en.pdf)
115. John, S, and Vaite, S. 2002. Tobacco and poverty observations from India and Bangladesh. Efrogmson D, ed. CA: PATH CA. Available at: [http://s3.amazonaws.com/zanran\\_storage/bata.globalink.org/ContentPages/2454240062.pdf](http://s3.amazonaws.com/zanran_storage/bata.globalink.org/ContentPages/2454240062.pdf)
116. FAO. Economics and Policy Innovations for Client-Smart Agriculture. Zambia. Available at: <http://www.fao.org/climatechange/epic/projects/countries/zambia/en/>
117. UNDP MPTF Office. UN-REDD Programme – Zambia Quick Start Initiative. Available at: <http://mptf.undp.org/factsheet/project/00074834>
118. Kweyuh, PHM. Tobacco expansion in Kenya: the socio-ecological losses. *Tob Control* 1994; 3:248.
119. Kibwage, JK, et al. 2009. Diversification of Household Livelihood Strategies for Tobacco Small-holder Farmers: A Case Study of Introducing Bamboo in South Nyanza Region, Kenya. Final Technical Report submitted to the Research for International Tobacco Control (RITC) Program of the International Development Research Centre (IDRC). Ontario, Canada: International Development Research Centre.
120. Longwood University. Cigarette Litter – IMPACTS. Available at: <http://www.longwood.edu/cleanva/cigbuttimpacts.htm>
121. Chauvel, C. Commonwealth parliamentarians discuss tobacco control and effective parliamentary oversight. *Journal of the Parliamentarians of the Commonwealth* 2017; 98(1).
122. UNDP. 2016. Commonwealth Parliamentarians plan to tackle the tobacco epidemic. Available at: <http://www.undp.org/content/undp/en/home/presscenter/articles/2016/12/19/commonwealth-parliamentarians-plan-to-tackle-the-tobacco-epidemic.html>
123. UNDP and WHO FCTC Convention Secretariat. 2016. Tobacco Control Governance in sub-Saharan Africa: implementing Article 5.2a of the WHO Framework Convention on Tobacco Control. Available at: <http://www.undp.org/content/undp/en/home/librarypage/hiv-aids/tobacco-control-governance-in-sub-saharan-africa.html>
124. FCTC/COP/4/REC/1. 2010. Conference of the Parties to the WHO Framework Convention on Tobacco Control. Fourth session. Punta Del Este, Uruguay, 15-20 November 2010. Decisions and Ancillary Documents. Available at: [http://apps.who.int/gb/fctc/PDF/cop4/FCTC\\_COP4\\_REC1.pdf](http://apps.who.int/gb/fctc/PDF/cop4/FCTC_COP4_REC1.pdf)
125. Transparency International. 2017. Corruption Perceptions Index 2016. Available at: [https://www.transparency.org/news/feature/corruption\\_perceptions\\_index\\_2016](https://www.transparency.org/news/feature/corruption_perceptions_index_2016)
126. WHO and UNDP. 2017. The Bill China Cannot Afford: Health Economic and Social Costs of China's Tobacco Epidemic. Available at: <http://www.cn.undp.org/content/china/en/home/presscenter/pressreleases/2017/04/14/tobacco-china-s-addiction-to-an-outdated-and-impoverishing-economy.html>
127. Paul, JN. Earmarking Revenues for Health: A Finance Perspective on the Philippine Sintax Reform. Available at: [http://www.who.int/health\\_financing/topics/public-financial-management/D2-S4-JPaul-earmarking.pdf](http://www.who.int/health_financing/topics/public-financial-management/D2-S4-JPaul-earmarking.pdf)
128. Briefer on the Sin Tax Law. Available at: <http://www.thepafp.org/docs/study-materials/sintax.pdf>
129. Brauch, MD. IISD. 2016. Philip Morris v. Uruguay: all claims dismissed; Uruguay to receive US\$7 million reimbursement. Available at: <https://www.iisd.org/itn/2016/08/10/awards-and-decisions-24/>
130. UNCTAD. World Investment Report 2014. Overview. Investing in the SDGs: An action plan. Available at: [http://unctad.org/en/PublicationsLibrary/wir2014\\_overview\\_en.pdf](http://unctad.org/en/PublicationsLibrary/wir2014_overview_en.pdf)
131. Decision FCTC/COP7(12). 2016. Addressing gender-specific risks when developing tobacco control strategies. Available at: [http://www.who.int/fctc/cop/cop7/FCTC\\_COP7\\_12\\_EN.pdf?ua=1](http://www.who.int/fctc/cop/cop7/FCTC_COP7_12_EN.pdf?ua=1)
132. Royal College of Physicians and Royal College of Psychiatrists. 2013. Smoking and mental health. Available at: <https://shop.rcplondon.ac.uk/products/smoking-and-mental-health?variant=6638049733>

133. International Monetary Fund. 2016. Fiscal Policy – How to Design and Enforce Tobacco Excises? Available at: <https://www.imf.org/external/pubs/ft/howtonotes/2016/howtonote1603.pdf>
134. World Bank. 2017. Brief – Tobacco Control Program. Available at: <http://www.worldbank.org/en/topic/health/brief/tobacco>
135. Geist, HJ, and Lambin, EF. Proximate causes and underlying driving forces of tropical deforestation: tropical forests are disappearing as the result of many pressures, both local and regional, acting in various combinations in different geographic locations. *BioScience* 2002; 52(2):143–150.
136. Harrison, S, et al. 'Business impacts and dependence on biodiversity and ecosystem services' in *The Economics of Ecosystems and Biodiversity (TEEB) in Business and Enterprise*. Bishop, J, ed. Earthscan, London and New York, 2012.
137. McSweeney, R. 2014. Carbon Brief: Deforestation in the tropics affects climate around the world, study finds. Available at: <https://www.carbonbrief.org/deforestation-in-the-tropics-affects-climate-around-the-world-study-finds>
138. Hyman, EL. The demand for woodfuels by cottage industries in the province of Ilocos Norte, Philippines. *Energy* 1984; 9(1):1–13.
139. Lawrence, D, and Vandecar, K. Effects of tropical deforestation on climate and agriculture. *Nature Climate Change* 2014; 5:27–36.
140. United Nations Framework Convention on Climate Change. Available at: [http://unfccc.int/essential\\_background/convention/items/6036.php](http://unfccc.int/essential_background/convention/items/6036.php)
141. Mazarura, U, Mahaso, F, and Goss, M. Response of farmers to technological transfer in the methyl bromide phase-out programme in Zimbabwe: the floating tray system. *African Crop Science Journal* 2012; 20(3):171–177.
142. Hulac, B. 2016. Tobacco and Oil Industries Used Same Researchers to Sway Public. *Scientific American*. Available at: <https://www.scientificamerican.com/article/tobacco-and-oil-industries-used-same-researchers-to-sway-public/>
143. FAO. 2006. Deforestation causes global warming. Key role for developing countries in fighting greenhouse gas emissions. Available at: <http://www.fao.org/newsroom/en/news/2006/1000385/index.html>
144. Geist, HJ. Global assessment of deforestation related to tobacco farming. *Tob Control* 1999; 8:18–28.
145. Boucher, D. 2013. 10% of Greenhouse Gas Emissions Come from Deforestation. Union of Concerned Scientists. Available at: <http://blog.ucsusa.org/doug-boucher/ten-percent-of-greenhouse-gas-emissions-come-from-deforestation-342>

---

# PHOTO ATTRIBUTIONS

---

The authors of this report would like to warmly acknowledge the photographic contributions made by those listed below.

**Cover page:**

Top row, left to right: Tribes of the World, Flickr; ILO, Flickr; USAID, Flickr.  
Middle row, left to right: Wilfredorrh, Flickr; EpiscopalRelief, Flickr.  
Bottom row, left to right: USAID, Flickr; World Bank, Flickr; Saad Akhtar, Flickr.

**Page 2:**

ADB, Flickr.

**Page 8:**

USAFAFRICA, Flickr.

**Page 15:**

UNDP Peru, Mónica Suárez Galindo.

**Page 27:**

WHO.

**Page 34:**

Adam Cohn, Flickr.

**Page 35:**

Saha, UNDP.

