The State of Tobacco Control in ASEAN: Framing the Implementation of the FCTC from a Health Systems Perspective

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Abstract

Using a tobacco control framework that combines demand-reduction and selected supply-reduction measures according to a health system’s building blocks, this article aims to assess the state of Framework Convention on Tobacco Control implementation in ASEAN countries from a health systems perspective. Results show that more ASEAN member states are showing leadership in adopting effective policies in the MPOWER suite of interventions such as raising taxes on tobacco, establishing smoke-free areas and implementing graphic health warnings. However, effective enforcement of these policies is hampered by the lack of policies to protect public health measures from tobacco industry interference. ASEAN faces three challenges to control and reduce tobacco use: tackling the increasing burden of disease from tobacco use, tobacco industry interference and the need for better governance based on stronger political will and commitment. ASEAN member states need to further invest and innovate on tobacco control and promoting healthy lifestyles in order to achieve the SDG target on tobacco control.

Key words: tobacco control, ASEAN, FCTC, Southeast Asia, health policy, health system

1. Introduction

With the increasing global burden of noncommunicable diseases (NCDs), countries reached consensus towards strengthening the implementation of the WHO Framework Convention on Tobacco Control (FCTC) in all countries. This is upheld in the Sustainable Development Goals (SDG 3A) and linked primarily to the SDG target of reducing premature NCD mortality by one-third by 2030, particularly from cardiovascular disease, cancers and chronic obstructive pulmonary diseases (UN 2017). Tobacco is a threat to development, and tobacco control is a key policy to achieve the SDGs (WHO 2017a). Aside from the SDGs, global NCD targets were adopted in 2013, which includes a voluntary target to relatively reduce prevalence of current tobacco use by 30 per cent by 2025. The FCTC is the first global evidence-based public health treaty negotiated under the auspices of the World Health Organization (WHO) that aims to address and curb the tobacco epidemic and NCDs. One hundred eighty-one countries are party to the convention, making it one of the United Nations’ most widely embraced treaties. The WHO, together with the Bloomberg Initiative, initiated MPOWER—a cost-effective and evidence-based implementation and monitoring instrument—to assist the domestic implementation of at least six of the FCTC’s articles on demand reduction. MPOWER refers to specific measures that (i) monitor tobacco use and prevention policies; (ii) protect people from tobacco smoke; (iii) offer help to quit tobacco use; (iv) warn...
about the dangers of tobacco; (v) enforce bans on tobacco advertising, promotion and sponsorship, and; (vi) raise taxes on tobacco.

All ASEAN member states (AMS) are parties to the FCTC, except for Indonesia. Among the AMS that are parties to the FCTC, Brunei, Myanmar, Singapore, Thailand and Vietnam were among the first 60 countries to ratify the FCTC in 2004. As AMS renewed their goals for an ASEAN Socio-Cultural Community (ASCC) 2025, which includes ASEAN’s post-2015 health development agenda, and after more than 10 years since the FCTC came into force, there is a need to review the state of tobacco control in ASEAN from a health systems perspective.

Looking at FCTC implementation through a holistic and integrated health system perspective would be helpful towards better and effective implementation of the convention’s various articles. Therefore, this study explores the utility and the validity of a new approach to frame the FCTC domains within the context of established health system building blocks. Due to its novelty, this exploratory study required some assumptions and a degree of licence with regards to methodological considerations that were taken.

This article is divided into four sections. A new framework that incorporates a health system’s building blocks in tobacco control is presented in the first section. The second section presents the case and current state of ASEAN’s implementation of the FCTC according to a health systems’ building blocks perspective. Challenges to FCTC implementation in ASEAN are discussed in the third section. Some conclusions are drawn in the final section.

2. Framework and Methodology

This study utilised a case study approach to comparatively assess the progress of AMS in terms of tobacco control policies and health outcomes, and adopted an integrated framework that acknowledges the paradigms of (i) human development, as embodied in the UNDP (1990) Human Development approach; (ii) health systems building blocks as employed in the WHO (2007) health systems framework, and; (iii) health system reform (Phua & Chew 2002). The human development paradigm is based on principles of improving the lives of people by opening up opportunities through improving health, education and standard of living (UNDP 1990). On the other hand, an optimal health system, according to the WHO (2007), is composed of six core building blocks aimed at promoting and improving health outcomes. These building blocks include delivery of good health services, a well-performing health workforce, a well-functioning health information system, equitable access to essential medical products, vaccines and technologies, a good health financing system and strategic leadership and governance. This study adapts a systems thinking approach with the core argument that health systems are composed of dynamic, inter-related and interacting nested building blocks (de Savigny and Adam 2009). Previous work on systems thinking for tobacco control has primarily focused on specific tobacco control sub-systems such as healthcare services through smoking cessation programmes, and on governance of regulatory networks (National Cancer Institute 2007; Borland et al. 2010; Young et al. 2012; Battle-Fisher 2015). As of writing, tobacco control implementation has not been framed through a health system’s building blocks. By using the health system building blocks to frame the FCTC (beyond the demand and supply reduction measures) (see Table 1), the study recognises that the implementation of the FCTC can strengthen health systems and that the health system, as a whole, can inform, sustain or even undermine FCTC implementation (Gilson 2012).

The proposed framework also includes grouping ASEAN countries according to the state of their health systems vis-à-vis their level of human development, according to the UNDP (2016) Human Development Report: (i) very high and high human development group with developed or high performing health systems designated as ASEAN1 (Singapore, Brunei Darussalam, Malaysia and Thailand) and; (ii) medium human development group with newly industrialising
| Health system building block | FCTC article | Indicator | Score† |
|------------------------------|-------------|-----------|--------|
| Leadership and governance (65) | Article 5.1. Development, implementation, updating and review of multisectoral national tobacco control strategies | Multisectoral national tobacco control strategy | 2.5 |
| Article 5.2. Establishing, reinforcing, financing a national coordinating mechanism or focal points for tobacco control | National coordinating mechanism or focal point for tobacco control | 2.5 |
| Article 5.3. Protecting public health policies from the commercial and vested interests of the tobacco industry | Whole-of-government code of conduct/non-interference policy | 5 |
| Article 6. Price and tax measures to reduce demand for tobacco | At least 75% excise tax share on final price‡ | 10 |
| Article 8. Protection from tobacco smoke | Compliance with regulations on smoke-free environments | 10 |
| Article 11. Packaging and labelling of tobacco products | At least 50% of package consists of large graphic health warnings | 10 |
| Article 12. Education, communication, training and public awareness | Anti-tobacco mass media campaigns | 5 |
| Article 13. Tobacco advertising, promotion and sponsorship | Complete ban on direct tobacco advertising | 5 |
| Article 15. Illicit trade in tobacco products | Tracking regime to further secure the distribution system | 5 |
| Article 16. Sales to and by minors | Sales to minors prohibited | 2.5 |
| Article 17. Tobacco growing and support for economically viable alternatives | Viable alternatives provided to tobacco growers | 2.5 |
| Financing (10) | Article 26. Financial resources | At least USD 0.11 government expenditure on tobacco control per capita§ | 5 |
| Service delivery (10) | Article 14. Demand-reduction measures concerning tobacco dependence and cessation | Toll-free quitline/helpline | 5 |
| Article 20. Research, surveillance and exchange of information | Availability of smoking cessation support in any facility (primary care, hospitals, health clinics, community) | 5 |
| Information (5) | Article 20. Research, surveillance and exchange of information | Recent, representative and periodic (at intervals of five years or less) data for both adults and youth¶ | 3 |
| Article 21. Reporting and exchange of information | Periodic reports to the FCTC Secretariat (every 2 years) | 2 |
| Human resources (5) | Article 12d. Training or sensitization and awareness programmes on tobacco control for health workers, community workers, social workers, media professionals, educators, decision makers, administrators and other concerned persons | Full-time staff for tobacco control | 2 |
| Article 12b. Training or sensitization for health workers, community workers, social workers, media professionals, educators, decision makers, administrators and others | Training on tobacco control for health workers, community workers, social workers, media professionals, educators, decision makers, administrators and others | 3 |

(Continues)
countries and transitional health systems designated as ASEAN2 (Indonesia, Vietnam, Philippines, Lao PDR, Cambodia and Myanmar). By categorising ASEAN countries according to their level of human development and the state of their health systems, the framework also provides the socio-economic context within which the FCTC is implemented.

Scientific evidence guided the creation of FCTC and the evidence base on comparing tobacco control across countries as well as the most effective interventions have expanded since its implementation (Levy et al. 2004; Joossens & Raw 2006). Recent studies showed that the most effective policies (in terms of averted smoking-attributable deaths, as well as change in smoking prevalence) in the MPOWER package of demand-reduction measures are as follows: to raise taxes, comprehensive smoke-free laws, large graphic health warnings, comprehensive marketing bans and comprehensive cessation interventions (Levy et al. 2016; Gravely et al. 2017). To aid in the analysis, a conceptual framework of the FCTC articles and general indicators embedded in health system building blocks is presented in Table 1. It is a modified version of the European Tobacco Control Scale introduced by Joossens and Raw (2006) and the FCTC Scorecard introduced by the Southeast Asia Tobacco Control Alliance (SEATCA) (2016). The framework takes into account the recent evidence on effective interventions that provided the rationale for the indicators included for each building block as well as the weight assigned for each indicator. Specifically, four measures identified by recent studies as the most effective interventions—taxation, smoke-free policies, warning labels, ban on advertising, promotion and sponsorship, and their corresponding indicators were each assigned the maximum weight of 10. Smoking cessation support and its corresponding indicators are subsumed into the service delivery building block and are also assigned the maximum weight of 10. As these interventions would not be possible without adequate financing, financing as a building block was similarly assigned the maximum weight of 10. Given the linkages of these interventions to the measures subsumed in the building blocks on information, human resources and medical products and technologies, these building blocks were each assigned a maximum weight of 5. While supply reduction measures (Articles 15, 16 and 17) are not given enough significance in studies on tobacco control, this study incorporates such measures into the leadership and governance building block and also assigned a cumulative weight of 10, with illicit trade assigned a weight of 5.

The study aims to review the progress of AMS from the country-reported data to the WHO FCTC Secretariat, supplemented with an independent evaluation of the state of FCTC implementation by analysis of reports of regional initiatives implemented through
WHO and ASEAN, and other international organisations or initiatives. This involved searching and examining the grey literature (online news articles), official statements and reports of international organisations, which refer to FCTC implementation in ASEAN as a region, and among AMS. Studies that reported specifically on FCTC implementation as well as on domestic tobacco control policies and outcomes in AMS are included in the study. Data sources include but are not limited to comparable data from the WHO Global Health Observatory, the FCTC Implementation Database, and the SEATCA Tobacco Control Atlas (2016) and the SEATCA FCTC Scorecard (2016). This study represents a preliminary assessment of the utility of the health system building blocks in providing an improved framework for assessing country and regional progress on FCTC, in ways better able to make meaningful cross-country comparisons, and shape remedial tobacco control policy and multilateral action. As this is an exploratory study, further research is needed to comprehensively assess all aspects of the FCTC within health systems.

3. Results: The State of FCTC Implementation in ASEAN

All AMS have implemented tobacco control, in varying degrees, as early as the 1970s as in the case of Singapore and Brunei. In overall terms, there are substantial differences in implementing FCTC-related legislation among AMS, as they range from implementation of specific articles to comprehensive tobacco control measures. Although Indonesia is not party to the FCTC, as a member of ASEAN, it has an obligation (although not legally binding) to implement tobacco control policies that were in line with the ASEAN Health Development Agenda (2010–2015) and consistent with the objectives of the 2015 ASCC Blueprint.

Using the framework introduced in the previous section, a summary of the results is presented in Table 2. Table 3 shows the more detailed results by country and by each indicator. It shows that Singapore has strong tobacco control compared to the rest of the region. While Brunei, Malaysia, Thailand, the Philippines, Vietnam and Cambodia fall within group of countries with moderate tobacco control, the degree of enforcement or whether the policies are enforced varies among them. Laos and Myanmar have relatively weak tobacco control, along with Indonesia, a country that is not party to the FCTC, but implements some of the MPOWER measures, and has a very high number of tobacco users. The following sections discuss the results on select indicators from the perspective of health system building blocks in more detail, with data mostly from the country reports to the FCTC Implementation Database. The results validate the utility of a framework that incorporates the health systems building blocks in conceptualising and measuring the progress of the FCTC.

3.1. Leadership and Governance

One element of leadership and governance in tobacco control is the demand-reduction measures in the FCTC. All ASEAN1 countries have adopted at least one highest level MPOWER measure between 2007 and 2014. All ASEAN1 countries have tobacco control policies in place, although not all have developed and implemented a comprehensive multisectoral national tobacco control strategy in accordance to the FCTC. Most have established tobacco control units, assigned a focal point for tobacco control and a national coordinating mechanism or committees for tobacco control. As small high-income city-states with no local tobacco growing industry, Singapore’s technocratic authoritarianism and Brunei’s absolute monarchy created historically strong states, and implementing tobacco control measures faced less opposition from the tobacco industry. Singapore has not only banned electronic nicotine delivery systems or electronic cigarettes, but also emerging tobacco products, and has announced plans to introduce plain packaging of cigarettes. The ban does not apply to products that pass Singapore’s standards as medical devices and are allowed and regulated by the government. Thailand’s leadership and support of the FCTC process during negotiations, and its pre-FCTC tobacco control
measures, provided a good model of a developing country with a strong national tobacco control institution established as early as the 1980s (Lee et al. 2012a). Among ASEAN1 countries, only Singapore has a written policy or a code of conduct to prevent tobacco industry interference enforced by all government ministries (whole of government approach), while Thailand has a code of conduct only enforced in the Ministry of Health.

Similarly, all ASEAN2 countries have tobacco control legislation in place but in varying degrees of strength and implementation. Among ASEAN2 countries, only Vietnam and

| Table 2 | Summary of FCTC Implementation by Health System Building Blocks |
|-----------------|-----------------|-----------------|-----------------|
| **FCTC implementation** | **Strong tobacco control (80–100)** | **Moderate tobacco control (50–79)** | **Weak tobacco control (0–49)** |
| | Singapore | Malaysia | Indonesia |
| | Brunei | Thailand | Laos |
| | | Philippines | Myanmar |
| | | Vietnam | Cambodia |
| **Health system building block** | | | |
| **Leadership and governance (65)** | Singapore | Malaysia | Indonesia |
| | Brunei | Thailand | Cambodia |
| | | Philippines | Laos |
| **Financing (10)** | Singapore | Thailand | Philippines |
| | Brunei | Malaysia | Cambodia |
| | | Vietnam | Laos |
| | | Myanmar | Indonesia |
| **Service delivery (10)** | Singapore | Thailand | Laos |
| | Brunei | Malaysia | Myanmar |
| | | Vietnam | Cambodia |
| | | Philippines | China |
| | | | |
| **Information (5)** | Singapore | Brunei | |
| | Malaysia | Indonesia | |
| | Thailand | Cambodia | |
| | Philippines | Myanmar | |
| | Laos | Vietnam | |
| **Human resources (5)** | Singapore | Brunei | Indonesia |
| | Malaysia | Thailand | Vietnam |
| | Thailand | Laos | Cambodia |
| | Philippines | Myanmar | |
| | | Vietnam | |
| **Medical products, vaccines and technologies (5)** | Thailand | Brunei | Vietnam |
| | Singapore | Philippines | |
| | Malaysia | Cambodia | |
| | Laos | Indonesia | |
| | | Myanmar | |
### Table 3  Country Scores by FCTC Indicator and Health System Building Blocks

| FCTC indicator                                      | Singapore | Brunei | Malaysia | Thailand | Indonesia | Philippines | Vietnam | Laos | Cambodia | Myanmar |
|-----------------------------------------------------|-----------|--------|----------|----------|-----------|-------------|---------|------|----------|---------|
| Multisectoral national tobacco control strategy‡ (2.5) | 2.5       | 2.5    | 1        | 2.5      | 2.5       | 2.5         | 2.5     | 2.5  | 2.5      | 2.5     |
| National coordinating mechanism or focal point for tobacco control (2.5) | 2.5       | 2.5    | 2.5      | 2.5      | 2.5       | 2.5         | 2.5     | 2.5  | 2.5      | 2.5     |
| Whole-of-government code of conduct/policy§ (5)   | 5         | 5      | 2.5      | 2.5      | 0         | 2.5         | 0       | 0    | 0        | 1       |
| At least 75% excise tax share on final price¶ (10) | 8         | 8      | 7        | 9        | 7         | 7           | 5       | 3    | 4        | 7       |
| Compliance with regulations on smoke-free environments (10) | 10        | 10     | 0        | 5        | 1         | 5           | 5       | 8    | 5        | 5       |
| At least 50% of package consists of large graphic health warnings (10) | 10        | 10     | 10       | 10       | 5         | 10          | 10      | 10   | 10       | 10      |
| Anti-tobacco mass media campaigns (5)               | 5         | 2.5    | 5        | 5        | 5         | 3           | 5       | 4.5  | 4        | 3       |
| Complete ban on direct tobacco advertising (5)      | 0         | 3      | 5        | 4.5      | 0         | 3           | 4       | 5    | 3        | 2.5     |
| Complete ban on tobacco promotion and sponsorship (5) | 5         | 5      | 4        | 5        | 0         | 3           | 4       | 5    | 3        | 2.5     |
| Tracking regime to further secure the distribution system (5) | 0         | 0      | 0        | 0        | (-)       | 5           | 0       | 0    | 0        | 0       |
| Sales to minors prohibited (2.5)                   | 2.5       | 2.5    | 2.5      | 2.5      | (-)       | 2.5         | 0       | 0    | 0        | 1       |
| Viable alternatives provided to tobacco growers (2.5)†† | (NA)     | (NA)   | 2.5      | 0        | (-)       | 2.5         | 0       | 0    | 0        | 0       |
| Leadership and governance (65)                     | 55.5      | 53     | 42       | 49       | 23        | 50.5        | 41.5    | 35.5 | 36       | 34.5    |
| Government expenditure on tobacco control (5)‡‡     | 5         | 5      | 2        | 5        | 1         | 1           | 5       | 1    | 1        | 1       |
| National health insurance covers cost of smoking cessation support (2.5) | 2         | 2.5    | 2.5      | 2        | 0         | 0.5         | 0       | 0    | 0        | 0.5     |
| National health insurance covers cost of NRT (2.5)  | 2         | 2.5    | 2.5      | 0        | 0         | 0.5         | 0       | 0    | 0        | 0       |
| Financing (10)                                      | 9         | 10     | 7        | 7        | 1         | 2           | 5       | 1    | 1        | 1.5     |
| Toll-free quitline/helpline (5)                     | 5         | 5      | 3        | 5        | 5         | 5           | 0       | 5    | 0        | 0       |
| Availability of smoking cessation support in any facility (primary care, hospitals, health clinics, community) (5)§§ | 3         | 1      | 2        | 3.25     | 1.5       | 2           | 0.5     | 0    | 2.5      | 1.5     |
| Service delivery (10)                               | 8         | 6      | 5        | 8.25     | 6.5       | 7           | 5.5     | 0    | 7.5      | 1.5     |
| (Monitoring) Recent, representative and periodic (at intervals of five years or less) data for both adults and youth (3) | 3         | 3      | 3        | 3        | 3         | 3           | 3       | 3    | 3        | 1       |

(Continues)
| FCTC indicator†  | ASEAN1 |  |  |  | ASEAN 2 |  |  |  |  |
|------------------|--------|---|---|---|--------|---|---|---|---|
| (Reporting) Periodic reports to the FCTC Secretariat (every two years) (2)¶¶ | 2 | 1 | 2 | 2 | (NA) | 2 | 2 | 2 | 1 | 2 |
| Information (5) | 5 | 4 | 5 | 5 | 3 | 5 | 5 | 5 | 4 | 3 |
| Full-time staff for tobacco control††† | 2 | 2 | 1 | 1 | 0.5 | 0.5 | 1 | 1 | 1 | 0.5 |
| Training on tobacco control for health workers, community workers, social workers, media professionals, educators, decision makers, administrators and others (3) | 3 | 1 | 3 | 3 | (-) | 3 | 3 | 2 | 2 | 2 |
| Human resources (5) | 5 | 3 | 4 | 4 | 0.5 | 3.5 | 4 | 3 | 3 | 2.5 |
| Nicotine replacement therapy is in the country’s essential drug list or publicly available (2) | 2 | 2 | 2 | 2 | 0.5 | 1 | 0 | 0 | 0.5 | 0 |
| Nicotine replacement therapy free or reimbursable (3) | 2 | 2 | 2 | 3 | 0 | 0.5 | 0 | 0 | 0 | 0 |
| Medical products, vaccines and technologies (5) | 4 | 4 | 4 | 5 | 0.5 | 1.5 | 0 | 0 | 0.5 | 0 |
| Total score (100) | 86.5 | 80 | 67 | 78.25 | 34.5 | 69.5 | 61 | 44.5 | 52 | 43 |

†Based on 2016 reports to the FCTC Implementation Database, unless stated otherwise.
‡A score of 2.5 refers to a Yes answer to the following questions in the WHO FCTC Implementation Database reports: Have you developed and implemented comprehensive multisectoral national tobacco control strategies, plans and programmes in accordance with the Convention? A score of 1 refers to a Yes answer to: Have you partially developed and implemented tobacco control strategies by including tobacco control in national health, public health or health promotion strategies, plans and programmes?
§A score of 5 refers to a code of conduct or non-interference policy or regulation that applies to the whole of government. A score 2.5 refers to a code of conduct or policy or regulation that applies only to the health sector/ministry. A score of 1 refers to a code of conduct or policy or regulation that is currently being developed. Brunei does not have a code of conduct based on Article 5.3. The score here takes into account the SEATCA Tobacco Industry Interference Index score for Brunei (Assunta and Dorotheo 2016).
¶Note on scores: >75% = 10 / 51-75% = 9-7 / 26-50% = 6-4 / <25% = 3-1.
††NA = not applicable. Singapore and Brunei do not have local tobacco industries. (-) = no data available.
‡‡The scores are based on reported government expenditure for tobacco control (WHO 2017c). For unreported expenditures, data from the SEATCA FCTC Scorecard (2016: 96–97) were considered. The authors computed expenditure per capita for scores. A full score of 5 ≥ USD0.11. A score of 2 = USD0.10 and > USD0.01. A score of 1 = < USD0.01.
§§Partial points of 0.75 are given to availability of smoking cessation support if the country profile indicates ‘yes, in most’ for each facility and 0.5 points if profile indicates ‘yes, in some.’ Based on the WHO report on the global tobacco epidemic 2017 country profiles.
¶¶Based on the available reports on the WHO FCTC Implementation Database. Reports every 2 years since 2010 = 2; at least 2 reports since 2010 = 1. Note that Indonesia is not party to the FCTC and does not need to submit reports to the FCTC Secretariat.
†††The scores are based on reported number of full-time staff and are computed per million population (WHO 2017c). ≥5 full-time staff per million population = 2; ≤1 full-time staff per million population = 1; ≤0.1 full-time staff per million population = 0.5.
the Philippines have implemented at least one highest level MPOWER measure by 2014 (Levy et al. 2016). Among ASEAN2 countries, only the Philippines has a code of conduct to prevent tobacco industry interference which covers the whole bureaucracy but is not strictly enforced. In the Philippines and Vietnam, the tobacco industry representatives are still allowed in health policy-making entities, and even participate in FCTC delegations (SEATCA 2016). SEATCA (2016) noted that the rest of the ASEAN2 countries still give preferential treatment to the tobacco industry either through tax exemptions, incentives, privileges and benefits to operate in the country.

One development in tobacco control among ASEAN2 countries is the implementation of pictorial health warnings on cigarette packaging. However, it was only in 2016 and in early 2017 that the Philippines, Cambodia, Myanmar and Lao PDR implemented pictorial health warnings covering at least 50 per cent (75 per cent in Myanmar and Lao PDR) of both sides of all cigarette products (FCTC Secretariat 2017). Indonesia remains the laggard in the region despite the implementation of Indonesia’s 2012 tobacco control regulation in 2014, requiring pictorial health warnings covering only 40 per cent of cigarette packs (Reuters June 24, 2014).

Another leadership and governance issue relates to supply-reduction measures (Article 15) including the control of illicit trade in tobacco. Illicit trade is a contentious issue used by the tobacco industry to oppose increases in tobacco taxes, but also to counter policies aimed at packaging, advertising bans and even pack size restrictions (Stoklosa 2016). According to the latest country reports to the FCTC Implementation database, only the Philippines has a tracking regime to secure the distribution system of tobacco products. The Philippines uses internal revenue stamps with security features affixed on imported and locally manufactured cigarettes. The effectiveness of this measure, however, has yet to be assessed. Other measures to counter illicit trade include specific marks on duty-paid cigarettes. For example, Singapore requires that all cigarette sticks sold in the country bear the Singapore Duty-Paid Cigarette mark to differentiate duty-paid cigarettes from contraband cigarettes (Lim 2013). Another supply-reduction measure is the ban of sales to minors (Article 16). All ASEAN countries, except for Indonesia, prohibit the sale of tobacco products to minors, but not all of them mandate that the seller require proof of age at point of sale or ban the sale of individual or small ‘kiddie’ packs.

The supply of tobacco can further be reduced at the national level through government support for economically viable alternatives for tobacco workers and growers (Article 17). However, in all ASEAN countries (except for Brunei and Singapore) that have a local tobacco growing industry, such support is still lacking as Indonesia, Vietnam and the Philippines are still major producers of cigarettes. Indonesia produced the highest volume of cigarettes in 2015 at 269 billion sticks, followed by Vietnam with 105 billion sticks and the Philippines with 102 billion sticks (Euromonitor International 2017b). Providing alternatives to tobacco growers is a difficult strategy because the region is not only a major producer but also a major exporter, exporting USD2.3 billion worth of cigarettes in 2016 alone, almost twice the value it exported in 2010 at USD1.4 billion (International Trade Centre 2017).

3.2. Financing

All ASEAN1 countries have funding mechanisms for tobacco control. Financing for tobacco control have implications for support for smoking cessation (service delivery), training for tobacco control (human resources) and availability and access to nicotine replacement therapy (medicines and technologies). Singapore, Brunei and Thailand annually allocate more than USD100 million to tobacco control. Singapore and Brunei’s funding for tobacco control comes from the National Treasury amounting to at least more than USD1 million. Thailand’s funding for tobacco control is from 2 per cent surcharge taxes from alcohol and tobacco, often referred to as the ‘sin tax’ approach. However, when
reported government expenditures on tobacco control per capita are considered, only Singapore, Brunei and Vietnam are found to be spending at least USD0.11 on tobacco control per capita.

Most ASEAN2 countries have funding mechanisms for tobacco control through the government, except for Cambodia and Myanmar. Since 2013, Lao PDR and Vietnam have earmarked surcharge taxes for tobacco control which ranged from USD1 million to USD3 million. One caveat is that Lao PDR is restricted because of an existing tobacco license agreement with Imperial Tobacco and as such, the government cannot enforce increases in tobacco tax (Lao PDR FCTC Report 2016). On the other hand, the Philippines distributes the revenue from ‘sin taxes (on tobacco and alcohol)’ to health promotion programmes and to subsidies for insurance premiums among poor members of the national health insurance scheme. External grants from philanthropic foundations and international civil society organisations still form the bulk of funding for development assistance to tobacco control primarily towards tobacco control advocacy and research and health promotion in ASEAN2 countries (Ross & Stoklosa 2012).

3.3. Information

In the FCTC MPOWER package, this health system building block is enforced through monitoring tobacco use and prevention policies and related health outcomes. All AMS monitor tobacco use and prevention policies with recent, representative and periodic data for both adults and youth that are collected at least every 5 years (WHO 2017c). Most ASEAN countries participate in the WHO Global Tobacco Surveillance System, which includes the Global Adult Tobacco Survey and the Global Youth Tobacco Survey, except for Myanmar, which participated in the 2009 and the 2014 STEPSwise approach to Surveillance (STEPS)—a risk factor-based approach.

Figure 1 Smoking Prevalence by Gender, 2000–2020

Source: WHO, Global Health Observatory
surveillance instrument, instead of the Global Adult Tobacco Survey.

About 10 per cent of the world’s 1 billion smokers live in ASEAN. Based on WHO Global Health Observatory estimates, when disaggregated by gender, smoking prevalence among male adults range from 28 per cent (Singapore) to 76 per cent (Indonesia) in 2015 (see Figure 1). By 2020, smoking prevalence among ASEAN male adults is projected to range from 28 per cent (Singapore) to 83 per cent (Indonesia) (see Figure 1). In 2015, Indonesia ranked third, while the Philippines ranked tenth among the 10 countries with the largest smoking population in the world (GBD 2015 Tobacco collaborators 2017).

3.4. Human Resources

All ASEAN1 countries have human resources for tobacco control, with Thailand and Singapore with more than 20 full-time staff. Only two (Vietnam and Indonesia) of the six ASEAN2 countries have more than 10 full-time government staff for tobacco control. However, only Singapore and Brunei have at least five full-time tobacco control staff per million population. Most ASEAN countries have active civil society organisations engaged in tobacco control, many of which are supported by donors and philanthropic foundations. SEATCA (2016) reported that among the ASEAN1 countries, Thailand has the highest number of tobacco control nongovernmental organisations (NGOs), while Brunei has none. Among the ASEAN2 countries, Myanmar, Lao PDR, Cambodia and Vietnam have at least one tobacco control NGO, while Indonesia has about 80 tobacco control NGOs and the Philippines has at least 10 (SEATCA 2016). Another indicator considered for human resources is whether there is training on tobacco control nongovernmental organisations (NGOs), while Brunei has none. Among the ASEAN2 countries, Myanmar, Lao PDR, Cambodia and Vietnam have at least one tobacco control NGO, while Indonesia has about 80 tobacco control NGOs and the Philippines has at least 10 (SEATCA 2016). Another indicator considered for human resources is whether there is training on tobacco control for health workers, community workers, social workers, media professionals, educators, decision makers and administrators. The country reports indicate that most ASEAN countries provide training on tobacco control, with some limited to certain groups within the health sector.

3.5. Service Delivery

A critical health service towards tobacco control is the existence of smoking cessation programmes. All ASEAN1 countries have toll-free quitlines for smoking cessation. Thailand had an operational smoking quitline since 1993 with support from the Action for Smoking and Health Foundation although the national quitline was not launched until 2008 (Tobacco Control Research and Knowledge Management Centre 2016). Singapore’s national quit movement which included the toll-free quitline (operational since 2002) and various quit channels (via social media, SMS) was launched in 2011. Malaysia’s national quitline was only launched in 2016 as a university-based and private sector-supported initiative (New Straits Times August 29, 2016). Brunei launched a quitline in 2014 and a smoking cessation mobile application in 2015 (Ministry of Health – Brunei Darussalam n.d.). Aside from quitline services, Brunei also opened smoking cessation counselling services in community clinics in 2005. Among ASEAN2 countries, Vietnam and Cambodia have quitlines while the Philippines have recently launched call-based and mobile phone-based (SMS) cessation quitlines (WHO 2015; Department of Health Philippines June 19, 2017). However, even with the availability of quitlines, ASEAN countries still have limited facilities that can provide smoking cessation support.

3.6. Access to Medicines, Vaccines and Medical Technologies

The promotion of tobacco cessation and adequate treatment for tobacco dependence forms part of the demand reduction measures in the FCTC. Only ASEAN1 countries have WHO-recommended nicotine replacement therapy (NRT) (nicotine transdermal patches and chewing gum) that are generally available in the public health sector (WHO 2017b:47; WHO Global Health Observatory 2017). For example, Brunei, Malaysia and Singapore have free or reimbursable cessation medicines. On the other hand, NRT is generally unavailable or inaccessible in the public health sector in
ASEAN2 countries (WHO Global Health Observatory 2017).

4. Challenges to FCTC Implementation in ASEAN

Examining tobacco control through the lens of health system building blocks offers a different and nuanced snapshot of the state of AMS’s implementation of tobacco control. The results contribute to the evidence that strong tobacco control policies form an integral part of health systems strengthening and the larger objective of providing universal health care. The results also show that ASEAN faces three main challenges to FCTC implementation.

First, the magnitude of the tobacco epidemic in ASEAN is a real threat not only to public health but also to the economies of the countries involved (Goodchild et al. 2017). Globally, about 9 per cent of deaths (556,000) and 10 per cent of DALYs (14 million) attributable to tobacco smoke occurred in ASEAN in 2015 and both have doubled since 1990 (IHME 2017). The Institute of Health Metrics and Evaluation (2017) further estimated that in 2015, about 76,000 more people in ASEAN died from cardiovascular diseases attributable to tobacco smoke than those who died from smoking-related cancers and chronic respiratory diseases combined (see Figure 2).

The increasing burden of disease from smoking-related diseases calls for increased support for health promotion, and funding for research particularly on nicotine dependence and smoking cessation. The dangers of purportedly less harmful tobacco products as a new strategy by the tobacco industry is also emerging in the region. Some ASEAN countries are more vigilant than most, however. Even before the growth of scientific evidence about the harms of electronic cigarettes on human health (Moheimani et al. 2017; Hess et al. 2017), majority of the AMS have banned electronic cigarettes.

![Figure 2](source_of_image)

Source: Global Burden of Disease Study 2015. Global Burden of Disease Study 2015 (GBD 2015) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2016. Available from: http://ghdx.healthdata.org/gbd-results-tool?params=querytool-permalink/8cedab92578ba7158d4a321da35fe1457, accessed August 31, 2017.
cigarettes, particularly Brunei, Cambodia, Indonesia, Singapore, Thailand and Vietnam, albeit in varying degrees of enforcement.

Second, tobacco industry interference is still high in the region and their strategies to oppose or water down tobacco control policies. The slow progress of ASEAN2 countries in FCTC implementation is attributable to the strong interference of the tobacco industry, of both local and multinational origin. There are two main reasons for the extensive interference from tobacco industry players in the region. Firstly, and as noted in previous sections, most developing ASEAN countries have local tobacco growing industries including Indonesia, Philippines, Thailand, Vietnam, Laos and Myanmar. Secondly, major multinational tobacco companies including Philip Morris, British American Tobacco and Japan Tobacco International operate through manufacturing and trading facilities in ASEAN particularly in Singapore, Malaysia, Philippines and Cambodia (Assunta & Dorotheo 2016; SEATCA 2016a; SEATCA 2016b).

There are forecasts that multinational tobacco companies will continue to invest in export hubs as part of their business strategy (Euromonitor International 2017a). Some tobacco companies in the region, like Thailand Tobacco Monopoly, a state-led enterprise, have plans to expand operations regionally (Lee & Eckhardt 2017; MacKenzie et al. 2017) while Indonesian legislators are aiming at tripling its cigarette production to 524 billion cigarettes by 2020 (Halim & Aritonang 2017). In 2014, Gudang Garam, a major Indonesian cigarette and kretek company, was listed as one of the top 100 ASEAN companies that have strong assets and significant cash holdings, and was the only company listed in the tobacco industry, with USD9.8 billion in market capital (ASEAN & UNCTAD 2015; Forbes 2017).

With globalised trade and foreign direct investment, multinational tobacco companies found new markets in these countries (WHO 2008). The shift of focus from high income countries where tobacco control is currently at their strongest, to low and middle-income countries where tobacco control is at their weakest, is also reflected in the transition of multinational tobacco companies shifting their resources towards indirectly influencing and lobbying LMICs to oppose stronger tobacco control policies in the international arena (Lee et al. 2012b).

In ASEAN, Indonesia presents an interesting case for leadership and governance, where the government is driven more by economic arguments in favour of the tobacco-growing sector than by public health arguments (Human Rights Watch 2016; Danubrata & Reinard 2017). In this regard, the critical challenge is to obtain greater political support and commitment from relevant governments and relevant stakeholders including donors and NGOs, and a capacity for these governments to obtain broader, multi-sectoral support for better implementation of the key FCTC articles. There is thus a strong need to monitor the tobacco industry and its new strategies to counter and dismiss the public health benefits of tobacco control. Previous research and exposés on the tobacco industry’s tactics have shown how it strategizes and infiltrates even the FCTC Conference of Parties to improve its foothold in growing markets in the region (Reuters 2017). The tobacco industry’s efforts to distract the health sector from its main goal to profit by selling tobacco products have reached new ironic heights with Philip Morris announcing its support for a Foundation for a Smoke-Free World with USD80 million a year over a 12-year period (Yach 2017). The WHO, tobacco control advocates and scholars have already voiced its opposition to the initiative, citing a clear conflict of interest (WHO 2017d).

Third, and on an optimistic note, the opportunities for stronger implementation are also expanding, predicated on stronger regional governance and involvement of multiple stakeholders. As this study shows, ASEAN countries are showing political will and leadership through the passage of FCTC-related legislation and regulations, with more countries now with moderate tobacco control policies. Some policy impetus comes from ASEAN itself. Although not considered a high priority compared to pandemics and

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emerging and re-emerging infectious diseases (Caballero-Anthony and Amul 2015), tobacco control is a recurrent component of the ASEAN health agenda, embedded in the ASCC Blueprints (2009–2015 and 2016–2030) and the ASEAN Strategic Framework on Health Development (2010–2015). Tobacco control is included as a priority in the Regional Action Plan on Healthy ASEAN Lifestyles (ASEAN Secretariat 2012), with the aim ‘to develop and implement national action consistent with the Framework Convention on Tobacco Control, as appropriate, for example, on smuggling, taxation, product advertising, distribution, sale, and agricultural production.’ The action plan also included increasing the capacity of and access to health care services for health education, health promotion, disease prevention and tobacco control advocacy. Consequently, the ASEAN post-2015 health development agenda (2016–2020) includes promoting healthy lifestyles, which would prioritise the prevention and control of NCDs, and the reduction of tobacco consumption and harmful use of alcohol, and strengthening health systems and access to care, that is geared towards universal health coverage, among others. Initiated by Thailand, the ASEAN Focal Points on Tobacco Control was established in October 2009 to serve as a platform for developing mutually beneficial strategic tobacco control measures, to strengthen and support tobacco control implementation in line with the FCTC as well as to develop, implement, monitor, review progress and evaluate regional cooperation on tobacco control. Under the new regional health agenda, the ASEAN Focal Points on Tobacco Control was integrated into ASEAN Health Cluster 1 on promoting healthy lifestyles (ASEAN Secretariat n.d.).

The involvement of philanthropic foundations in tobacco control in ASEAN cannot be understated. Financing tobacco control in the region is still dependent on external donors, a bulk of which comes from philanthropic foundations (Ross and Stoklosa 2012), particularly Bloomberg Philanthropies and the Bill and Melinda Gates Foundation (see Figure 3). With the inclusion of tobacco control in the SDG targets, donors now give it a higher priority. Since it began in 2006 with USD375 million as a 6-year investment, the Bloomberg Initiative to Reduce Tobacco Use has been funding the implementation of the MPOWER package in ASEAN, with a focus on Indonesia, the Philippines, Vietnam and Thailand. In December 2016, Bloomberg Philanthropies gave USD360 million for a new round of funding to support FCTC implementation, contributing almost USD1 billion to support tobacco control implementation since 2006 (Bloomberg Philanthropies 2017). With a cumulative USD210 million commitment since 2008, the Bill and Melinda Gates Foundation (n.d.) partners with Bloomberg Philanthropies towards building capacities for governments and non-governmental organisations in Africa,
China and Southeast Asia. The Gates Foundation supports policy interventions (education and advocacy) towards tobacco taxation, bans on tobacco advertising, graphic health warning labels and plain packaging, and smoke-free indoor environments, as well as social marketing, both traditional and innovative but targeted campaigns to shift perceptions related to tobacco use, and building the evidence base for local and global tobacco control (Gates Foundation n.d.).

5. Conclusions

Given the state of tobacco control in ASEAN, and the challenges of implementing stronger tobacco control policies, the region still has a wide room for improvement. There is a need to engender more commitment from ASEAN countries, to follow through with their obligations under the FCTC, their commitments to the SDGs and towards a healthy ASEAN Community. A wider evidence base for effective interventions, whether as demand-reduction measures or as supply-reduction measures in the region, is also necessary to maintain the momentum for tobacco control.

The new framework utilised in this study aims to further contribute to monitoring the progress of tobacco control through the lens of health systems’ building blocks. The proposed framework also provides a more holistic context of the health system itself within which FCTC implementation needs to be considered. The results show that with a majority of the measures dependent on leadership and governance, there is an increasing need to engage the leaders in the region towards implementing stronger tobacco control policies. The use of health system building blocks in measuring and characterising progress of the FCTC points to a different methodology beyond existing MPOWER-focused assessments towards a systems point of view. The use of the framework identifies and highlights the weak links or challenges to implementation among the building blocks of the health system, which in turn can be utilised to shape the implementation of corresponding measures at the national and regional level. While differences in the region point to gaps in implementation, it also represents an opportunity for the ‘strong’ implementers to share experiences and knowledge with neighbouring countries and work towards stronger collective action to curb the important health menace of tobacco.

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