WHO FRAMEWORK CONVENTION
ON TOBACCO CONTROL

# Smokeless tobacco in South-East Asia in relation to the WHO FCTC

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## Acknowledgements

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## Executive summary

The smokeless tobacco (SLT) scenario in the South-East Asia Region (SEAR) is complex and presents considerable challenges for tobacco control, with nearly 250 million adult users, representing 90% of adult users globally. There is high prevalence (over 20% among men) in Myanmar, India, Nepal, Bangladesh, Sri Lanka and Bhutan. A wide variety of products, many of them country or state specific, are manufactured by hundreds of entities, mostly cottage industries and a range of industrial scale entities. India is the largest agricultural producer, product manufacturer and consumer of smokeless tobacco in the region. Basic ingredients are known and often include areca nut, but the full list of ingredients is not typically disclosed on packaging. The few chemical analyses done on products sold in the region have shown a wide variability of constituents and in many products, high levels of nicotine and tobacco related nitrosamines.

Health risks of SLT use include higher mortality, adverse reproductive outcomes, oral cancer, heart disease and periodontal disease. Public awareness of the health risks of SLT is low in the region. In India, advertising has been difficult to control, with firms resorting to loopholes such as surrogate or indirect advertising, and there is also a significant amount of cross-border advertising. Attractive and colourful packages of single dose portions serve as point of sale advertising, even though banned. With the government actively promoting exports, Indian firms have been legally exporting increasing quantities of SLT products over the last decade, mainly to countries of the Eastern Mediterranean Region. Illegal trade is directed towards neighboring SEAR countries, which has increased the variety of products available there.

Whole of government approaches to tobacco control in each country would help to implement anti-tobacco policies and reduce use of SLT. Within India, taxation rates have remained more or less constant over the past five years and prices remain low. Numerous manufacturers evade taxation. Most SEAR countries have comprehensive tobacco control laws that restrict advertising, require warning labels, forbid sale to minors and a few prohibit sales of all tobacco products near educational institutions. Advocacy has helped to achieve important successes such as a ban on gutka (a popular form of SLT) in India. However, increased advocacy for additional tobacco control measures is still needed in the region. Other practical steps for change include public awareness campaigns, further training of law enforcers in tobacco control laws, strengthening of enforcement bodies at all levels, strategic litigation against the tobacco industry, and acceding to the WHO FCTC Protocol to Eliminate Illicit Trade in Tobacco Products.

# 1. Introduction

Tobacco use is the leading preventable cause of death globally. The health, social and economic burdens of tobacco use are devastating. If current global trends continue, it is estimated that tobacco will kill more than 8 million people annually by 2030, and three quarters of these deaths will be in low- and middle-income countries.[1]

Some of the largest and most complex tobacco control environments in the world can be found in the South-East Asia Region (SEAR), comprised of eleven countries: India, Bangladesh, Democratic People's Republic of Korea, Indonesia, Thailand, Bhutan, Maldives, Myanmar, Nepal, Sri Lanka and Timor Leste. Ten countries in the region have ratified the WHO Framework Convention on Tobacco Control (WHO FCTC).[2] Indonesia has initiated measures to become a Party to the Convention.[3]

The region is amongst the largest producers and consumers of tobacco products globally and the widespread use of smokeless tobacco (SLT) products in the region makes the tobacco control efforts even more complicated. Achievements in tobacco control in the region will be largely dependent upon strong national legislation and public awareness campaigns, combined with all-embracing, global, legally-binding policy instruments, which would curb both national and international tobacco marketing and consumption of both smoked and SLT products.

# 2. Regional scenario

The SLT scenario in SEAR has several major challenges and features that render the situation particularly complex. Existing policies have not yet been able to significantly curb the widespread use of SLT.

## 2.1 Challenges and complexities

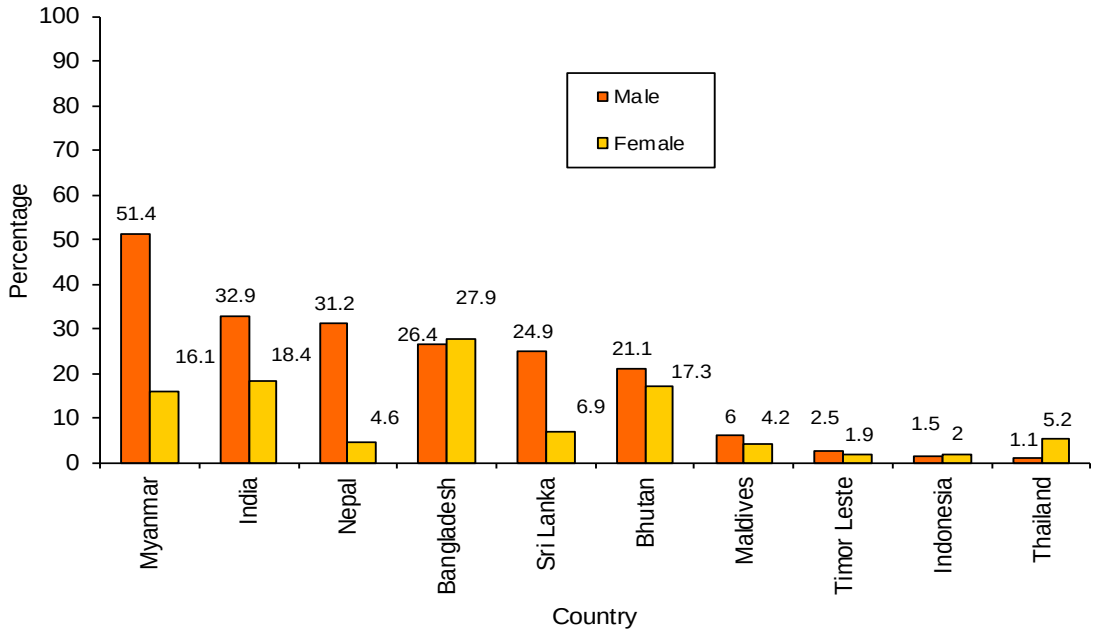
The Region is characterised by a high prevalence of use, the wide diversity of products available, a large number of manufacturers, many of them small and even cottage industries, and customized preparation of tobacco products by vendors and often by users themselves. There are widespread misconceptions about benefits of SLT tobacco and a lack of awareness of the potential harms. There is a varied spectrum of risks to health, such as periodontal diseases, oral cancer, heart disease and adverse reproductive effects, about which most of the public is largely unaware. Furthermore, product preferences vary by country, region, ethnicity and gender. Marketing strategies vary by the type of product and size of manufacturers and are affected by legislation. Information on ingredients and chemical composition is partial and not routinely collected. Tobacco control efforts have been initiated by health ministries, but other ministries, in some countries in the region, currently promote production and exports of tobacco products. There are, however, some exemplary measures that have been taken in the region by Parties to the Convention, including Bhutan.

### *2.1.1 Trends and determinants*

SEAR has nearly 250 million adult SLT users, representing 90% of the smokeless tobacco users in the world.[5] SLT products are known to be used in 10 out of the 11 countries of the Region. SLT products are not known to be consumed in the Democratic Republic of Korea (DPR Korea); therefore DPR Korea is excluded from this discussion.[6]

Country-wise prevalence in the region, shown in Figure 1, ranges from 1.1% in males in Thailand to 51.4% in Myanmar and from 5.2% in females in Thailand to 16.1% among females in Myanmar, as shown from available surveys. Prevalence among males is over 20% in Bhutan, Sri Lanka, Bangladesh, Nepal, India and Myanmar; among females it is 16% and above in all these countries except Nepal and Sri Lanka.[5]

**Figure 1. Prevalence of smokeless tobacco use among adults (current users) in the South-East Asia Region.**




Source: Sinha et al 2012.[5] (data sources used: GATS for Bangladesh, India, Indonesia, Thailand, STEPS for Bhutan, Myanmar, Nepal and Sri Lanka, DHS for Maldives and Timor Leste).[7-15]

An increasing trend in SLT use has been registered in Myanmar in three successive WHO Sentinel Tobacco Surveys and in one more recent STEPS Survey on risk factors for non-communicable diseases[17] from 14.9% to 29.7% among all adults,[12] with simultaneous decreases in smoking prevalence. In India, although repeated national surveys using the exact same methodology do not exist, a comparison of available national survey data over the last decade shows an increase in the importance of SLT in the form of increased prevalence, as shown in Figure 2, and an increase in use of SLT relative to smoking, among males, as shown in Figure 3.[8,18,19]

**Figure 2.**

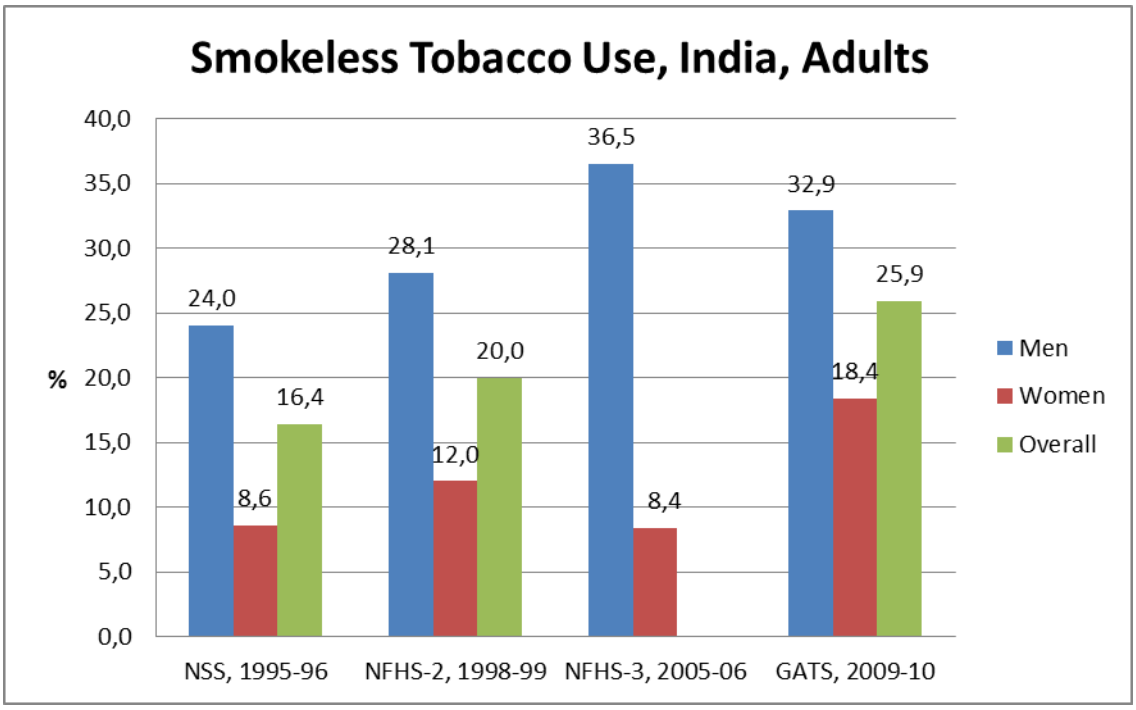
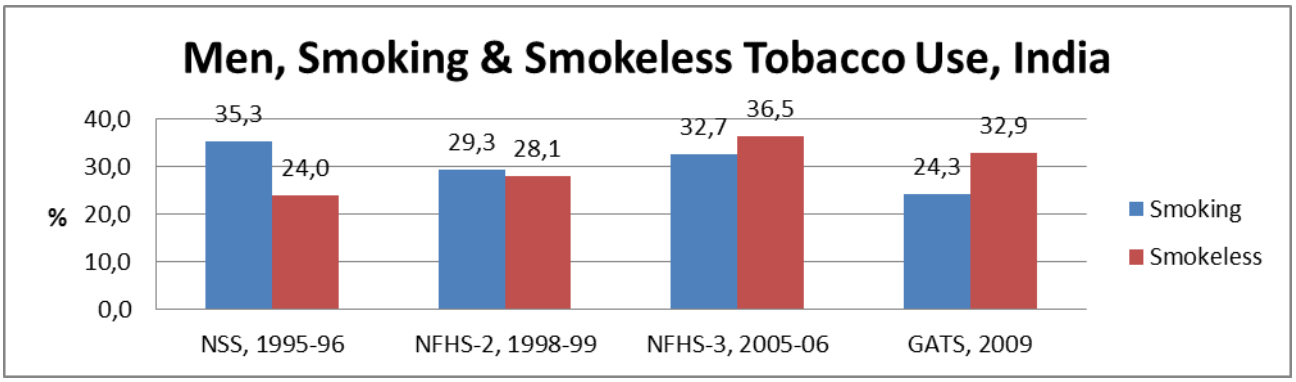



**Figure 3.**




In Thailand and Indonesia, there have been decreases in SLT use prevalence, with simultaneous significant increases in smoking.[5] Some of this can be attributed to smoking being increasingly viewed as a more "modern" and "sanitary" form of tobacco use compared to SLT, as SLT use typically entails spitting. [20]

In India, there is a strong association of SLT use with social disadvantage as shown in an analysis of GATS data: increasing risk of use with lower levels of education, the highest risk with illiteracy; increasing risk with lower levels of security in employment (self-employed, non –government employment); the highest risk with unemployment.[21]

It is also well documented from surveys for other countries of the region that SLT use is associated with lower socioeconomic status and rural residence.[22-24] An exception to this pattern in the region is seen for the relatively newer product, gutka, in India, where before the recent ban it was the second most popular SLT product, with similar prevalence in both urban and rural areas. It was the most commonly used product among males with secondary or higher education.

The prevalence of SLT use increases with age to the highest age group in Bangladesh, India and Nepal[7,8,13] but in Myanmar, prevalence of SLT among men is highest in the 25-34 year age group while in women it is highest in middle age (45-54 years).[12]

In India, an exception to increasing prevalence of SLT use with age occurred with gutka.. Among males in 2010, the prevalence of gutka was highest in the younger age groups: 14% of males aged 15-24 years and 17% of males 25-44 years. The proportion decreases to 5% among the higher age groups.[8]

### *2.1.2 Multiplicity of products and ingredients*

Betel quid, a combination prepared from slices or pieces of areca nut, slaked lime, spices and condiments, rolled up in leaves of the *Piper Betle*, is a traditional and popular vehicle for chewing tobacco throughout SEAR and is still the most widely used form of SLT in Bangladesh,[7] Indonesia,[5] Myanmar,[25] Nepal,[26] Sri Lanka,[5] and Thailand.[10] In India, the country with the largest number of users, khaini is the most popular form of SLT used, which was followed by gutka and betel quid.[8] In India, gutka has been marketed as a convenient substitute for betel quid.

Apart from betel quid, there is a large variety of SLT products in the Region, especially in India. Products encompass those for chewing, which are either chewed by themselves or incorporated into betel quid, those for application on teeth and gums, those for snuffing and those for gargling or drinking. Another classification is based on whether they contain areca nut or not. There are different names for the various products in different states or regions. Most of the products have been used for centuries in the Region.

A table briefly summarising the products available in the region is provided below (Table 1). A more detailed table is provided as Appendix II.

**Table 1. Tobacco Products Used in the South-East Asia Region**

| |
|---|
| For Chewing: |
| Leaf tobacco (all Member countries); Khaini (Bangladesh, Bhutan, India, Nepal); Zarda (Bangladesh, Bhutan India, Myanmar, Nepal); Kiwam (Bangladesh, India, Nepal – largely used by upper caste people); Gundi (India); Hnatsay (Myanmar); Betel Quid with tobacco (all Member countries). |
| Areca nut and tobacco mixtures for chewing: |
| Pan Masala with tobacco, Gutka (India and most South Asian countries); Mainpuri Tobacco (India); Mawa (India); Dohra (India), (Beeda) Sri Lanka. |
| For application: |
| Gudhaku (India), Gul (India, Bangladesh); Creamy snuff (India); Lal dantamanjan (India); Masheri/mishri (India). |
| For gargling/sipping: |
| Tuibur, Hidakphu (India), liquid tobacco (Myanmar). |
| For inhalation: |
| Snuff |
| Adapted from : WHO SEARO Report on the Expert Group Meeting on Smokeless Tobacco in the South-East Asia Region [27] |

### *2.1.3 Rising production in the unorganized sector*

Available information suggests that most of the production of SLT in India[28] and the Region is in the unorganized sector, (e.g., Nepal) as it is only in recent times that SLT products have been produced on an industrial scale.[24, 29]

There are, or were until recently, 375-400 brands of gutka in India,[31] which may give an indication of the number of manufacturers. There is evidence that a large amount of gutka production has gone unrecorded and untaxed. [31]

### *2.1.4 National, regional, ethnic and gender variation in preferences*

Table 1 provides names of products used in the different countries. GATS-India has shown that in India, the central and north eastern states have the highest prevalence of SLT use.[8]

Certain products are preferred by women on a mostly regional basis in Bangladesh, India and Nepal, especially products used for oral application (bajjar, gudhaku, mishri, gul).[32] In India, these are mainly used in Bihar (gudhaku), Gujarat (bajjar), Maharashtra and Goa (mishri), and West Bengal (gudhaku).[33]

### *2.1.5 Limited awareness of harms and misconceptions about benefits*

Tobacco control policies focused on SLT use are more likely to be more successful where there is a high level of public awareness and personal understanding about its harmfulness. According to the GATS, a vast majority of adults in Bangladesh (93%), India (89%) and Thailand (71%) believe that SLT causes serious illness.[7,8,10] Despite these apparently high levels of awareness, few quit attempts are made. For example the percentages of SLT users who made a quit attempt in the past year in Bangladesh (29%), India (35%) and Thailand (22%) were fairly low. Hence it may be presumed that awareness is rather superficial. Since in the GATS there is only one question on beliefs about health effects of SLT use, no details were gathered. However, a systematic review of studies conducted in India, Nepal, Pakistan and the UK among South Asians between 1994 and 2009 found limited awareness of specific health effects due to SLT use.[34] In a survey conducted in Maharasthra and Bihar, despite fairly high levels of awareness that SLT causes mouth cancer or gum disease, most users had no intention to quit.[35] It is likely that user awareness of the harmfulness of SLT is limited to oral diseases, especially oral cancer, which is important, but a disease that generally takes many years to develop and does not affect a large proportion of users. However, adverse reproductive effects from SLT are common, and the negative effects on the heart attributable to SLT, while not yet well quantified, may be more widespread than cancer.

Some surveys have revealed the incomplete knowledge or misconceptions held by people about SLT in countries of the region. For example, in a rural area studied in Sri Lanka, for levels of awareness on health risks caused by tobacco in different forms and alcohol, 84% knew about oral cancer, but only 68% were aware that betel quid chewing can cause it and did not know the symptoms.[42]

#### Misconceptions and Reasons for Use

Currently in India, tobacco is used for various purposes by individuals of all ages e.g., to cleanse teeth, freshen breath,[33] treat toothache,[36] relieve gastric disturbances,[33] ease abdominal pain,[37] relieve stress[38],[39] alleviate morning sickness and labour pains.[40] Areca nut is used to freshen breath[41] sometimes with tobacco. Snuff is sometimes used to relieve nosebleed and nasal stuffiness.[20] Some people use SLT to keep awake and alert while working.[43]

While many people are aware that tobacco in general is dangerous, they may not be aware that particular products (e.g. betel quid, mishri or gutka) are dangerous. For example, in an intervention study, school children in Madhya Pradesh knew that tobacco was harmful but did not know that gutka contained tobacco or was harmful.[44]

Considering the available information on awareness of the harms of SLT in the countries of the region, awareness appears to be very superficial as well as incomplete.

### *2.1.6 Associated health risks*

#### Mortality

In prospective cohort studies in India, SLT users have had slightly but significantly elevated age adjusted relative risks for premature mortality of 1.2–1.96 among men and 1.3 among women.[46-49]

**Cancer**

Oral cancer is the most widely known fatal disease and most common cancer caused by SLT use, with 95,140 estimated oral cancer cases per year in SEAR countries.

The International Agency for Research on Cancer (IARC) reviewed numerous studies on SLT from all over the world.[50,51] Most of the studies from Asia were from India, but there were also studies from Bangladesh, Bhutan, Indonesia, Burma, Nepal, Pakistan, and Sri Lanka, mostly conducted in the second half of the 20th century, but some more recently. From these studies, restricted to those examining the use of SLT apart from betel quid or areca nut, the IARC estimated that over half of all oral cancers in Asia were caused by SLT use; a summary of epidemiological studies from Asia and the USA showed an overall elevated relative risk of oral cancer with SLT use of 2.6 (95% Confidence interval (CI): 1.3-5.2). However, some studies in Europe did not show a significantly elevated higher risk, although this may be due to the differences in product composition.[52]

Betel quid without tobacco and areca nut (a major ingredient of betel quid), have been classified as human carcinogens; they have been shown to cause oral cancer; with tobacco they cause oral, cancer, cancer of the pharynx and esophagus.[53]

Many of the Asian studies included users of tobacco with areca nut. In studies from India in which betel quid with tobacco was the major form of use of SLT, the elevated odds ratios for oral cancer in men have ranged approximately from about 3-6, while in two studies where women participated, they had odds ratios of 25 and 46.[54,55]

In a cohort study of incident cancers in Mumbai, excess risks (expressed as adjusted hazard ratios) for cancers at various sites were seen among SLT users: lip, oral cavity and pharynx (HR=1.48 [95% CI: 1.03,2.13]), esophagus (HR=3.65 [95% CI: 1.59,8.38]), liver and intrahepatic bile ducts (HR=2.35 [95% CI: 1.08,5.10]), Respiratory and intrathoracic organs (HR=1.71 [95% CI:1.08,2.73])[56]

In a study comparing oral cancer incidence data of the Ahmedabad Population Cancer Registry from two time periods, 1983-87 and 1995-96, using ten-year age groups, an increase of oral cancer in men younger than 50 years was detected.[57] It was known from a previous study in rural Bhavnagar district in Gujarat, that *mawa*, a vendor made mixture of areca nut and tobacco, had become popular among men from at least the early 1990s and that the precancerous condition oral submucous fibrosis had become common in men under 50 years of age.[58] Several years later, a case series of oral cancer cases in Surat, where gutka was popular, found higher numbers of cases in young men.[59]

**Periodontal diseases and tooth loss**

Periodontal disease and tooth loss are much more common in SLT users compared to non-users, despite existing beliefs to the contrary held by many people.

**Heart disease**

SLT use in South-East Asia also is associated with an increase in the risk for cardiovascular diseases, especially the risk of heart attack (2-4 times increased risk), as seen in two studies. [60,61] In several studies in India, SLT use has been found to increase the risk profile for heart disease, much like smoking does.[62] For example, in a large cohort study conducted in Mumbai, that

observed mortality in 99,570 individuals aged>35 years, interviewed during 1991–94 and followed up for an average of 5.5 years, a relative risk (RR) for women of 1.19 (1.02–1.38) was found for diseases of the circulatory system (I00-I99] and also for women a relative risk of 1.25 (1.05–1.49) for the subset of ischaemic heart disease (IHD). The relative risks for coronary vascular disease CVD [I61-64,66,67] for men and for women were slightly elevated but not significant.[47]

**Adverse reproductive outcomes**

SLT use by itself, as well as betel quid chewing (with and without tobacco), has been associated with adverse pregnancy outcomes in a recent review of seven studies (five in lower and middle income countries and two in high income countries). The main effects seen were low birth weight and stillbirth.[63] Use of SLT in pregnancy is typically associated with a higher risk of low birthweight of 2-3 times higher than in non-users. In an earlier review of six studies from India a tentative estimate of 457 000 tobacco related infant deaths in the year 1986: of which 124 000 were still births, 194 000 were prematurity related deaths and 139 were perinatal deaths; the vast majority due to SLT and the rest due to smoking.[64] Since then, several more studies from India and Bangladesh have confirmed previous findings on the association of SLT use in pregnancy with low birth weight infants and stillbirths.[65,66] One of the studies also found a higher risk of these outcomes with gutka in respect to mishri. It also found an association of SLT use with anaemia in pregnant women.[64] Thus, widespread SLT use in pregnancy is at odds with the UN Millennium Goal 4 (to reduce child mortality) and Goal 5 (to improve maternal health).[68]

**Economic costs of related health problems**

A study of health care costs attributable to tobacco in India estimated that in 2004 the direct medical costs of treating SLT related diseases in India amounted to $285 million. The indirect morbidity costs of SLT use which includes the cost of caregivers and value of work loss due to illness amounted to $104 million. Thus the total cost of diseases caused by SLT use in India was $389 million (about INR 17.9 billion) in 2004.[69]

### *2.1.7 Limited information on chemical composition of SLT products*

While most products carry a list of ingredients on the packages, not all manufacturers list them. Furthermore, it is not known the extent to which such lists are complete. As yet, there is no notified legal requirement for manufacturers to report ingredients. In India, analyses for additives in areca nut products also containing tobacco, considered food products, have revealed magnesium carbonate, a restricted substance, subject to prescribed levels in food products. Not all additives and flavouring agents are specified on wrappers, but many such ingredients have been discovered by analyses and include methyl or ethyl salicilates, β-citronellol, 1,8 cineole, menthol, benzyl benzoate, eugenol, and coumarin as flavouring agents. Additives used to raise the pH in order to free the nicotine from the product include ammonia, ammonium carbonate, and sodium carbonate.[70] At present, no government agency is involved in chemically testing SLT (or smoked) products. Products are not routinely tested for checking the accuracy or comprehensiveness of the labels.

### *2.1.8 Industry characteristics : large, diverse, cottage based to industrial manufacturing*

Tobacco used for SLT products is grown and processed within the countries of the Region. Most of the SLT products are made in small units or in cottage industries, while others are made by the vendors. Since most of the products are simple to make, they are also sometimes made by the users themselves. Some of the products that are made by industrial units on a large scale include zarda, khaini, and gutka.

**Agricultural production for SLT use**

Using latest available data, in 2002-03, India produced around 85 000 tons of tobacco leaves for chewing products and 6 000 tons of tobacco leaves for snuff products. This tobacco is mainly grown in the states of Tamil Nadu, West Bengal, Bihar, Assam and Uttar Pradesh. [71] While India is the third largest tobacco producer in the world, only a fraction of it goes into SLT. The rest is used for smoking products domestically or for export of raw tobacco or smoking products. Production data from other countries is not accessible.

### *2.1.9 Marketing strategies*

Colourful packages and containers, as well as fresh pan leaves, are displayed at point of sale, usually along with smoking products, but SLT products tend to take up most of the space in most of the tobacco sellers' stalls. Perhaps to counter this trend, in recent years, cigarette manufacturers have started sponsoring stalls dedicated solely to cigarettes of their brand, along with other products bearing their company logo, including snacks and candies.

**Figure 1. A tobacco stall in Navi Mumbai, India, dated May 2012.**

In India, advertisements for pan masala shown on television are actually surrogate ads for gutka. This was shown by a study that demonstrated that the earnings from pan masala of particular brands were less than the cost of advertising, whereas the earnings from gutka of the same brand were very high.[7]

A survey undertaken among youth as late as 2007, showed that 13-15 year old urban school boys were seeing actors on TV chewing tobacco.[73] Gutka companies have sponsored religious, cultural and sports events and film awards. Cricket matches in Australia have had displays of ads for SLT tobacco in Hindi, which were taken down after it was confirmed that they were really SLT advertisements.[74] These matches were viewed not only by expatriate Indians in Australia, but largely by Indians in India.

Students aged 13-15 years in the Global Youth Tobacco Survey (GYTS) conducted in Karnataka 2003-04, reported seeing a lot of advertisements for gutka/pan masala on television, print media, newspapers, magazines, social gatherings.[75] It is to be noted that there appears to be confusion in the minds of youth as to whether or not these advertisements are for a tobacco product.

Chaini Khaini is chewing tobacco of the brand Chaini, but there is also a mouth freshener not containing tobacco, of the same brand name, called Chaini Chaini.[76] Chaini Chaini is widely advertised in all the media.

A number of manufacturers of SLT in India have websites. There are also trading sites permitting national and international trade of SLT products, listing companies in SEAR.

### *2.1.10 Trade: Legal and Illicit and current related policies*

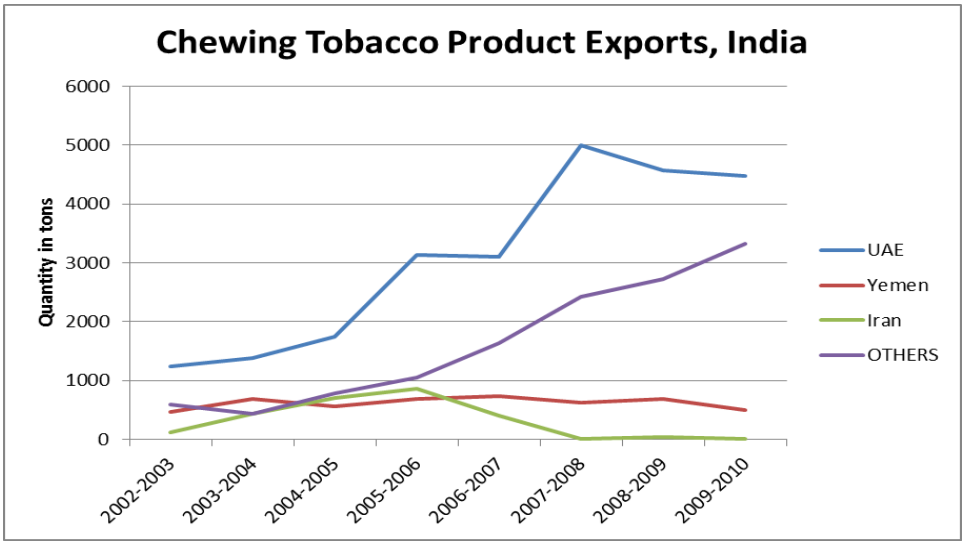
As shown by lists of exporters on trade websites, India, Nepal, Indonesia, Bangladesh and Sri Lanka all export chewing tobacco.[77] Among them, India appears to be the largest exporter, as it is the largest tobacco producer and has the largest number of exporters listed on Alibaba.com, 2011 (186 exporters listed for India, while only 17 for all the other countries in SEAR, as of 25 April, 2011).

**Legal trade**

Data on legal exports of tobacco are available online only for India, which exports SLT to over 50 countries. In India, tobacco exports are promoted by the Tobacco Board (Ministry of Commerce), created by an Act of Parliament in 1975. In its annual report of 2009-10, the Tobacco Board states that overall tobacco exports had been growing for eight consecutive years and registered a record performance in 2009-10.[78] India exports unmanufactured tobacco to Bangladesh, Indonesia and Sri Lanka. Among all of India's tobacco exports, chewing tobacco products exports more than tripled from 1,953 tons in 2000-01 to 8,725 tons in 2009-10.

According to official reports of the Tobacco Board, Indian chewing tobacco is listed as exported legally to only Nepal (e.g., 140 tons in 2008-09, 231 tons in 2009-10) among all countries in SEAR. However, there could be smaller amounts exported legally to other countries in SEAR also; they may be considered too small to list separately.[80, 81] The bulk of India's legal SLT tobacco exports, mainly chewing products, however, are destined for countries of the Eastern Mediterranean Region, where a large migrant South Asian population works and lives.

**Figure 2. Legal exports of chewing tobacco products from India to various countries during 2002-03 to 2009-10**




Source: The Tobacco Board: Statistics, Exports Data, 2002-03 through 2009-10. www.Tobaccoboard.com

**Areca Nut Production and Trade**

SLT in SEAR requires the production of areca nuts (betel nuts) for the fresh preparation of betel quid and related non-perishable products. Most of the SEAR countries produce areca nuts, including India, Bangladesh, Myanmar, Indonesia and Thailand, and so do other nearby countries. India and Bangladesh are the largest producers, but Indonesia and Thailand are important contributors to inter-regional trade especially because their prices are very competitive (probably because domestic demand is currently low). Suppliers of raw areca nuts, mostly Indonesian, are found on the Internet. A large percentage of the areca nuts produced in other SEAR countries is also imported into India.

India is the largest areca nut producer in the world. Since 1966, the Indian government set up the Directorate of Areca Nut and Spices Development, Government of India (DANSD) to promote production and marketing of areca nut and spices. Areca nut production in India has been increasing at least until recently.[53] The fact that areca nut has been most often used with SLT in SEAR countries is of great relevance here. In India, nearly 36% of tobacco consumption contains areca nut, according to a 2010 report.[31]

A continuous increase in consumption of areca nut in India has been documented from 1956-57 (0.114 million tons) through the years until 1999-2000 (0.336 million tons). The amount is expected to reach 0.617 million tons in the year 2020, which would be five times more than in 1956-57.[81] India's production of areca nut has nearly quadrupled from 1961 to 2007, [53, 82, 83] as has its population, from 4.4 million to over 1.2 billion in 2011, according to the Census of India.[84] In contrast, tobacco production in India, although increasing from the 1950s, has lagged behind population growth over the years.[85] The increase in consumption of areca nut can partly be explained by the formation of a multistate cooperative, the Central Areca nut and Cocoa Marketing and Processing Cooperative, Limited (CAMPCO), by areca nut farmers in India in 1973.[79]

The increase in areca nut production and consumption in SEAR seems to be highly related with an increasing manufacture and export of gutka and pan masala and similar products, mainly in India. Illegally imported nuts have been routed to unlicensed SLT (gutka and pan masala) manufacturing units in India (especially in Uttar Pradesh [UP], the state with the highest production of such products before the recent ban on sale of gutka in UP).[31] It is to be noted that products containing areca nut and tobacco (e.g., Babul Beeda) have been illegally exported to Sri Lanka.[86] Traders in India import areca nuts from other countries in South East Asia, including Indonesia and Thailand, but they often route them through Nepal, Sri Lanka and Bangladesh, in order to avail of the benefits of free trade agreements with those countries (Nepal is a SAARC country while Thailand and Indonesia are ASEAN countries). Under-invoicing and smuggling of areca nuts are often used to avoid paying the full import duty in India to keep the cost down, as indicated through complaints by Indian areca nut growers.[87] Import of areca nuts by India has also been considered to be due to the rising demand .[88]

Areca nut products not containing tobacco are viewed as gateway products to SLT, especially gutka.[89] Currently, their sale to minors is not prohibited in India. Now that gutka has been banned in all states under the central Food Standards and Safety Act, 2006 and Rules 2011, manufacturers are responding by selling separate products containing areca nut or tobacco. In some cases, they bear the same brand names as the earlier combined products. In other cases, new names and imagery are used. Some packages depict cartoon characters apparently designed to appeal to children.

**Trade policies**

In 2004, member countries of the South Asian Association of Regional Cooperation (SAARC) negotiated a free trade agreement called the South Asian Free Trade Association (SAFTA). Parties include Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. Six of these countries belong to WHO SEAR, and two to WHO Eastern Mediterranean Region.

SAFTA aims to liberalize trade among the SAARC countries. However, one of the clear principles is its position against (or for regulating) trade in items hazardous to health, which include tobacco.

The stance of SAFTA against trade in items hazardous to health fits under the Safety Valves principle of the World Trade Organization (WTO), Category (a), which provides for policies to protect public health.[90] One such protective policy of the WTO is import tariffs on tobacco products. Tariffs on tobacco are high right now and are unlikely to be reduced soon. In fact, member countries of SAARC included tobacco on the Sensitive List of SAFTA, which means tobacco was not to be a subject for tariff reduction/trade liberalization for at least four years from the beginning of the agreement in 2004. In 2008, there was no move to remove tobacco products from the sensitive list. A number of reasons why tobacco is not likely to be taken off the Sensitive List in the near future continue to operate: SAARC countries are Parties to the WHO FCTC and their governments would also theoretically stand to lose revenue if tariffs are reduced.

Also, under the WTO Agreement, countries can ban imports of those types of products that they do not manufacture or export.[90] Bhutan and Thailand, being non-manufacturing countries of SLT, have taken this stance. However, a considerable amount of SLT is still being brought into Bhutan by individuals.[91]

**Illicit trade of SLT products**

Studies show that most of the international trade in SLT in SEAR evades tariffs and bans: it is illegal trade.[92] According to a study of illicit tobacco trade in four countries (Bangladesh, India, Pakistan and Sri Lanka) illicit trade in the region is increasing. Smugglers were reported to be linked to organized crime groups, and enforcement agencies are lacking in resources to effectively combat tobacco smuggling.[31] It appears that neither tariffs nor bans on imports have been able to achieve the objectives of curbing imports or use of SLT as envisioned by the WHO FCTC.

Data on the true extent of exports of SLT from India to other SEAR countries are hard to obtain because it appears that most of this trade is illegal. It is known that SLT products are smuggled from India to Bangladesh, Nepal, and Sri Lanka [31] and also to Bhutan, where imports are banned, except for small amounts for personal consumption, requiring declaration.[93] Smuggled SLT products are mostly carried in small quantities by individuals, a practice commonly known as ant smuggling. According to a 2010 study, tobacco products are carried across borders along with other products like cosmetics and sugar. The tobacco products end up being sold in the black market. Raw materials like tobacco leaves and areca nuts are also smuggled across borders to producers of SLT products, especially in India.[31] Illicit trade of tobacco undermines the sovereign rights of governments, negatively impacting government revenues and public health.[92] For example, tobacco smuggling undermines health regulations such as mandatory health warnings and restrictions on sales to minors. It also contributes to making tobacco products cheaper and more accessible, leading to increased consumption and, ultimately, resulting in increased mortality and morbidity. Since illicit trade of tobacco is often carried out by organized crime and terrorist organizations, it undermines law and order and national security.

There is also the possibility that the ban on sales of certain types of SLT within India, may lead to increased exports, including illegal export. It was seen earlier that pan masala was being sold in markets in Yangoon, Myanmar, during the State bans in India.[94] This could have been illegal trade to Myanmar, where a thriving illegal trade for cigarettes is already known to exist.[31]

India is the main exporter in the region. The main country to which legal exports go from India is Nepal (Tobacco Board). (Stating this fact is not to deny the possibility that other countries may also be trading their own SLT products with India and each other, but information is lacking). Otherwise, most exports are illegal, including to Nepal,[80] Bangladesh, Sri Lanka.

A major flow of trade of SLT products is from India to Bangladesh, Nepal, Sri Lanka,[31] Myanmar,[43] and Bhutan,[93] which is outside of trade laws. Legal imports generally imply the imposition of import taxes when the products enter a country. To avoid these, and in reflection of a lucrative proposition, many individual carriers smuggle SLT products (including gutka) and bidis and other smoking products (cigarettes, cigars and cheroots) across borders. According to the Customs Department of Nepal, the value of SLT imports increased three-fold between 1996-97 and 1998-99. Data on smuggling are scarce due to the illicit nature of the trade. However, according to news reports, a businessman was fined Nepalese Rs. 7.2 million for importing khaini without paying VAT .[80]

Currently there is some evidence of illegal importation of SLT products into Thailand from the United States and India. There is no country in the Region that is immune from smuggled SLT.

### *2.1.11 Need for a "whole of government approach" towards tobacco control*

A major obstacle to tobacco control in the Region is interference by the tobacco industry in the policy making processes of governments.[5] This is compounded by a lack of a whole of government approach to tobacco control. First of all, at least two countries in the region, Thailand and DPR Korea have government owned cigarette manufacturing businesses, which complicates tobacco control efforts. Then, there are other aspects of a lack of whole of government commitment to tobacco control, especially with regard to SLT.

In India, for example, while the Ministry of Health is active in promoting tobacco control legislation and a national programme that is gradually being implemented in all States, other Ministries are either not fully supportive of tobacco control or are promoting tobacco. The Ministry of Finance is interested in revenue from tobacco, while the Ministry of Commerce sets targets for export of SLT.

In May 2007, gutka manufacturers had tried to get a court injunction to delay the directive requiring health warnings on gutka packets.[95] Since then, tobacco industry representatives have approached the Ministers belonging to the consultative Group of Ministers assigned to review the pictorial warnings provision of India's tobacco control legislation, COTPA 2003. In India, due to lobbying by the industry, the requirement of pictorial warnings was postponed many times from 2006 until May 31, 2009.

In India, the Trade Mark Act, 1999 permits the use of a single brand name to be registered for more than one product. This has led to use of tobacco brand names for areca nut products. The Cable Television Networks Act, 1995 prohibits advertising of tobacco or alcohol on television, but an amendment in 2008 allowed company logos of manufacturers of tobacco to be used while advertising other products. For SLT, this amounts to brand stretching, because areca nut products with similar packaging to the tobacco products are shown. Also, cultural events, news programmes and other products with the same brand name as the tobacco products are used to promote them. In 2009, the Cable Television Networks Amendment (CTNA) Rules were published, giving certain conditions for advertising products with the same brand name or logo of tobacco products, for example, prohibiting any direct or indirect reference to the prohibited products, and requiring that the expenditure on such advertising shall not be disproportionate to the actual sales of the product. Despite this amendment to CTNA, this law and the Trade Mark Act, 1999 both conflict with COTPA 2003 and its 2004 Rules which prohibit all direct and indirect advertising of tobacco. The different Ministries responsible for introducing and monitoring these laws (Commerce and Industry, Information and Broadcasting, and Health and Family Welfare) need to work together for a whole of government approach to tobacco control.

It is essential that all ministries are made aware of the WHO FCTC and its guidelines for implementing Article 5.3 (Protection of public health policies with respect to tobacco control from commercial and other vested interests of the tobacco industry.) In India, activities of the Directorate of Tobacco Development (Ministry of Agriculture) promoting the development of tobacco farming and industry, of the Central Tobacco Research Institute, developing new varieties of tobacco, and of the Tobacco Board (Ministry of Commerce) that promotes tobacco exports (including SLT) are not in line with WHO FCTC Guidelines.[96] A ray of hope is seen in the advice of the Tobacco Board to tobacco farmers on growing alternative crops to avoid surplus tobacco and to stabilize prices. In these instances, the Tobacco Board had offered technical advice and

assistance.[71] Although it would take time, with a whole of government approach, tobacco cultivation could eventually be thus phased out altogether.

## 2.2 Policy Scenario

### *2.2.1 WHO FCTC and Comprehensive Tobacco Control Laws*

Presently, ten out of the eleven SEAR countries are Parties to the WHO FCTC. [6] Indonesia is the only member state that has not yet ratified the WHO FCTC, although it is currently taking actions towards becoming a Party to the Convention.

As of April 2014, ten of the eleven member states in SEAR have national tobacco control laws and Timor-Leste is currently in the process of adopting legislation. In Indonesia, new tobacco control regulations were signed in December 2013 which include important provisions related to such areas as tobacco advertising, packaging and labelling of tobacco products, and smoke-free environments. Thailand implemented a comprehensive tobacco control law in 1992, even before the WHO FCTC was envisioned, while the laws of the other countries having them went into effect between 2004 and 2013 (see Table 2).

**Table 2. Countries with national legislation on tobacco control**

| Countries | National legislation on tobacco control | Effective Date of the Law |
|---|---|---|
| Bangladesh | ACT NO. 16 OF 2013, "An Act for the Amendment of Smoking And Tobacco Products Usage (Control) Act, 2005" | May 2, 2013 |
| Bhutan | Tobacco Control Act of Bhutan, 2010 | June 6, 2010 |
| DPR Korea | Law of the Democratic People's Republic of Korea on Tobacco Control | July 20, 2005 |
| India | Cigarettes and Other Tobacco Products Act, 2003 | May 01, 2004 |
| Indonesia | Regulation of the Government of Indonesia Number 109 of 2012 Concerning Control Of Materials That Contain Addictive Substances in Tobacco Products in the Interests of Health | December 24, 2012 |
| Maldives | Law on Tobacco Control, 2010 | January, 2013 |
| Myanmar | Control of Smoking and Consumption of Tobacco Product Law (Law No. 5/2006) | May 4, 2006 |
| Nepal | Tobacco Product (Control and Regulation) Act, 2011 | August 8, 2011 |
| Sri Lanka | National Authority on Tobacco and Alcohol Authority Act, No. 27 of 2006. | August 29, 2006 |
| Thailand | Tobacco Products Control Act, B.E. 2535 (1992)[a] | March 29, 1992 |

[a] Amended three times since 1992; in 2002, 2009 (on pictorial warnings) and 2010 (on smoke-free environments).

**Measures to ban SLT in India**

Although the prevalence of SLT use in India is the highest in the world, important policy measures are now being implemented in India that could significantly reduce SLT use in India and could potentially serve as a model for other countries in the Region. Gutka, a preparation of crushed areca nut, tobacco, catechu, lime and flavouring agents is widely sold across India in small, inexpensive individual packets. In 2010, the Supreme Court banned the use of plastics in gutka packaging after determining that it was an environmental hazard. This decision, upheld in March 2011, helped pave the way for banning gutka itself, since gutka is typically sold in plastic sachets. Government and civil society came together to plan an approach for banning gutka for health reasons. The Supreme Court also directed Government of India (GOI) to undertake an analysis on the contents and harmful effects of SLT. The Ministry of Health and Family Welfare (MoHFW) in consultation with experts prepared a comprehensive report on SLT and areca nut, which it submitted to the Supreme Court in February 2011. In April 2011, MoHFW and WHO organized a national consultation on SLT which recommended progressive restrictions, including bans on all SLT including gutka.

A strong basis for banning gutka was established in 2004 when the Supreme Court ruled that products such as gutka and pan masala are indeed food products. This allowed GOI to enact regulation 2.3.4 under the 2006 Food Safety and Standards Act (FSSAI) which states that a product should not contain “any substance which may be injurious to health: Tobacco and nicotine shall not be used as ingredients in any food products," thereby banning sale of any food product containing tobacco and nicotine such as gutka. To support implementation of these regulations, MoHFW sent letters to state governments to initiate action at their end. Civil society has played a catalytic role in advocacy to create support for implementation of the FSSAI regulations. Advocacy by Voices of Tobacco Victims (VoTV), comprised of individuals suffering from the visible effects of SLT use was instrumental in sensitizing members of legislative assemblies and the media on the harms of gutka. Directors of regional cancer centres also sent letters to the Prime Minister seeking a gutka ban, with additional political support gained through Chief Ministers of 11 states and hundreds of other leaders signing pledges to ban gutka.

The state of Madhya Pradesh became the first state to issue orders to implement regulation 2.3.4, thereby banning manufacture, sale and storage of gutka from April 2012. As of March 2014, 33 states/Union Territories have issued orders or notification to enforce the ban on manufacture, sale, and storage of gutka and pan masala containing tobacco and nicotine. Currently, measures to ensure effective enforcement of the ban are crucial. Enforcement efforts in states first adopting the ban are being studied so that lessons can be shared.[97]

Table 3 shows a summary of the regional policy situation, including the year the countries became Party to the WHO FCTC, whether the countries have a comprehensive tobacco control law and the major components of the law(s).

**Table 3. Tobacco control policy for smokeless products in the SEA Region**

| Countries | Became party to the WHO FCTC | Have Comprehensive Tobacco Control Law | Ban on import of SLT | Ban on advertisement for SLT | Health Warning for SLT | Prohibition of sales of SLT to minors | Ban on sales of SLT within 100 yard/meter Educational Institutions |
|---|---|---|---|---|---|---|---|
| Bangladesh * | June 14, 2004 | √ | X | √ | √ | √ | √ |
| Bhutan[1] | August 23, 2004 | √ | √ | √ | * | √ | X |
| DPR Korea | April 27, 2005 | √ | X | X | X | √ | X |
| India | February 5, 2004 | √ | X | √ | √ | √ | √ |
| Indonesia | Not ratified yet | X | X | X | X | X | X |
| Maldives | May 20, 2004 | √ | X | √ | ** | √ | X |
| Myanmar | April 21, 2004 | √ | X | √ | ** | √ | √ |
| Nepal | November 7, 2006 | √ | X | √ | ** (75%) | √ | √ |
| Sri Lanka | November 11, 2003 | √ | X | √ | ** | √ | X |
| Thailand | November 8, 2004 | √ | √ | √ | √ | √ | X |
| Timor Leste | December 22, 2004 | X | X | X | X | X | X |

Key: √ = has legislation; X = Does not have legislation.

* Health warnings required on all imported tobacco products from the country of the origin.
** Health warning is required by the National Laws but there is no specific prescription for smokeless tobacco.
[1] Allows limited import of tobacco products for personal consumption only.
Sources: Singh 2012 pp. 373-378;[5] Zolty, et al., 2012 pp.321-326;[97] and WHO South-East Asia Regional Office. Expert Group Meeting on Smokeless Tobacco Control and Cessation. New Delhi, India, 16-,17 August, 2011 [cited 2013 May 13]. Available from: http://www.searo.who.int/entity/tobacco/documents/seatobacco43/en/index.html [27]

The following sections describe the existing policy scenario in more detail, under the separate articles of the WHO FCTC using available information.

### *2.2.2 Demand reduction policies*

#### a) Price and tax measures (Article 6)

Taxation of tobacco products is considered one of the most powerful tools for controlling tobacco.[98] While all governments do tax tobacco products, this is limited by the fact that there is no unified taxation across tobacco products and among the member states.[5] This implies that prices of SLT remain low compared to cigarettes. SLT tobacco is the cheapest product and the one most used by the poor. SLT use is known to have become increasingly popular in some countries (India, Myanmar) in the past decade or so. The extent to which this may be related to price, however, is not known.

In Bhutan, the import quota for personal use has been fixed at 200 sticks of cigarettes, 150 grams of pipe tobacco and 50 grams of other tobacco products. Taxes on tobacco products are 100% and imports from third countries are subject to an additional 100% customs duty. In Mynamar there is a 75% tax on cigarettes, 10% tax on cheroots, 20% tax on betel quid with tobacco. Lower taxes on SLT products promote switching of consumers from smoking forms of tobacco to smokeless forms.

In India, CENVAT is a tax on the value added on a raw material through processing. It is imposed on various products, including tobacco. The rate of CENVAT is 50% of the value added for manufactured SLT. This rate has been at this level since 2011. In 2010 the rate was 60%, but before that it was 50%. The rate is the same for unmanufactured tobacco also. For smoking products the rate is about Rs. 0.6 to Rs. 1.8 on each cigarette, depending on the type (Length, filter, etc).

#### b) Protecting people from harmful effects of smokeless tobacco use (Article 8)

Tobacco spit creates environmental pollution and is a public health hazard that contributes in spreading communicable diseases such as Swine Flu, tuberculosis, and pneumonia. Following the spirit of the WHO FCTC Article 8 to protect the public from exposure to tobacco smoke, countries could provide universal protection from the potential health hazards of exposure to tobacco spit by ensuring that in all indoor public places, all indoor workplaces, all public transport and possibly all other outdoor or quasi outdoor public places spitting is prohibited. No exemptions would be justified and penalties would be levied on violators.

In India, there is already considerable legal basis to prohibit spitting. Section 268 of the Central Legislation the Indian Penal Code makes the act of causing “public nuisance” a punishable offence and has been effectively used to curtail public smoking. This can also be extended to curb the use of chewing tobacco in public places in view of the threat to the health of general public by the act of spitting in public place. The Indian Railways Act, 1989, bans spitting and some departments have stopped their employees and visitors from consuming spit tobacco within their office premises and have introduced fines for violators.

Some local and state laws which are antecedent to the Tobacco Control Act, 2003, provide for prohibition on spitting in public places or use and in public service vehicles, and such laws can be

effectively used for curbing the use of SLT in public place. The state of Goa also has legislation prohibiting spitting. Rule 4.2 of the Municipal Solid Waste (Prohibition of Littering and Regulation of Segregation, Storage, Delivery & Collection) Rules 2006, Municipal Corporation of Brihanmumbai, states "Creating Public Nuisance includes the specification that bans spitting in any public place except in such places specifically provided for this purpose. The Bombay Police Act of 1951, Sections 115 (c) and 116 also includes a prohibition on spitting in certain public places. Other states which have similar enactments are West Bengal with " The West Bengal Prevention of Smoking and Spitting and Protection of Health of Non Smokers and Minors Act,2001" and Tamil Nadu with "The Tamilnadu Prohibition of Smoking and Spitting Act 2002." Some states such as Himachal Pradesh (Shimla), Punjab, Haryana and Assam (Guwahati) have incorporated provisions prohibiting spitting at public places in their local Municipal Laws.

Despite the above-mentioned examples on prohibitions in India on spitting in public places, education and enforcement efforts have thus far been rather limited. It is possible that lessons can be drawn from the WHO FCTC Guidelines on Article 8, which suggest that once smoke-free legislation is adopted, an educational campaign is essential for informing and mobilizing the community to support its implementation. These guidelines could be adopted for a prohibition of spitting in public places. In particular, information needs to be provided to business owners and building managers outlining their responsibilities under the law. For educational campaigns and implementation, some resources, especially sign boards need to be provided. These measures are expected to increase voluntary compliance. Messages empowering non users of SLT and thanking users for complying with the law will also help with smooth implementation. An enforcement infrastructure would include inspectors, which would be the same as the ones checking for smoking in public places, who inspect businesses and workplaces. These inspectors would need training and supervision and the work would require a national coordination mechanism. In the initial phase, soft enforcement may be used in which violators are cautioned and educated about their new responsibilities. This would be followed by more rigorous active enforcement, with penalties. Using high profile prosecutions can be used to enhance compliance in the initial phase of active enforcement. Involvement of the community in monitoring and providing them a hotline to report violations can be an additional strategy. Financing of such a programme could be partially offset by tobacco taxes.[93]

### c) Regulation of the contents of tobacco products (Article 9)

As required by the WHO FCTC, Parties are expected to adopt and implement effective legislative, executive and administrative or other measures for testing and measuring the contents of tobacco products at specified intervals. At present, no government agency is involved in chemically testing tobacco products in countries of SEAR. In India, COTPA, 2003, requires the central government to establish laboratories for testing and measuring tar and nicotine content in tobacco products but the effective date the provisions are still not notified. Consequently, one of the goals of the National Tobacco Control Programme (NTCP) is to establish tobacco product testing facilities to build regulatory capacity.[99] Regulation of ingredients may also aim to reduce the use of ingredients that make tobacco products more attractive to consumers, such as sweeteners, flavourings, aromas, spices, herbs and chemicals to reduce irritation.

Operating a programme for testing requires allocation of significant resources. The WHO FCTC Guidelines suggest that a large part of the financial resources needed for testing could be obtained from the tobacco industry itself and from retailers, through various licence fees,

registration fees, and taxes. The Partial Guidelines for Implementation of Articles 9 and 10 also give a list of such methods and an appendix with examples. The Guidelines also provide numerous other recommendations for product testing, disclosure of information, international cooperation, etc.[96]

### d) Regulation of tobacco product disclosures (Article 10)

While most manufacturers of SLT give a list of ingredients, not all manufacturers report them on the labels. Furthermore it is not known the extent to which such lists are complete. As yet, there is no notified legal requirement for manufacturers to report ingredients. In India, analyses for additives in areca nut products also containing tobacco, considered food products, have revealed magnesium carbonate, a restricted substance, subject to prescribed levels in food products. Not all additives and flavouring agents are specified on wrappers, but many such ingredients have been discovered by analyses. [67] When official testing of products is rendered feasible and made compulsory, content disclosure can then be enforced.

The national legislation in India requires the disclosure of tar and nicotine content in tobacco products but the enforcement date of the provisions are still not notified after a decade of the law coming into force. In DPR Korea and Sri Lanka, national legislation requires the tobacco companies to disclose the tar and nicotine content on the packages of all forms of tobacco products. In Indonesia the law is applicable only for the cigarettes.

The WHO FCTC Guidelines recommend that Parties consider making information about toxic constituents of tobacco products publicly accessible, e.g. on packages and in awareness programmes. Clear consequences need to be in place for noncompliance with testing, regulation of ingredients, use of prohibited ingredients and disclosure. The Guidelines also suggest ways of financing this activity. Laboratories in other countries may be used. Governments will need to draw up a list of prohibited ingredients, arrange for product testing, conduct occasional factory inspections and respond quickly to non-compliance in accordance with their laws. [96]

### e) Packaging and labelling of tobacco products (Article 11)

Parties to the WHO FCTC are obligated to comply with Article 11 within three years of ratifying the Convention. This can in some cases be achieved earlier and more effectively through international collaboration. The Guidelines remind Parties of the guiding principle in Article 4 that everyone should be informed of the health consequences, addictive nature and mortal threat posed by tobacco consumption. One effective way of doing this is through health warnings on packaging. [96]

Packaging and labelling requirements also include restrictions on the use of misleading descriptions, [96] which for SLT may include descriptions of added flavours (e.g., “saffron blended”) or high quality.

India and Bangladesh are currently the only countries in SEAR to adopt graphic warnings for SLT products. In Bangladesh, in April 2013 by a recent amendment in the Legislation “Smoking and Tobacco Product Usage (Control) Act of 2005,” all the tobacco control measures were made applicable to the SLT products as well. In Bangladesh, the graphical pictorial health warnings are

required on packaging of all tobacco, covering half of the packets' surface. Warning labels must be printed on the upper half of the packet.

In India, three periodically rotating textual and pictorial health warnings on 40% of the surface area of SLT packages are required. India first notified the requirement for pictorial warnings in July 2006. [100] The first proposed images were field tested and found effective.[98] However, due to pressure from the tobacco industry in India, the images chosen initially were replaced by other less effective images which were introduced in May 2009. They were field tested only after implementation.[101]

Field testing (pre-testing) of health warnings has been done by NGOs. Problems that have arisen with pictorial warnings in India include delayed implementation, amendment of rules due to industry interference and poor quality printing of graphical warnings on packages. India still needs to address the fact that many deceptive and misleading messages are still found on SLT products, such as indication of flavours, high quality and the suggestion of use as a mouth freshener. Some SLT products also bear labels stating that they do not contain gutka or pan masala, while some areca nut products now bear labels stating that they do not contain nicotine or tobacco.

In 2012, a pretest of various types of health warnings for SLT was conducted in India and Bangladesh. This compared the perceived effectiveness of text only warnings with three types of pictorial warnings (symbolic and graphic) and one with a personal testimonial. The study, which included just over one thousand individual interviews in each country among adult users as well as youth users and non-users, concluded that a pictorial warning with a personal testimonial was the most effective, while the text warning alone was the least effective.[103]

### f) Education, communication, training and public awareness (Article 12)

Given the low levels of public awareness in SEAR about the harmfulness of tobacco, including SLT, governments have an urgent responsibility to warn people about these harms, as part of their policy package. In fact, the success of other tobacco control policies is likely to depend to a large extent on increasing public awareness.

In Bhutan, India, Nepal and Thailand, education of the public on the harmfulness of tobacco has been undertaken through electronic and print media. In Bhutan, GYTS 2006 and 2009 data revealed that about six in ten students had been taught in class about the dangers of smoking.

In Thailand, ongoing school health education programs on smokeless and smoking tobacco is helping reduce the initiation into tobacco use and keep it down. [104]

In India, much of health communication is now taking place in various states under the National Tobacco Control Programme (NTCP), inaugurated in 2007. One of its components is awareness generation. In 2009, in collaboration with the World Lung Foundation, the NTCP took up the first ever mass media campaign (via television and radio) on the harmful effects of SLT use, with a focus on cancer. One spot featured a 24 year old male, representing the growing number of young men using SLT. The spot was filmed at the hospital where he was being treated. An evaluation found that most SLT users, despite their low socio economic status, were effectively reached even in rural areas, especially through television.[99] The Indian government has continued

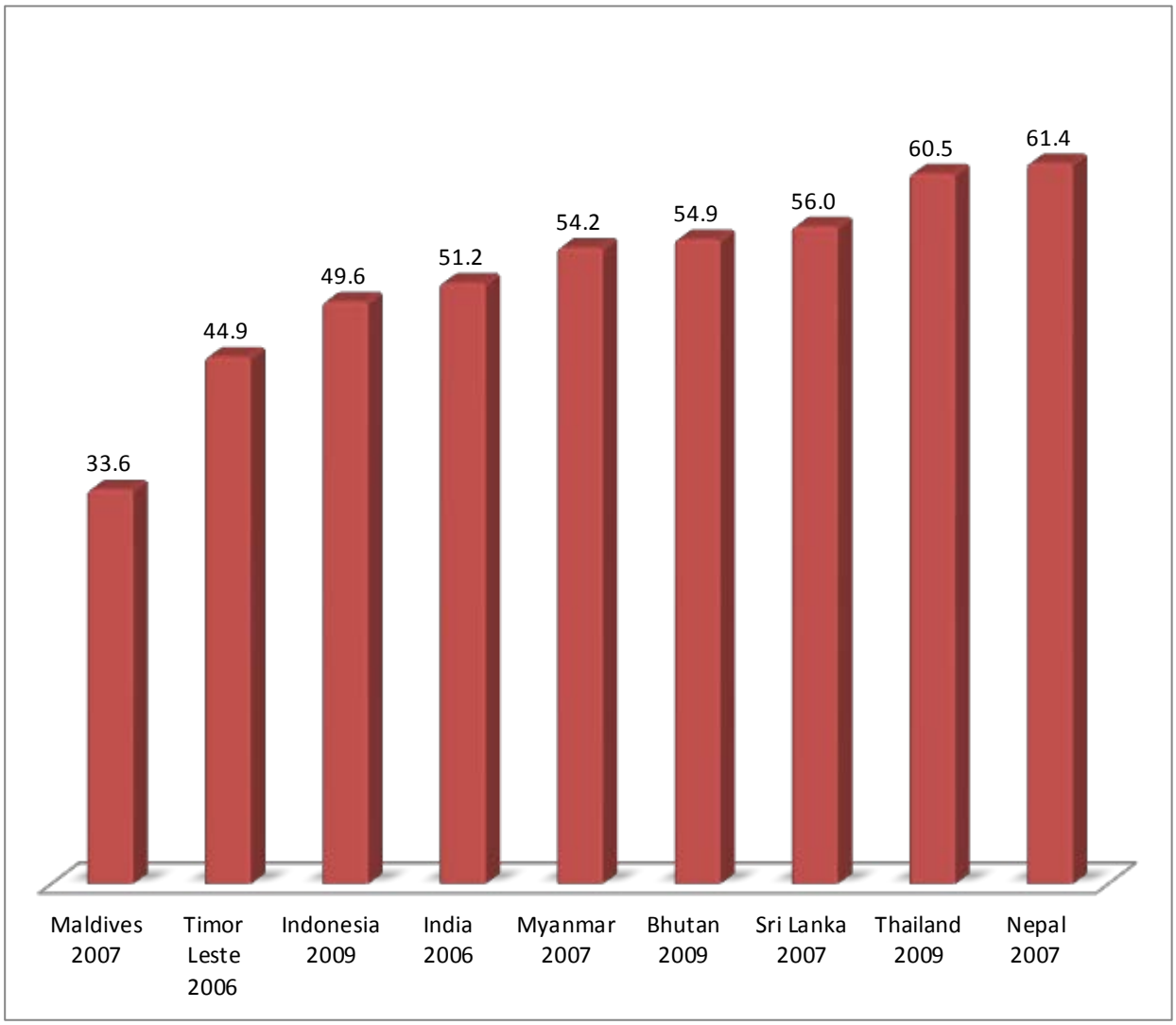
to involve health professionals and tobacco victims in making television campaigns on the dangers of SLT. The television campaigns have also been supplemented by a website and text messaging campaign. [105]

In India, public education, communication and training on the harmfulness of tobacco and tobacco control on a national scale is still quite limited, but national communications have recently focussed on cancers being caused by SLT. State-wide awareness generation efforts began with the NTCP in 2007. With a vast population, nationally broadcast messages have not been specifically targeted to any one group or to any specific product. Earlier community level interventions have been targeted. News articles have been highlighting the role of the tobacco industry in delaying and diluting tobacco control efforts. In addition, there are efforts of NGOs in raising public awareness (e.g., see the text box above).

**Voice of Tobacco Victims Campaign**

Voice of Tobacco Victims (VoTV) was initiated by a senior surgeon at Tata Memorial Hospital in Mumbai, India, who was concerned by the increasing number of young patients suffering from oral cancer from use of tobacco, mostly from SLT. VoTV was initiated so that patients and their families could share their stories with policy makers, media and the public. The victims, many of whom are disfigured by their disease, present the impact of tobacco on their lives, and warn others against the dangers of tobacco, particularly SLT. They also advocate for adoption and implementation of effective tobacco control policies. Physicians and tobacco control advocates provide evidence on the effectiveness of tobacco control policies. Through an emotional appeal to policy makers, VoTV has consistently demonstrated its ability to propel policy makers to action. VoTV has successfully lobbied members of parliament, ministers, and other policy makers, and sensitized media and the public on the consequences of tobacco use on them and their families. VoTV has been instrumental in the ban on gutka and other forms of SLT in most States in India. VoTV provides the "face of tobacco control" reminding policy makers of the need to take effective measures to prevent the disease and suffering caused by tobacco. The NGO “Campaign for Tobacco Free Kids” has provided important collaboration for this initiative, and based on the success of VoTV in India, is currently supporting similar efforts in Bangladesh and Indonesia.[97]

**Figure 3. The proportion of students aged 13-15 years (class 8-10) who had been taught about the effects of tobacco use during the past year, using latest available GYTS Factsheets.**




### g) Tobacco advertising, promotion and sponsorship (Article 13)

Restricting tobacco advertising, promotion and sponsorship is a key area of tobacco control because so much of the diffusion of tobacco use depends on these promotional activities. Seven countries in the Region have banned advertising of SLT. Difficulties in implementation and enforcement have characterised this aspect everywhere and continue to impede progress. Industry interference has been cited as a major road block to updating legislation and through litigation that has delayed implementation, at least in India.

Bangladesh: Tobacco Advertising, Promotion and sponsorship of all forms of tobacco is banned in print as well as electronic media.

Bhutan: As per the Tobacco Control Act of 2010 all forms of Tobacco Advertising, Promotion and Sponsorship is prohibited through any medium in Bhutan. Advertisement of all tobacco products is

prohibited on all the national media channels since 1995. However, cross-border advertising on international television and radio channels, cinema and the print media does take place.

India: All forms of direct and indirect advertisement of all forms of tobacco products are prohibited by law with an exception of point of sale advertisement subject to some restrictions. The law also does not explicitly ban advertising on international broadcast media to the extent that the recipients of funds provided by the tobacco industry promote tobacco products, its trademarks or brand names, such actions are prohibited by law. The law in India also does not appear to prohibit general sponsorship by the tobacco industry that does not involve the direct promotion of tobacco products. In fact, indirect advertising has not been defined in the law. As a result, it is rampant in various forms and media in the country including event sponsorship. At the sub-national level, Goa and Tamil Nadu have implemented additional bans on advertising. Municipal laws in Mumbai have recently banned sponsorship of religious festivals by pan masala and gutka manufacturers.[106]

Indonesia: Advertisement of smoking forms of tobacco is prohibited on domestic TV, radio, and other broadcast media between certain time periods. Advertisements may not show cigarettes, cigarette packs, or the use of cigarettes or tobacco. The law does not apply to SLT products.

Maldives: Most forms of tobacco advertising, promotion and sponsorship are banned.

In Mynamar, Nepal, Sri Lanka and Thailand national legislation on tobacco control ban all forms of direct and indirect advertising, in national TV and radio and local magazines and newspapers, point of sale, billboards, outdoor advertising and internet. The law also prohibits promotion of all tobacco products and brand names, free distribution of tobacco products in the mail or through other means, promotional discounts, brand names of non-tobacco goods or services identified with tobacco brand names, appearance of tobacco products in TV and/or films (product placement). However, cross-border advertising on international television and radio channels, cinema and the print media does take place.

The WHO FCTC Guidelines on implementing Article 13 recommend that a comprehensive ban on advertising and promotion (both direct and indirect) is needed as it would reduce the consumption of tobacco products. This is because when only some forms of promotion are banned, tobacco manufacturers shift their resources to other avenues.

In India, there are many examples of how SLT manufacturers circumvent an advertising ban. For example, areca nut product packages made by some tobacco manufacturers bear pictures of cartoon characters, names of famous actors, and misleading promotional phrases. Misleading phrases and words are used on product packaging referring to flavours, quality and social acceptability. Also, there is a news programme, bearing the name of a pan masala and gutka product (Rajnigandha) that is aired during station breaks on television.

The WHO FCTC guidelines state that sales on the internet need to be banned as these may lead to sale to minors, tax evasion and illegal trade. Cross border advertising may occur with internet use, films, and satellite broadcasting, movement of publications as well as trade in products with packaging that contains promotional elements. As yet, none of the SEAR countries address the use of the internet for advertising and promotion in their laws. Numerous SLT manufacturers in the region have websites promoting their products.

The guidelines suggest that to control advertising and promotion of tobacco, the involvement of civil society as well as international collaboration are needed to aid government efforts.[96]

### h) Demand reduction measures concerning tobacco dependence and cessation (Article 14)

Provision of assistance with quitting tobacco is minimal in the Region[107] due to lack of training of health providers in the methods for this[108-109] and few specialised centres. An indication of the situation is available through the Global Health Professions Surveys that interview students of health professions on tobacco related issues. In India, in surveys conducted between 2005 and 2009, close to 90% of students of health professions including medicine, dentistry, nursing and pharmacy believe that health professionals have a role in giving advice to patients on quitting, however only 29%-55 had said they had received any training in this, and between 3.4% and 13.4% were current cigarette smokers, while between 4.5% and 10.6% were users of other tobacco products.

According to results of the GATS in Bangladesh, India and Thailand, health care providers are around 35% less likely to ask about SLT use compared to asking about smoking. If they ask, they are around 30% less likely to advise users to quit. SLT users are also somewhat less likely than smokers to make a quit attempt (Table 4). The GATS report for Indonesia does not provide any data on whether health care providers ask about SLT.

**Table 4. Percentage of smokers and SLT users asked about tobacco use, advised to quit, and quit attempts**

| | Visited an HCP[1] | Asked by HCP if used[1] | Advised by HCP To Quit[2] | Made quit attempt[1] |
|---|---|---|---|---|
| **BANGLADESH** | | | | |
| Smokeless Users | NR | NR | 47.9 | 28.5 |
| Smokers | 38.3 | 56.0 | 52.9 | 47.3 |
| | | | | |
| **INDIA** | | | | |
| Smokeless Users | 46.5 | 34.2 | 26.7 | 35.4 |
| Smokers | 47.2 | 53.0 | 46.3 | 38.4 |
| | | | | |
| **THAILAND** | | | | |
| Smokeless Users | NR | NR | 18.7 | 21.5 |
| Smokers | 34.9 | 60.2 | 51.9 | 49.8 |

Sources: Global Adult Tobacco Surveys, 2009, Respondents **≥ 15 yrs who visited a HCP**
HCP = Health care provider; NR = Not reported.

1. Includes current and former smokers who have abstained for less than 12 months.
2. Among current and former smokers who visited an HCP during the last 12 months.

**Tobacco Cessation Services in SEAR**

Parties to the WHO FCTC are obligated to implemented measures which promote cessation. The WHO FCTC Guidelines on Article 14 encourage Parties to develop an infrastructure that motivates tobacco users to quit, provides wide access to support for quitting tobacco use and provides sustainable resources to ensure that this support remains widely available.[96]

In the Region, Bangladesh, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka and Thailand have established tobacco cessation clinics in some of their government hospitals. In addition, Bangladesh, India, Indonesia, Maldives, Myanmar and Thailand have some cessation services in community level government health facilities. In Sri Lanka and Thailand, health insurance or the National Health Service covers the cost of this support entirely or partially. In the Region, nicotine replacement therapy (NRT) is available over-the-counter only in India and Thailand. Pharmacotherapy (Bupropion) is available with a physician's prescription in India, Myanmar, Sri Lanka and Thailand.[111]

In India since 2001, the Ministry of Health and Family Welfare (MoHFW), with support from WHO, has established 19 tobacco cessation centres (TCCs) in 17 states across the country in diverse settings. These include cancer treatment hospitals, psychiatric hospitals, and medical colleges to help users quit their tobacco addiction. Psychiatric departments in some other medical schools also provide support. India has also developed national tobacco cessation treatment guidelines in 2011, which refer comprehensively to all forms of tobacco use, including SLT use.[110]

With support from WHO, several NGOs in Bangladesh have established tobacco cessation programmes both at the clinic and community levels with an evaluation component. The health workers visit the homes of community members and counsel them on quitting any form of tobacco use including SLT. Good results have been obtained so far.

In Thailand, a lot of work has been done to address the need for cessation support, with the leadership of voluntary organizations. Thailand has about 1120 cessation clinics. In addition, there are helplines. These were all designed to address smoking, however, not SLT.

In the Region as a whole, a need has also been identified to equip school teachers with the knowledge to help students quit using tobacco. This is based on results of the Global Youth Tobacco Surveys (GYTS) showing that seven out of ten smokers want to quit but lack support. Corresponding results on SLT users have not been reported. Meanwhile, the Global School Personnel Surveys (GSPS) conducted in the countries of the region showed that seven out of ten teachers have no training or teaching materials on tobacco control. In addition, the majority of students preparing to work in health professions are not yet receiving training on how to help tobacco users quit.

In India, an evaluation of the national campaign against SLT which aired for 6 weeks in November and December 2009 found that 63% of smokeless-only users and72% of dual tobacco users (i.e., those who consumed both smoking and smokeless forms) recalled the campaign, mainly the televised version. Some 70% of those who recalled the campaign said that it made them stop and think, was personally relevant and informative. Campaign awareness was associated with cessation-oriented intentions and behaviours.[112]

### *2.2.3 Supply Reduction Policies*

The policies contemplated under the WHO FCTC for supply reduction include control of illicit trade among countries, prevention of sales to and by minors and promotion of alternative livelihoods to the manufacture and sale of tobacco products. This section summarises the policies and the current policy scenario.

#### a) Illicit trade in tobacco products (Article 15)

Article 15 of the WHO FCTC is focused on illicit trade. Article 5.5 of the WHO FCTC states the obligation the Parties to cooperate to achieve the objectives of the Convention. Clearly in SEAR, cooperation among the parties will be required to combat the problem of illegal trade of SLT. A global agreement, called the Protocol to Eliminate Illicit Trade of Tobacco Products has been developed with active participation of SEAR countries. This Protocol, adopted by the Parties to the WHO FCTC in November 2012, was opened for signature by the Parties on 10th January, 2013. Mynamar signed the protocol on that day, and as of March 2014, remains the only SEAR countries have signed the protocol thus far. The protocol aims to fight illegal trade in tobacco products through control of the supply chain and international cooperation. As a key measure, Parties commit to establishing a global tracking and tracing system to reduce and eventually eradicate illicit trade. A detailed analysis of illicit trade of SLT in the Region is provided in section 2.1.10.

#### b) Prevention of sales to and by minors (Article 16)

Youth are especially vulnerable to initiating SLT use as it is easy to consume, cheaper in comparison to smoking products and easy to practise without detection. Thus the strict tobacco control measures are required to save the future generation from tobacco.

In most of the countries in the region the provision for prohibiting sale of tobacco products to minors and within a certain area of educational institution exists, but the major challenge is the implementation of the existing laws.

#### c) Provision of support for economically viable alternative activities (Article 17)

A study on the economics, poverty and working conditions of people employed in the tobacco industry in India was conducted by Voluntary Health Association (VHAI) of India. It was conducted among tobacco farmers, tendu leaf pluckers and bidi rollers in States of Uttar Pradesh, Madhya Pradesh, Bihar and Jharkhand. It was found that a majority of tobacco workers want to shift from their present occupations which have kept them in unending poverty to safer alternative means of livelihood. At present, most of them work for the tobacco industry as they have no choice due to lack of skills or other employment opportunities.

As it is required by the WHO FCTC for Parties to adopt supply reduction measures, the VHAI study recommends facilitation of alternative livelihood options and other significant measures to address supply-side concerns. To gain a clearer understanding of the situation, such studies should be conducted in other countries of the region and practical measures for offering new livelihoods for these sections of society need to be found.

In 2008-09 the Ministry of Health and Family Welfare led a pilot project on alternate crops for growers of non-flue cured Virginia (FCV) tobacco varieties (bidi/hookah/chewing) that was implemented by the Central Tobacco Research Institute, Rajahmundry, Andhra Pradesh. Economically viable options were identified. Such work has been done by CTRI earlier for FCV tobacco to help farmers in times of drought and overproduction.[68]

The situation of tobacco retailers also requires to be looked into, as they would be affected by tight control of tobacco products. As it is, many of them tend to sell many other items besides tobacco. Those who exclusively sell tobacco may shift to selling other goods. Locally, some non-profit organizations have helped retailers to find other occupations.

### *2.2.4 Other provisions*

#### a) Protection of the environment and the health of persons (Article 18)

In India, considering the environmental pollution caused due to plastic sachets used for the packaging of the smokeless tobacco products (gutka, pan masala and any smokeless tobacco), the Supreme Court has banned the use of any type of plastic for packaging gutka and pan masala to take effect from March 2011. This was in response to a Public Interest Litigation filed by a health activist in Rajasthan High Court which was later moved to the Apex Court.

#### b) Research, surveillance and exchange of information (Article 20)

Monitoring for tobacco control is one of the good practices in the Region: Surveys of the Global Tobacco Surveillance System are being implemented starting with GYTS, GHPS and more recently the GATS, in almost all the countries.[6] Other surveys, such as DHS and STEPS have also gathered some data on tobacco use among adults in the Region.[5]

Ten Member States in the Region have conducted the GYTS. It supported the collection of valuable information on the prevalence of tobacco use, knowledge, and attitudes towards tobacco use, role of the media and advertising, access to tobacco products, exposure to SHS, and information on cessation of tobacco use. Member states conducted at least two rounds of national GYTS. In the Region, nine member countries have conducted Global School Personnel Survey (GSPS) on a national sample. The Global Health Professions Students Survey (GHPSS) was conducted in seven member states of the Region. The GATS in different streams has been conducted in Bangladesh, India, Indonesia, and Thailand. Thailand repeated GATS in 2011. The standard "Tobacco Questions for Surveys" (Singh, 2012)[6] has been integrated in ongoing surveys in several countries of the Region.

# 3. Practical steps to strengthen control of smokeless tobacco products

## 3.1 Advocacy

Where ratified, the WHO FCTC has empowered civil society to advocate for development and/or strengthening of comprehensive tobacco control laws. In Timor Leste, advocacy is still required until such laws are drafted and adopted. However, even in SEAR countries with comprehensive legislation, there is still need for advocacy for such measures as raising taxes to a uniformly high level on all types of tobacco and for better implementation of tobacco control laws, since enforcement is often weak. Advocacy is also needed to close loopholes in legislation banning on tobacco advertising, promotion and sponsorship.[113]
In addition, there is a need to advocate for the strengthening of bodies formally constituted under national tobacco control programmes, such as tobacco control cells at state and local level, and steering committees formed by experts at national level, as in India, to advise the NTCP and/or the MoHFW on tobacco control issues.

Advocates need to work with the media and with individual policy makers to ensure that factual information is publicized that can contribute to informed policy decision making about tobacco and its control at all levels.
Advocacy is required for tighter regulation of SLT (ingredients, flavours, labels, price). Another area of advocacy is that warning pregnant women of the dangers of consuming tobacco during pregnancy needs to become part of standard practice of health practitioners who care for pregnant women.

In India, as described earlier in this paper, a major accomplishment of advocacy is a ban on gutka. A large part of this successful can be attributed to the VOTV Advocacy Campaign, in which cancer patients meet policymakers to put forward their appeal for control of tobacco. This has helped bring about a ban on the manufacture, distribution, sale and storage of gutka in 24 States and three Union Territories as of March 2014.[114] [115]

It has been shown that tobacco use decreases as education levels increase (NFHS-III; GATS-India). Better education for all would also result in economic development for the country which is likely to decrease all forms of tobacco use. All efforts in this direction would be useful.

## 3.2 Training of Law enforcers

Local coalitions for tobacco control have found that they had to get involved in training of government agency personnel responsible enforcement of tobacco control laws in order for enforcement to begin. Enforcement personnel trained typically have included city police and Food and Drug Authority personnel.

### 3.3 Steps Sub-National / State Governments Can Take

If the implementation of the laws lies with sub national government bodies/State Governments, their role becomes very important. In India the penal provisions for the violation of Tobacco Control law are not that deterrent, here the sub regional / state governments need to take lead and enforce the laws.

### 3.4 Report on Smokeless Tobacco

The MoHFW in India has initiated the preparation of a detailed report on SLT, having invited the collaboration of various experts in the health care community, a number of non-government organizations (NGOs) active in the public health sphere in India, the Centers for Disease Control and Prevention, USA and the World Health Organization-India and SEARO. This example could be promoted to other countries in the region, as appropriate.

### 3.5 Strengthen Tobacco Control Cells at Sub National / State Level

In India, as of March 2014, the NTCP programme has been initiated in 42 districts of 21 States in two phases. All of these States are required to have a State Tobacco Control Cell (STCC) under their Health Department headed by the Chief Health Secretaries of the State and a District Tobacco Control Cell (DTCC) in the selected districts.[116] In most of the States and districts these STCC and DTCC are in existence but are not as active as required. However, in some areas advocacy efforts and intervention of civil society organizations has helped to activate these bodies. It will be important to find ways to optimize the functioning the tobacco control cells. Similarly the other countries in the region would benefit from strengthening or establishing such cells for tobacco control including SLT.

### 3.6 Litigation

Litigation serves a useful purpose of institutionalizing law by providing a judicial interpretation. It helps in elucidation and analysis of the diverse components of a comprehensive law. Judicial review lies at the very heart of effective implementation of any legislation and provides much needed clarity on a law. In India, almost all the key tobacco control initiatives proposed to be implemented in the country get challenged by the tobacco industry in the court of law. In the recent past in India there are several instances where the court decisions and directives have resulted into public health advancements, such as the gutka ban, graphic warnings on all tobacco products, notification of ban on sale of tobacco products within 100 yards of any educational institution, and the ban on hookah parlours in the State of Maharashtra. It would be useful for these developments to be more widely disseminated in the Region.

### 3.7 Ratification of the Protocol on Illicit Trade

SEAR countries need to prepare themselves for tackling illicit trade of SLT products in the region and those Parties who have not already done so need to accede to the Protocol on an urgent basis. They also need to plan activities under the Protocol and budget resources to cover them.

To achieve regional control in SEAR, interagency partnerships, such as among law enforcement agencies, customs, tax, judiciary and the ministry of foreign affairs, would need to be strengthened within and among countries, and intergovernmental negotiations would be needed to resolve tobacco control issues among countries. The Protocol on Illicit Trade suggests the use of special bilateral and multilateral agreements to enhance cooperation.

Once the countries accede to the Protocol, they need to follow some practical steps that have already had some success. As has been shown in Nepal, deployment of a women's contingent of soldiers in border control has been a deterrent for women carrying illegal consignments of tobacco, including SLT, into the country (Kabir, 2010).[31] Since children are also involved in smuggling, women officers might be better able to handle them than the male officers. Thus, deploying both women as well as men would be a practical step in border control activities. In Europe, investigating and suing smugglers in the courts had helped to reduce smuggling of cigarettes.[117] A similar approach might be applicable in this region as well, including for SLT.

## 4. Conclusions

The tobacco burden in SEAR is one of the highest among WHO regions, and the widespread use of SLT in its many forms makes tobacco control efforts even more complicated. In many SEAR countries, SLT use is high among both men and women, and there is still a lack of knowledge about the health risks of SLT. In order to effectively reduce the use of SLT in the region, a multi-faceted approach is needed. Ten out of eleven countries in the region have ratified the WHO FCTC, and the remaining country, Indonesia, has been taking actions towards becoming a Party to the Convention. Countries in the region have already implemented a number of provisions of the Convention to reduce both the supply and the demand for tobacco, including SLT. However, there is still much more that can be done by countries in the region towards implementation.

Further implementation of Article 5.3 is still needed, as tobacco industry interference is a major concern in the region. Another area of concern is that in some countries in SEAR, measures to reduce tobacco use, including use of SLT, are being implemented by Ministries of Health, while, at the same time, other Ministries are promoting tobacco production. Therefore, whole of government approaches to tobacco control are needed in each country to help to ensure full implementation of tobacco control policies.

Strategic advocacy has helped to achieve important successes in the region, such as a ban on gutka in India, and it is important to share these strategies with other countries in the region and elsewhere. However, increased advocacy for additional tobacco control measures is still needed. Other practical steps for change include further training of law enforcers in tobacco control laws and strengthening of enforcement bodies at all levels. Smuggling of tobacco products, including SLT, remains a significant problem in the region. As of April 2014, only one country in SEAR has

signed the WHO FCTC Protocol on Illicit Trade; therefore, acceding to the Protocol should also be made a high priority for Parties in the region.

Despite the many obstacles, countries in SEAR have made important progress in implementation of the WHO FCTC. Through sharing of experiences and an enhanced multi-stakeholder approach, countries can build upon these successes, resulting in reduced consumption of tobacco, including SLT, and the ensuring reduction in the health, social and economic burden caused by tobacco.

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# APPENDIX

**Appendix I. Smokeless tobacco products used in the countries of the South East Asian Region.**

| Product Name and mode of use | Product Description | SEAR countries where consumed |
|---|---|---|
| *Chewing (by itself or with betel quid)* | | |
| Leaf tobacco ("unmanufactured") | Sun cured and usually fermented leaf tobacco in the form of flakes, strands or finely cut. Shredded tobacco is used in Thailand for oral use or for rolling cigarettes. May be branded or unbranded | All |
| Khaini/Khoinee | A mixture of sun-dried tobacco flakes and slaked lime, known in some areas as khaini/khoinee, sada, surti. Manufactured khaini may contain added flavorings, e.g. menthol. | Bangladesh, Bhutan, India, Nepal |
| Zarda | Two types of products go under the name zarda. One is unmanufactured tobacco that is packaged and branded. Another is a manufactured product prepared by cutting tobacco leaves into small pieces and boiling them in water with slaked lime and spices until the water evaporates. It is then dried, and colouring and flavouring agents are added. Zarda may be chewed by itself, with areca nut or in betel quid. It is available in small packets or tins. | Bangladesh, Bhutan India, Myanmar, Nepal |
| Khiwam/Qimam | Khiwam is a thick tobacco paste; it is also available as granules or pellets. To prepare khiwam, the midribs and veins of tobacco leaves are removed, and the remaining matter is boiled in water.<br><br>Powdered spices (saffron, cardamom, aniseed and musk) are added, and the mixture is stirred and allowed to macerate until it becomes a paste, from which granules and pellets are made. The paste is placed in the | Bangladesh, India<br><br>Used by the upper socio-economic group |

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| | mouth and chewed or used in betel quid. | |
| Gundi | A mixture of cured tobacco, coriander seeds and other spices. Each constituent is fried separately, powdered coarsely and mixed and the product is scented with a resinous oil. Gundi is known as kadapan in Orissa and Bengal; it is also used in Gujarat. | India |
| Wet tobacco | Tobacco mixed with water | Myanmar |
| Hnatsay, hsey paung | Tobacco mixed with honey, alcohol or lemon. It is used with betel quid. | Myanmar |
| Betel Quid with tobacco | A quid made of betel leaf (= pan/paan leaf), slaked lime, areca nut, usually catechu or gambier, various condiments and tobacco in some form (as above).<br><br>In a few instances, areca nut, lime and tobacco may be chewed, without betel leaf. | All |
| *Areca nut mixtures for chewing* | | |
| Pan Masala | A commercial preparation containing areca nut, slaked lime, catechu and condiments and marketed since 1975. One brand contains tobacco. In 1985 pan masala became available in single dose pouches. From then on sales skyrocketed and many more brands became available as more manufacturers emerged. | India and most South Asian countries |
| Gutka | A variety of pan masala, containing tobacco. A dry, relatively non-perishable, commercial preparation containing areca nut, slaked lime, catechu, condiments and powdered tobacco (tobacco waste) along with additives (e.g. Magnesium carbonate)<br><br>Both gutkha and pan masala come in attractive foil packets (sachets) and tins, which can be stored and carried conveniently. | India and most South Asian countries: Bangladesh, Bhutan, Myanmar, Nepal, Sri Lanka. Indian TV ads are visible from those countries. |
| Beeda | Similar to gutka but may contain other unknown substances as well. Imported from Pakistan | Sri Lanka (Sinha et al, 2012) |

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| Mainpuri Tobacco | A very popular ready-made mixture in the Mainpuri district of Uttar Pradesh and in nearby areas. It contains tobacco with slaked lime, finely cut areca nut, various spices and essences, cloves and in one type, camphor. | India |
| Mawa | A preparation containing about 95% thin shavings of areca nut with the addition of some tobacco and slaked lime. Small pieces, or thin shavings of sun-cured areca nut and mixed with tobacco flakes and slaked lime. The mixture is rubbed together to combine. It has become popular in Gujarat, India, especially among the young and also in a few other parts of India. | India |
| Dohra | 'Dohra' is a mixture of tobacco, areca nut and other ingredients like catechu (Kattha), Peppermint, Cardamom (Ilayachi). It is a wet product. It is mainly produced in Jaunpur district of Uttar Pradesh and it is very popular in Jaunpur and its nearby districts. It is marketed without any brand name and the name of manufacturer. About 200 mg product is kept in plastic bag and rubber band applied. | India |
| Kharra | Kharra is the name of a freshly prepared mixture of tobacco, areca nut and lime, used in Maharashtra. | India |
| *Products for Application* | | |
| Masheri/mishri | A roasted, powdered preparation made by users or manufacturers by baking tobacco on a hot metal plate until it is uniformly black later on it is powdered. Women, who use it to clean their teeth initially, soon apply mishri several times a day. | India |
| Gul | A pyrolysed tobacco powder. | Bangladesh, India |
| Creamy snuff | Commercial preparations of tobacco paste marketed in tubes like toothpaste. Constituents are tobacco, clove oil, glycerine, spearmint, menthol, camphor | India |
| Red tooth powder | An herbal preparation also often containing tobacco. This is because in India there is a | India, Nepal |

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| | misconception that tobacco is good for the teeth. | |
| Gudhaku | A paste of tobacco and molasses used commonly in Bihar, Orissa, Uttar Pradesh, and Uttaranchal; It is made manually by users themselves and also marketed in different brands. | India, Nepal |
| *Products for Gargling/sipping* | | |
| Tuibur, Hidakphu | A watery preparation made by passing tobacco smoke through water. Tobacco water (Known as Tuibur in Mizoram and Hidakphu in Manipur) is sipped and retained in mouth for 5-10 minutes and then spat out. In general, in one sip usually 5 -10 ml tobacco water is kept within mouth. One, who uses tobacco water to clean one's teeth initially, soon starts sipping several times in a day and gets addicted. | India |
| Sources: IARC (2007),[51] Sinha (2004),[113] Kyiang et al. (2005),[42] Somatunga et al, (2012)[83] and Report of Expert Meeting (SEARO, 2011).[27] | | |