

# ASSESSING ILLICIT CIGARETTES IN ETHIOPIA

RESULTS OF THE

2018

EMPTY PACK SURVEY

MAY 2021



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The information and views set out in this report are those of the authors and do not reflect opinion of the Parties to the WHO Framework Convention on Tobacco Control (WHO FCTC), the Parties to the Protocol to Eliminate Illicit Trade in Tobacco Products (the Protocol), or the Secretariat of the WHO FCTC and its Protocols.

# SUMMARY

## BACKGROUND

According to Ethiopia's 2016 Global Adult Tobacco Survey (GATS), over 3.2 million Ethiopians currently use tobacco and 2.2 million smoke daily, and about 17 thousand Ethiopians die every year from tobacco-related diseases. In addition to the human toll, the direct and indirect costs of smoking in Ethiopia reach at least 1,391 million Birr (USD 50 million) annually.

Tobacco taxes are one of the best tools available to the government for controlling tobacco consumption in Ethiopia. However, the effectiveness of this tool is undermined by the presence of illicit cigarette on the market, as these cigarettes are often sold for lower prices and undermine the government's tax revenue goal. In addition, the presence of an illicit cigarette trade is used as an argument by the tobacco industry against any pro-health tobacco tax policy.

The National Tobacco Enterprise (NTE) recently reported that the illicit cigarette market accounts for over 61% of the total market, and over 90% in the Eastern part of Ethiopia. However, it is not clear how the NTE obtained these estimates. In addition, evidence from other countries clearly shows that studies supported by the tobacco industry tend to overestimate the size of the problem so that they can be used to lobby for limited or no tax increase.

This study aims to fill the gap in knowledge regarding the prevalence of illicit cigarettes in Ethiopia. It is transparent about its methodology and independent of any commercial interest.

## METHOD

We employed a cross-sectional observational study of empty packs that were obtained from two types of retailers (kiosks and street vendors) and from the streets in ten towns selected for convenience and representing ten regional states and two autonomous cities. These towns are clustered in five geographical regions of Ethiopia: The North, South, East, West, and Center regions. In each town, the research team selected 5 blocks or streets with a high consumer density, and then randomly determined the point of departure for the data collectors. The point of departure was either a school, a market, a taxi stand, or a bus station.

The observational study was supplemented by a survey among retailers to obtain information about the sources of illegal cigarettes and their prices.

## RESULT

Overall, we collected 6,438 empty cigarette packs (5,368 from the streets and 1,070 from retailers). The majority of these packs (80.1%) belonged to locally produced brands, while the remaining 19.9% were foreign brands, including those allowed to trade in Ethiopia with a special agreement of the NTE.

Based on the pre-determined criteria used for classifying a pack as illegal, we determined that the share of illicit cigarettes market varied considerably across the country. The estimates vary from as little as 0.4% in Hawassa in the South to as much as 97.7% in Jigjiga in the East. The packs obtained in the South, the South West, and the North were mostly legal while the packs found in the East part of Ethiopia are mostly illegal. The packs collected in the capital Addis Ababa point to only 6.8% of the market being illicit, even though that estimate is subject to the limitation of more tourists being present in the capital.

The share of illicit cigarettes market varied considerably across the country, with as many as 97.7% and 86.6% of packs found respectively in Jigjiga and Dire Dawa (both in the East) being illicit. On the other hand, the packs obtained in the South, the South West, and the North were mostly legal (96.8 – 99.56%). The packs collected in the capital Addis Ababa point to only 6.8% of the market being illicit, even though that estimate is subject to the limitation of more tourists being present in the capital.

The majority of packs classified as illicit were foreign brands not eligible of distribution in Ethiopia. Some of the illicit brands such as Green Apple and Oris cost more (3.25 and 1.8 Birr per stick, respectively) than the domestic legal brand Nyala, which sells for about 1.2 Birr per stick. However, the legally imported foreign brands such as Marlboro or Rothmans are even more expensive (5 and 3 Birr per stick, respectively) compared to the illegal foreign brands.

## CONCLUSION

The estimates of the size of illicit cigarette market in Ethiopia vary by regions. The majority of towns surveyed had very small shares of illicit cigarette market, but the estimates in the East, where Ethiopia shares borders with Somalia and Djibouti, are alarming.

To counter the challenges of illicit cigarette trade, the country needs to strengthen border control and law enforcement, especially in the East. The ratification of the WHO Protocol on Illicit Tobacco Trade would be an important step in joining the international community in its fight against the illicit tobacco trade and its public health and fiscal impacts. Also, and because in the current Ethiopian market cigarette packs are not required to have any marking linking them to the production chain, nor are packs required to feature any proof that sales taxes were appropriately paid (e.g., tax stamps), the adoption of a secure tracking and tracing system (T&T) for cigarette is strongly recommended. A secure T&T system would reinforce the efficiency of excise taxation and reduce tax evasion in the cigarette market.

# INTRODUCTION

## BACKGROUND

Tobacco use is one of the major causes of preventable premature death and disability in the world. According to Ethiopia's 2016 Global Adult Tobacco Survey (GATS), over 3.2 million Ethiopians currently use tobacco and 2.2 million smoke daily. This results in both human and economic losses. About 17 thousand Ethiopians die every year from tobacco-related diseases while the direct and indirect costs of smoking amount to about 1,391 million Birr, or USD 50 million every year.<sup>1</sup>

To address the health and economic consequences of tobacco use, Ethiopia ratified the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) in 2014.<sup>2</sup> The FCTC recognizes that tobacco taxes are one of the best tools available to governments for controlling tobacco consumption. However, the effectiveness of this tool is undermined by the presence of illicit cigarettes on the market, since these cigarettes are often cheaper than legal cigarettes, which reduces the demand-suppressing effect of higher taxes. In addition, the consumption of illegal cigarettes undermines tax revenue goals and provides an argument for the tobacco industry to use to lobby against a pro-health tobacco tax policy.

Article 15 of the WHO FCTC calls on signatories to monitor, collect, and share data on illicit trade in tobacco products. It defines illicit trade in tobacco products as 'any practice or conduct prohibited by law and which relates to production, shipment, receipt, possession, distribution, sale or purchase including any practice or conduct intended to facilitate such activity.' Illicit trade can occur anywhere along the tobacco supply chain, from production and manufacturing to wholesale or retail distribution. It involves products that are smuggled, counterfeited, or illegally manufactured or distributed. Diversion from legal to illegal trade typically occurs before the point where taxes are assessed, particularly when diversion is motivated by tax evasion.

The National Tobacco Enterprise (NTE), an Ethiopian tobacco monopoly controlled by Japan Tobacco International (JTI),<sup>3</sup> claims that illicit cigarettes account for over 61% of the market<sup>4</sup>, and close to 90% of the market in Eastern Ethiopia.<sup>5</sup> However, these estimates cannot be either independently verified, due to non-disclosure of the methodology, or trusted, given the vested interest of the industry. The NTE argues that any tobacco-control measures, and especially higher tobacco taxes, will exacerbate the illicit cigarette trade in Ethiopia, and thus undermine the revenue goals as well as the national security of Ethiopia, given the alleged links between the illicit cigarette trade and terrorist funding.<sup>6</sup>

Reliable data on the prevalence of illicit tobacco trade in Ethiopia have been missing.

Research points to a negative relationship between the tax level and the illicit market penetration.<sup>7</sup> Recent empirical evidence shows no, or at best a weak, link between a tax increase and the level of illicit trade.<sup>8</sup> In contrast, strong law enforcement, criminal prosecution, and robust tax administration reduce the illicit trade in tobacco products.<sup>9</sup>

## TOBACCO CONTROL IN ETHIOPIA

The ratification of the WHO FCTC in the Proclamation No. 822/2013 mandated the Ethiopian Food and Drug Authority (EFDA) to take all necessary measures to implement the convention. As result, Ethiopia enacted its Tobacco Control Directive No. 28 in 2015.<sup>10</sup> The Directive stipulates that packs must carry a health warning that should cover at least 30% of the principal display area of the package and that the warning statement should be either in English or in Amharic and cover both sides of the pack (Annex A). Anything that could obscure, conceal, or otherwise hamper the visibility of the health warning is illegal.

Only licensed tobacco-product manufacturers, importers, and wholesalers may supply tobacco products to the Ethiopian market. Cigarettes must be sold only in intact packages and single stick cigarette sales are prohibited. Flavored cigarettes are banned.

In February 2019, Ethiopia enacted one of Africa's strongest tobacco-control laws that calls, among other measures, for pictorial health warnings to be implemented by 2020.

However, none of these laws call for the mandatory application of tax stamps, nor any measures to control tax avoidance and tax evasion.

## ETHIOPIAN TOBACCO TAX LAW

The Ethiopian excise tax, a purely ad valorem system, levied a 75% tax on the cost of production. This changed in February 2020 when the government implemented a mixed tax regime consisting of both an ad valorem and a specific tax. The ad valorem rate declined to 30% of the production cost, but a specific component of eight Ethiopian Birr (ETB) (USD\$ 0.25) per pack of cigarettes (20 sticks) was added.<sup>11</sup> The change in the tax system demonstrates the commitment of the Government of Ethiopia to addressing the issue that tobacco use is one of the leading causes of non-communicable diseases such cancer, cardiovascular disease, and chronic obstructive lung disease.

Imported cigarettes are subject to the excise tax, a customs duty of 35%, and a surtax of 10%. The custom duty is levied on CIF<sup>12</sup> while the surtax is levied on (CIF + Customs duty + VAT + Excise Tax).<sup>13</sup>

All cigarettes are subject to the standard VAT of 15%.

**ETHIOPIA DOES NOT REQUIRE  
TOBACCO PRODUCT PACKAGING  
TO CARRY TAX STAMPS.**

## OBJECTIVE OF THE STUDY

The objectives of this study are to:

- 1) Estimate the size of illicit cigarette trade in Ethiopia using two different, but transparent, methods.
- 2) Identify illegal brands on the market.
- 3) Study geographical diversity in illicit trade penetration.
- 4) Study the distribution channels for the illicit products.

## METHODS

This is a cross-sectional study based on the observation of empty packs. The packs were obtained from two sources during our 2018 Empty Pack Survey (EPS): from retailers and from streets.

Despite the law that prohibits the sale of single cigarette sticks, 61.4% of smokers obtained their cigarettes via a single stick sale in 2016.<sup>14</sup> This implies that empty cigarette packs can be obtained from retailers. Therefore, we approached both store sellers and street vendors and asked them to surrender the empty packs. The retailers usually give away the pack to the customer who bought the last stick(s) in the pack to promote customer loyalty. If a retailer indicated a possible loss due to surrendering the packs for research, a small incentive was provided. When there was an interaction with retailers, we also interviewed them (see the questionnaire in Annex C) to obtain additional information about their cigarette supply chain and cigarette prices.

Empty discarded cigarette packs can be frequently observed in the streets, near garbage bins, in open solid waste dumps, and near Khat<sup>15</sup> stores/chewing areas. These areas were the second source of empty packs for the study.

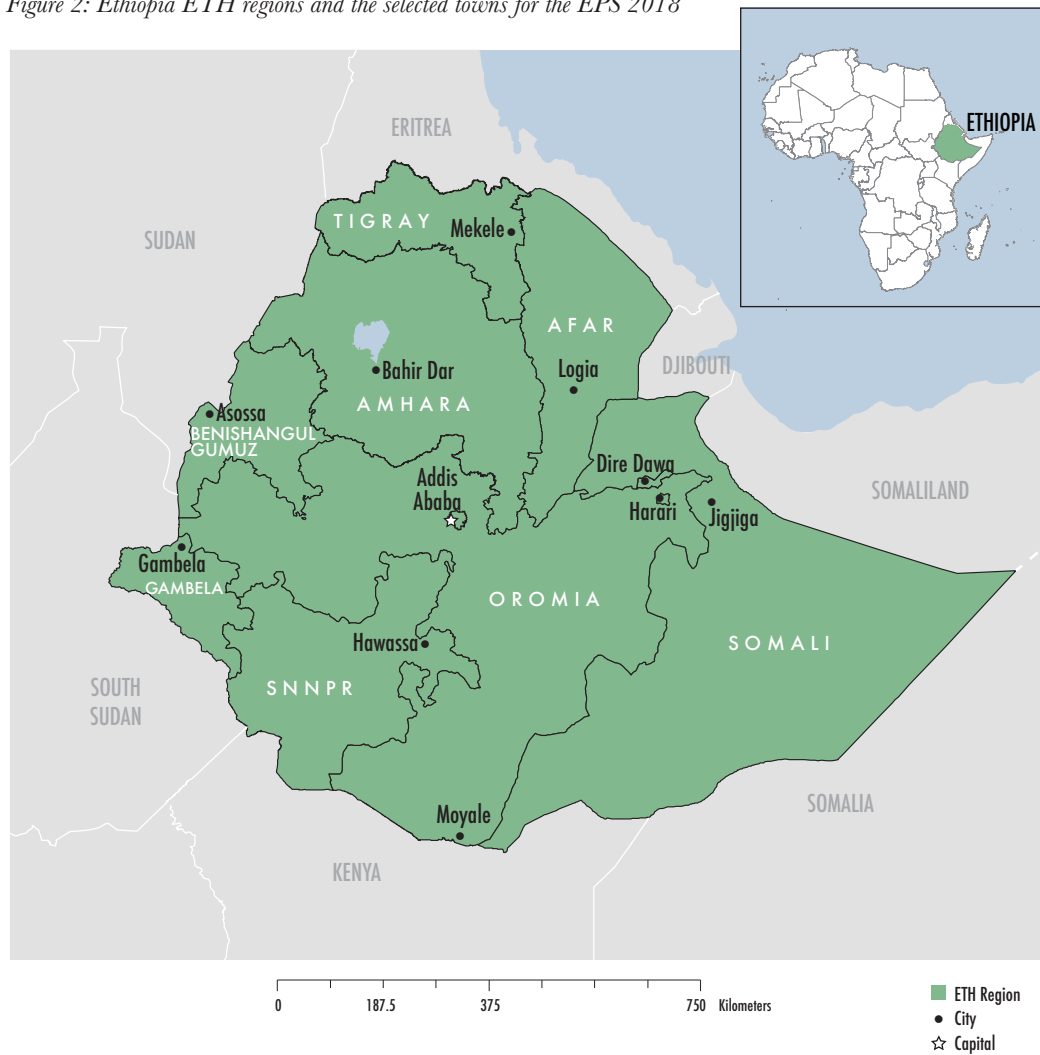
The advantage of this method of obtaining empty packs is that it employs an observational technique, and thus avoids the bias related to self-reported data.<sup>16</sup>

Ethiopia consists of nine regional states and two autonomous cities (Addis Ababa and Dire Dawa) (Figure 1). The data collection covers all these states and cities with the exception of Harar, as it is geographically very small and has characteristics similar to Dire Dawa, which is included in the sample. Therefore, the data were collected in 10 geographical areas in five clusters: the North, the South, the East, the West, and the Center (Figure 2).

Figure 1: Ethiopian map by region



Figure 2: Ethiopia ETH regions and the selected towns for the EPS 2018





In each of those areas, we purposely selected one town on the basis of its geographical location (i.e., the proximity to a border, since we wanted to sample 5 inland cities and 5 cities in border areas), administrative status (prioritizing high administrative status; most of the cities are regional capitals), and political situation (to ensure the safety of data collectors), as well as regional smoking prevalence, obtained from GATS 2016.<sup>17</sup> The idea was to select areas with both relatively low and relatively high smoking densities. Each town was classified as either a border town or an inland town (Table 1) in order to study any differences in the penetration of illicit trade close to borders with Eritrea, Somalia, Djibouti, Kenya, South Sudan, and Sudan.

Each town was divided into five clusters, representing the North, South, East, West and Central areas. In each cluster, the research team selected 1 block or street with high consumer density, based on the presence of commercial buildings and local knowledge. The point of departure for the data collectors in each block was randomly determined from all possible points using a lottery method. The point of departure was either a school, a market, a taxi stand, or a bus station.

**Table 1: Towns in the sample, dates of data collection, and sample size**

|       | CITY,<br>STATE            | BORDER/<br>INLAND | DATA<br>COLLECTION<br>DATES | # OF PACKS COLLECTED |        |       |
|-------|---------------------------|-------------------|-----------------------------|----------------------|--------|-------|
|       |                           |                   |                             | RETAILER             | STREET | TOTAL |
| 1     | Addis Ababa               | Inland            | 20–30/10/2018               | 189                  | 1119   | 1308  |
| 2     | Bahir Dar, Amhara         | Inland            | 13–19/10/2018               | 184                  | 616    | 800   |
| 3     | Mekele, Tigray            | Inland            | 18–23/10/2018               | 51                   | 493    | 544   |
| 4     | Hawassa, SNNPR            | Inland            | 16–21/10/2018               | 58                   | 459    | 517   |
| 5     | Dire Dawa                 | Inland            | 8–15/10/2018                | 88                   | 500    | 588   |
| 6     | Jigjiga, Somalia          | Border            | 18–25/10/2018               | 78                   | 444    | 522   |
| 7     | Moyale, Oromia            | Border            | 25–30/11/2018               | 74                   | 425    | 499   |
| 8     | Logia, Afar               | Border            | 9–15/10/2018                | 93                   | 470    | 563   |
| 9     | Gambella, Gambella region | Border            | 8–14/10/2018                | 93                   | 407    | 500   |
| 10    | Asossa, B. Gumz           | Border            | 5–11/10/2018                | 162                  | 435    | 597   |
| TOTAL |                           |                   |                             | 1070                 | 5368   | 6438  |

The collection of the littered packs began from the point of departure clockwise, exploring all blocks or streets within a radius of approximately 1 to 1.5 km. This was done twice on a single day: in the morning and in the afternoon.

Retailers (both those in stores and street vendors) along the streets where the discarded packs were collected were approached to surrender their empty cigarette packs. The participating retailers signed a written consent (Annex B) after the aim of the study was explained to them. The data collectors gave each retailer a pre-labeled bag during the morning round of pack collection. The bag of empty packs was then collected in the evening hours. In addition to providing the empty packs, the retailers also answered some questions regarding the source of their cigarettes and the sale prices.

Each empty cigarette pack was cleaned and placed in a transparent plastic bag with a unique ID that was associated with the mode of collection (street or retailer), time of day (morning or afternoon) the geographical location, and the retailer's ID. About 0.5% of packs, collected from the street, that were too damaged for observation were discarded.

Each pack was examined for features such as the presence of health warning labels (HWL), the compliance of the HWL with the law, country of origin as written on the pack, trademark owner as written on the pack, the presence of an explicit statement allowing the brand to be sold in Ethiopia (for foreign brands), and a duty-free stamp. These data were entered into an Excel spread sheet to assist the data analysis.

A domestic legal pack was defined as a brand manufactured by the National Tobacco Enterprise (NTE) in Ethiopia. The additional criterion for the domestic brand of compliance with the HWL law was dismissed because of the weak application of the law. This was the result of an intensive NTE lobbying effort that resulted in the government agreeing to enforce the law only on one brand, Nyala, even though the NTE manufactures 5 brands: Nyala, Nyala Premium, Gisilla, Delight, and Eleni.

A foreign legal pack was defined as a pack with a written statement on the product's closing seal stating "to be sold in Ethiopia with a special agreement with NTE" or other comparable messages. There are only a few foreign brands that have a special license from NTE allowing them to import to Ethiopia. We located only 2 such brands in our survey: Rothmans and Marlboro.

All other packs were classified as illegal.

The whole process of data collection, starting from communication among team members, through delineating the survey area, identifying points of departure, administering the survey, and labeling the samples, to entering the data was conducted consistently by following a pre-tested field checklist (see Annex D). This helped to maintain the data quality and avoid inconsistency during data collection. The data were collected from October 5, 2018 to November 30, 2018 by four study teams, each consisting of three members.

# RESULTS

As indicated in Table 4, about 1,070 empty packs were collected from 385 retailers: 370 (96.1%) stores/kiosks were the source of 1,009 empty packs, while 15 (3.9%) street vendors were the source of 61 empty packs. The top three sources of retail packs were Addis Ababa, Bahir Dar, and Assosa. On average, the stores supplied about 3 empty packs in a day while the street sellers were the source of about 4 empty packs in a day. This is likely due to the narrow specialization of the street sellers, who offer a limited range of products.

**Table 4: Packs obtained from retailers by region.**

| REGION                          | CITY/TOWN   | RETAILERS   | PACKS COLLECTED | AVERAGE PACKS PER RETAILER |
|---------------------------------|-------------|-------------|-----------------|----------------------------|
| Addis Ababa City Administration | Addis Ababa | 53          | 189             | 3.6                        |
| Afar                            | Logiya      | 26          | 93              | 3.6                        |
| Amhara                          | Bahir Dar   | 56          | 184             | 3.3                        |
| Benshangul Gumz                 | Assosa      | 62          | 162             | 2.6                        |
| Dire Dawa City Administration   | Dire Dawa   | 33          | 88              | 2.7                        |
| Gambella                        | Gambella    | 29          | 93              | 3.2                        |
| Oromia                          | Moyale      | 36          | 74              | 2.1                        |
| SNNPR                           | Hawassa     | 30          | 58              | 1.9                        |
| Somalia                         | Semera      | 31          | 78              | 2.5                        |
| Tigray                          | Mekele      | 21          | 51              | 2.4                        |
| All Ethiopia                    |             | 385         | 1,070           | 2.8                        |
| TYPE OF RETAILER                |             |             |                 |                            |
| Stores/kiosks                   |             | 370 (96.1%) | 1009 (94.3%)    | 2.7                        |
| Street vendor                   |             | 15 (3.9%)   | 61 (5.7%)       | 4.1                        |

The vast majority of store/kiosk owners obtained cigarettes directly from wholesalers linked to the National Tobacco Enterprise (NTE). By contrast, three-quarters of the street vendors obtained cigarettes from other retailers, because they usually do not possess a licence to trade (Table 5).

**Table 5: Self-reported sources of cigarettes by type of retailer**

| RETAILER TYPE | SOURCE OF CIGARETTES      |                              |                          |
|---------------|---------------------------|------------------------------|--------------------------|
|               | WHOLESALEERS<br>N (ROW %) | OTHER RETAILERS<br>N (ROW %) | OVERALL<br>(N, COLUMN %) |
| Store/Kiosk   | 986 (97.7)                | 23 (2.3)                     | 1009 (94.3)              |
| Street Vendor | 16 (26.2)                 | 45 (73.8)                    | 61 (5.7)                 |
| Total         | 1002 (93.6)               | 68 (6.4)                     | 1070 (100)               |

Table 6 shows the distribution of packs collected from streets by regions. Addis Ababa, the capital, was the source of over a thousand packs, while the other cities provided between 407 to 616 packs. Overall, 5,368 empty packs were collected from the streets.

**Table 6: Packs obtained from streets by region.**

| REGION                          | CITY/TOWN   | PACKS COLLECTED |
|---------------------------------|-------------|-----------------|
| Addis Ababa City Administration | Addis Ababa | 1119            |
| Afar                            | Logiya      | 470             |
| Amhara                          | Bahir Dar   | 616             |
| Benshangul Gumz                 | Assosa      | 435             |
| Dire Dawa City Administration   | Dire Dawa   | 500             |
| Gambella                        | Gambella    | 407             |
| Oromia                          | Moyale      | 425             |
| SNNPR                           | Hawassa     | 459             |
| Somalia                         | Semera      | 444             |
| Tigray                          | Mekele      | 493             |
| All Ethiopia                    |             | 5,368           |

Table 7 presents the proportion of legal and illegal packs from the 2018 EPS. Overall, 6,438 empty cigarettes packs were collected (5,368 from the street and 1,070 from retailers) from the ten cities. By applying the definition of a legal pack given in the Method section, we find that, on average, approximately 81.1% of the packs are legitimate products and the remaining 18.9% are illicit products. As expected, the proportion of illicit packs is relatively higher among the packs collected in the street (19.6%) than among the packs collected from retailers (15.2%). The reason is that retailers tend to be reluctant to provide empty packs when they are illegal. In addition, the street packs identified as illicit may have been brought in legally by visitors or travelers, especially in Addis Ababa.

**Table 7: Frequency and percentage of licit and illicit cigarette packs, by type of retailer.**

| SOURCE OF PACKS | LEGAL STATUS | N (%)       | 95% CONFIDENCE INTERVAL FOR (%) |
|-----------------|--------------|-------------|---------------------------------|
| Retailers       | Illegal      | 163 (15.2)  | (13.1, 17.4)                    |
|                 | Legal        | 907 (84.8)  | (82.6, 86.9)                    |
| Streets         | Illegal      | 1054 (19.6) | (18.6, 20.7)                    |
|                 | Legal        | 4314 (80.4) | (79.3, 81.4)                    |
| Overall         | Illegal      | 1217 (18.9) | (17.9, 19.9)                    |
|                 | Legal        | 5221 (81.1) | (80.1, 82.1)                    |

As shown in Table 8, among packs collected from retailers, packs obtained from shops (kiosks) are twice as likely to be illicit (15.8%) than those obtained from street vendors (6.6%).

**Table 8: Frequency and percentage of licit and illicit cigarette packs, by type of retailer and source.**

|                | TOTAL | ILLICIT     | LICIT       |
|----------------|-------|-------------|-------------|
| Retail vendors | 1070  | 163 (15.2%) | 907 (84.8%) |
| Kiosks         | 1009  | 159 (15.8%) | 850 (84.2%) |
| Street vendors | 61    | 4 (6.6%)    | 57 (93.4%)  |

Note: Confidence intervals account for brand and region/city fixed effects.

The origin of the packs was first determined by looking for any indication on the pack itself, such as “made in Ethiopia”, “made in the UK”, etc. If this was not sufficient, we identified the brand owner and/or the manufacturer and checked if those brands were authorized for sale in Ethiopia, a method also applied in Ross et al (2015).<sup>18</sup>

Table 9 shows that about 80% of empty packs were stamped “made in Ethiopia”, followed by “made in the UK” (8.3%), “made in UAE” (8.3%), and “made in Yemen” (2.0%). Other countries are represented sparsely. The packs from the streets were more diverse in terms of the country of origin. While all of the domestic packs were licit, all foreign packs were classified as illicit, except that some packs originating from Switzerland and the United Kingdom were classified as legal, as only 59.7% and 92.1% of the packs from these countries, respectively, were illicit.

**Table 9: Empty packs by country of origin**

| COUNTRY OF ORIGIN    | FREQUENCY   |             |             | SHARE (%)     | LICIT       |              | ILLICIT     |              |
|----------------------|-------------|-------------|-------------|---------------|-------------|--------------|-------------|--------------|
|                      | Street      | Retailer    | Overall     |               | N           | %            | N           | %            |
| Ethiopia             | 4257        | 898         | 5155        | 80.06         | 5155        | 100          | 0           | 0            |
| United Kingdom       | 462         | 72          | 534         | 8.31          | 41          | 7.85         | 493         | 92.15        |
| United Arab Emirates | 452         | 81          | 533         | 8.28          | 0           | 0.00         | 533         | 100          |
| Yemen                | 114         | 17          | 131         | 2.03          | 0           | 0.00         | 131         | 100          |
| Switzerland          | 60          | 2           | 62          | 0.96          | 25          | 40.32        | 37          | 59.68        |
| Kenya                | 14          | 0           | 14          | 0.22          | 0           | 0.00         | 14          | 100          |
| Turkey               | 2           | 0           | 2           | 0.03          | 0           | 0.00         | 2           | 100          |
| Vietnam or India     | 2           | 0           | 2           | 0.03          | 0           | 0.00         | 2           | 100          |
| China                | 1           | 0           | 1           | 0.02          | 0           | 0.00         | 1           | 100          |
| Germany              | 1           | 0           | 1           | 0.02          | 0           | 0.00         | 1           | 100          |
| India                | 1           | 0           | 1           | 0.02          | 0           | 0.00         | 1           | 100          |
| Unknown              | 2           | 0           | 2           | 0.03          | 0           | 0.00         | 2           | 100          |
| <b>Total</b>         | <b>5368</b> | <b>1070</b> | <b>6438</b> | <b>100.00</b> | <b>5221</b> | <b>81.10</b> | <b>1217</b> | <b>18.90</b> |

Tables 10 and 11 show the degree of compliance with the health warning label regulations separately for the domestic and the foreign packs. Almost all (99.7%) domestic packs are compliant, while the opposite is true for foreign packs (95% non-compliance). All no-compliant local packs were for the brand Delight. Among the foreign packs, 28 that did not comply with the warning label regulation were classified as legitimate due to the presence of a statement that they are allowed to be sold in Ethiopia. Indeed, in Ethiopia, non-compliance of warning labels is tolerated in practice, for both domestic and foreign brands.

**Table 10. Domestic products: compliance with warning label regulation**

|   |     | TOTAL |      |
|---|-----|-------|------|
|   |     | N     | %    |
| HWL present   | Yes | 5148  | 99.9 |
|   | No  | 6     | 0.1  |
| If HWL present, does it comply with 30% text requirement? | Yes | 5141  | 99.9 |
|   | No  | 7     | 0.1  |
| Overall compliance  | Yes | 5141  | 99.7 |
|   | No  | 13    | 0.3  |

**Table 11. Foreign products: compliance with warning label regulation**

|   |     | TOTAL |      |
|---|-----|-------|------|
|   |     | N     | %    |
| HWL present   | Yes | 1125  | 87.6 |
|   | No  | 159   | 12.4 |
| If HWL present, does it comply with 30% text requirement? | Yes | 64    | 5.7  |
|   | No  | 1061  | 94.3 |
| Overall compliance  | Yes | 64    | 5.0  |
|   | No  | 1220  | 95.0 |

IN ETHIOPIA, NON-COMPLIANCE OF WARNING LABELS IS TOLERATED IN PRACTICE, FOR BOTH DOMESTIC AND FOREIGN BRANDS.

Table 12 presents the geographical distribution of licit and illicit packs. The proportion of illicit packs varies considerably across cities. The largest share of illicit brands by far was in the Eastern part of the country, where 63.8% of the packs were classified as illicit. The overwhelming majority of the packs found in the city of Jigjiga (97.7%) and the city of Dire Dawa (86.6%) in the East were found to be illegal. At the other extreme, the cigarette markets in cities located in the North, South, and in South West exhibit a very low share of illicit packs (2% to 2.8%). Illegal packs were almost absent in the cities of Gambella and Hawassa.

About 6.8% of the cigarette packs found in Addis Ababa were classified as illicit. This is less than in the East of the country, but higher than in other cities located further from the Somalia border. It is possible that some packs found in Addis were classified as illegal but could have been brought in legally by tourists and travelers.

**Table 12: Frequency and proportion of licit and illicit cigarette products by city and location**

| LOCATION       | CITY         | LICIT       |             | ILLICIT     |             | TOTAL       |
|----------------|--------------|-------------|-------------|-------------|-------------|-------------|
|                |              | N           | %           | N           | %           |             |
| East           | Logiya       | 515         | 91.5        | 48          | 8.5         | 563         |
|                | Dire Dawa    | 79          | 13.4        | 509         | 86.6        | 588         |
|                | Jigjiga      | 12          | 2.3         | 510         | 97.7        | 522         |
|                | <b>TOTAL</b> | <b>606</b>  | <b>36.2</b> | <b>1067</b> | <b>63.8</b> | <b>1673</b> |
| North          | Bahir Dar    | 784         | 98.0        | 16          | 2.0         | 800         |
|                | Mekele       | 529         | 97.2        | 15          | 2.8         | 544         |
|                | <b>TOTAL</b> | <b>1313</b> | <b>97.7</b> | <b>31</b>   | <b>2.3</b>  | <b>1344</b> |
| West           | Assosa       | 587         | 98.3        | 10          | 1.7         | 597         |
|                | Gambella     | 498         | 99.6        | 2           | 0.4         | 500         |
|                | <b>TOTAL</b> | <b>1085</b> | <b>98.9</b> | <b>11</b>   | <b>1.1</b>  | <b>1097</b> |
| South          | Hawassa      | 515         | 99.6        | 2           | 0.4         | 517         |
|                | Moyale       | 483         | 96.8        | 16          | 3.2         | 499         |
|                | <b>TOTAL</b> | <b>998</b>  | <b>98.2</b> | <b>18</b>   | <b>1.8</b>  | <b>1016</b> |
| Center         | Addis Ababa  | 1219        | 93.2        | 89          | 6.8         | 1308        |
| <b>Overall</b> |              | <b>5221</b> | <b>81.1</b> | <b>1217</b> | <b>18.9</b> | <b>6438</b> |

The analysis of illicit market share by proximity to the borders is presented in Table 13. The largest share of illicit brands was found near the border with Somalia, where 97.7% of the packs were illicit. By contrast, the share of illicit brands is much smaller in cities located close to the border with Djibouti (8.5% illicit) and Kenya (3.2% illicit). Packs collected inland were evaluated in two ways, either including or excluding Dire Dawa. Even though the town of Dire Dawa is located inland, it is a city of international migration, via Djibouti and Somalia, to the Gulf States and Europe and has an established route for illicit trade.<sup>19</sup> If Dire Dawa is excluded, the share of illicit cigarettes inland drops to 3.9%.

**Table 13: Frequency and proportion of licit and illicit cigarette products by proximity to borders**

| LOCATION                   | BORDER COUNTRY | LICIT       |             | ILLICIT     |             | TOTAL       |
|----------------------------|----------------|-------------|-------------|-------------|-------------|-------------|
|                            |                | N           | %           | N           | %           |             |
| Inland including Dire Dawa | None           | 3126        | 83.2        | 631         | 16.8        | 3757        |
| Inland excluding Dire Dawa | None           | 3047        | 96.5        | 122         | 3.9         | 3169        |
| Border                     | Somalia        | 12          | 2.3         | 510         | 97.7        | 522         |
| Border                     | Sudan          | 1085        | 98.9        | 12          | 1.1         | 1097        |
| Border                     | Eritrea        | 0           | -           | 0           | -           | 0           |
| Border                     | Kenya          | 483         | 96.8        | 16          | 3.2         | 499         |
| Border                     | Djibouti       | 515         | 91.5        | 48          | 8.5         | 563         |
| <b>Total</b>               |                | <b>5221</b> | <b>81.1</b> | <b>1217</b> | <b>18.9</b> | <b>6438</b> |

An analysis by brand is presented in Table 14. Of the 30 cigarette brands collected, 4 were domestic and 26 were foreign. The brands collected from the streets were more diverse compared with those from retailers (only 16 brands were from retailers), indicating a possible reluctance on the part of retailers to reveal illicit packs to data collectors.

The most common cigarette brand was the domestic brand Nyala (71.4% of all packs), followed by Nyala Premium (6.9% of all packs), and two foreign brands Rothmans Royals (6.4%) and Business Royals (6.1%). Both of these foreign brands were illegal. The two foreign brands allowed to be legally distributed in Ethiopia (Rothmans and Marlboro) are supplied both legally and illegally. Flavored brands like Green Apple and Strawberry are prohibited by law in Ethiopia.

When asked about the source of their illicit products, retailers answered that they came from Addis Ababa, except in Dire Dawa, Logiya, and Jigjiga, where retailers claimed that illicit cigarettes came from the border areas. One street vendor in Hawassa said that he could be penalized with up to a year in prison if caught selling illicit brands.



Table 14: Cigarette brands in Ethiopia by legal status.

| BRAND NAME          | STREET (N)   |             |              | RETAILER (N) |            |             | OVERALL     |             |             |              | BRAND MARKET SHARE (%) |
|---------------------|--------------|-------------|--------------|--------------|------------|-------------|-------------|-------------|-------------|--------------|------------------------|
|                     | LICIT        | ILLICIT     | TOTAL        | LICIT        | ILLICIT    | TOTAL       | LICIT       | ILLICIT     | TOTAL       | % OF LICIT   |                        |
| Nyala               | 3797         | 0           | 3797         | 799          | 0          | 799         | 4596        | 0           | 4596        | 100.0        | 71.4                   |
| Nyala Premium       | 394          | 0           | 394          | 52           | 0          | 52          | 446         | 0           | 446         | 100.0        | 6.9                    |
| Delight             | 62           | 0           | 62           | 45           | 0          | 45          | 107         | 0           | 107         | 100.0        | 1.7                    |
| Gisilla             | 4            | 0           | 4            | 2            | 0          | 2           | 6           | 0           | 6           | 100.0        | 0.1                    |
| <b>All domestic</b> | <b>42577</b> | <b>0</b>    | <b>42577</b> | <b>898</b>   | <b>0</b>   | <b>898</b>  | <b>5155</b> | <b>0</b>    | <b>5155</b> | <b>100.0</b> | <b>80.1</b>            |
| Awsam               | 0            | 1           | 1            | 0            | 0          | 0           | 0           | 1           | 1           | 0.0          | 0.0                    |
| Benson&Hedges       | 0            | 63          | 63           | 0            | 11         | 11          | 0           | 74          | 74          | 0.0          | 1.1                    |
| Blues               | 0            | 1           | 1            | 0            | 1          | 1           | 0           | 2           | 2           | 0.0          | 0.0                    |
| Bright              | 0            | 1           | 1            | 0            | 0          | 0           | 0           | 1           | 1           | 0.0          | 0.0                    |
| Bon                 | 0            | 12          | 12           | 0            | 2          | 2           | 0           | 14          | 14          | 0.0          | 0.2                    |
| Business Royals     | 0            | 337         | 337          | 0            | 58         | 58          | 0           | 395         | 395         | 0.0          | 6.1                    |
| Davidoff            | 0            | 1           | 1            | 0            | 0          | 0           | 0           | 1           | 1           | 0.0          | 0.0                    |
| Empire Royals       | 0            | 2           | 2            | 0            | 0          | 0           | 0           | 2           | 2           | 0.0          | 0.0                    |
| Ghamdan             | 0            | 113         | 113          | 0            | 17         | 17          | 0           | 130         | 130         | 0.0          | 2.0                    |
| Gold Flake          | 0            | 1           | 1            | 0            | 0          | 0           | 0           | 1           | 1           | 0.0          | 0.0                    |
| Gold Mount          | 0            | 1           | 1            | 0            | 2          | 2           | 0           | 3           | 3           | 0.0          | 0.0                    |
| Gold Seal           | 0            | 4           | 4            | 0            | 0          | 0           | 0           | 4           | 4           | 0.0          | 0.1                    |
| Green Apple         | 0            | 30          | 30           | 0            | 4          | 4           | 0           | 34          | 34          | 0.0          | 0.5                    |
| L&M                 | 0            | 1           | 1            | 0            | 0          | 0           | 0           | 1           | 1           | 0.0          | 0.0                    |
| Manchester          | 0            | 17          | 17           | 0            | 2          | 2           | 0           | 19          | 19          | 0.0          | 0.3                    |
| Marlboro            | 23           | 30          | 53           | 2            | 0          | 2           | 25          | 30          | 55          | 45.5         | 0.9                    |
| Marlboro gold       | 0            | 7           | 7            | 0            | 0          | 0           | 0           | 7           | 7           | 0.0          | 0.1                    |
| Marshal             | 0            | 1           | 1            | 0            | 0          | 0           | 0           | 1           | 1           | 0.0          | 0.0                    |
| Oris                | 0            | 47          | 47           | 0            | 12         | 12          | 0           | 59          | 59          | 0.0          | 0.9                    |
| Pall mall           | 0            | 1           | 1            | 0            | 0          | 0           | 0           | 1           | 1           | 0.0          | 0.0                    |
| Range Royal         | 0            | 1           | 1            | 0            | 0          | 0           | 0           | 1           | 1           | 0.0          | 0.0                    |
| Richman Royal       | 0            | 2           | 2            | 0            | 0          | 0           | 0           | 2           | 2           | 0.0          | 0.0                    |
| Rothmans            | 34           | 6           | 40           | 7            | 0          | 7           | 41          | 6           | 47          | 87.2         | 0.7                    |
| Rothmans Royals     | 0            | 359         | 359          | 0            | 54         | 54          | 0           | 413         | 413         | 0.0          | 6.4                    |
| Sports man          | 0            | 14          | 14           | 0            | 0          | 0           | 0           | 14          | 14          | 0.0          | 0.2                    |
| Strawberry          | 0            | 1           | 1            | 0            | 0          | 0           | 0           | 1           | 1           | 0.0          | 0.0                    |
| <b>All foreign</b>  | <b>57</b>    | <b>1054</b> | <b>1111</b>  | <b>9</b>     | <b>163</b> | <b>172</b>  | <b>66</b>   | <b>1217</b> | <b>1283</b> | <b>5.1</b>   | <b>19.9</b>            |
| <b>Total</b>        | <b>4314</b>  | <b>1054</b> | <b>5368</b>  | <b>907</b>   | <b>163</b> | <b>1070</b> | <b>5221</b> | <b>1217</b> | <b>6438</b> | <b>81.1</b>  | <b>100.0</b>           |

Table 15 summarizes the prices of cigarette packs obtained from retailers by brand. The most expensive brand is Marlboro (5 ETB), followed by Green Apple (3.25 ETB) and Rothmans (2.86 ETB). The cheapest brand is Ghamdan (0.75 ETB), followed by Gisella (0.88 ETB). The most popular brand, Nyala, sells for as little as 1 ETB per stick.

**Table 15: Prices per stick of cigarettes, by brands and country of origin**

| Brand             | Country of Origin | Manufacturer                    | Price (ETB) |         |      |
|-------------------|-------------------|---------------------------------|-------------|---------|------|
|                   |                   |                                 | Minimum     | Maximum | Mean |
| Domestic          |                   |                                 |             |         |      |
| Gisella           | Ethiopia          | NTE                             | 0.75        | 1       | 0.88 |
| Delight           | Ethiopia          | NTE                             | 0.75        | 2       | 1.46 |
| Nyala             | Ethiopia          | NTE                             | 1           | 2       | 1.22 |
| Nyala Premium     | Ethiopia          | NTE                             | 1           | 2       | 1.45 |
| International     |                   |                                 |             |         |      |
| Benson & Hedges   | United Kingdom    | BAT                             | 2           | 2.5     | 2.09 |
| Blues English     | United Kingdom    | Independent Tobacco Inc.        | 1           | 1       | 1    |
| Bon International | United Kingdom    | Al Wahdania General Trading Co. | 1           | 1       | 1    |
| Business Royals   | United Kingdom    | Independent Tobacco Inc.        | 0.75        | 1.5     | 0.78 |
| Ghamdan           | Yemen             | United Industries Company       | 0.75        | 0.75    | 0.75 |
| Green Apple       | UAE               | Independent Tobacco Inc.        | 3           | 4       | 3.25 |
| Gold Mount        | United Kingdom    | London Tobacco Ltd              | 1           | 1       | 1    |
| Manchester        | United Kingdom    | Adam General Trading LLC        | 1.75        | 1.75    | 1.75 |
| Marlboro          | Switzerland       | PMI                             | 5           | 5       | 5    |
| Oris              | Unknown           | Oriental General Trading Inc    | 1.5         | 3.5     | 1.79 |
| Rothmans          | United Kingdom    | BAT                             | 2           | 3       | 2.86 |
| Rothmans Royals   | United Kingdom    | BAT                             | 1.25        | 1.25    | 1.25 |

Table 16 summarizes prices per stick by brand and by legal status. Interestingly, the minimum prices of legal and illegal brands are the same (0.75 ETB). Except for two brands (Business Royals, from the UK, and Ghamdan, from Yemen), the majority of illicit brands had similar or higher prices than the most popular Nyala brand. The flavored brand of cigarettes, Green Apple, is sold at a substantial premium, and its average price is higher than the legally imported Rothmans brand.

**Table 16: Price per stick, by brands and legal status**

| BRAND             | STATUS          | PRICE (ETB) |         |      |
|-------------------|-----------------|-------------|---------|------|
|                   |                 | MINIMUM     | MAXIMUM | MEAN |
| Illicit           |                 |             |         |      |
| Benson & Hedges   | illicit         | 2           | 2.5     | 2.09 |
| Blues English     | illicit         | 1           | 1       | 1    |
| Bon International | illicit         | 1           | 1       | 1    |
| Business Royals   | illicit         | 0.75        | 1.5     | 0.78 |
| Ghamdan           | illicit         | 0.75        | 0.75    | 0.75 |
| Gold Mount        | illicit         | 1           | 1       | 1    |
| Green Apple       | illicit         | 3           | 4       | 3.25 |
| Manchester        | illicit         | 1.75        | 1.75    | 1.75 |
| Oris              | illicit         | 1.5         | 3.5     | 1.79 |
| Rothmans Royals   | illicit         | 1.25        | 1.25    | 1.25 |
| Licit             |                 |             |         |      |
| Delight           | Licit           | 0.75        | 2       | 1.46 |
| Gisilla           | Licit           | 0.75        | 1       | 0.88 |
| Marlboro          | Licit & illicit | 5           | 5       | 5    |
| Nyala             | Licit           | 1           | 2       | 1.22 |
| Nyala Premium     | Licit           | 1           | 2       | 1.45 |
| Rothmans*         | Licit           | 2           | 3       | 2.86 |

Note: \*Rothmans brand is supplied both legally and illegally, but we only have a price for the legal product.

The majority of cigarettes sold for 1.25 ETB per stick (33.6%) and 1 ETB per stick (33.1%), followed by 1.5 ETB (19.7%) as the next most common price. The average price of all cigarettes sold at retail is 1.25 ETB. The average price of a legal brand is 1.26 ETB, while the average price of an illegal brand is 1.17 ETB. Even excluding the legally imported brands, which tend to be more expensive, the average price of a legal brand was 1.24 ETB, 0.07 ETB more than illicit brands on average. The majority (97%) of cigarettes sold at 0.75 ETB were illegal. Most of the legal brands (94.4%) have prices ranging from 1 ETB to 1.50 ETB.

# LIMITATIONS

Due to budget limitations, this study does not provide a nationally representative estimate of the illicit trade of cigarettes in Ethiopia. For example, the survey did not include rural areas. However, the data cover all states and all geographical regions in Ethiopia, and therefore represents the diversity of the country's population and market conditions.

We could not determine the legal status of 33 packs with a duty-free sign that came from the streets. However, as three of these packs (Marlboro) had a statement “to be sold in Ethiopia with a special agreement with NTE”, we classified them as legal, and the remaining 30 duty-free packs as illegal. None of the packs obtained from retailers had a duty-free sign.

Since Ethiopia does not apply any tax stamps or other means of marking on manufactured products that indicate that these products have paid the applicable taxes, it was impossible to determine whether packs classified as legal had paid sales tax or not.

# DISCUSSION

This empty pack survey (EPS) is the first attempt to estimate the magnitude of the illicit cigarette market in Ethiopia. The EPS was conducted in 5 cities located inland and in 5 cities located near the Ethiopian borders. It includes 6,438 packs from 385 participating retailers and 50 streets across the ten cities. Even though the dataset is not nationally representative, it captures reasonably well the regional variation in illicit trade across Ethiopia. The interaction with retailers during data collection provided useful information on prices and daily volumes of cigarettes sold as single sticks.

About 80% of the collected packs were local and supplied by the NTE. The rest of the market is occupied by foreign brands, the majority of which (95%) are not legal. According to the 2016 GATS in Ethiopia, 87% of respondents smoked the local brand Nyala. Nyala's market share (Nyala and Nyala Premium) in our survey is 78%. This could be due to the lack of the national representation of the EPS data.

Familiarity with the cigarette market in Ethiopia led to a working definition of an illicit pack. There are large regional differences in the penetration of illicit cigarettes. The most affected area is the East of the country bordering Somalia and Djibouti, where the share of illicit market is enormous. For example, 97.7% and 86.6% of the packs collected in the cities of Jigjiga and Dire Dawa were illicit. This situation indicates weak border controls by the government of Ethiopia and a weak government in Somalia, as well as terrorist groups in the region.<sup>20</sup> On the other hand, illicit cigarettes are much rarer in other regions of Ethiopia, ranging from 0.4% in Gambella and Hawassa to 6.8% in the capital.

Cigarettes in Ethiopia are cheap. Two-thirds are sold for less than 1.25 ETB per stick, or less than 25 ETB (USD 0.60) per pack. This indicates that there is scope for higher tobacco taxes that would increase prices and reduce the affordability of cigarettes. This would generate more tax revenue, reduce smoking prevalence, and improve public health.

Despite the fact that some people are willing to pay a premium for illicit brands with flavors that are currently banned in Ethiopia, the purchase of illicit brands tends to be based on a desire to save money, as illicit brands are on average cheaper than legal brands.

Cheaper illicit cigarettes are likely to contribute to higher smoking prevalence, given that smoking prevalence is higher in the Eastern part of the country, where the market is flooded with illicit cigarettes. In 2016, smoking prevalence among adults in the Ethiopian regions of Afar, Harari, and Somali that share borders with Djibouti and Somalia were 15.5%, 7.2%, and 6.5%, respectively, higher than the national average of 5% measured in the same year.

As well as estimating the size of the illicit market, we also noticed some degree of non-compliance with HWL regulations, both in imported brands and those sold by the NTE.

CHEAPER  
ILLICIT  
CIGARETTES  
ARE LIKELY TO  
CONTRIBUTE  
TO HIGHER  
SMOKING  
PREVALENCE

# CONCLUSION AND RECOMMENDATIONS

The presence of illicit cigarettes on the market undermines both the public health and the fiscal goals of the government. Therefore, it is important to monitor the size of illicit cigarette market regularly and take the appropriate actions to control it.

To counter the supply of illicit cigarettes, Ethiopia should consider ratification and full implementation of the WHO Protocol on Illicit Tobacco Trade (ITP).<sup>21</sup> This would indicate a political commitment to a systematic effort to combat the illicit trade within Ethiopia. The ratification of the ITP would lead to an adoption of a track and trace (T&T) system that would ensure that taxes are collected on all packs legally supplied to the market. It would also give the customs officers a powerful monitoring tool to detect counterfeits and smuggled cigarettes. The experience of Kenya in addressing the illicit trade highlights the feasibility of a successful implementation of the T&T system in Africa, as well as the importance of international collaboration.

In the meantime, the government needs to deal urgently with the situation in the East by securing its borders.

Given the low level of cigarette prices in Ethiopia, the government should not be afraid of further increasing tobacco taxes. A tax increase supported by a technological solution such as a T&T system would most certainly generate much-needed revenue while simultaneously addressing the public health burden of tobacco use.

The international evidence shows that tax increases are not the reason for the presence of illicit trade, but that weak enforcement and reliance of the industry for solutions are.<sup>22</sup>

# ANNEX 1

## HEALTH WARNINGS

Approved by the Ethiopian Food, Medicine and Healthcare Administration and Control Authority (FMHACA) and provided to National Tobacco Enterprise

### TEXT

**Must include the following messages:**

- tobacco smoking is addictive;
- tobacco smoking causes pulmonary disease, cancer, bronchitis, cardiac disease;
- tobacco smoking can harm your fetus;
- tobacco smoking can harm your child;
- tobacco smoking cause diseases in non-smokers around you;
- tobacco use causes premature death; and
- quitting smoking now greatly reduces serious risk to your health

### 2017 health warning messages in English:

1. Tobacco smoking causes lung cancer
2. Tobacco smoking causes cardiovascular diseases
3. Smoking kills you

### 2018 health warning messages in Amharic (translated)

1. ሲጋራ ማጨስ የልብ በሽታን ያመጣል፤ (Tobacco smoking causes heart disease)
2. ትምባሆ መጠቀም ካንሰር ያስከትላል፤ (Tobacco smoking causes cancer)
3. ትምባሆ ማጨስ ጽንሰን ይጎዳል (Tobacco smoking harms the fetus)

# ANNEX B

## RETAILERS CONSENT FORM

I am working with the CORD consultancy PLC, a private consultancy firm that is engaged in rigorous research to provide policy inputs. The CORD consultancy PLC is doing a survey of empty cigarette packs in Ethiopia. The information will be used for planning by FMHACA. The purpose of this study is to determine the type of cigarettes sold in the market and the cost of cigarettes in Ethiopia in different retailer outlets and different geographical locations. Your village and shop have been random selected for the study. Your participation is very important to us and the community. Your answers will represent many other retailers. If you agree to participate, we will buy or give you a plastic bag for collection of empty packs and ask you few questions about the price of cigarettes and their sources.

I hereby declare that I voluntarily take part in this study. I will be asked about my cigarette sale and related issues. I will surrender all empty cigarette packs based on my one-day sale. The CORD fieldwork staff will get the packs and related information in a form where my name cannot be identified.

---

NAME OF RESPONDENT

---

DATE

---

SIGNATURE



# ANNEX C

## RETAILERS' QUESTIONNAIRE

### Questionnaire: Ethiopian Empty Pack Survey questions

|          |               |                         |
|----------|---------------|-------------------------|
| REGION   | ZONE/SUB-CITY | WOREDA (I.E., DISTRICT) |
| LOCATION | RETAILER ID   | DATE                    |

1. Who supplied you with the cigarettes that you are selling?

---

2. What is your regular source of cigarettes for your shop?

---

3. Do you obtain all cigarettes from the same source? ☐ Yes ☐ No  
If your answer is “no”, can you name all your cigarette sources?

---

4. Did you obtain the illegal/counterfeit packs from the same sources as the legal/genuine packs? ☐ Yes ☐ No  
If your answer is “yes”, do you get specific instructions or incentives from the those who supply them to you?

---

5. At what price did you **buy** them? *[Record the price by brand type]*

---

6. At what price do you **sell** them? *[Record the price by brand type]*

---

7. Is the price of illicit products the same as the legitimate one? *[Record the price by brand type]*

---

Those are all of the questions I have. Thank you very much for participating in this important survey.

*[Record any notes about interview]*

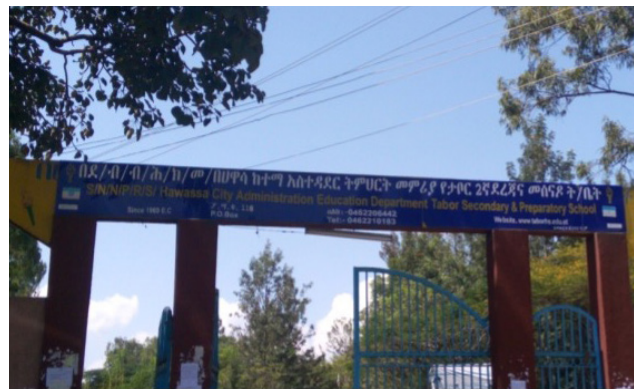
# ANNEX D

## FIELD CHECKLIST

- A. Inform the appropriate government body in the selected town about the data collection if needed.
- B. Get familiar with the city and determine five sub-study areas that fulfill the requirement (a commercial area, high customer density, the presence of potential sources of empty packs, at least one starting point that can be identified, etc.); document the main reason for the selection.
- C. Select the starting point randomly if more than one starting point identified.
- D. Record the GPS coordinates of each starting point and at the final point in each areas.
- E. Take pictures of the area and if possible, during the interviews.
- F. Empty packs from the streets have to be collected in both morning and afternoon.
- G. Identify retailers (shops and street vendors) who will provide empty packs during your morning data collection on the grounds and provide them with plastic bags with ID to store empty packs.
- H. Take either informal or formal consent from each retailer included in the study.
- I. Consider providing an incentive for the retailer if you think it is necessary.
- J. Collect empty packs from the retailers during your afternoon data collection on the grounds (after 4:45 pm local time at the earliest).
- K. Administer the retailers' questionnaire while focusing on rapport building and probing systematically during the interviews.
- L. Label all storage plastic bags using region, town name, area, sources, and time of collection.
- M. Label all packs with a unique ID. The ID consist of Region/Town name/Area/Source (Retailer, Street Vendor, Street)/Number (starting with 01) E.g. ID: T-M-N-SV-01 indicated that the pack was collected from Tigray region, Mekele town, North area, and from street vendor number one.

# ANNEX E

## PHOTOS OF STARTING POINTS AND A STREET VENDOR





# ANNEX F

## INTERVIEWING RETAILERS



# ANNEX G

## RETAILERS IN EAST ETHIOPIA SELLING ILLICIT CIGARETTES

With the NTE advertising warning against selling illicit cigarettes



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