

# TOBACCO ECONOMIC ECOSYSTEM IN INDONESIA

A Scoping Study Report

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Jl. Kramat VI, no.5, Kenari  
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## **Indonesian Development Foundation (Yayasan Pembangunan Indonesia)**

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# LIST OF ACRONYMS

|                  |  |
|------------------|--|
| <b>ENDS</b>      | Electronic nicotine delivery systems                     |
| <b>Kretek</b>    | Cigarettes made of tobacco and clove                     |
| <b>Riskesdas</b> | Riset Kesehatan Dasar / Basic Health Survey              |
| <b>Siskernas</b> | National Health Indicators Survey                        |
| <b>UI</b>        | The University of Indonesia                              |
| <b>CHT</b>       | Excise Rates for Tobacco Products                        |
| <b>DBHCHT</b>    | Revenue Sharing Funds of Tobacco Products Excise         |
| <b>CRT</b>       | Cigars   |
| <b>HPTL</b>      | Other tobacco processing products including e-cigarettes |
| <b>KLB</b>       | Hand-rolled corn husk cigarettes                         |
| <b>KLM</b>       | Chubarb cigarettes                                       |
| <b>SKM</b>       | Machine-rolled kretek cigarettes                         |
| <b>SKT</b>       | Hand-rolled kretek cigarettes                            |
| <b>SKTF</b>      | Hand-rolled kretek filtered cigarettes                   |
| <b>SPM</b>       | White cigarettes   |
| <b>SPT</b>       | Hand-rolled white cigarettes                             |
| <b>SPTF</b>      | Hand-rolled white filtered cigarettes                    |
| <b>TIS</b>       | Shag tobacco or loose tobacco                            |
| <b>PPPI</b>      | Indonesian Development Planners Association              |
| <b>APBN</b>      | National State Budgets                                   |
| <b>JKN</b>       | National health insurance program                        |
| <b>IDRJMN</b>    | Medium-term national development plan                    |

# EXECUTIVE SUMMARY

Indonesia remains a paradise for smokers and tobacco companies. Despite the current tobacco control measures implemented in almost all regions in the country, the number of smokers, particularly among youth, is increasing. The Ministry of Health's Basic Health Survey 2018 (Riskesmas) revealed that the share of smokers aged 15 years and above was 33.8 per cent and the prevalence of novice smokers (aged 10-18 years) was also rising from 7.2 per cent in 2013 to 9.1 per cent in 2018, both of which contributed to 67 million active smokers in the country.

Tobacco-attributable illness, including cardiovascular diseases, cancers, chronic respiratory and premature deaths, contributed to an 82.1 per cent increase in total health loss in Indonesia over the past three decades, from 39.7 per cent in 1990 to 72.3 per cent in 2019. The economic losses associated with morbidity, disability, and premature deaths from smoking in 2019 has reached IDR 375 trillion or one-fifth of the total State Budget.

Indonesia faces a dilemma in the consumption of tobacco, which is considered a threat to public health, while tobacco farming and industry are considered public income providers. Although Indonesia is not a Party to the WHO Framework Convention on Tobacco Control (FCTC), the country has implemented some tobacco control policies that include regulation on Smoke-Free Zones, tobacco advertising, tobacco promotion and sponsorship, tobacco packaging and labelling, sales restrictions, and regulation on tax and excise.

Cigarette excise tax structures in Indonesia are considerably complex. The current structure applies 10 tiers, divided into 3 tiers for machine-rolled kretek cigarettes (SKM), 3 tiers for white cigarettes (SPM), and 4 tiers for hand-rolled kretek cigarettes (SKT). This complex structure is aimed to accommodate small-scale cigarette industries, such as firms making hand-rolled kretek cigarettes.

Nevertheless, the excise taxes on tobacco products in Indonesia are relatively low compared with other countries. This has affected cigarette affordability over the years and contributed to the increase in the prevalence of smoking. Therefore, it is envisioned that increasing tobacco excise taxes will reduce the affordability of tobacco products and the prevalence of smoking, particularly among youth, early smokers, and low-income smokers, as these segments are more price sensitive.

Apart from reducing the prevalence of smoking, tobacco excise tax increases can also be sources of government fiscal revenue. Addicted smokers are the key segment that contributes to tax revenues as the tobacco demand of this segment is relatively inelastic. This market segment is less responsive to price increase as a result of the tax increase.

The government has initiated tobacco excise tax system simplification as a policy option to improve the administrative efficiency of tax collection. In 2009-2011 the 14 tier tax system was applied and in 2012-2017 a tax increase was combined with simplifying the tax tiers system to 12 tiers. In 2017 the government introduced a Ministerial-level regulation to set out a four-year simplification roadmap for its tobacco excise tax structure (PMK No.146/2017). This roadmap is designed to gradually adjust the tax structure from 12 tiers to 5 tiers by 2021. The roadmap was effective since 2018, starting with a tax structure simplification to 10 tiers. However, to protect small-scale tobacco industries, the government revoked the excise tax simplification initiative in 2019, which resulted in the tax structure remaining unchanged in 2021 at 10 tiers.

This tier simplification will increase the tax at a higher rate, decrease the prevalence of smoking and health costs, and increase the efficiency of tax collection and government revenue. On the

other hand, this tax structure simplification is envisaged to reduce opportunities for tax avoidance and tax evasion, as well as the distortionary effect of cigarette excise.

Indonesia is also experiencing an increase in demand for healthcare services and claims to the national health insurance program (JKN) associated with tobacco-attributable diseases. The pressure on the JKN for these extra healthcare expenditures has depleted the national budgets and absorbed a large portion of the Revenue Sharing Fund of Tobacco Products Excise (DBHCHT). According to the Ministry of Finance Regulation No. 222/2017, at least 50 per cent of DBHCHT must be allocated to support health programs, including the National Health Insurance Program (JKN).

In 2021, the government amended the DBHCHT such that 50 per cent of the revenue sharing funds are to be allocated to support social welfare programs for farmers and tobacco industry workers, 25 per cent for improving health programs including COVID-19 mitigation activities, and the remaining 25 per cent for law enforcement activities used against illegal cigarettes and building centres for the tobacco products industry. These funds are distributed to tobacco-producing regions as regulated in Finance Ministry Regulation No. 7/PMK.07/2020. The ministerial Act regulates program categories that can be funded through the DBHCHT, namely: improving the quality of raw materials; industrial development; social environment development; socialization of provisions in the field of excise; and/or eradication of illegal excisable goods.

Tobacco has been an inherited cross-generation business since the 19th century, where total production by 2020 was 198 thousand tons cultivated from 205 thousand hectares. Our scoping study revealed that while smallholder tobacco farmers have relied economically on tobacco, as 80 per cent of Indonesia's tobacco products are absorbed by cigarette industries, tobacco farming has not been an optimal economic decision for farmers. Current tobacco market conditions are unfavourable and tightly controlled and monopolised by the tobacco industries. On the other hand, the tobacco industry tends to use tobacco farmers' welfare and livelihood as an argument to encounter tobacco control, despite contrary evidence in most tobacco growing regions in Indonesia.

Other tobacco processing products (Hasil Pengolahan Tembakau Lainnya or HPTL), which include tobacco harm reduction products have not been adequately regulated in Indonesia. The government's approach to reducing smoking prevalence has largely been through regulatory controls on cigarette production, advertisements, selling and consumption, as well as public awareness campaigns targeting youth, children and new smokers. The government has yet to implement a harm reduction strategy to reduce the smoking health risks of the 67 million addicted smokers in the country. The only existing regulation on the harm reduction products is the special excise tariff rate of 57 per cent, as regulated in the Ministry of Finance's act No. 156/2018, however, there are no specific regulations on the advertising, promotion, or sponsorship of these products, age restrictions, and child safety or health warnings on packaging.

This report aims to underline some findings of the scoping study associated with the socio-economic issues, productivity losses and health outcomes related to tobacco consumption in Indonesia. The report also proposed the development of transformative roadmaps of the national tobacco control program and the provision of the technical inputs for the policy formulation.



## Policy gaps and areas of focus for the next phase program.

The next phase program is the continuation of the scoping study that will address the policy gaps identified during this study, and will comprehensively focus on consumers' behaviour, market, as well as government policies concerning the cigarettes, e-cigarette, and harm reduction products as an alternative to reduce health risks of the 67 million active smokers in the country. Below are some policy gaps identified during this scoping study:

- Accelerating the simplification of cigarette tax tier structures has not been the focus of the government, while complex tax tiers can encourage downward substitution to lower-priced products, hence deterring smoking cessation initiatives.
- The argument to adopt such a complex cigarette tax structure to protect employment in tobacco manufacturing and farming seems contrary to the fact that tobacco manufacturing represents only a small share (0.34 per cent) of Indonesia's total employment in the manufacturing sector and 5.3 per cent of jobs in the manufacturing sector, compared to other sectors such as food (27.43 per cent), garments (11.43 per cent), and textiles (7.90 per cent). The perceived economic gains from the tobacco industry also fall short of the health and economic costs of tobacco consumption.
- The national tobacco control strategy has largely been through regulatory controls and public awareness campaigns on cigarette consumption, but less on electronic nicotine delivery systems (ENDS) or other tobacco processing products (HPTL) including harm reduction products (HRP). As a result, standards and regulations of the HPTL have not adequately addressed these products in the Indonesian market.
- Existing national tobacco control policies such as regulations on smoke-free zones, tobacco advertising, tobacco promotion, packaging, labelling and excise tax have put more emphasis on reducing smoking prevalence among price-sensitive segment groups such as youth, children, early smokers, and low-income smokers, but disregard the health issues of 67 million addicted smokers.
- Existing national tobacco control policies have not fully addressed (1) the welfare of tobacco farmers, (2) strategies to strengthen tobacco farmers' bargaining power in the market and (3) strategies to reduce farmers' dependence on a tobacco industry that dictates the prices and quantity of tobacco leaves that the industry is willing to buy.
- The implementation of national tobacco control regulation in Indonesia is not progressing steadily due to factors underlying the political structure of the decentralised government, including lack of coordination, poor accountability, and competing interests between government sectors. However, the government has yet to reform the national tobacco control strategy to consider the factors stalling the progress of the tobacco control program and to include alternative harm reduction strategies in the equation, as well to leveraging connections with tobacco company networks to support the research and development of the harm reduction products.
- The existing mechanism for the redistribution and utilisation of DBH-CHT has not been fully implemented and followed by subnational government levels following the Ministry of Finance regulation No. 7/2020, which is to fund programs and activities in improving the quality of raw materials, industrial and social environment development, excise policy, and the eradication of illegal excisable goods. A large portion of these budgets has been used to fund the social environment sector, which includes the health sector, and an exceptionally low portion has been used to fund programs such as improving the quality of raw materials and industrial development.

- Regardless of the adverse effect of smoking on health and productivity, the most recent cigarette tax increase in February 2021 (as one of the tobacco control measures) is far below the national maximum threshold of tobacco excise tax (57 per cent), and some cigarette categories like SKT are not even subject to tax increase. On the other hand, excise taxes on harm reduction products, such as heated tobacco products, are set at the maximum threshold of 57 per cent despite claims of their effectiveness in reducing the risks of tobacco-related diseases.

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# INTRODUCTION

1. **The scoping study was conducted to provide a range of information associated with the socio-economic issues, productivity losses and health outcomes related to tobacco consumption in Indonesia.** It includes the formulation of an advisory committee, which aims to develop transformative roadmaps of the tobacco control program and provide technical inputs for the policy framework. The committee consists of a Committee Chairman (consortium representative), representatives of the Indonesian Development Planners Association (PPPI) and representatives from the Ministry of Home Affairs, the Ministry of Agriculture, the Ministry of Health, the University of Indonesia (UI), Sahid University and the Prolitera Foundation. PPPI is an independent professional organisation that takes the role of structuring liaisons with relevant government agencies, educational institutions, and businesses, formulating the draft roadmaps of transformative tobacco control programs that complement the existing national tobacco control strategy. This committee has also completed its initial agenda to increase public awareness of tobacco risk reduction through media training events, writing competitions, sports competitions and healthy lifestyle promotion.
2. **The report of the scoping study frames the general and current tobacco economic ecosystem outlook in Indonesia,** which includes consumption rates, smoking trends, demographics, health expenditures related to smoking-attributable diseases, mortality rates, productivity losses, and economic costs. This report also highlights government revenue from excise taxes, tobacco farmers and industry labour, the use of other tobacco processing products, and existing government legislation. Input into tobacco control policy formulation will be developed by the advisory committee in the form of draft roadmaps, based on the findings of this study and secondary data collected during documentary research.
3. **This report is structured in seven chapters, following an introduction providing an overview of this scoping study.** Tobacco economic ecosystem; supply and demand are discussed in the first chapter. The smoking prevalence, economic costs and health outcomes are discussed in the second chapter. The third chapter, "Tobacco Tax and Excise," discusses Indonesia's cigarette tax and excise rate system, and its impacts on cigarette prices, smoking prevalence rates, and cigarette consumption behaviour. The fourth chapter, "The Tobacco Excise Revenue Sharing Funds (DBHCHT)", reports the results of a desk study criticizing DBHCHT regulation and its implementation, as well as discussing the provision of health facilities for smoking cessation, socialization and health risk campaigns. The fifth chapter, "Field study reports," discusses study findings related to the tobacco economic ecosystem and farming in East Lombok and Temanggung regencies, as well as the use of harm reduction products in Jakarta. The sixth chapter, "Other processing tobacco products as electronic nicotine delivery systems", discusses the progress and behaviour of electronic nicotine delivery systems users, their consumption levels, impacts on smoking prevalence and switching, and government regulations on excise tax. The closing chapter "Draft roadmap on the tobacco control policy and strategy", discusses inputs for policy formulation around the national tobacco control program drafted by the advisory committee.
4. **The situation in the field during the scoping study was considered difficult due to the COVID-19 pandemic,** yet field research teams were able to conduct online and offline interviews with respondents. Interviews in tobacco production areas aimed

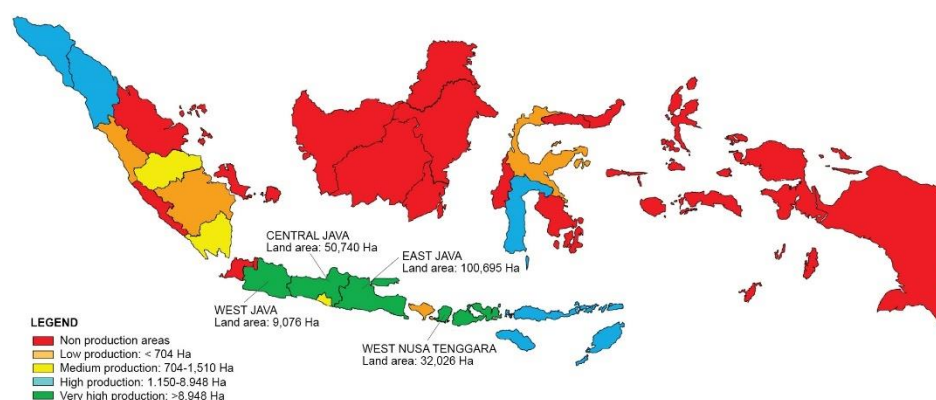
to clarify different aspects of tobacco production, farming and consumers in local tobacco trading ecosystems. The study on HPTL including e-cigarettes was conducted in Jakarta. Data was collected via questionnaires and focus group discussions with selected respondents in the area.

# 1.TOBACCO ECONOMIC ECOSYSTEM; SUPPLY AND DEMAND

## 1.1. Tobacco farming and employment opportunity

5. **Tobacco farming in Indonesia is spread across 15 provinces and is centralised in East Java, Central Java, and West Nusa Tenggara (NTB).** Data from the Ministry of Agriculture revealed that the total land devoted to tobacco farming across the archipelago had been slightly increased from 198.657 Ha in 1975 to 204.961 Ha in 2020, and it was estimated that in 2020 East Java occupied around 49 per cent of the arable land, followed by Central Java (24,7 per cent) and West Nusa Tenggara (15,6 per cent)<sup>1</sup>. Overall, tobacco farming is dominated by smallholder farmers that contributed to 99.96 per cent of farming areas, with the rest of the areas occupied by State-owned plantations (0,04 per cent)<sup>2</sup>. The smallholder farmers refer to the tobacco plantations with no legal entities and are managed by a small group of farmers or family members.

**Figure 1: Indonesia tobacco production land areas 2018**



Source: Directorate General of Estates, Ministry of Agriculture (2019)

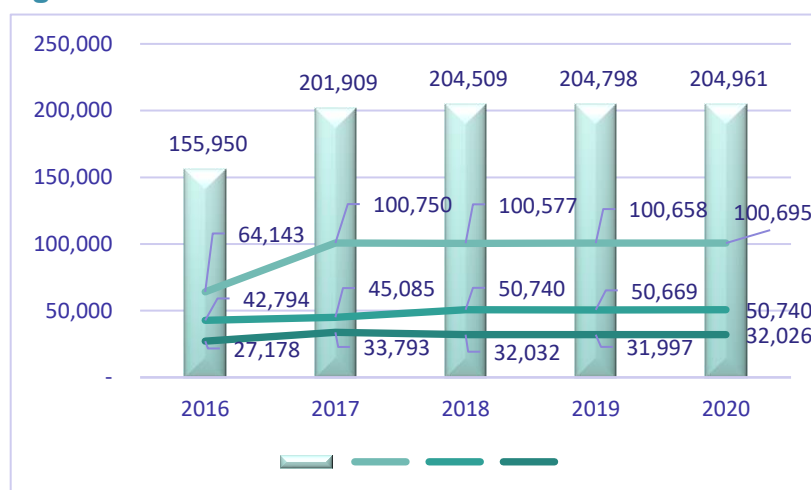
6. **Tobacco smallholder farmers in Indonesia grow all types of tobacco leaf, including local and introductory leaves.** Virginia, White Burley and Oriental are the introductory leaves, which do not originate from Indonesia but have been planted primarily in three provinces: East Java, West Nusa Tenggara, and Bali. Virginia has been the most favourable leaf grows across tobacco production regions, despite its requirement for more labours in the curing process, compared to other variants such as

<sup>1</sup> Gartina, D., & Sukriya, R. L. L. (2019). Tree Crop Estate Statistics Of Indonesia 2018-2020; Tobacco, Secretariate of Directorate General of Estates, Ministry of Agriculture, p.20-24

<sup>2</sup> Gartina, D., & Sukriya, R. L. L. (2019). Tree Crop Estate Statistics Of Indonesia 2018-2020; Tobacco, Secretariate of Directorate General of Estates, Ministry of Agriculture, p.7

White Burley, Oriental and local variants. In most cases Virginia leaf has a stronger market and higher prices, depending on planting time and areas, usage, and quality grade. Local leaves, on the other hand, are less favourable and are named after their planting regions, such as Temanggung tobacco, Madura tobacco, Paiton tobacco, etc. Generally, local leaves are too inconsistent or poor in quality to meet the requirements of the cigarette industry<sup>3</sup>. In Indonesia Tobacco is used as the basic component of cigarettes, including kretek cigarettes, Rolled Your Own (RYO) cigarettes, and the cigar industry<sup>4</sup>.

**Figure 2: Tobacco arable land in Indonesia 2016-2020**



Source: Directorate General of Estate Crops, Ministry of Agriculture (2020)

7. **Tobacco leaf type and quality grade define the tobacco price.** In Indonesia, middlemen and the tobacco industry determine the quality grade and prices of tobacco leaf at a practical level. Smallholder farmers have a weak bargaining position over price and grade, but there has been no government intervention in the grading process and price determination. Middlemen are the largest tobacco leaf buyers, accounting for two-thirds of tobacco sales, while cigarette company warehouses are the second-largest buyers. In some cases, farmers also sell their tobacco leaves directly to cigarette companies<sup>5</sup>. Farmers who have direct access to sell directly to companies are bound by a formal or informal contract with the industry. These farmers receive a consistent number of physical inputs and capital and in turn, the farmers must sell their tobacco leaf to the industry at dictated prices, while the selling price will include deductions of input costs<sup>6</sup>.
8. **Smallholder tobacco farmers in Indonesia have been experiencing considerably high inputs costs for growing tobacco.** The most common inputs include chemical pesticides, fertilizer (organic and non-organic), farming equipment rentals,

<sup>3</sup> Audrine, P, (2020), A Policy Perspective on Tobacco Farming and Public Health in Indonesia; Policy Paper no.29, Center for Indonesian policy study, Jakarta

<sup>4</sup> Djajadi, D, (2015), Tobacco Diversity in Indonesia; A review, *Journal of Biological Researches*: 20 (27-32)

<sup>5</sup> Sahadewo, G. A., et al, (2020), In-and-Out of Tobacco Farming: Shifting Behavior of Tobacco Farmers in Indonesia, *International Journal of Environmental Research and Public Health*, <https://doi.org/10.3390/ijerh17249416>.

<sup>6</sup> Sahadewo GA, Drope J, Witoelar F, Li Q, Lencucha R. (2020). The Economics of Tobacco Farming in Indonesia: Results from Two Waves of a Farm-Level Survey, *Tobacconomics, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago*, p.23



and firewood, which is largely used to cure Virginia tobacco leaf<sup>7</sup>. Apart from these physical inputs associated with tobacco farming, farmers are also burdened with higher opportunity costs associated with hired labours, household labour hours and child labour than non-tobacco farming. However, many tobacco farmers underestimate these costs and exclude them in each growing season calculation. As the result, many farmers find that actual cultivating costs are far higher than estimated costs, and consequently get smaller profits from tobacco sales<sup>8,9</sup>.

9. **Clove, the main ingredient for Kretek cigarettes after tobacco leaf, in 2020 is planted over a total of 561,724 Ha land across the archipelago.** Clove farming is more dispersed, but more than two-thirds of the supply originates from Sulawesi Island and East Java, Central Java, West Java, and Maluku<sup>10</sup>. Cloves are an Indonesian native plant that was originally an export commodity. In the past decade, total export volume has fluctuated and the highest total export was in 2018 (20,246 tonnes)<sup>11</sup>, but as kretek industry requirements increased, cloves were also imported to meet the market demand<sup>12,13</sup>.
10. **The high input costs of growing tobacco, combined with insufficient capital to grow other crops and run other businesses, and farmers' dependence on the tobacco industries, make tobacco farming in Indonesia a challenging venture.** Many tobacco farmers are even prone to lose or get minimal margins at some point in time when all intangible costs are incorporated<sup>14</sup>. A WHO study conducted in 2017 reveals that widespread poverty among tobacco farmers has created issues around food security and has led to higher reliance on the government's social assistance and health care benefits as well as encouraging child labour<sup>15</sup>. Child labour is more prevalent among the poor farming families and encourages children to work in tobacco growing to help fulfil basic living requirements<sup>16</sup>.

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<sup>7</sup> Sahadewo GA, Drope J, Witoelar F, Li Q, Lencucha R. (2020). The Economics of Tobacco Farming in Indonesia: Results from Two Waves of a Farm-Level Survey, Tobacconomics, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, p.27

<sup>8</sup> Sahadewo GA, Drope J, Witoelar F, Li Q, Lencucha R. (2020). The Economics of Tobacco Farming in Indonesia: Results from Two Waves of a Farm-Level Survey, Tobacconomics, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, p.27-42.

<sup>9</sup> Sahadewo GA, Drope J, Li Q, et al (2020), Tobacco or not tobacco: predicting farming households' income in Indonesia, *Tobacco Control Published Online First*, doi: 10.1136/tobaccocontrol-2019-055274.

<sup>10</sup> Dhani, G., & Sukriya, R. L. L. (2019). Tree Crop Estate Statistics Of Indonesia 2018-2020; Clove, Secretariate of Directorate General of Estates, Ministry of Agriculture, p.7-11

<sup>11</sup> Dhani, G., & Sukriya, R. L. L. (2019). Tree Crop Estate Statistics Of Indonesia 2018-2020; Clove, Secretariate of Directorate General of Estates, Ministry of Agriculture, p.21;52

<sup>12</sup> Pratama, A. P., Darwanto, D. H., & Masyhuri, M. (2020). Indonesian Clove Competitiveness and Competitor Countries in International Market, *Economics Development Analysis Journal*, 9(1), p.41-44.

<sup>13</sup> Nurhayati, E., Hartoyo, S. and Mulatsih, S. (2018), Analysis of Indonesian Clove Export Development', *Jurnal of Economic and Development Policy*, 7(1), pp. 21–42.

<sup>14</sup> Sahadewo, G. A., et al, (2020), In-and-Out of Tobacco Farming: Shifting Behavior of Tobacco Farmers in Indonesia, *International Journal of Environmental Research and Public Health*, p.11, <https://doi.org/10.3390/ijerh17249416>

<sup>15</sup> World Bank, (2017), The economics of tobacco farming in Indonesia: health, population, and nutrition global practice. WBG Global Tobacco Control Program. Washington, DC

<sup>16</sup> Hermanus, E, et al, (2020), Diagnostic Study of Child Labour in Rural Areas; with Special Emphasis on Tobacco Farming, SMERU Research Report, The SMERU Research Institute, Jakarta.

11. **Tobacco farming is considerably labour intensive, particularly at harvest and post-harvest times compared with cultivating other crops**<sup>17</sup>. A two-waves study conducted by Sahadewo et al (2020) on 1350 farmers in the major tobacco production regions revealed that farming households spent more time on the farm than non-tobacco farmers. To assist in activities on-farm and processes during these peak periods, farmers normally employ external workers, including adults and children on daily basis. Adult male labours normally have significantly higher participation on farms during the cultivation process compared with their female counterparts, who are focused on the post-harvest process. Child labours are mostly involved in light works to help adult workers. Some children work for no compensation, either because they work for their own families or exchanged labour with other families in their communities<sup>18</sup>. Overall, the Indonesian statistic data in 2020 indicated that tobacco farming is not a major contributor to the agricultural sector, only accounting for 0,65 per cent total farming area<sup>19</sup>.
12. **Indonesia has implemented strict laws to regulate child labours**, which regulate that the minimum age for employment nationwide is 15 YO<sup>20</sup>, but children ages 13-15 YO may still be permitted to participate in light works that do not interrupt physical, mental, or social development, while participation in hazardous work is prohibited to all under 18 YO<sup>21</sup>. However, a baseline study conducted by SMERU Research Institute in West Nusa Tenggara and East Java revealed that there was an increase in child labour aged 5-17 YO involved in tobacco farming during the post-harvesting period and 95,7 per cent of them have ever been involved in hazardous works<sup>22</sup>. These children are often in the field instead of school to contribute to families' income. A study conducted by Human Rights Watch revealed that there is a strong correlation between children participating in tobacco farming and family poverty. Children employed on the farm to help tobacco farming families gain more savings from hiring non-household workers regardless of the inherent hazardous work in the farms, such as direct contact with chemical substances, nicotine through tobacco plants and leaves, and extreme heat<sup>23</sup>.

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<sup>17</sup> Sahadewo GA, Drope J, Witoelar F, Li Q, Lencucha R. (2020). The Economics of Tobacco Farming in Indonesia: Results from Two Waves of a Farm-Level Survey, Tobacconomics, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, p.27-42.

<sup>18</sup> Human Rights Watch (2016), The Harvest is in My Blood: Hazardous Child Labor in Tobacco Farming in Indonesia; Human Rights Watch: Amsterdam, The Netherlands.

<sup>19</sup> Statistics Indonesia (2021), Luas Areal Tanaman Perkebunan Rakyat Menurut Jenis Tanaman 2018-2020, retrieved from: <https://www.bps.go.id/indicator/54/770/1/luas-areal-tanaman-perkebunan-rakyat-menurut-jenis-tanaman.html>

<sup>20</sup> Government of Indonesia, (1999), Act of the Republic of Indonesia No. 20 of 1999, Concerning Minimum Age for Admission to Employment, retrieved from: [https://jdih.kemnaker.go.id/data\\_wirata/1999-1-2.pdf](https://jdih.kemnaker.go.id/data_wirata/1999-1-2.pdf)

<sup>21</sup> Ministry of Manpower (2003), Act of the Republic of Indonesia No. 13 Concerning Manpower.

<sup>22</sup> Andrina, M, et al, (2020), Baseline Study on Child Labour in Tobacco-Growing Areas in Indonesia, SMERU Research Report, The SMERU Research Institute, Jakarta, p.11-13

<sup>23</sup> Human Rights Watch, (2016). The harvest is in my blood: hazardous child labor in tobacco farming in Indonesia, HRW, Amsterdam, Retrived from: [www.hrw.org/sites/default/files/report\\_pdf/indonesia0516\\_brochure\\_web.pdf](http://www.hrw.org/sites/default/files/report_pdf/indonesia0516_brochure_web.pdf)

13. **The majority of Indonesian tobacco smallholder farmers are trapped in cycles of poverty<sup>24</sup>, do not have enough savings to set up tobacco farming, which frequently pushed into debt and loan seeking<sup>25</sup>.** Access to financial loans and credit facilities is essential to the farmers considering their lack of capital for cultivating tobacco<sup>26</sup>. In most cases, these loans are also used to pay off other non-tobacco farming expenses such as land hire, farming inputs, schooling, investing in other businesses, meeting daily household expenses, as well as health expenses<sup>27</sup>
14. **Due to economic concerns, a small number of farmers are considering switching to cultivating alternative crops.** A study conducted by World Bank on tobacco farming in Indonesia revealed that the economic return has been the main reason for these tobacco farmers to switch to alternative crops, apart from other reasons such as weather conditions and the attractiveness of other crops. A large majority of farmers continue to grow tobacco, and are reluctant to move beyond their comfort zones and expertise in growing tobacco and have been in the industry for many years and perceive that it is still a profitable source of income. Land and markets have also been available to support their businesses<sup>28</sup>.

## Conclusion

Tobacco farming in Indonesia is dominated by smallholder farmers spread out across 15 provinces within the archipelago. This farming is centralised in East Java, Central Java, and West Nusa Tenggara (NTB), with total tobacco farming land slightly increasing each year. The local tobacco variants grown in Indonesia vary depending on planting regions, but in general smallholder farmers grow both local and introductory leaves, including Virginia, Oriental, and White Burley.

In Indonesia, tobacco prices are determined by tobacco leaf type and quality grade. The middlemen and the tobacco industry also play a significant role in determining the quality grade and prices of tobacco leaf, while farmers have no bargaining power over price and grade. Most farmers are also bound by contracts with the industry that lend capital and provide seeds and fertilizers. With considerably high input costs for growing tobacco, coupled with unpredictable weather, and farmers' dependence on the tobacco industry, tobacco farming in Indonesia is often challenging. In most cases, tobacco smallholder farmers are trapped in cycles of poverty but have very little interest in switching to other alternative crops due to a lack of knowledge and support from the government, industry and community.

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<sup>24</sup> Tobacco Industry Watch (2017), Indonesian tobacco farmers caught in rhetoric, Tobacco Industry Watch, Southeast Asia Tobacco Control Alliance.

<sup>25</sup> World Bank, (2017), The economics of tobacco farming in Indonesia: health, population, and nutrition global practice. WBG Global Tobacco Control Program. Washington, DC

<sup>26</sup> Appau, A., (2019), Why Do Farmers Grow Tobacco? A Qualitative Exploration of Farmers Perspectives in Indonesia and Philippines, *International Journal of Environmental Research and Public Health*, doi:10.3390/ijerh16132330.

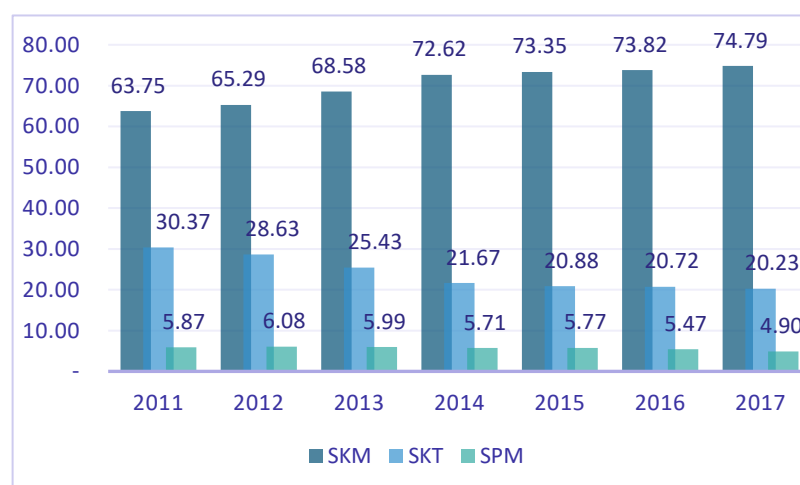
<sup>27</sup> Sahadewo GA, Drope J, Witoelar F, Li Q, Lencucha R. (2020). The Economics of Tobacco Farming in Indonesia: Results from Two Waves of a Farm-Level Survey, *Tobacconomics, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago*, p.42

<sup>28</sup> World Bank, (2017). The economics of tobacco farming in Indonesia: health, population, and nutrition global practice. WBG Global Tobacco Control Program. World Bank Group, Washington, DC:

## 1.2. The landscape of the tobacco industry and its contribution to the economy

15. **Cigarettes in Indonesia are classified by how they are produced and the ingredients used.** Based on this classification, cigarette production includes machine-rolled kretek cigarettes (SKM), white cigarettes (SPM), hand-rolled kretek cigarettes (SKT), hand-rolled kretek filtered cigarettes (SKTF), hand-rolled white cigarettes (SPT), hand-rolled white filtered cigarettes (SPTF), shag (TIS), hand-rolled corn husk cigarettes (KLB), and rhubarb cigarettes (KLM)<sup>29</sup>. However, white cigarettes (SPM) and kretek cigarettes made of tobacco and cloves (SKM and SKT) are the most popular cigarettes produced by large corporations in Indonesia. Of these three cigarette types, in 2017 SKM had the largest market share (74.79 per cent), followed by SKT (20.23 per cent), and SPM (4.90 per cent)<sup>30</sup>.

**Figure 3: Market share by cigarette types in Indonesia in 2011-2017**



Source: Centre for Indonesian Policy Study, Policy paper no.29 (2020)

16. **The latest data the National Social Economy Survey (SUSENAS) in 2020, released by Statistics Indonesia also show similar trends in cigarette consumption.** The weekly average consumption and expenditure of the cigarette types both in urban and rural areas have been dominated by SKM, followed by SKT and SPM. In urban areas, the average consumption and expenditure of SKM reach 11,827 sticks (IDR 13.660), while in rural areas consumption is slightly below that of urban areas, at 12,981 sticks (IDR 13.122)<sup>31</sup>.

<sup>29</sup> World Bank, (2017). Cigarette affordability in Indonesia, 2011-2017, World Bank Group, Washington, DC.

<sup>30</sup> Audrine, P. (2020). (issue brief). A Policy Perspective on Tobacco Farming and Public Health in Indonesia, No.29, (pp. 13–14). Jakarta: CIPS Indonesia..

<sup>31</sup> Statistics Indonesia (2020), Pengeluaran untuk Konsumsi Penduduk Indonesia, Maret 2020; Berdasarkan hasil SUSENAS Maret 2020, Statistics Indonesia, Jakarta, p.62, retrieved from <https://www.bps.go.id/publication/2020/11/02/2d7c91e53ab840a301689f34/pengeluaran-untuk-konsumsi-penduduk-indonesia-maret-2020.html>

**Table 1: Weekly average consumption and expenditure per capita by type of cigarettes in urban and rural areas 2020**

| No | Cigarette types | Urban Areas |          |             | Rural Areas |          |             |
|----|-----------------|-------------|----------|-------------|-------------|----------|-------------|
|    |                 | Unit        | Quantity | Value (IDR) | Unit        | Quantity | Value (IDR) |
| 1  | SKM             | Sticks      | 11.827   | 13.660      |             | 12.981   | 12.122      |
| 2  | SKT             | Sticks      | 1.771    | 1.779       |             | 2.975    | 2.679       |
| 3  | SPM             | Sticks      | 1.167    | 1.480       |             | 0.818    | 847         |

Source: SUSENAS 2020

17. **77 per cent of the cigarette market in Indonesia is dominated by five major private corporations.** HM Sampoerna (of which a 92.5 per cent share is owned by Phillip Morris Indonesia) is the market leader with 28,8 per cent market share in 2020<sup>32</sup> and followed by Gudang Garam with a 26,6 per cent market share in the same year<sup>33</sup>. The 2018 data showed that Djarum with 12,7 per cent market share, Bentoel, the subsidiary of British American Tobacco, with a 7 per cent market share, and Najorono Tobacco with a 4,2 per cent market share<sup>34</sup>. While the top five players still enjoy a margin from the increasing sales, by increasing productivity and selling cigarettes at affordable prices, the number of small and medium-size industry players declined from 2,540 in 2011 to 487 in 2017 due to the gradual increase of tobacco excise taxes<sup>35</sup>.

18. **Importing is one option for Indonesia to satisfy domestic needs for tobacco leaf.** Indonesia is importing Virginia, Oriental, and White Burley tobacco leaves as these variants have not been widely produced in-country<sup>36</sup>. China has been the leading country of origin for raw tobacco imports in Indonesia, followed by Brazil and Zimbabwe. In 2020 total imports from China reached around 43.000 tonnes, Brazil 21.000 tonnes, and Zimbabwe 10.000 tonnes<sup>37</sup>. The volume of imports depends on the level of local supplies. When the industry's stocks are at a low level due to low local production, this will be followed by greater import levels. For instance, in 2010 Indonesia experienced its lowest production levels during the period from 2007-2017, which was 135,700 tonnes. This production level led to an increase in imports in 2011 and 2012. The same situation happened in 2016, when production declined to 126,728 tonnes, resulting in a rise in imports to 119,545 tonnes in 2017<sup>38</sup>.

<sup>32</sup> PT Hanjaya Mandala Sampoerna, Tbk, (2021) HM Sampoerna Annual Report 2020, retrieved from [https://www.sampoerna.com/resources/docs/default-source/sampoerna-market-documents/annual-reports---en/annual-report-2020.pdf?sfvrsn=c0cf95b4\\_2](https://www.sampoerna.com/resources/docs/default-source/sampoerna-market-documents/annual-reports---en/annual-report-2020.pdf?sfvrsn=c0cf95b4_2)

<sup>33</sup> PT. Gudang Garam, Tbk, (2021), Gudang Garam Annual Report 2020, retrieved from [https://www.gudanggaramtbk.com/media/uploads/files/GGRM\\_AR\\_2020\\_FINAL.pdf](https://www.gudanggaramtbk.com/media/uploads/files/GGRM_AR_2020_FINAL.pdf)

<sup>34</sup> Campaign for Tobacco-Free Kids (2020), The toll of Tobacco in Indonesia, Washington, DC, retrieved from <https://www.tobaccofreekids.org/problem/toll-global/asia/indonesia>

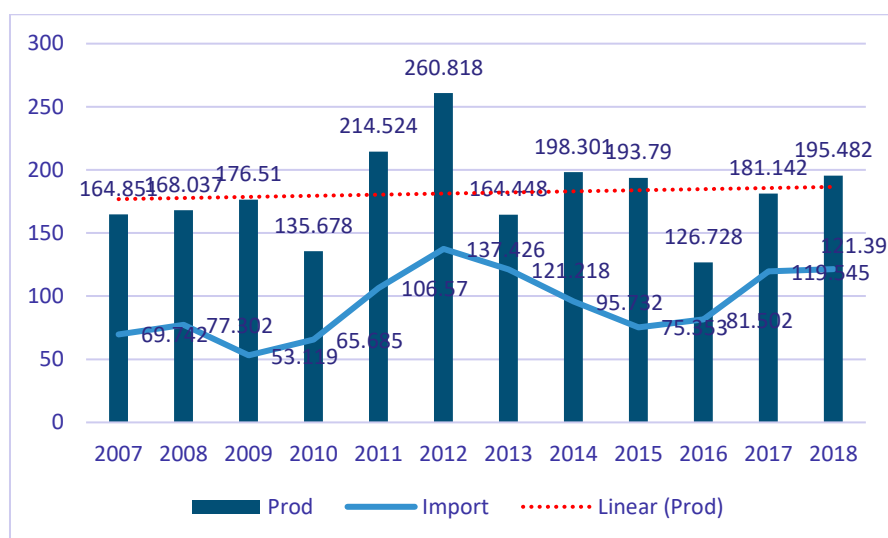
<sup>35</sup> Ministry of Industrial. (2018), Cigarette Industry Plan Under Scrutiny. Retrieved from <https://kemenperin.go.id/artikel/19983/Cigarette-industry-plan-under-scrutiny>

<sup>36</sup> Dhani, G., & Sukriya, R. L. L. (2019). Tree Crop Estate Statistics Of Indonesia 2018-2020; Tobacco, Secretariate of Directorate General of Estates, Ministry of Agriculture, p.13-17

<sup>37</sup> Nurhayati-Wolff, H, (2021), Import volume of tobacco in Indonesia in 2020, by country, Statista, NY.

<sup>38</sup> Dhani, G., & Sukriya, R. L. L. (2019). Tree Crop Estate Statistics Of Indonesia 2018-2020; Tobacco, Secretariate of Directorate General of Estates, Ministry of Agriculture, p.20-21

**Figure 4: Tobacco production and import levels 2007-2018 (tonnes)**



Source: Directorate General of Estate Crops, Ministry of Agriculture (2020)

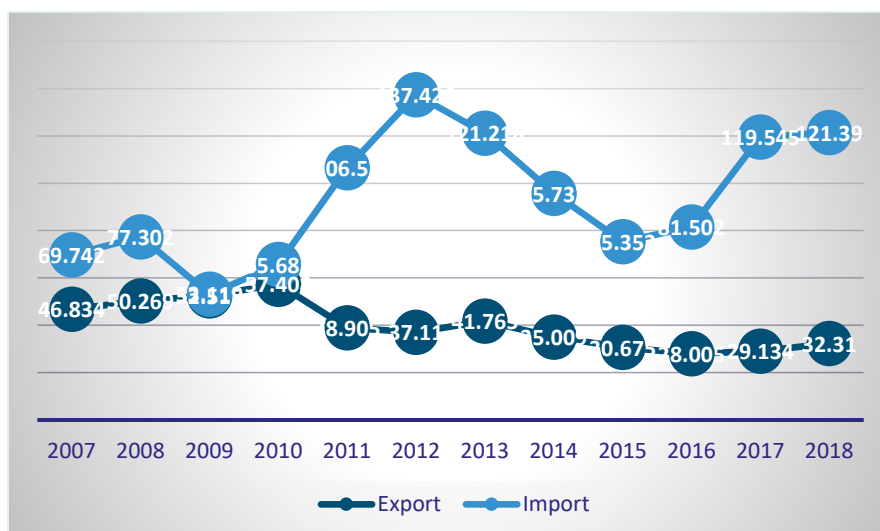
19. **Among the introductory variants of imported tobacco leaves, Virginia has been the most favourable variant and is in high demand.** Although these three variants are also planted in Indonesia, domestic production cannot meet market demand, and consequently importing is one strategy used to address the supply shortage. In 2015 Virginia made up 74 per cent of total tobacco imports, followed by 17 per cent for Oriental and 9 per cent for White Burley<sup>39</sup>.
20. **Indonesian tobacco exports are far below their import quantity, both by volume and by value.** During 2010-2018 total tobacco export value decreased by around 0.15 per cent, with the largest decrease during 2013-2016 by around 35.59 per cent. However, the export value during 2016-2018 started to increase marginally from USD 128,550 to USD 169,055<sup>40</sup>. As of 2017, the US and Sri Lanka were the leading countries by raw tobacco imports from Indonesia, representing 2827 tonnes and 1086 tonnes, respectively. Other countries as Indonesia export destination include Belgia (992.7 tonnes), Netherland (871.8 tonnes), and the Dominican Republic (753,3 tonnes)<sup>11</sup>.

<sup>39</sup> Ahsan A, Wiyono NH, Veruswati, M. (2019), Review of tobacco leaf import in Indonesia status challenges and policies, UI Publishing.

<sup>40</sup> Dhani, G., & Sukriya, R. L. L. (2019). Tree Crop Estate Statistics Of Indonesia 2018-2020; Tobacco, Secretariate of Directorate General of Estates, Ministry of Agriculture, p.21



**Figure 5: Tobacco export and import levels 2007-2017 (tonnes)**



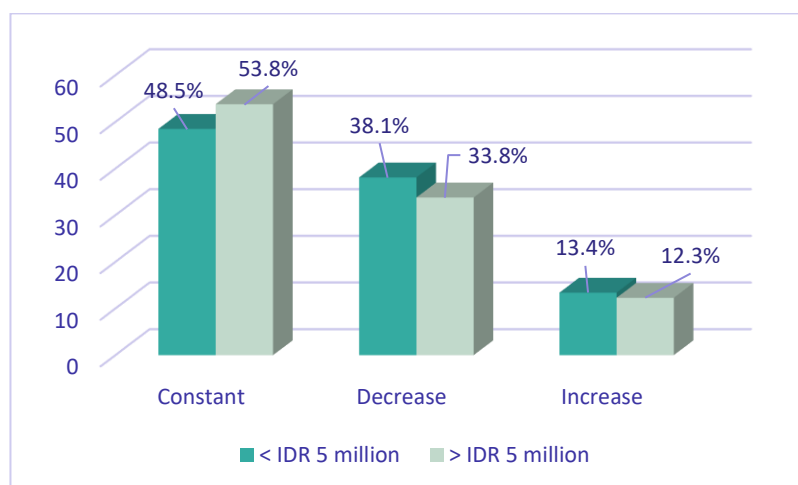
Source: Directorate General of Estate Crops, Ministry of Agriculture (2020)

21. **Decreases in cigarette consumer purchasing power due to cigarette excise tax increases and the economic impacts of the COVID-19 pandemic have led to the growing preference of active smokers for low price products, smaller packages, and higher tar.** This situation has driven the tobacco industry, such as SKM producers, to work on product development to meet market requirements such as to increase the production of smaller pack products. This in turn has led to a growing preference for high-tar SKM and SKT products. In 2020 SKM and SKT also dominated cigarette production in Indonesia. In this year SKM production reached 163,4 billion sticks, followed by SKM IIB 40,2 billion sticks, and SKM IIA 13,5 billion sticks. While SKT III production reached 27,7 billion sticks, SKT IB 26,9 billion sticks, and SKT II 4,4 billion sticks<sup>41</sup>. A recent study conducted by the National Commission of Tobacco Control (KOMNASPT) involving 612 middle-low incomes respondents in 25 provinces, exploring the relationships between the COVID-19 pandemic and cigarette consumption, showed a similar trend. The study revealed a significant number of respondents, with income group < IDR 5 million and > IDR 5 million, reported no changes in cigarette consumption (represented by 48,5 per cent and 53,8 per cent respectively). There was a smaller percentage of respondent reported reduce consumption, which represented by 38,1 per cent of the income group < IDR 5 million and 33,8 respondent with income > IDR 5 million, while 13,4 per cent of income group of < IDR 5 million and 12,3 per cent > IDR 5 million reported increased consumption during the Covid-19 pandemic<sup>42</sup>.

<sup>41</sup> Jayani, D. H., (2020) 298,4 Miliar Batang Rokok Diproduksi pada 2020, databoks, katadata Indonesia, Jakarta, Retrieved from <https://databoks.katadata.co.id/datapublish/2020/12/11/2984-miliar-batang-rokok-diproduksi-pada-2020>

<sup>42</sup> Bayu, D.J. (2021) Mayoritas Perokok Tak Kurangi Konsumsi Rokok saat Pandemi, databoks, katadata Indonesia, Jakarta. Retrieved from: <https://databoks.katadata.co.id/datapublish/2021/02/17/mayoritas-perokok-tak-kurangi-konsumsi-rokok-saat-pandemi>

**Figure 6: Cigarette consumption during COVID-19 pandemic (%)**



Source: National Commission of Tobacco Control (2021)

22. **Although the cigarette industry may be seen as economically significant to the Indonesian economy, in terms of both state revenue and employment,** data from Statistics Indonesia in 2019-2020 shows that the tobacco industry only contributed 0.34 per cent of total employment in the manufacturing sector. This figure slightly decreased from 0.36 per cent in 2018<sup>43</sup>. The 0.34 per cent of total employment was represented by 5.98 million total workers in the tobacco industry, that consist of 4,28 million in the tobacco manufacturing and distribution sectors, and 1.7 million in the tobacco farming sector<sup>44</sup>. However, the tobacco industry uses the perspective of the labour force involved in the tobacco business to exert strategic influence on government policymaking and to obtain continuous government support for national tobacco production<sup>45</sup>.

23. **During the past decades, Indonesian tobacco import has been higher than export, particularly for Virginia, Oriental and White Burley variants,** due to the increase of the market demands, while at the same time domestic production was below its capacity to meet the demand<sup>46</sup>. Of the total 121.390 thousand tons of tobacco import in 2018, Virginia accounted for 62 per cent (75.397 thousand tons), while Oriental and white Burley imports were much lower at 8.85 and 7.74 per cent respectively<sup>47</sup>

<sup>43</sup> Statistics Indonesia (2020), Proporsi Tenaga Kerja pada Sektor Industri Manufaktur (Persen), 2019-2021, Statistics Indonesia, Jakarta, Retrieved from: <https://www.bps.go.id/indikator/9/1217/1/proporsi-tenaga-kerja-pada-sektor-industri-manufaktur.html>

<sup>44</sup> Ministry of Industry (2019), Industri Hasil Tembakau Tercatat Serap 5,98 Juta Tenaga Kerja, retrieved from <https://kemenperin.go.id/artikel/20475/Industri-Hasil-Tembakau-Tercatat-Serap-5,98-Juta-Tenaga-Kerja>

<sup>45</sup> Miftahudin, H, (2020) Industri Hasil Tembakau Harapkan Perlindungan Pemerintah, Medcom.id, Retrieved from <https://www.medcom.id/ekonomi/bisnis/4KZR4BqK-industri-hasil-tembakau-harapkan-perlindungan-pemerintah>

<sup>46</sup> Ahsan, A et al (2020), Comparison of tobacco import and tobacco control in five countries: lessons learned for Indonesia, Globalization and Health, 16:65, <https://doi.org/10.1186/s12992-020-00595-y>

<sup>47</sup> Dhani, G., & Sukriya, R. L. L. (2019). Tree Crop Estate Statistics Of Indonesia 2018-2020; Tobacco, Secretariate of Directorate General of Estates, Ministry of Agriculture, p.13-17

24. **There are substantial concerns regarding the effectiveness of government tobacco control programs.** Indonesian tobacco policies appear to be uncoordinated between regulators. The Ministry of Agriculture has been implementing a Virginia tobacco integrated cultivation strategy that focuses on the expansion of farming lands, with the target of 34.710 Ha within 6 years (2019-2024) and implementation of technology for the Virginia tobacco intensification and extensification strategy. These strategies aim to increase domestic production capacity up to around 67.863 tons in 2024, which is expected to reduce 73 per cent of total imports<sup>48</sup>. The Ministry of Industry has a Tobacco Product Industry Roadmap 2015–2020 to guarantee supplies of tobacco and cloves for domestic production, control the growth of cigarette production at around 5 – 7.4 per cent per year, and increase mutual partnerships between the cigarette industry and tobacco farmers<sup>49</sup>. Meanwhile, Bappenas is fostering the tobacco processing industry in Java and Bali islands, reduce risks of unhealthy lifestyles and non-communicable diseases particularly on children, and fostering national tobacco control program, as stipulated in the Technocratic RPJMN 2020–2024<sup>50</sup>, and the Ministry of Health is implementing a tobacco control roadmap 2020-2024 around a strategy to decrease the smoking prevalence, public awareness and education on risks of smoking, and to decrease smoking-attributable morbidity and mortality<sup>51</sup>.
25. **Another issue in the cigarette business in Indonesia is the existence of illicit trade.** There are currently two types of illicit cigarettes on the market, smuggled cigarettes and illegal domestic production. The latter is sold without an excise stamp or with a fake excise stamp, and illicitly manufactured products have been dominated the market since 2004 with a primary objective of evading excise tax<sup>52</sup>. Directorate General of Customs and Excise, Ministry of Finance, described a close relationship between illicit cigarette trade and the increase of excise tax. In 2020 the when the average excise tax increase was 23,5 per cent, the level of illicit trade reached 4,86 per cent. This figure has increased from 3,03 per cent in 2019, where there was no excise tax increase<sup>53</sup>.

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<sup>48</sup> Sukresna, I (2021), Teknologi Budidaya Terpadu untuk Tembakau Virginia, Info teknologi, Balittas, Agriculture Research and Development, Ministry of Agriculture.

<sup>49</sup> Ministry of Industry (2015) Roadmap Produksi Industri Hasil Tembakau tahun 2015-2020, Ministry of Industry, retrieved from [https://kemenperin.sikn.go.id/uploads/r/unit-kearsipan-i-kementerian-perindustrian/5/9/a/59a5df2acff5b171511d9d986003a12e9b489182c706b5973c32afd084792d0c/2.\\_Permenperin\\_No.63\\_M-IND\\_PER\\_8\\_2015\\_Tentang\\_Peta\\_Jalan\\_\\_Roadmap\\_\\_Produksi\\_Industri\\_Hasil\\_Tembakau\\_Tahun\\_2015-2020.pdf](https://kemenperin.sikn.go.id/uploads/r/unit-kearsipan-i-kementerian-perindustrian/5/9/a/59a5df2acff5b171511d9d986003a12e9b489182c706b5973c32afd084792d0c/2._Permenperin_No.63_M-IND_PER_8_2015_Tentang_Peta_Jalan__Roadmap__Produksi_Industri_Hasil_Tembakau_Tahun_2015-2020.pdf)

<sup>50</sup> Bappenas (2019), Rancangan Teknokratik: Rencana Pembangunan Jangka Menengah Nasional 2020-2024, Bappenas, retrieved from [https://www.bappenas.go.id/files/rpjmnn/Narasi%20RPJMN%20IV%202020-2024\\_Revisi%2014%20Agustus%202019.pdf](https://www.bappenas.go.id/files/rpjmnn/Narasi%20RPJMN%20IV%202020-2024_Revisi%2014%20Agustus%202019.pdf)

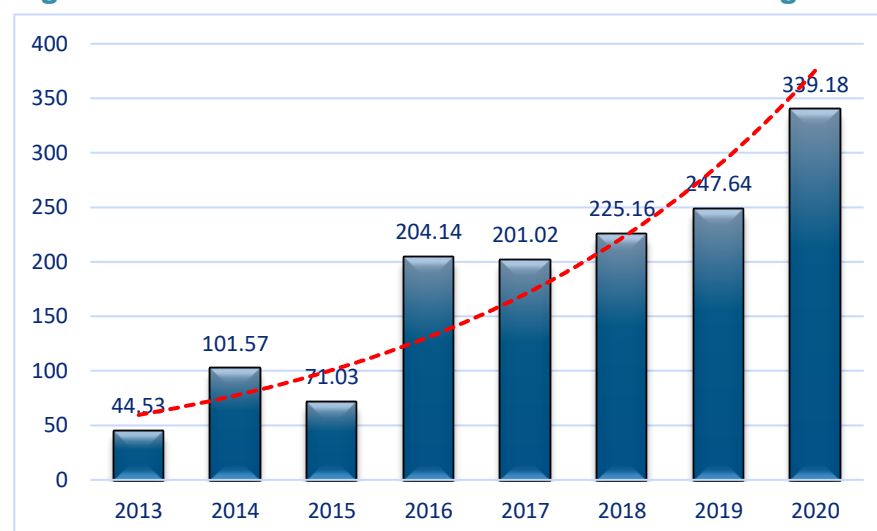
<sup>51</sup> Ministry of Health (2013), Minister regulation No.40/2013: Peta jalan pengendalian dampak konsumsi rokok bagi Kesehatan, Ministry of Health, Indonesia, retrieved from [jdih.bkpm.go.id/jdih/userfiles/batang/PMK%20No.%2040%20ttg%20Roadmap%20Pengendalian%20Rokok.pdf](http://jdih.bkpm.go.id/jdih/userfiles/batang/PMK%20No.%2040%20ttg%20Roadmap%20Pengendalian%20Rokok.pdf)

<sup>52</sup> Ahsan, A., Wiyono, N.H., Setyonaluri, D. et al (2014). Illicit cigarette consumption and government revenue loss in Indonesia. *Global Health* 10, no.75. doi.org/10.1186/s12992-014-0075-7,

<sup>53</sup> Sembiring, L J, (2021) Bea Cukai Akui Cukai Naik, Peredaran Rokok Ilegal 'Meledak', CNBC Indonesia, retrieved from <https://www.cnbcindonesia.com/news/20210826193118-4-271581/bea-cukai-akui-cukai-naik-peredaran-rokok-illegal-meledak>

26. **Regulations regarding illicit cigarette trade are stipulated in law no.39/2007, chapters 54 and 56 (Amendments to Law No.11/1995). The Law emphasises the sanction for the illicit cigarette trade<sup>54</sup>.** The government has also conducted awareness campaigns and public education on illicit trade to discourage the trading of illegal cigarettes in Indonesia<sup>55</sup>, but these measures have not yet decreased the level of financial loss due to illicit trade. The Ministry of Finance's 2020 data revealed that state losses due to illicit cigarette trade in 2020 reached IDR 339.18 billion. This figure has increased exponentially over the last seven years from IDR 44.53 billion in 2013<sup>56</sup>

**Figure 7: State fiscal loss from the illicit trade of cigarettes (billion IDR).**



Source: Databoks, Katadata Indonesia (2020)

## Conclusion

Cigarettes in Indonesia are classified by how they are produced and the ingredients used. Based on this classification, cigarette production includes SKM, SPM and SKT. 77 per cent of the market for cigarettes in Indonesia is dominated by five major private corporations, including HM Sampoerna, Gudang Garam, Djarum, Bentoel, and Najorono Tobacco, all of which fulfil annual domestic demand. These cigarette companies also import tobacco from other countries, predominantly Virginia, Oriental, and White Burley tobacco leaves, to satisfy domestic market needs when local production falls short.

Data revealed that the increase in the cigarette tax and the effect of the COVID-19 pandemic has a varied impact on cigarette market demand. There has been little decrease in demand from youth, children and low-income smokers, but shows an opposite

<sup>54</sup> Indonesian government Law No. 39/2007, <https://jdih.kemenkeu.go.id/fulltext/2007/39tahun2007UU.HTM>

<sup>55</sup> Directorate General of Customs and excise (2020) Kampanyekan Gempur Rokok Ilegal, Bea Cukai Gelar Talkshow dan Sosialisasi, Ministry of Finance, retrieved from <https://www.beacukai.go.id/berita/kampanyekan-gempur-rokok-ilegal-bea-cukai-gelar-talkshow-dan-sosialisasi.html>

<sup>56</sup> Annur, C, M., (2020) Nilai Kerugian Akibat Rokok Ilegal Terus Meningkat dalam Tiga Tahun Terakhir, databoks, Katadata Indonesia, retrieved from <https://databoks.katadata.co.id/datapublish/2020/12/14/nilai-kerugian-akibat-rokok-ilegal-terus-meningkat-dalam-tiga-tahun-terakhir>

trend for addicted smokers. This situation has led to an increase in demand for certain types of cigarettes such as SPM. Meanwhile, employment in this industry has only contributed around 0.34 per cent of total employment in the manufacturing sector, which is too small for the industry to claim that it is one of the major employment providers.

The cigarette prices and the excise tax increases have encouraged the increases in illicit cigarette trade in Indonesia. The existing government regulation (law no. 39 of 2007 concerning illegal trading) and public education and awareness programs have not contributed to a significant decrease in illicit trade.

## 2. SMOKING PREVALENCE, ECONOMIC COSTS AND HEALTH OUTCOMES

27. **Globally, the tobacco epidemic is one of the world's largest public health threats.** It increases the risk of death from lung and other cancers, heart disease, stroke, respiratory diseases, and tuberculosis, which has contributed to 8 million deaths each year. Non-smokers who are exposed to second-hand smoke have also experienced immediate adverse effects on the cardiovascular system, leading to coronary heart disease and stroke and resulting in 1.2 million premature deaths each year<sup>57</sup>. Low and middle-income countries represent more than 80 per cent of the world's smokers<sup>58</sup>, and some of them (including Indonesia) account for the world's largest cigarette producers. In 2019 Indonesia has produced 197.25 thousand metric tons of tobacco and is the sixth leading tobacco producer worldwide<sup>59</sup>.
28. **The Framework Convention on Tobacco Control (FCTC), an international health treaty convention initiated by the World Health Organization (WHO) in 2005, has become implemented as international law.** Its purpose is to protect current and future generations from damage to their health, the environment, and the economy from consuming tobacco. Currently, 182 countries have ratified the convention<sup>60</sup>. Regardless of debates on the effectiveness of the WHO's FCTC to reduce the smoking prevalence, Indonesia has yet to ratify the Framework, with its rationale being to protect farmers and cigarette industry workers who rely on cigarette consumption, and to maintain a significant portion of government revenue that originates from the cigarette excise taxes<sup>61</sup>.
29. **Indonesia remains the largest consumer of cigarettes in the Asia Pacific Region and one of the countries with the highest smoking rate worldwide. In 2017 322.1 billion cigarettes were consumed in the country**<sup>62</sup>. The National Social Economy Survey in 2020 (SUSENAS 2020) released by Statistics Indonesia revealed that spending on cigarettes is among the major expenditures both in urban and rural areas in Indonesia. The data shows that monthly average cigarettes expenditures per capita

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<sup>57</sup> World Health Organization. (May 2020), *Tobacco; Key facts*, World Health Organization, retrieved from <https://www.who.int/news-room/fact-sheets/detail/tobacco>.

<sup>58</sup> World Health Organization. (May 2020), *Tobacco; Key facts*, World Health Organization, retrieved from <https://www.who.int/news-room/fact-sheets/detail/tobacco>.

<sup>59</sup> Shahbandeh, M, (2021), *Tobacco production worldwide 2019, by country*, Statista, NY.

<sup>60</sup> World Health Organization, (2021), *Parties to the WHO Framework Convention on Tobacco Control*, World Health Organization, retrieved from <https://www.who.int/fctc/cop/en/>

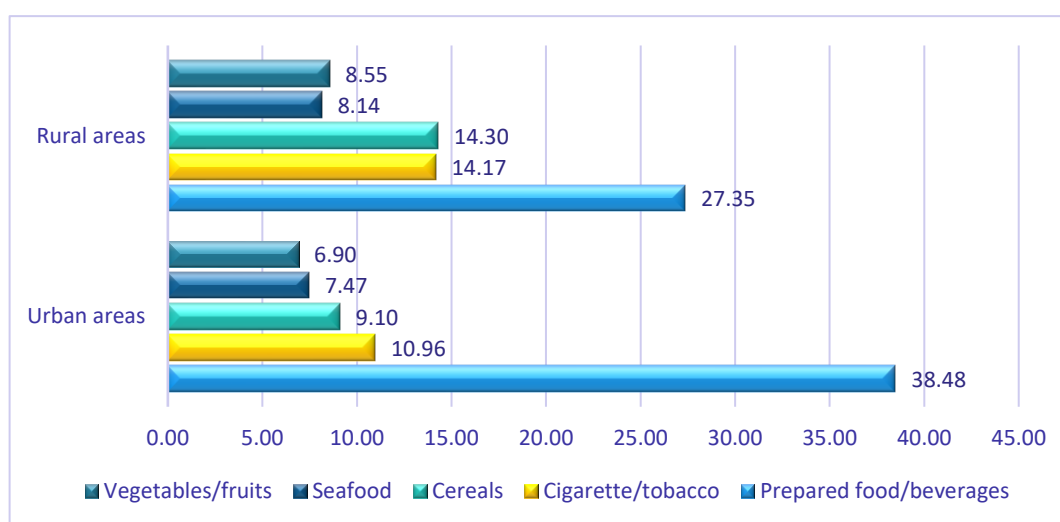
<sup>61</sup> *Why Indonesia Doesn't Ratify WHO's Framework Convention on Tobacco Control* (Jun 2016), Indonesia Investment, retrieved from <https://www.indonesia-investments.com/id/news/todays-headlines/why-indonesia-doesn-t-ratify-who-s-framework-convention-on-tobacco-control/item6932>

<sup>62</sup> Nurhayati, H.K (2021), *Tobacco industry in Indonesia - statistics & facts*, Statista - The Statistics Portal. Statista. Retrieved from <https://www.statista.com/topics/5728/tobacco-industry-in-indonesia/>



in urban and rural areas accounted for 10.96 per cent and 14.17 per cent of overall budgets, respectively. The figure in urban areas ranks as the second largest after the expenditure on prepared food and beverages (38.48 per cent), while in rural areas it ranks as the third-biggest expenditure after the prepared food and beverages and cereals (14.30 per cent), followed by expenditures on seafood, vegetables and fruits<sup>63</sup>.

**Figure 8: Per centages of monthly average expenditure per capita by commodity in urban and rural areas (2020).**



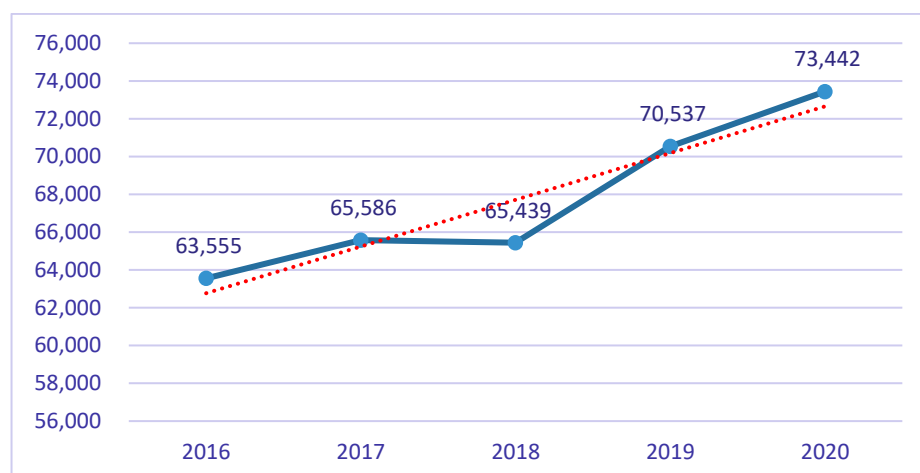
Source: Databoks, Katadata Indonesia (2020)

The survey data also shows that there was an increase in monthly cigarette expenditure per capita over the last 4 years (2016-2020). In 2016 monthly average cigarette expenditures were IDR 63.555 and increased by 15,5% to IDR 73.442 in 2020<sup>64</sup>.

<sup>63</sup> Supriyanto, S, (2020), Pengeluaran untuk Konsumsi Penduduk Indonesia, Susenas Maret 2020, Sub-directorate of Household Statistics, BPS-Statistics Indonesia, retrieved from <https://www.bps.go.id/publication/2020/11/02/2d7c91e53ab840a301689f34/pengeluaran-untuk-konsumsi-penduduk-indonesia-maret-2020.html>

<sup>64</sup> Supriyanto, S, (2020), Pengeluaran untuk Konsumsi Penduduk Indonesia, Susenas Maret 2020, Sub-directorate of Household Statistics, BPS-Statistics Indonesia, retrieved from <https://www.bps.go.id/publication/2020/11/02/2d7c91e53ab840a301689f34/pengeluaran-untuk-konsumsi-penduduk-indonesia-maret-2020.html>

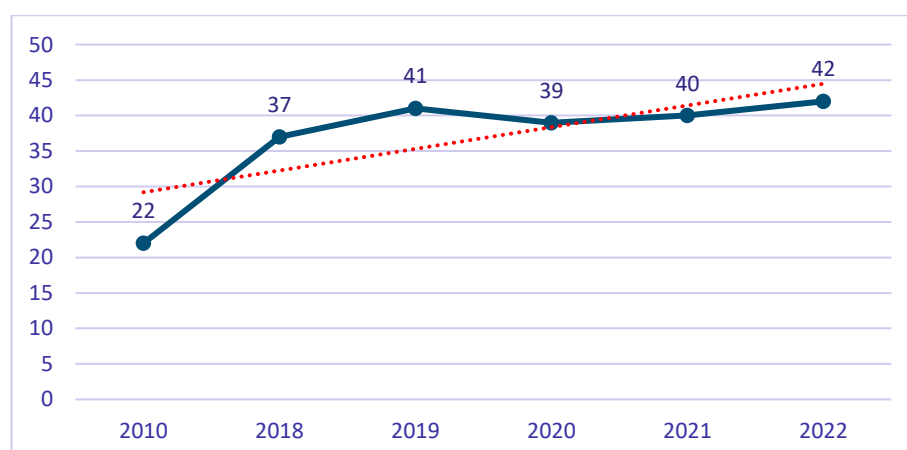
**Figure 9: Monthly cigarette average expenditure per capita (IDR), 2016-2020**



Source: BPS-Statistics Indonesia 2020

30. **A similar increasing trend was shown by the survey data released by Statista for total expenditures on cigarettes and tobacco in 2010-2021, including a projection for 2022.** The data shows that in 2010, total expenditures on cigarettes and tobacco were roughly USD 22 billion, and these figures were expected to double in 2022 to USD 42 billion, although the share of expenditure decreased slightly in 2020 as a result of the economic impact of the COVID-19 pandemic and the increase in cigarette and tobacco tax that occurred earlier in 2020 that led to reductions in disposable income<sup>65</sup>.

**Figure 10: Annual total cigarettes and tobacco expenditure (in billion USD)**

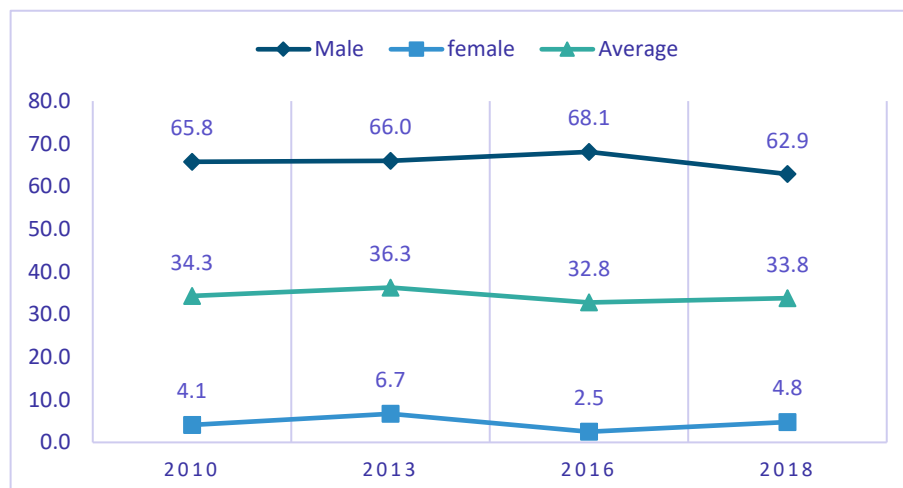


Source: Statista report, 2020

<sup>65</sup> Nurhayati, H.K (2021), *Annual expenditure on cigarettes and tobacco in Indonesia 2010-2019*, Statista - The Statistics Portal. Statista, retrieved from <https://www.statista.com/statistics/1177671/indonesia-annual-expenditure-on-cigarettes-and-tobacco/>

31. **The prevalence of smoking among those aged  $\geq 15$  YO in Indonesia showed an increasing trend from 2016 to 2018.** The Ministry of Health data shows that the national average of smoking prevalence among this age group in 2018 was 33.8 per cent, an increase from 32.8 per cent in 2016.

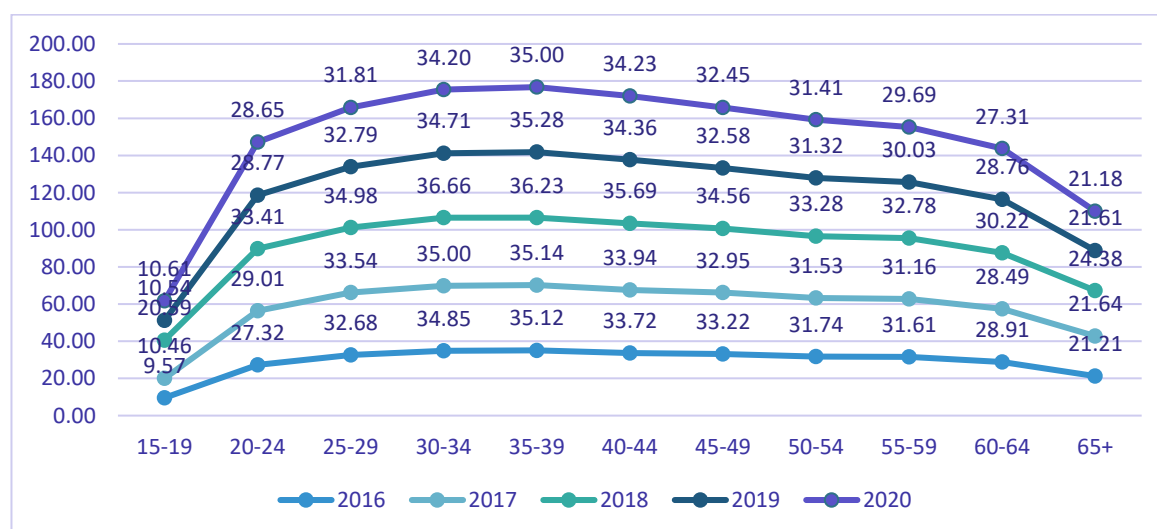
**Figure 11: Prevalence of smoking among  $\geq 15$  age group (per cent)**



Source: National health surveys; RISKESDAS (2010, 2013, 2018), SIRKESNAS (2016)

SUSENAS data released by BPS-Statistics Indonesia in 2020 revealed that the highest smoking prevalence during the period from 2016 to 2020 was among the age group of 30-44 years.

**Figure 12: Smoking prevalence by age (2016-2020)**

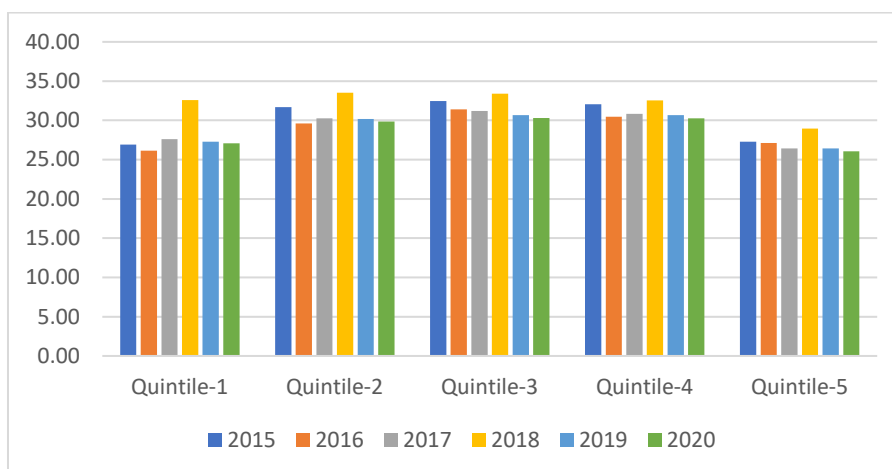


Source: SUSENAS 2020

The SUSENAS data also disclosed evidence that higher smoking prevalence rates tend to be associated with personal income status. The association between personal income and smoking behaviour was measured with an indicator of the quintile of expenditure, which consists of quintile-1 (underprivileged) up to quintile-5 (prosperous). The data during the study period shows that people in the middle-income range have higher rates of cigarette smoking than the general population, represented by quintile-3 of

expenditure. Many factors contributed to this trend, including social and cultural factors, as well as productive ages as shown in figure 12 above.

**Figure 13: Association between smoking behaviour and quintile of expenditure (2015-2020)**



Source: SUSENAS 2020

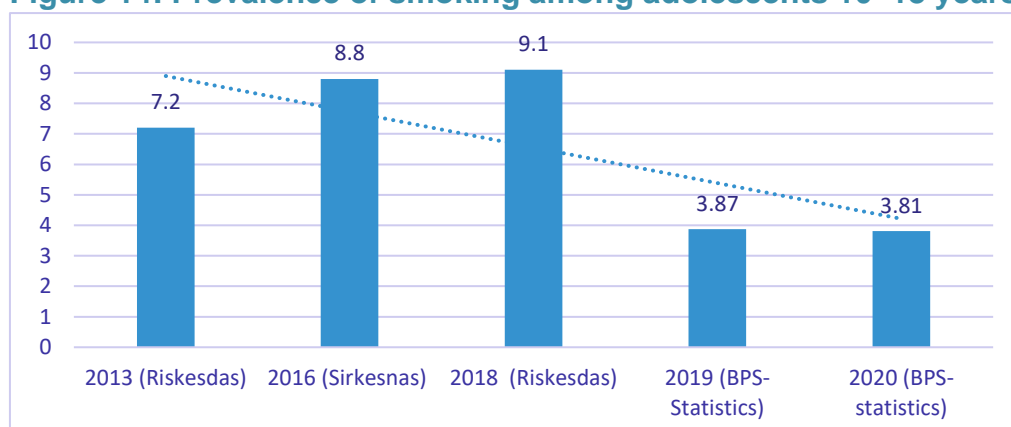
32. **Smoking prevalence among adolescents aged 10-18 YO.** Data published by the Ministry of Health (Riskesdas) between 2013 and 2018 shows an increasing trend in the prevalence of novice smokers, from 7.20 per cent in 2013, 8,8 per cent in 2016, and 9.1 per cent in 2018<sup>66</sup>. Data of basic health research (Riskesdas) of the Ministry of Health on the prevalence of non-communicable diseases (NCD) also showed a consistent trend with the increase in smoking rate in 2018. The data indicated the increase in the prevalence of Cancer among the age group of  $\geq 15$  YO increased to 1,8 per cent from 1,4 per cent in 2013. Similarly, Stroke increased from 7 per cent to 10,9 per cent, Diabetes increased from 6,9 per cent to 8,5 per cent, and hypertension increased from 25,8 per cent to 34,1 per cent<sup>67</sup>. However, the continuation of the national tobacco control program, including an annual increment of cigarette excise taxes, has resulted in a decrease in smoking prevalence for novice smokers, from 9.1 per cent in 2018 to 3,81 per cent in 2020<sup>68</sup>.

<sup>66</sup> Balitbangkes (2018), *Hasil utama RISKESDAS 2018*, p:125, The Ministry of Health, retrieved from [https://kesmas.kemkes.go.id/assets/upload/dir\\_519d41d8cd98f00/files/Hasil-riskesdas-2018\\_1274.pdf](https://kesmas.kemkes.go.id/assets/upload/dir_519d41d8cd98f00/files/Hasil-riskesdas-2018_1274.pdf)

<sup>67</sup> Bureau of Communication and Public Services (2018), *Potret Sehat Indonesia dari Riskesdas 2018*, the Ministry of Health, retrieved from <https://www.kemkes.go.id/article/view/18110200003/potret-sehat-indonesia-dari-riskesdas-2018.html>

<sup>68</sup> BPS-Statistics Indonesia (2021), *Persentase Merokok Pada Penduduk Usia  $\leq 18$  Tahun Menurut Kelompok Umur (Persen)*, 2018-2020, BPS-Statistics Indonesia, retrieved from <https://www.bps.go.id/indikator/30/1535/1/persentase-merokok-pada-penduduk-usia-18-tahun-menurut-kelompok-umur.html>

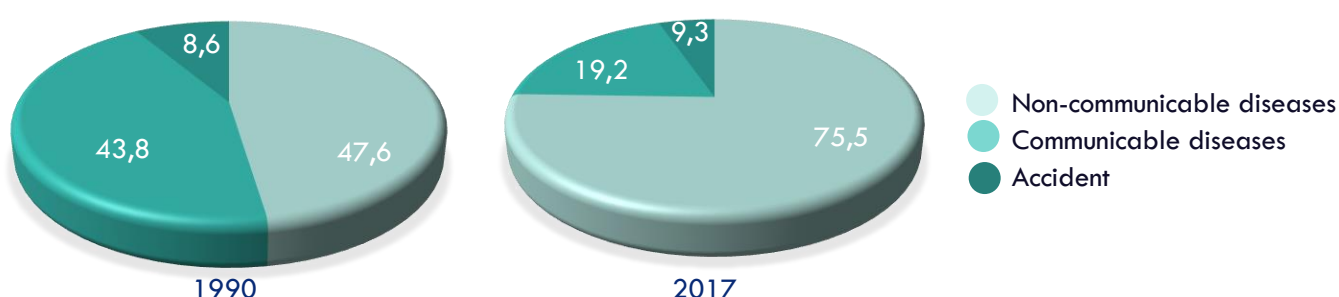
**Figure 14: Prevalence of smoking among adolescents 10–18 years (%)**



Source: RISKESDAS 2013 and 2018, SUSENAS 2020

33. **Smoking is having a significant impact on health. It leads to the development of non-communicable diseases (NCDs)**, mainly cardiovascular diseases (CVD), cancers, chronic respiratory diseases, and diabetes, causing high morbidity and premature death in Indonesia. These premature deaths are linked to unhealthy behaviours and tobacco smoking risk factors<sup>69</sup>. Data released by Institute for Health Metrics and Evaluation revealed that NCD has been the leading cause of death in the past 10 years. From 2009 – 2019 stroke and ischemic-heart diseases had been the first and the second cause of death in Indonesia. Hypertensive-heart diseases had jumped from rank tenth in 2009 to rank eighth in 2019, while lung cancer ranks eighth in 2019, going up from rank thirteenth in 2009<sup>70</sup>. Yet tobacco is considered to be a high-value agricultural product, creating economic benefits such as becoming a source of income for farmers, generating revenue for the government, and providing job opportunities<sup>71</sup>.

**Figure 15: Common causes of death (1990 vs 2017)**



Source: Institute Health Metric and Evaluation (IHME), 2020.

<sup>69</sup> Balitbangkes (2018), *Hasil utama RISKESDAS 2018*, The Ministry of Health, retrieved from [https://kesmas.kemkes.go.id/assets/upload/dir\\_519d41d8cd98f00/files/Hasil-riskesdas-2018\\_1274.pdf](https://kesmas.kemkes.go.id/assets/upload/dir_519d41d8cd98f00/files/Hasil-riskesdas-2018_1274.pdf)

<sup>70</sup> Institute for Health Metrics and Evaluation (IHME) (2019) Indonesia profile, IHME, University of Washington, retrieved from <http://www.healthdata.org/indonesia>

<sup>71</sup> The Ministry of Industry (2019), *Industri Hasil Tembakau Serap 5,98 Juta Tenaga Kerja*, The Ministry of Industry, retrieved from

34. **Tobacco use burdens the national economy with an estimated IDR 375 trillion or one-fifth of the total National State Budget (APBN)** in healthcare costs and productivity losses each year. These losses reached IDR 4180.27 trillion or one-third of the national GDP<sup>72</sup>. Tobacco use has also increased costs to the health sector, it increases the risk factor for early mortality and claims to the national health insurance program (JKN) that burdens the economy and society<sup>73</sup>. During 2014-2018, expenditures under the JKN to cover tobacco-attributable diseases increased from IDR 9.9 trillion to IDR 18.9 trillion, representing one-fifth of the total medical expenses of the JKN<sup>74</sup>.
35. **Households with active smokers affect children and other family members through decreasing expenditure on nutritious foods for children.** A World Bank study in 2018 revealed that Indonesian children are adversely affected by stunting. Particularly among poor families, paternal smoking is closely associated with decreases in the growth and weight of children. This is in line with the decrease in expenditure on other staple foods and nutritious diets for children, which then become an additional factor contributing to the stunting epidemic after poor nutrition and repeated infections – which are identified as the main factors that lead to stunting in Indonesia<sup>75, 76</sup>.
36. **Indonesia is among the countries in the Asia Pacific region with the lowest price of cigarettes, and the low prices of cigarettes in the country have led to higher tobacco consumption rates.** Smoking initiation is also encouraged by the low tax rate and cigarette distribution system where it is available for single sticks peddled by street vendors that make it more accessible to all economic segments including the poor and children<sup>77</sup>.

## Conclusion

Globally, the tobacco epidemic is one of the world's largest public health threats, both on smokers and non-smokers who are exposed to second-hand smoke. Smoking has contributed to the development of non-communicable diseases (NCDs) in Indonesia, mainly cardiovascular diseases (CVD), cancers, chronic respiratory diseases and diabetes, causing high morbidity and premature death.

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<sup>72</sup> Ramadhan, A (2019), Kerugian akibat rokok nilainya capai sepertiga PDB, Antaranews, <https://www.antaranews.com/berita/951460/kerugian-akibat-rokok-nilainya-capai-sepertiga-pdb>

<sup>73</sup> Agustina R, et al. (2019), *Universal health coverage in Indonesia: concept, progress, and challenges*. Lancet 2019, retrieved from <https://www.thelancet.com/action/showPdf?pii=S0140-6736%2818%2931647-7>

<sup>74</sup> World Health Organization, Regional Office for South-East Asia (2020) Menaikkan Cukai dan Harga Produk Tembakau untuk Indonesia Sehat dan Sejahtera, p:8, World Health Organization, Jakarta, retrieved from <https://komnaspt.or.id/wp-content/uploads/2020/10/Menaikkan-Cukai-dan-Harga-Produk-Tembakau-untuk-Indonesia-sehat-dan-sejahtera.pdf>

<sup>75</sup> The World Bank, (2018), *Aiming high: Indonesia's ambition to reduce stunting*. World Bank Group, Washington DC.

<sup>76</sup> Wijaya-Erhardt M.(2019), Nutritional Status of Indonesian Children in Low-Income Households with Fathers that Smoke, *Osong Public Health Res Perspect*; 10(2): 64–71. doi: 10.24171/j.phrp.2019.10.2.04

<sup>77</sup> WHO (2020), Raising Tobacco Taxes and Prices for a Healthy and Prosperous Indonesia, WHO Regional office for South-East Asia, Jakarta, Indonesia, retrieved from [https://www.who.int/docs/default-source/searo/indonesia/indonesia-tobacco-tax-paper-2020.pdf?sfvrsn=67c3d89a\\_2](https://www.who.int/docs/default-source/searo/indonesia/indonesia-tobacco-tax-paper-2020.pdf?sfvrsn=67c3d89a_2)



Despite these adverse effects, the prevalence of smoking in Indonesia has increased year on year. Ministry of Health data shows that the national average prevalence of smoking among adults aged 15 years and above is 33.8 per cent in 2018, increasing from 32.8 per cent in 2016. Smoking prevalence has also surged in the case of novice smokers aged 10-18.

Tobacco use in Indonesia has burdened the national economy with an estimated IDR 375 trillion, or one-fifth of the total National State Budget (APBN), in healthcare costs and productivity losses each year. Households with active smokers also affect children and other family members through second-hand smoke and result in a smaller portion of expenditures being allocated for nutrition food for children.

### 3. TOBACCO TAX AND EXCISE

37. **Taxes on tobacco products are regulated in Law No. 11/1995 along with other products such as ethyl alcohol or ethanol<sup>78</sup> and the law was amended in Act No. 39/2007<sup>79</sup>.** The government through the Ministry of Finance has also regulated the 2021 tobacco products excise tax increase by 12,5 per cent on average, except for SKT. In more detail, the increase in excise tax for SKM class I is 16,9 per cent, SKM class IIA 13,8 per cent and SKM class IIB 15,4 per cent. While the excise tax increase for SPM class I is 18,4 per cent, SPM class IIA is 16,5 per cent and SPM class IIB is 18,1 per cent<sup>80</sup>.
38. **The Indonesian government has been raising taxes on tobacco products almost every year, and its highest tax hike was 23 per cent in 2020.** In 2021 the government approved another 12.5 per cent excise tax, aimed at decreasing the smoking prevalence rate among youths to 8.7 per cent in 2024, even though the current tax level is considered lower than the maximum allowable 57 per cent excise tariff in Indonesia<sup>81</sup> and far below the WHO-recommended tax share of 75 per cent of the retail price<sup>82</sup>. The current increase of excise tax was also envisaged to boost the government tax revenue up to IDR 173.78 trillion in 2021<sup>83</sup> that was around a 14 per cent increase from 2018 (IDR 153 trillion), which was nearly 96% of the national excise

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<sup>78</sup> Undang-undang Republik Indonesia no 11/1995 tentang Cukai (1995), retrieved from <https://jdih.kemenkeu.go.id/fullText/1995/11TAHUN~1995UUHAL5.HTM>

<sup>79</sup> Undang-undang Republik Indonesia no 39/2007 tentang perubahan atas undang-undang no 11/1995 tentang cukai (2007), retrieved from <https://jdih.kemenkeu.go.id/fulltext/2007/39tahun2007UU.HTM>

<sup>80</sup> The Ministry of Finance (2020), Pemerintah Tetapkan Kebijakan Tarif Cukai Hasil Tembakau Tahun 2021 (press release), [https://www.kemenkeu.go.id/media/16913/sp-96\\_pemerintah-tetapkan-kebijakan-tarif-cukai-hasil-tembakau-tahun-2021.pdf](https://www.kemenkeu.go.id/media/16913/sp-96_pemerintah-tetapkan-kebijakan-tarif-cukai-hasil-tembakau-tahun-2021.pdf)

<sup>81</sup> Undang-undang Republik Indonesia no 39/2007 tentang perubahan atas undang-undang no 11/1995 tentang cukai (2007), retrieved from <https://jdih.kemenkeu.go.id/fulltext/2007/39tahun2007UU.HTM>

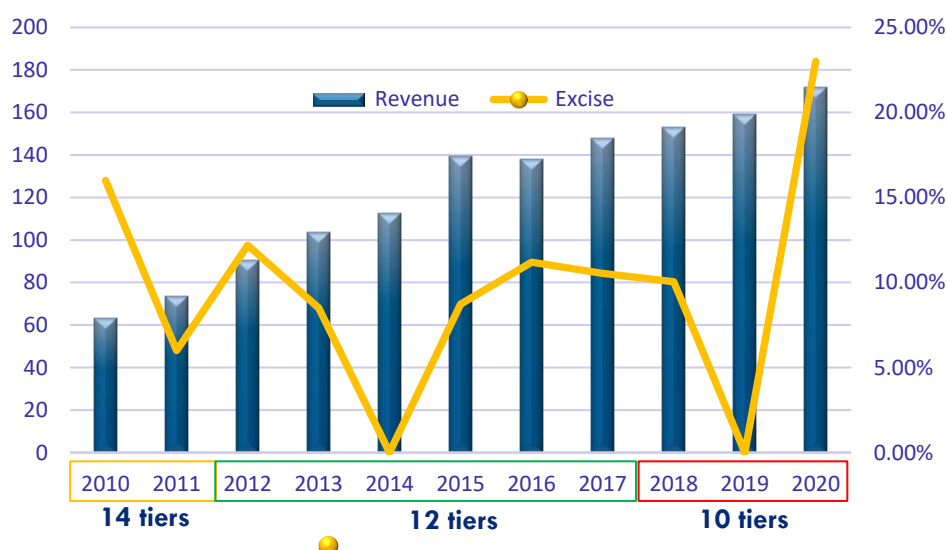
<sup>82</sup> World Health Organization (WHO). 2019. WHO Report on the Global Tobacco Epidemic 2019: Offer help to quit tobacco use, Geneva, Switzerland.

<sup>83</sup> Undang-undang Republik Indonesia no 39/2007 tentang perubahan atas undang-undang no 11/1995 tentang cukai (2007), retrieved from <https://jdih.kemenkeu.go.id/fulltext/2007/39tahun2007UU.HTM>

total and equivalent to 10% of total government revenue<sup>84</sup>. From the government's perspective, efforts at raising the excise tax on tobacco products need to balance the strategy of reducing smoking prevalence with the need to support a tobacco industry that provides employment. This policy is translated into a strategy (namely the excise tax tier structure) where excise taxes are based on manufacturers' types of cigarettes, the scale of cigarette productions, and per unit retail price. The rationale for such a structure was to protect smaller firms that accounted for more than half of total factories in the tobacco industry and were responsible for employing a significant share of the workers in tobacco manufacturing<sup>85</sup>.

39. **Indonesia has implemented a multi-tiered tobacco tax system, though it has been simplified to 10 tiers from a 14 tier structure over the last decade.** These structures are applied for SKM (clas I, II), SPM (class I, II), SKT (clas I, II, III), SKTF, TIS, KLB, KLM, and CRT and are based on cigarette type, the number of cigarettes produced, and per-unit maximum retail price<sup>86</sup>. Despite the administrative challenges and potential to encourage tax evasion and avoidance, the government applies this complex tax structure to accommodate small-scale cigarette firms, by differentiating firms with different production scales, such as hand-rolled kreteks (SKT) firms, that employ a significant share of the workers in tobacco manufacturing.

**Figure 16: Tobacco tax excise, tax tiers structure and tax contribution to public revenue (trillions IDR)**



Source: Ministry of Finance (2019)

<sup>84</sup> Wibawa. T., (2019), Tackling Indonesia's smoking addiction a 'double-edged sword, ABC News, Australia, retrieved from <https://www.abc.net.au/news/2019-09-01/tackling-indonesias-smoking-addiction-harder-than-it-seems/11430638>

<sup>85</sup> Sahadewo, G.A., Iglesias, R., Araujo, E.C., (2018), the Economics of Tobacco Taxation and Employment in Indonesia, World Bank report, WB Group.

<sup>86</sup> Ministry of Finance (2019), Peraturan Menteri Keuangan Republik Indonesia No. 152/PMK.010/2019; tentang tarif cukai hasil tembakau, Ministry of Finance.

40. **The Indonesian tobacco excise system applies different tax rates to different types of cigarettes (SKM, SKT, and SPM).** SKT is subject to the lowest excise rates (due to labour absorption), while SKM I and SPM I are subject to the highest excise rates. Cigarette firms are classified based on the annual production scale, where group I for SKM and SPM include all firms with an annual production capacity of  $\geq 3$  billion sticks and group II are firms with a production capacity of  $\leq 3$  billion sticks. SKT manufacturers consist of three groups: group I with a total annual production of 2 billion sticks, group II with production between 500 million – 2 billion sticks, and group III with  $\geq 500$  million sticks<sup>87</sup>. The tier structure of the cigarette category is also determined by a number of groups in each category, for instance from 2018-2021 the government applied a 10 tax tier structure (as shown in figure 11 above), consisting of 3 tiers in SKM (group I, IIA, IIB), 3 tiers in SPM (group I, IIA, IIB), and 4 tiers in SKT (group IA, IB, II, and III).

**Table 2: Cigarette firm product type and production capacity**

| No | Type of product | Group | Production capacity     | Unit   |
|----|-----------------|-------|-------------------------|--------|
| 1  | SKM             | I     | $\geq 3$ billion        | Sticks |
|    |                 | II    | $\leq 3$ billion        | Sticks |
| 2  | SPM             | I     | $\geq 3$ billion        | Sticks |
|    |                 | II    | $\leq 3$ billion        | Sticks |
| 3  | SKT             | I     | $\geq 2$ billion        | Sticks |
|    |                 | II    | 500 million – 2 billion | Sticks |
|    |                 | III   | $\leq 500$ million      | Sticks |

Source: Ministry of Finance (2017)

41. **The current 12.5 per cent cigarette taxes increase effective since February 2021, which was announced by the Finance Minister in December 2020, has not been effective in reducing smoking prevalence in the country<sup>88</sup>.** Data shows a negative correlation between cigarette retail prices (due to tax hikes) and cigarette sales, particularly SPM cigarettes, which dominate the market<sup>89</sup>. But in 2020 when the tax increase was at the highest, the market share of SPM cigarettes dropped by approximately 30.5 per cent. Interestingly, sales of SKT cigarettes increased by 14.7 per cent, as the labour-intensive SKT industry is not subject to tax increases<sup>90</sup>. During the situation where the cigarette retail prices hike and the COVID-19 pandemic evolves, that lead to consumers purchasing power has fallen, the big cigarette industries have the ability to mitigate demand drop by designing smaller packages, lower prices, and higher tar to meet market preferences<sup>91</sup>. Some industries also limit their production under the requirement of group I manufacturers and produce below 3 billion sticks as

<sup>87</sup> Ministry of Finance (2019), Peraturan Menteri Keuangan Republik Indonesia No. 152/PMK.010/2019; tentang tarif cukai hasil tembakau, Ministry of Finance.

<sup>88</sup> Musyaffa, I, (2020), Experts laud tobacco tax hike in Indonesia, Anadolu Agency, Indonesia.

<sup>89</sup> Pratiwi, A, Pangestu, F, (2020), Cigarette excise tax, employment and industry income, Academia working paper, Ministry of Finance.

<sup>90</sup> Suhendra, Z (2016), Terbebani Cukai dan Pajak, Konsumsi Rokok SKT Menurun, Liputan6, retrieved from: [www.liputan6.com/bisnis/read/2679940/terbebani-cukai-dan-pajak-konsumsi-rokok-skt-menurun](http://www.liputan6.com/bisnis/read/2679940/terbebani-cukai-dan-pajak-konsumsi-rokok-skt-menurun)

<sup>91</sup> Prasidya, Y, (2020), Consumers prefer cheaper cigarettes as purchasing power weakens: Sampoerna, The Jakarta Post, retrieved from <https://www.thejakartapost.com/news/2020/09/21/consumers-prefer-cheaper-cigarettes-as-purchasing-power-weakens-sampoerna.html>

a prerequisite by group II manufacturers, which aims to avoid higher tax, hence the prices can be reduced<sup>92</sup>. From the macro perspective, cigarette excise policies have not adversely impacted the tobacco industry or market demand. Ministry of Agriculture data revealed that tobacco production even increased by 0,7 per cent on average annually. During 2015-2020 the production in tobacco production regions increased from 193.790 to 198.739 tons, despite some fluctuations in 2016 and 2017<sup>93</sup>.

42. **The tobacco taxation policy in Indonesia has given more impact on youth and the poor.** The demand for cigarettes among these groups is relatively elastic, and cigarette price increases due to tax hikes have reduced the number of cigarettes consumed, although the reduction varies across different types of cigarettes e.g. SKM, SKT and SPM<sup>94</sup>. Hence, the government goal to reduce smoking prevalence among youth ages 10-18 by 8.7 per cent in 2024 could be realistically achieved<sup>95</sup>. However, tobacco taxation policy along with the complex tax tier system did not appear to address high-income active smokers. These groups of smokers are less sensitive to the cigarette price hike due to the increase in excise tax<sup>96</sup>. The Indonesian tax tier system has not only encouraged industry to reduce the tax burden, but the tax structure has also encouraged active adult smokers to switch to lower-taxed cigarettes or cheaper brands rather than quitting entirely<sup>97</sup>. The tier system is lowering the potential effectiveness of tobacco tax hikes in reducing smoking prevalence.

## Conclusion

Taxes on tobacco products in Indonesia are regulated in Law No. 11/1995 and Law No. 39/2007. The Indonesian government has been raising taxes on tobacco products almost every year, aimed at decreasing the smoking prevalence rate among youths to 8.7 per cent in 2024 and increasing government tax revenue to IDR 173,78 trillion in 2021, and the highest tax hike was 23 per cent in 2020. However, the current tax level is considered lower than the maximum national threshold of 57 per cent. Moreover, Indonesia is implementing a multi-tiered tax system that aims to accommodate small-scale cigarette companies that provide employment, such as SKT industries. Under the tax tier system, the government set different tax rates for different types of cigarettes and different industry production capacities. Small scale labour-intensive SKT industries are subjected

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<sup>92</sup> Mushofa, F (2019), Ombudsman RI minta Kemenkeu tutup celah cukai rokok, Ombudsman Republik Indonesia news, retrieved from <https://ombudsman.go.id/news/r/ombudsman-ri-minta-kemenkeu-tutup-celah-cukai-rokok>

<sup>93</sup> Gartina, D., & Sukriya, R. L. L. (2019). Tree Crop Estate Statistics Of Indonesia 2018-2020; Tobacco, Secretariate of Directorate General of Estates, Ministry of Agriculture, p.11.

<sup>94</sup> Rasyid, M (2019), Elastisitas Permintaan Produk Tembakau di Indonesia: Studi Konsumsi Rokok Lintas Rumah Tangga, Jurnal Ekonomi Kuantitatif Terapan, 12 (1), 97-107 Retrieved from [https://www.researchgate.net/publication/336487983\\_Elastisitas\\_Permintaan\\_Produk\\_Tembakau\\_di\\_Indonesia\\_Stu](https://www.researchgate.net/publication/336487983_Elastisitas_Permintaan_Produk_Tembakau_di_Indonesia_Stu) di\_Konsumsi\_Rokok\_Lintas\_Rumah\_Tangga

<sup>95</sup> Riski, P (2020) Cukai Rokok Naik, Perokok Anak Turun?, VOA-Indonesia news, Retrieved from <https://www.voaindonesia.com/a/cukai-rokok-naik-perokok-anak-turun-/5565221.html>

<sup>96</sup> WHO Regional Office for South-East Asia (2020) Menaikkan Cukai dan Harga Produk Tembakau untuk Indonesia Sehat dan Sejahtera, World Health Organization, Jakarta, Indonesia.

<sup>97</sup> Zheng, R, Marquez, P, V, Ahsan, A, (2018), Cigarette affordability in Indonesia 2002-2017, World Bank report, the WB Group, Washington DC.

to no tax increase as compared with manufacturers of large-scale machine-rolled kretek cigarettes (SKM) or machine-made white cigarettes (SPM).

Interestingly, the increase in cigarette taxes has not been effective to reduce smoking prevalence. Until 2019 sales of SPM, which has been dominated by the market, increased. But in 2020, as the tax increase was the highest, the market share of SPM cigarettes dropped by approximately 30.5 per cent. Interestingly, sales of SKT cigarettes increased by 14.7 per cent, as the labour-intensive SKT industry is not subject to tax increase.

This summarizes the finding that the tobacco taxation policy in Indonesia has given more impact on children and the poor with relatively elastic demand, but price increases only encourage addicted smokers to switch to lower-taxed cigarettes or cheaper brands rather than quitting entirely. Moreover, the complex tax tier system has encouraged industries to reduce their tax burdens by evading tax.

## 4. REVENUE SHARING FUNDS OF TOBACCO PRODUCTS EXCISE (DBHCHT)

43. **The DBHCHT is collected at the national level and distributed to regional governments that contributed to excise revenue and tobacco-producing regions following their weighted contributions.** Regions with higher contributions receive a higher share of the fund. Through a Finance Minister regulation in 2017, the national government encourages regional administrations to allocate at least 50 per cent of the fund to support health programs in their regions. The rest of the fund is used to support improving the quality of raw materials, developing the tobacco-related industrial sector, developing social environment programs, socializing the tax excise, and eradication of illicit goods<sup>98</sup>.

44. **The policy on DBHCHT started taking effect in 2007. DBHCHT is regulated in Law No.39/2007, Law no.222/PMK.07/2017 and Law No. 7/PMK.07/2020.** Under law no. 39/2007, the DBHCHT was regulated to be distributed as much as 2 per cent to regions that contributed to excise revenue<sup>99</sup>. The Law no.222/PMK.07/2017 emphasised the criteria of DBHCHT beneficiary regions, which include regions that contributed to excise revenue and the tobacco-producing regions<sup>100</sup>. Furthermore, Law No. 7/PMK.07/2020 regulates the usage and monitoring of funds that are distributed to excise-producing provinces and tobacco-producing provinces. The funds are managed by the provincial government and distributed to district levels based on their

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<sup>98</sup> Finance Minister regulation No.222/PMK/2017, <https://peraturan.bpk.go.id/Home/Details/112975/pmk-no-222pmk-07-2017>

<sup>99</sup> Indonesian government Law No. 39/2007, <https://jdih.kemenkeu.go.id/fulltext/2007/39tahun2007UU.HTM>

<sup>100</sup> Finance Minister regulation No.222/PMK/2017, <https://peraturan.bpk.go.id/Home/Details/112975/pmk-no-222pmk-07-2017>

contribution to excise tax collections<sup>101</sup>. The utilisation of DBHCHT must also be synchronized with programs funded from the receipt of cigarette taxes, special allocation funds (DAK), general allocation funds (DAU), other revenue-sharing funds (DBH), and regional government budget (APBD) and expenditure<sup>102</sup>.

45. **Built on Law no.7/PMK.07/2020, the government released details on the utilisation of the DBHCHT for the 2021 state budget.** The main focus of the DBHCHT has not changed (that are improving the quality of raw materials, developing the tobacco-related industrial sector, developing social environment programs, socializing the tax excise, and eradication of illicit goods), but the government emphasises more on (1) The regional economic recovery with public welfare as a priority – with 50 per cent budget allocation, (2) Law enforcement, with 25 per cent budget allocation and (3) Health sector, with 25 per cent budget allocation, that supports the National Health Insurance Program (JKN), in particular, to improve the quality and quantity of health facilities at the basic level<sup>103</sup>.

46. **Consistent with the increase in government revenues from excises and cigarette taxes, the allocation of DBHCHT to the regions also shows an increase from year to year.** For the year 2021, the government has allocated the DBHCT funds of IDR 3.47 trillion from the tax revenue<sup>104</sup>. This figure is 0.28 per cent higher than that of 2020. The province that received the highest allocation is East Java, amounting to IDR 1.93 trillion or 55.6 per cent of the total allocation, followed by Central Java (IDR 743.46 billion), West Java (IDR 401.65 billion), and West Nusa Tenggara (318.71 billion)<sup>105</sup>.

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<sup>101</sup> Finance Minister regulation No.7/PMK.07/2020,

<https://jdih.kemenkeu.go.id/fullText/2020/7~PMK.07~2020Per.pdf>

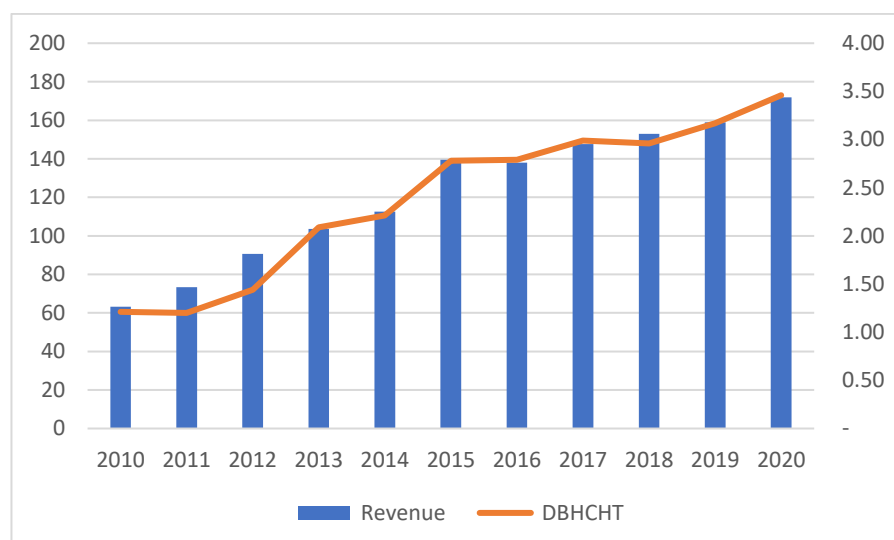
<sup>102</sup> Yandri. P, Budi. S, Sujatna. W, Masduki. U, (2020), Revenue Sharing Fund of Tobacco Products Excise and Economic Performance in Decentralized Era, Journal of Governance and Public Policy, , JGPP Vol.7, No.2.

<sup>103</sup> Ministry of Finance (2020), Sosialisai Kebijakan Penggunaan DBHCHT Tahun Anggaran 2021, Ministry of Finance, retrieved from <http://www.djpk.kemenkeu.go.id/wp-content/uploads/2021/01/Kebijakan-Penggunaan-DBH-CHT-2021.pdf>.

<sup>104</sup> Minister of Finance regulation no.230/PMK.07/2020 concerning DBHCHT distribution to provinces/District/and city budget year 2021, retrieved from <https://jdih.kemenkeu.go.id/download/d01ac99c-ccc8-40f5-a12b-29f12d6d4953/230~PMK.07~2020Per.pdf>

<sup>105</sup> Pangastuti. T, (2021), Alokasi DBH CHT Naik 0,28 percent, Jawa Timur Dapat Paling Tinggi, Investor Daily, Indonesia, retrieved from <http://brt.st/708v>

**Figure 17: Increases in the trend of DBHCHT against tax revenue 2010-2020**



Source: Ministry of Finance report (2020)

## Conclusion

The DBHCHT is a sharing fund collected from 2 per cent of the total tobacco excise tax at the national level, distributed to regional governments that is contributed to excise revenue and tobacco-producing regions based on their weighted contributions. DBHCHT is regulated in Law No. 39/2007 and Finance Minister Regulation No. 7/PMK.07/2020. Built on No. 7/PMK.07/2020 the government has released DBHCHT budget allocation design for the 2021 state budget

This amendment includes balancing three aspects, which are community welfare, health, and law enforcement. The DBHCHT will be allocated by 50 per cent to support social welfare programs for farmers and tobacco industry workers, 25 per cent for health programs, which include a contribution to National Health Program (JKN) for underprivileged families, and the remaining 25 per cent for law enforcement activities that are used to prevent and reduce illegal cigarettes. Consistent with the increase in government revenue from excise and cigarette taxes, the allocation of DBHCHT to the regions also shows an increase. However, the existing mechanism for the redistribution and utilisation of DBHCHT has not been fully implemented and followed by subnational government levels.



## 5.FIELD STUDY REPORTS

### 5.1. Tobacco economic and farming: the case of Temanggung and East Lombok.

#### 5.1.1. Methodology and data sampling

47. **The study utilised a smallholder farmers-level survey to get nationally representative data of the tobacco economic ecosystem in the major tobacco production regions in Indonesia.** The survey instrument used to obtain representative data from the primary source of information, included questionnaires and a combination of other data collection methods; in-depth interviews, group discussions and visual methodologies. The focus of this survey was to collect data on smallholder farmers' tobacco economic activities, including tobacco farming direct and indirect costs, production, and revenue from selling their products.
48. **Population sampling for this study was selected from two major tobacco production provinces in Indonesia, Central Java and West Nusa Tenggara (NTB).** In each province, we randomly selected one tobacco producer district, Temanggung district and East Lombok district. Using simple random sampling we then selected 2-3 sub-districts within each district. The target population for this study was smallholder tobacco farmers from each selected sub-district. Given the large population and the difficulty to identify every member of the population, we then use a simple random sampling method to select study population sampling. In Temanggung district we selected 60 population sampling and in East Lombok, we selected 100 population sampling. The details of the population sampling in these two districts can be seen in Table 3 below.

**Table 3: Number of participants in a field study in Lombok and Temanggung.**

| No | Temanggung             |                    | East Lombok  |                    |
|----|------------------------|--------------------|--------------|--------------------|
|    | Sub-District           | No. of Respondents | Sub-District | No. of Respondents |
| 1  | TelogoMulyo            | 22                 | Saka Timur   | 58                 |
| 2  | Bulu                   | 32                 | Selong       | 42                 |
| 3  | Kledung and Pringsurat | 6                  |              |                    |
|    | Total                  | 60                 |              | 100                |

Source: Field survey data in Lombok and Temanggung

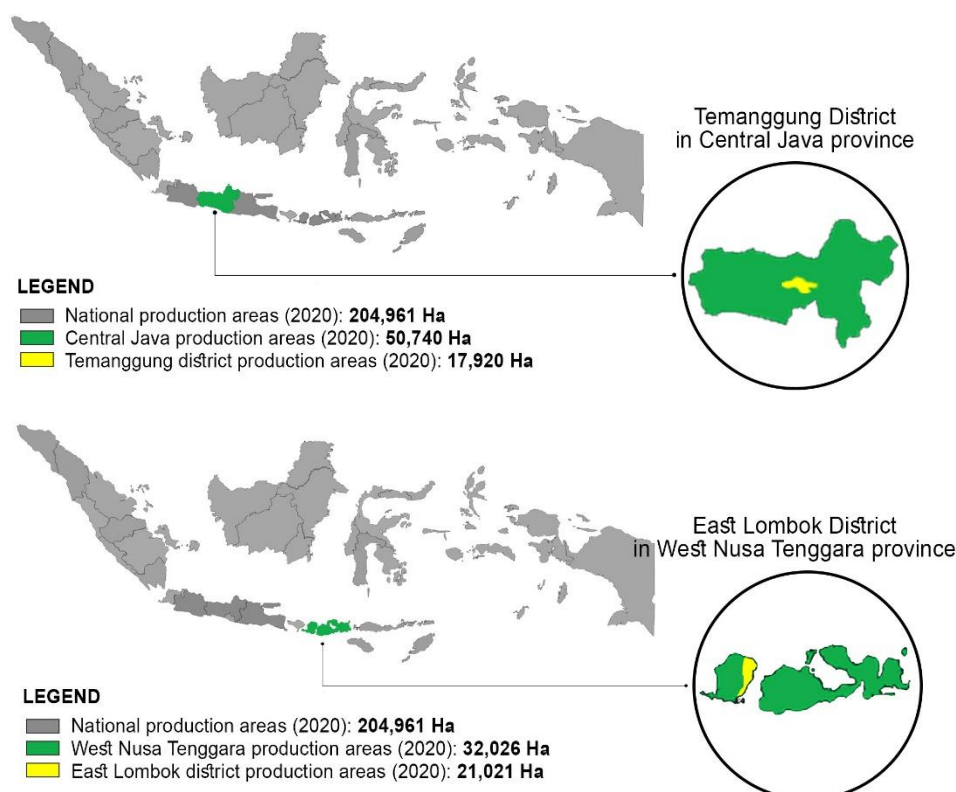
49. **Temanggung district is one of the districts in Central Java province that covers a land area of 870.65 km<sup>2</sup>.** In the year 2020, 21 per cent of the land area in Temanggung or around 17,900Ha has grown with tobacco. This figure contributes to 35 per cent of total land devoted to tobacco growing in Central Java province, which is 50,740Ha<sup>106</sup>, and 8,7 per cent of the national total land for tobacco growing.

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<sup>106</sup> Secretariat of Directorate General of Estates (2019), *Tree crop estate statistic of Indonesia – Tobacco 2018-2020*, Directorate General of Estates, Ministry of Agriculture Indonesia.

50. **While East Lombok, a district in West Nusa Tenggara province covers an area of 1.605,55 km<sup>2</sup> of which around 13 per cent (21.000 Ha) is grown with tobacco. East Lombok contributes to 65 per cent of tobacco growing land in the West Nusa Tenggara province, that account for 32,026Ha<sup>107</sup>, and 10,3 per cent of the national tobacco-growing land area.**

**Figure 18 Map of Temanggung and West Nusa Tenggara districts and tobacco arable land 2020**



Source: Ministry of Agriculture (2020)

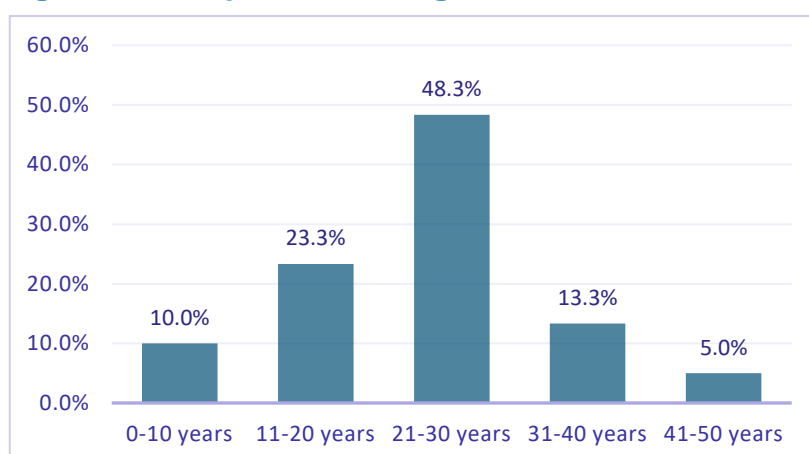
### 5.1.2. Respondents' socio-demographic profile

51. **The majority of the farmers were middle-aged married males who were contributing meaningfully to tobacco farming.** The family size of these married respondents can be considered “small”, where 83.4% of them are a family with 2 children or less. None of the data samples showed a family with more than 3 children. Many of the respondents also reported worked on non-tobacco agricultural activities including cultivating vegetables, yams, corns, chilli, and tomatoes and raising goats as a second job. 55 per cent of respondents sell these non-tobacco agricultural products to the local market and 45 per cent reported use for household consumption.

<sup>107</sup> Secretariat of Directorate General of Estates (2019), *Tree crop estate statistic of Indonesia – Tobacco 2018-2020*, Directorate General of Estates, Ministry of Agriculture Indonesia.

52. **The average work tenure of the survey respondents was 23 years in tobacco farming.** Nearly half of respondents (48.3 per cent) have worked for 21-30 years in the tobacco business, another one-third (33.3 per cent) worked for 20 years and less, and the remaining (18.3 per cent) worked longer than 30 years. On average, they employed 3 to 20 people to help with their tobacco farming and processing in each growing season. There were at least 33 families (55.5 per cent) employing workers between 3 to 9 people, and the rest (45.0 per cent) employed between 10 to 20 workers.

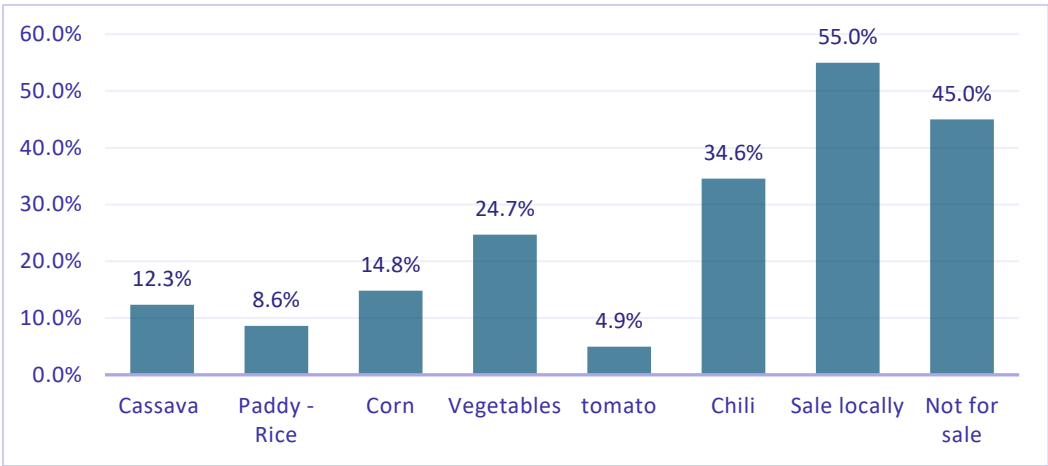
**Figure 19: Respondents' length of work in tobacco farms**



Source: Field survey data in Lombok and Temanggung

53. **At least six commodities of side crops were recorded, and chilli seems to be the most favourable side crops (34.6 per cent), followed by vegetables (24.7 per cent) and corn (14.8 per cent).** There was also cassava (12.3 per cent), paddy rice (8.6 per cent), and tomato (4.9 per cent). In cultivating the side crops, most of the respondents (63.3 per cent) stated that they employed family members, while the rest (36.7 per cent) employed paid workers. Although few respondents figured the financial benefits of growing side crops, some of them (38.3 per cent) made profits ranging from IDR 500,000 to IDR 2 million. The rest did not count the revenue and the costs of growing side crops, as these harvests were only to meet the needs of daily life.

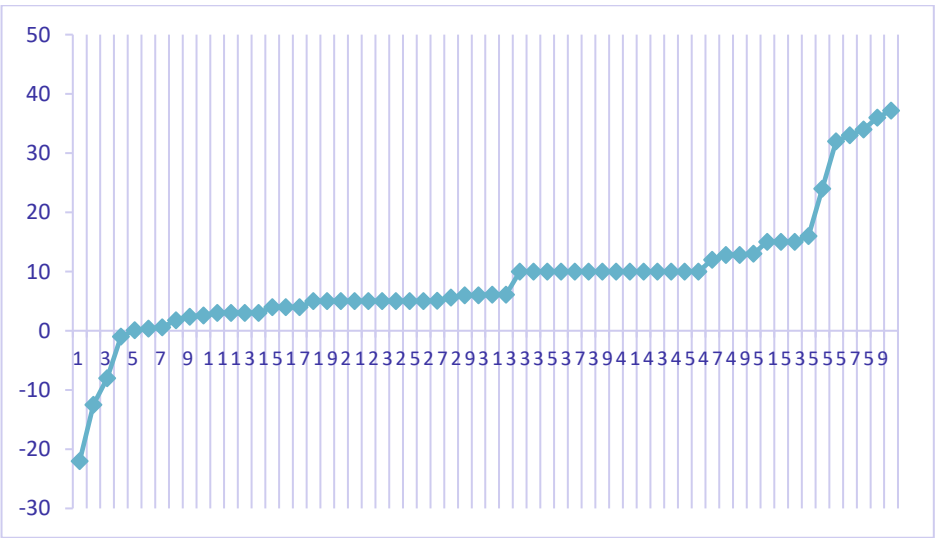
Figure 20: Side crops grown by respondents.



Source: Field survey data in Lombok and Temanggung

54. **The production of both tobacco and side crops is not well recorded, however.** There are both wet and dry tobacco products being traded at different prices according to their volume and quality. Almost all respondents sell their products via middlemen, and only a few respondents have the privilege of becoming partners with tobacco firms under legitimate contract agreements. 6.7 per cent of respondents experienced a loss in the tobacco business while the rest (93.3 per cent) realized profits between IDR 500,000 to IDR 37.2 million in a recent tobacco season. There were also cases where respondents obtained profits between IDR 5 million – IDR 10 million.

Figure 21: Respondents' profit from selling tobacco

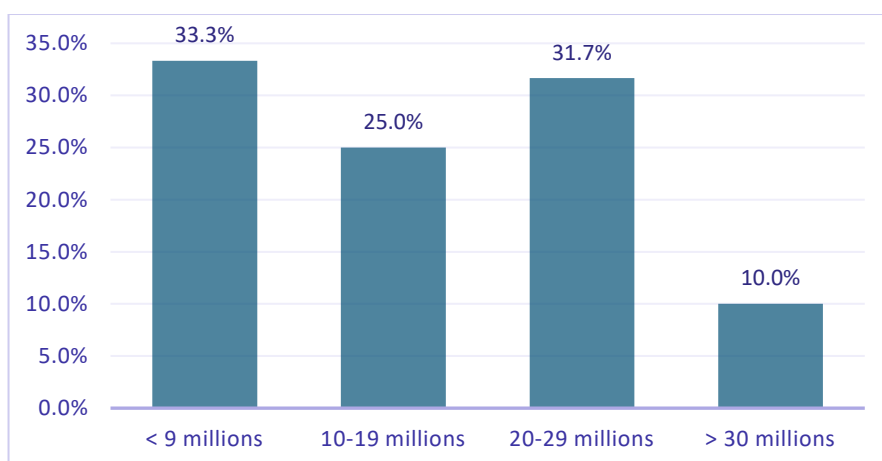


Source: Field survey data in Lombok and Temanggung

55. **Only a few respondents (6.7 per cent) possess more than just land (i.e. including machinery, warehouses) in running their tobacco business.** Initial capital for running a tobacco business varies, ranging from IDR 1.3 million up to IDR 60 million, with a median value of IDR 15 million. One-third of respondents were found to be running their business with an initial capital of IDR 9 million and lower, 25.0 per cent

used initial capital ranging from IDR 10-19 million, 31.7 per cent used initial capital of IDR 20-29 million and the other 10 per cent used IDR 30 million and higher to run their tobacco business. Most capital used in these businesses came from respondents' savings, while only 5.0 per cent of respondents applied for a bank loan for 20 per cent of the initial capital needed. Data samples showed that 81.7 per cent of respondents count and calculate initial capital to grow side crops, while others (18.3 per cent) do not count it. Just like tobacco, the size of initial capital for growing side crops ranged from IDR 330,000 to a maximum of IDR 7 million, with a median of IDR 2 million (28.6 per cent out of 81.7 per cent respondents clearly stated that IDR 2 million was their initial capital to grow side crops). So, 57.1 per cent of tobacco farmers paid between IDR 330,000 to IDR 2 million initially to grow side crops, and the other 42.9 per cent paid around IDR 2-7 million.

**Figure 22: Respondents' initial capital in tobacco farming**



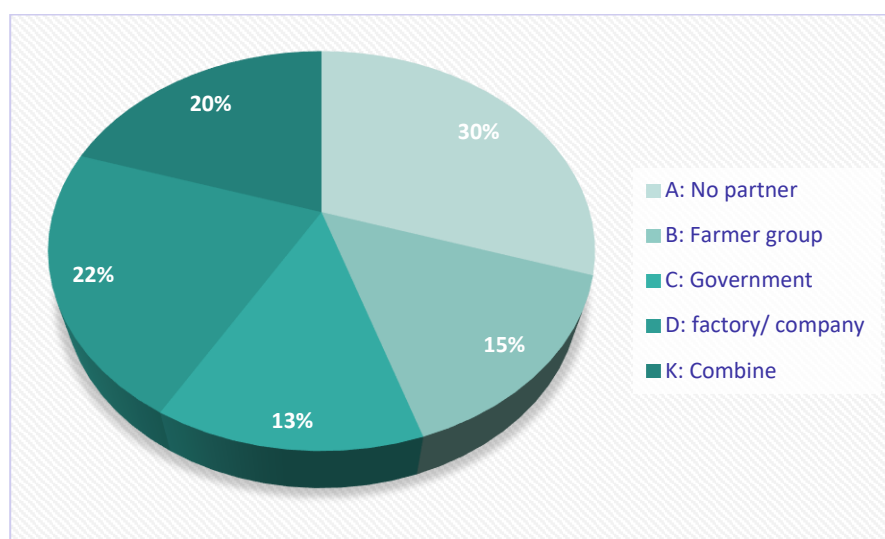
Source: Field survey data in Lombok and Temanggung

56. **Tobacco has been a hereditary cross-generational business since the 19th century, with the expectation that it could improve the local economy.** Survey data showed that 41.7 per cent of people started their tobacco business before 2000, and 58.3 per cent started in the 2000s. Most started farming tobacco at the age of 20, and the latest who entered the tobacco business was in 2015. The factors that influence tobacco production are weather or weather-related matters (98.3 per cent), which influence tobacco quality and price, instead of soil fertility, seasons, and pests. The riskiest task in tobacco production is the manual chopping/slicing process, yet 16.7 per cent of respondents said there was no danger at all in farming tobacco. Most (82 per cent) seem to disagree with child labour and considered tobacco-related activities as an unethical, unsuitable environment that is inappropriate for children to work in.

57. **Most respondents (30.0 per cent) prefer to work on their own in their tobacco business, which means that seedling, farming, harvesting, and marketing is done by the farmers and family members.** They are reluctant to get involved in partnerships to avoid being bound by contracts, where in most cases farmers will lose freedom in managing their farm, farmers are requested to use a certain variant of tobacco, and they must stick to the rules. Yet some respondents are willing to partner with others (single partner) such as farmers' groups (15.0 per cent), government (13.3 per cent),

cigarette firms (21.7 per cent) and combining partners, where 20 per cent prefer to work with multiple partners.

**Figure 23: Respondents' preferable partner(s) in farming tobacco**



Source: Field survey data in Lombok and Temanggung

58. **The respondents who are willing to work in partnerships with other parties believe that they will get updated information on farming and prices.** They also believe they will have more bargaining power, get the feeling of togetherness, and find it easier to get assistance from their partners when needed. From the government perspective, these partnerships are beneficial to carry out appropriate guidance to watch and control tobacco price and quality on behalf of farmers, and those who prefer partnering with cigarette firms argue that the firms will guarantee to buy their produced tobacco, provide capital, seeds, fertilizers, counselling, and provide an easy, clear trading system for tobacco sales. Taking into account all partnerships advantages, 20 per cent prefers to work in a multi-partner arrangement (12 per cent on BCD, 3 per cent on BD, and 5 per cent on CD).

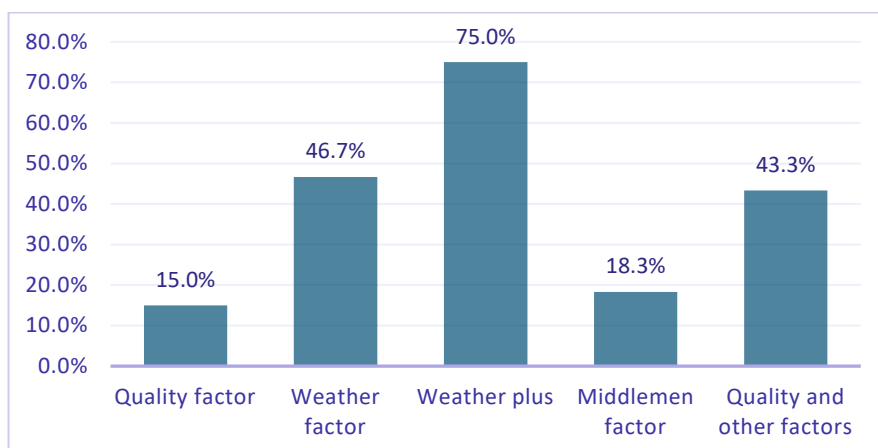
59. **All respondents (100 per cent) said that current tobacco market conditions are unfavourable (uncertain, confusing, less promising).** In the recent harvesting season, market absorption from the tobacco industry seems slow and not optimal. The grade C tobacco product is priced at IDR 60,000 per kg, far from the farmers' expected price. There were cases where cigarette companies applied strict health protocols due to the COVID-19 pandemic, resulting in less tobacco absorbed by these companies. Also, there used to be more than one buyer coming during harvest, and farmers had been harvesting tobacco for the fourth picking in this harvest time.

60. **The local administration acted by inviting the companies to maintain harmony and good relations with tobacco farmers.** Cigarette companies requested to give their reasonable price for the best quality tobacco products or have it adjusted accordingly to its quality, but companies expect tobacco prices to be stable in this COVID-19 pandemic. One company is targeting 4,000 tons or more of tobacco to buy

this year and is facing consumers' caution in buying cigarettes, in which the numbers tend to decline.

61. **The survey revealed that the most determinant factors in tobacco price are weather (75 per cent) and quality factors (43.3 per cent), followed by middlemen (18.3 per cent).** A few mentioned tobacco import, cigarette firms or tobacco suitable soil influence the tobacco price.

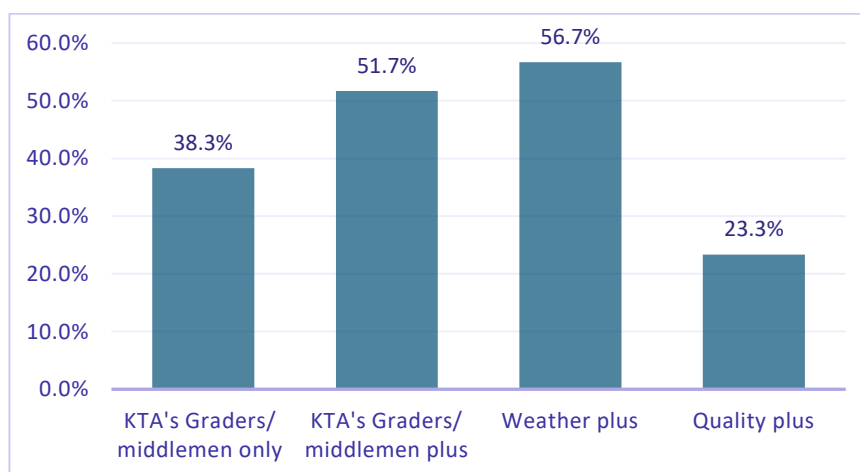
**Figure 24: Tobacco price factors**



Source: Field survey data in Lombok and Temanggung

62. **Factors that influence respondents' losses or profits in selling tobacco include weather and prices set by middlemen.** 56.7 per cent of respondents consider too much rain or a long dry season to be bad for tobacco quality and its price. 51.7 per cent of respondents stated that the tobacco prices are mostly set by middlemen or tobacco graders who own a "privilege" card for firsthand access to the price set by cigarette companies. Other tobacco graders include warehouse owners who piled up tobacco products to be sold at a better price. In most cases, Imported tobacco also creates competition for local tobacco products leading to price reductions.

**Figure 25: Tobacco prices determinants**

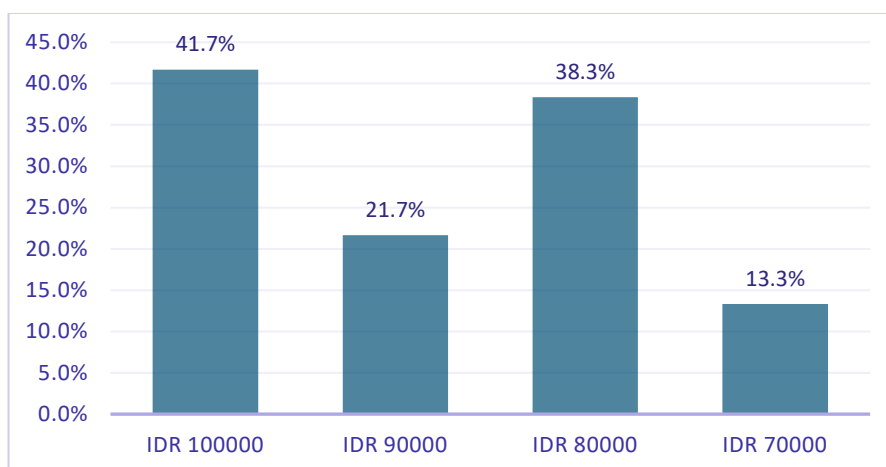


Source: Field survey data in Lombok and Temanggung



63. **Most respondents do not care about increases in cigarette prices and believe that cigarette prices do not directly affect the tobacco price**, although most of them are smokers. In regards to tobacco prices, most respondents (68.3 per cent) prefer varied prices over fixed prices, while 31.7 per cent of respondents prefer fixed prices. The tobacco price figure per kg according to most respondents was IDR 100,000 (41.7 per cent), followed by IDR 80,000 (38.3 per cent), then IDR 90,000 (21.7 per cent) and IDR 70,000 (13.3 per cent).

**Figure 26: Respondent preferences for tobacco prices (per Kg)**

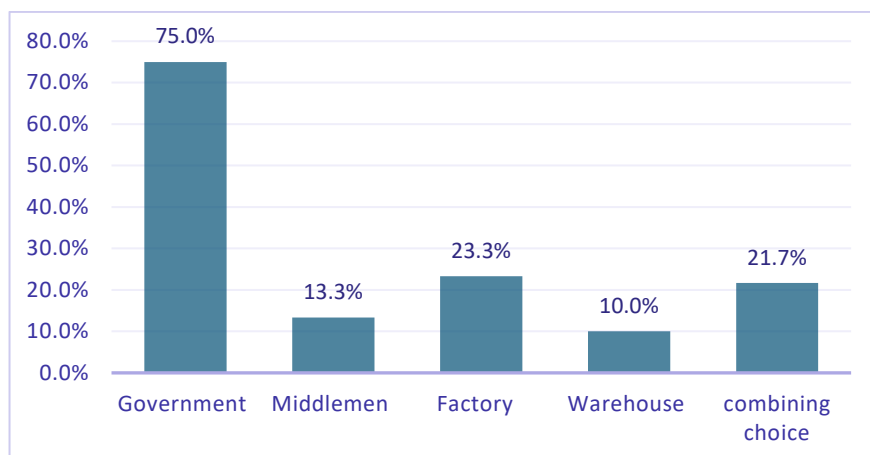


Source: Field survey data in Lombok and Temanggung

64. **Concerning the reasonable maximum value price of tobacco, 91.7 per cent of respondents consider a good tobacco price to be IDR 100,000 and below**, and the rest (8.3 per cent) consider a good tobacco price to be between IDR 100,000 to IDR 250,000 (5.0 per cent). Hence, the range of good prices for tobacco seems very wide from a low of IDR 20,000 up to IDR 250,000, mostly considered for grade C tobacco. We suspect that different quality levels matter in suggesting a good price figure for tobacco (sliced, wet or dried).

65. **Most respondents (75.0 per cent) believe that the government plays a major role in controlling tobacco prices**. While 23.3 per cent of respondents said that cigarette firms have some role in determining prices, 13.3 per cent feel they are controlled by middlemen and 10.0 per cent said, warehouse owners. Others (21.7 per cent) think that tobacco prices are controlled by two stakeholders, yet still involve the government in regulating the industry and warehouse owners.

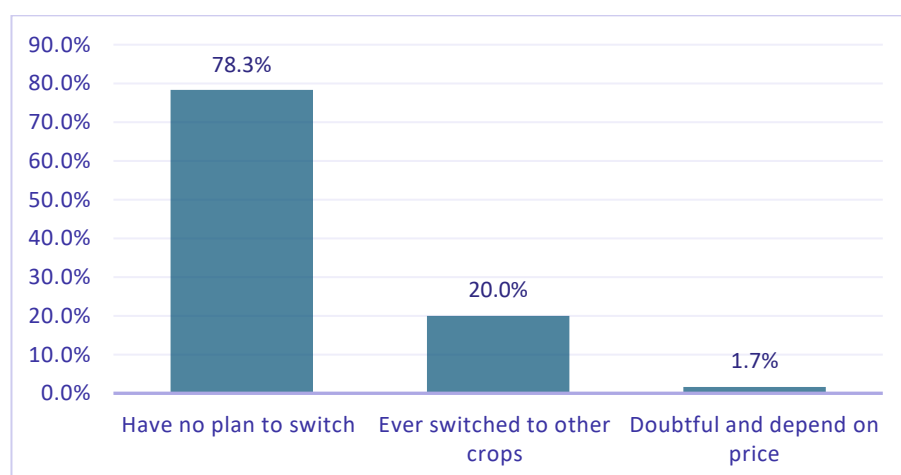
**Figure 27: Tobacco price control**



Source: Field survey data in Lombok and Temanggung

66. **Most respondents (78.3 per cent) have difficulty in switching to non-tobacco products for many reasons.** Among these reasons are no profitable substitute plants for tobacco, particularly during dry seasons when land conditions are more suitable for growing tobacco. Tobacco being cultured for more than a century, and it becomes a matter of preserving the culture of growing tobacco from generation to generation. Those who ever switched (20.0 per cent) considered that there were too many risks in the tobacco business. The price of tobacco is not fixed, and middlemen tend to manipulate the price, while somehow it is easier to sell non-tobacco agriculture products. Some respondents who own rice fields can water their tobacco fields during dry seasons, so it is an opportunity for adaptive soil structure to grow tobacco during the dry season.

**Figure 28: Respondents' willingness to switch to alternative crops**

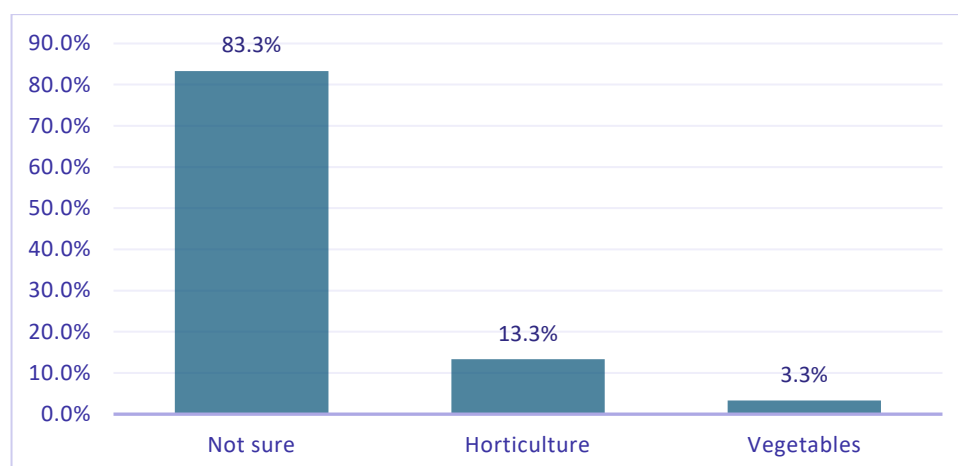


Source: Field survey data in Lombok and Temanggung

67. **Most respondents (83.3 per cent) have a lack of knowledge of the most profitable tobacco substitute crops.** Regardless of the success of farmers in other regions such as Madura island, with 250 Ha sesame plants as a substitute alternative to tobacco, there were only a few respondents in both Temanggung and Lombok who considered horticulture (13.3 per cent) and vegetables (3.3 per cent) as alternative

crops. Most respondents said that the government has never taken initiative to introduce substitute crops to tobacco farmers and markets for these commodities.

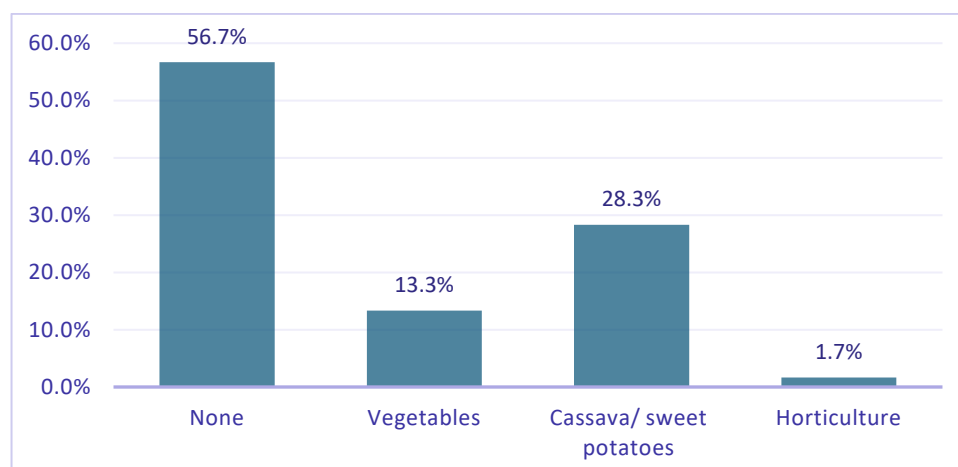
**Figure 29: Substitute crop preferences among respondents**



Source: Field survey data, Lombok and Temanggung

68. **More than half of respondents (56.7 per cent) said that there are no side crops suitable to grow during the tobacco growing season.** Growing side crops such as cassava or sweet potato (28.3 per cent) and vegetables (13.3 per cent) have helped farmers' economies in providing foods for their own needs. Cabbage, chillies, corn, and onions were among the vegetables being cultivated as side crops to tobacco in these regions.

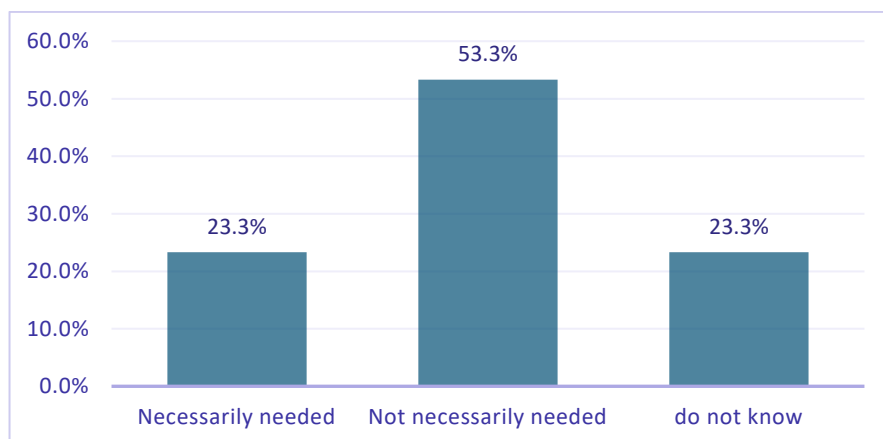
**Figure 30: Suitable side crops during the tobacco-growing session.**



Source: Field survey data, Lombok and Temanggung

69. **Getting consent from farmers group in switching to alternative crops has become a concern of 23.3 per cent of respondents,** while the majority of respondents (53.3 per cent) said that farmers' group consent is not compulsory, and another 23.3 per cent showed no comment on this matter. 53.3 per cent of respondents have indicated the benefits of involving the farmers' group when deciding to switch or on other issues, as this leads to a harmonious environment and increases their bargaining power.

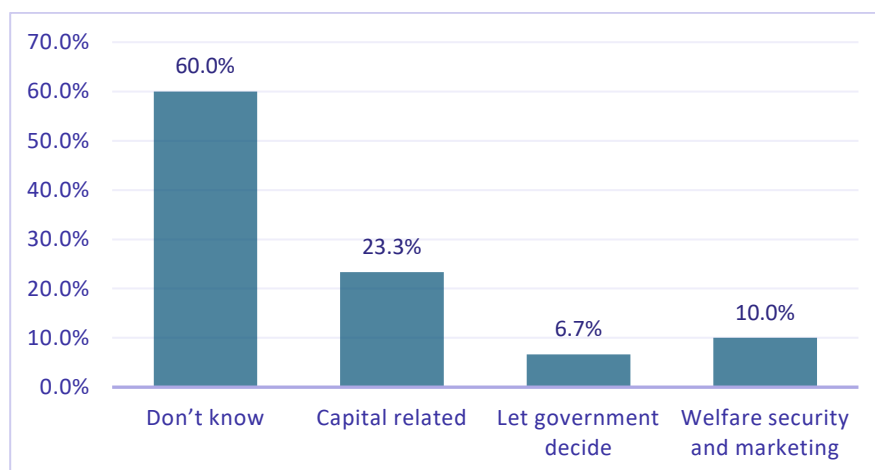
**Figure 31: Farmers' group consent in switching to alternative crops**



Source: Field survey data, Lombok and Temanggung

70. **Nearly half of respondents (40.0 per cent) indicated the need for support such as government supports when deciding to switch to alternative crops.** Of this number, 23 per cent indicated the need for capital, and only 10 per cent have thought specifically about the kind of supports that can be provided by the government. However, required government supports could be in terms of welfare security, given especially during the process of planting, building dams (embung) and assisting in tobacco marketing. However, the majority of respondents (60.0 per cent) were not sure of what support they would require.

**Figure 32: The need for supports when switching to alternative crops**

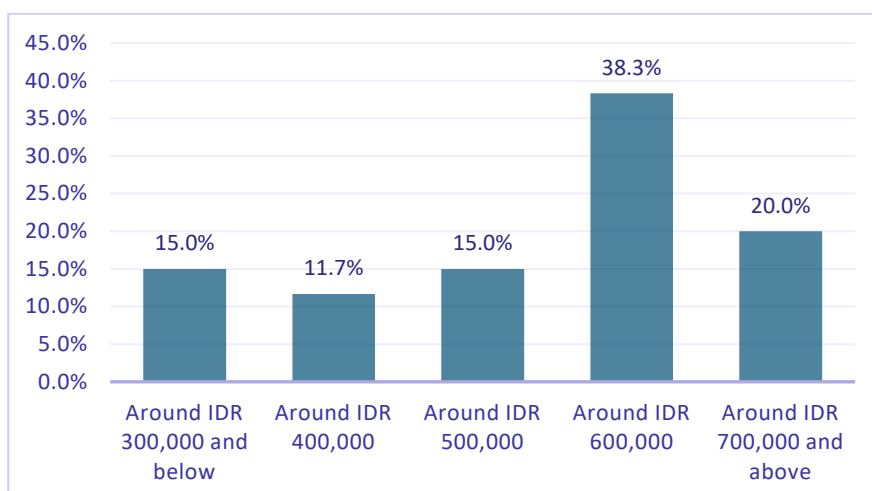


Source: Field survey data, Lombok and Temanggung

71. **The costs incurred for cigarette consumption each month seems to be in a wide range of spending, from IDR 150,000 to IDR 1,500,000 per month.** The data shows that 15.0 per cent of respondents spend around IDR 300,000 per month on smoking, 11.7 per cent spend around IDR 400,000, 15.0 per cent spend around IDR 500,000, 38.3 per cent spend around IDR 600,000, and 20.0 per cent spend around IDR 700,000 and above. All figures are for monthly spending. On average, the nominal value per capita is IDR 28.05 million a year in 2019 or IDR 2.34 million a month, which means half of the respondents put a quarter of their income to support their smoking

habit. The other half spends between 12 per cent and 21 per cent of their income on smoking.

**Figure 33: Respondents' spending on cigarette consumption**

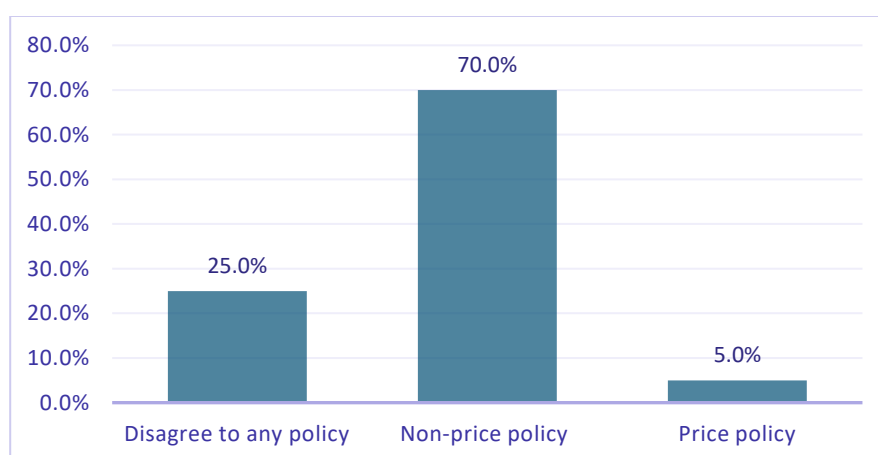


Source: Field survey data, Lombok and Temanggung

72. **Even though the smoking habit takes more than 10 per cent of their income, 91.7 per cent of respondents have no desire to quit or reduce smoking.** Others who try to quit gradually have not yet found the solutions. Regardless of cigarette prices, all respondents do not understand the concept of smoking risk reduction through switching from conventional cigarette consumption to HTP, hence they have no intention to switch. Respondents also showed concerns that HTP will affect the sales of their tobacco products.

73. **Regulating smoking restrictions through price or non-price policies (such as Smoke-Free Zones or pictorial warnings) was considered harmful to tobacco farmers by a quarter of the respondents (25.0 per cent).** These respondents were against any tobacco control policy. While most respondents (70.0 per cent) prefer to have non-price policies, only 5.0 per cent prefer price policies to restrict people from smoking.

**Figure 34: Respondents' opinion on the smoking cessation program**



Source: Field survey data, Lombok and Temanggung

## 5.2. Tobacco trading ecosystem: the case of Lombok and Temanggung

74. To collect respondents' attitudes and opinions on their ecosystem of producing tobacco, a Likert scale was used against a list of statements below. This psychometric scale aimed to understand respondents' views and perspectives towards the statements.

- 1. Tobacco is the main source of income.*
- 2. Tobacco farming is a hereditary business.*
- 3. After farming tobacco, the quality of life has improved.*
- 4. Income from tobacco is sufficient for daily living needs.*
- 5. It is easier to farm tobacco than other crops.*
- 6. I need guidance, mentoring, facilitation of capital.*
- 7. I must have partner/s in tobacco production.*
- 8. I did all the farming and marketing work.*
- 9. I pay workers (including family) for tobacco production.*
- 10. Besides tobacco, I must farm other crops.*
- 11. Farming tobacco and other crops are sufficient for family life.*
- 12. The use of science and technology in tobacco farming is better than traditional.*

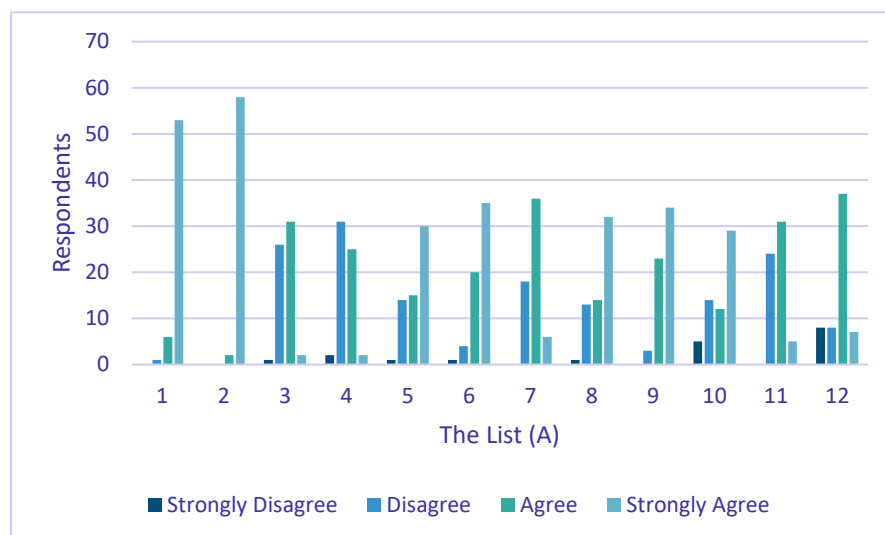
Some of the statements above were discussed in open questions to gather their general opinions, yet it was also necessary for comparison purposes to get measurable scales of respondents' opinions. Concerning statements number 1 and 2 above, more than half of respondents strongly agree that tobacco is a hereditary business, and it is their main source of income. Yet only around one third agree that their quality of life has improved from producing tobacco. Even though more than half (55.0 per cent) either strongly disagree or disagree that income from tobacco is sufficient for their daily living needs, 40 per cent seem to agree, and another 5 per cent are seemingly satisfied with their daily living from producing tobacco.

The majority of respondents (75.0 per cent) either strongly agree or agree with the statement that it is easier to farm tobacco than other crops, while the other quarter disagrees, of whom 1.7 per cent strongly disagree. Again, the majority of respondents (91.6 per cent) agree or strongly agree that they need guidance, mentoring and facilitation of capital in producing tobacco. One-third of respondents strongly disagree with having a partner(s) in tobacco production. Three-quarters of respondents (75.6 per cent) did all the farming and marketing work by themselves, yet around one-fifth (23.4 per cent) cannot do it by themselves. 95.0 per cent of respondents (strongly) agree that they must pay workers (including family) to help in their tobacco businesses.

To fulfil their daily needs, 68.3 per cent (strongly) agree that besides tobacco, they must grow other crops, while the rest disagree (8.3 per cent of whom strongly disagree). 40.0 per cent strongly disagree that farming tobacco and other crops are sufficient to support family life, although 50.0 per cent agree, and the remaining 10.0 per cent strongly agree that cultivating both tobacco and side crops should be sufficient for the

family. The majority of respondents agree (61.7 per cent) or strongly agree (11.7 per cent) that the use of science and technology in tobacco farming is better than traditional farming, and the rest (26.6 per cent) would keep their traditional ways.

**Figure 35: Respondents' perspective on the tobacco-producing ecosystem.**



Source: Field survey data, Lombok and Temanggung

75. A different list of questions for quick answers with scores was also given to respondents with some statements related to the ecosystem of tobacco pricing. This second list (B) was as follow:

1. Tobacco prices should be determined by the government.
2. Middlemen offer the best tobacco price.
3. Cigarette factories offer the best tobacco prices.
4. It is easier to sell tobacco directly to cigarette factories.
5. I do not have to be involved in the supply chain of tobacco companies.
6. I get the best tobacco prices determined by the market.
7. Online tobacco marketing is better than conventional marketing.
8. The price of cigarettes in the market does not affect the price of tobacco.
9. The increase in cigarette prices will also increase the price of tobacco.
10. Excise and cigarette taxes help tobacco farmers.
11. The government must increase the excise and cigarette taxes.
12. The current price of tobacco is considered fair and profitable.
13. I need guidance and mentoring in tobacco marketing.
14. Anyone can/may use tobacco by smoking.
15. Tobacco can trigger certain diseases (TB, GTC for example)

The respondents' answers on each of the above statements clarify the fact that tobacco pricing is not easy to follow and decide. Every party within the tobacco price ecosystem would like to take benefits from tobacco farming. As for tobacco farmers, they need protection not only to secure the businesses but also their livelihoods.

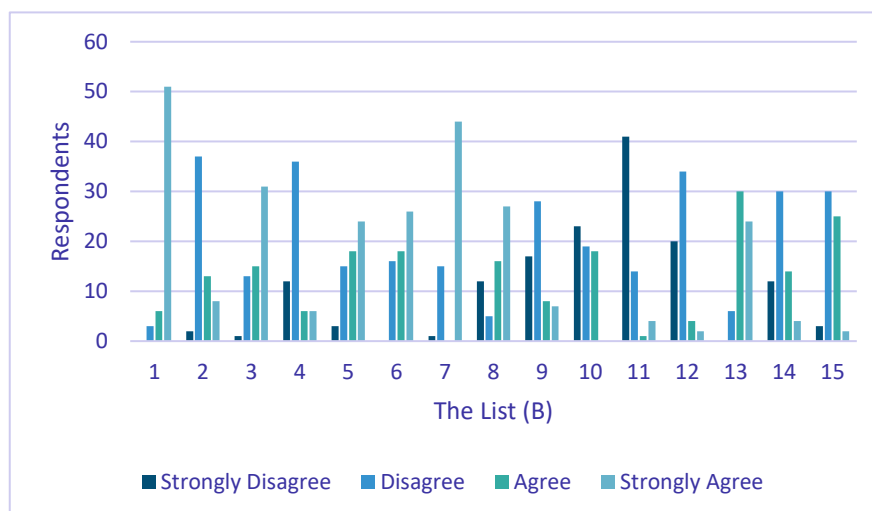


The majority of respondents (85.0 per cent) strongly agree (plus another 10.0 per cent who agree) that tobacco prices should be determined by the government, while the rest (5.0 per cent) strongly disagree. Looking at the role of the middlemen in the tobacco business, 65 per cent of respondents realize that middlemen cannot provide the best price for their tobacco, while the rest (35.0 per cent) seem satisfied with the middlemen's prices. So, although there are respondents who are displeased (23.4 per cent) by tobacco prices set by factories, more than three-quarters of respondents (76.6 per cent) agree or strongly agree that the factories could offer the best tobacco prices. It is not easy to sell tobacco directly to the cigarette factories, however, as experienced by at least 80.0 per cent of respondents. The other 20.0 per cent said that it is easy to sell tobacco directly to the firms.

The cigarette factories have their supply chain, using (registered/carded) middlemen or tobacco warehouse owners, to obtain tobacco from farmers. 70.0 per cent of respondents, of whom 30 per cent agree and 40 per cent strongly agree, choose not to engage in the tobacco factories' supply chain. The majority of respondents (73.3 per cent) said that they could get the best tobacco prices that the market determines, yet almost all (98.3 per cent) disagree or strongly disagree that online tobacco marketing is better than conventional marketing.

71.7 per cent of respondents, of whom 45 per cent strongly agree and 26.7 per cent agree, feel that the price of cigarettes on the market does not affect the price of tobacco, while almost one-third (28.3) disagree with this statement. Respondents mostly disagree (46.7 per cent) or strongly disagree (28.3 per cent) that cigarette price hikes will also increase the price of tobacco, yet one quarter agrees or strongly agree with this. Also, when being asked whether excise and cigarette taxes help the tobacco farmers, only one-third agree, while the rest disagree (31.7 per cent) or strongly disagree (38.3 per cent). Perhaps because of this, the majority of respondents (91.7 per cent) disagree or strongly disagree if the government should increase excise and cigarette taxes. So, no matter what cigarettes prices are, 90.0 per cent of respondents clearly state that the current price of tobacco is considered unfair and not profitable. What they need is guidance and mentoring in tobacco marketing so that they could have a better price as strongly agreed by 90.0 per cent of respondents. There seem to be social concerns among respondents, where most of them (70.0 per cent) disagree or strongly disagree that anyone can use tobacco by smoking. However, interestingly more than half of the respondents (55.0 per cent) do not believe that tobacco can trigger certain diseases like tuberculosis or GTC.

**Figure 36: Respondents' perspectives on tobacco pricing**



Source: Field survey data, Lombok and Temanggung

76. Respondents were also asked about their perspectives as cigarette consumers, particularly on the following statements as shown in the list (C) below:

1. Smoking is an individual right and it benefits tobacco farmers
2. Smoking is detrimental to the health of smokers and those around them
3. Smoking is an effective medium/method of communication
4. Smoking tobacco can be addictive
5. Pictorial health warning (PHW) can reduce a smoker's appetite
6. I exercise regularly
7. I never intended to quit smoking
8. I just smoke to relieve stress
9. I get a fair price on my favourite cigarette brand
10. I prefer conventional cigarettes to e-cigarettes
11. Electronic cigarettes are detrimental to tobacco farmers
12. Electronic cigarettes are better for health
13. I do not smoke electronics because of the high price
14. I like electronic cigarettes because they provide more variety in flavours
15. Electronic cigarettes are not addictive
16. Taxes and excises on e-cigarettes must be greater than conventional cigarettes

It may be part of the local tobacco business because cigarettes, mostly *kretek* cigarettes, are being consumed by locals, many of whom are respondents to this scoping study. Here, consuming *kretek* of any brand with its price might as well influence the tobacco farmers' family income. Almost all respondents strongly agreed (96.7 per cent) that smoking is an individual right and benefits tobacco farmers, and even the other 3.3 per cent conforms to agree. Yet not even half of the respondents (38.3 per cent) agree that smoking is detrimental to the health of smokers and those around them. Most of them (61.7 per cent) disagree that smoking is bad for a smoker's health and people around smokers. Even so, the majority of respondents (88.3 per cent) believe

that smoking is an effective medium or method of communication, and only 11.7 per cent disagree.

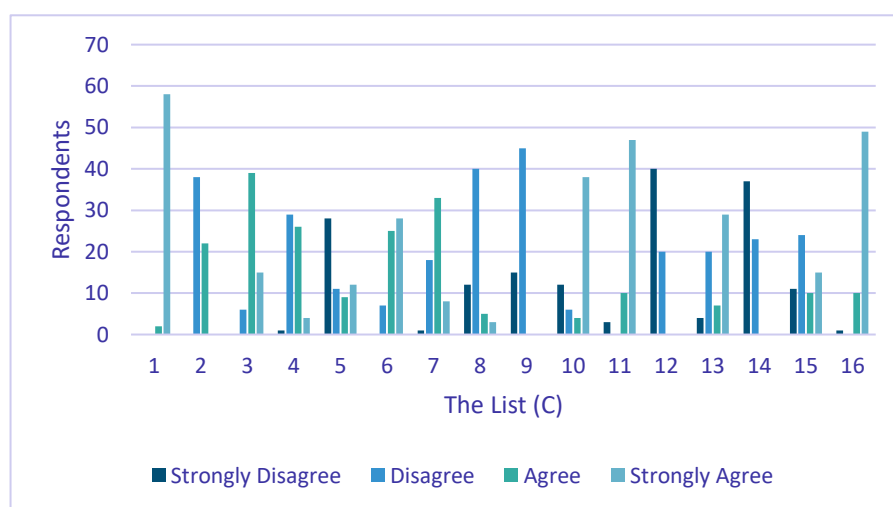
Half of the respondents disagree that smoking tobacco can be addictive. Only 36.7 per cent agreed that pictorial warnings (PHW) can reduce a smoker's appetite, while the rest believe that PHW is ineffective.

Most respondents (88.3 per cent) do exercise regularly, and perhaps that is among the reasons why two-third (66.7 per cent) of them never intend to quit smoking, while 33.3 per cent do intend to quit smoking. Most respondents (86.7 per cent) smoke for pleasure versus relieving their stress, while only 13.3 per cent of respondents agree that they smoke to relieve their stress. When they must smoke, however, only 15.0 per cent said that they could get a fair price on their favourite cigarette brands (*kretek*).

When respondents were asked whether they prefer conventional cigarettes to e-cigarettes, most of them (71.7 per cent) prefer conventional cigarettes. It could be because they (95.0 per cent) believe that electronic cigarettes are detrimental to tobacco farmers. None believe that electronic cigarettes are better for health, and 65.0 per cent of respondents strongly disagree if electronic cigarettes are good for health. 60.0 per cent of respondents believe that electronic cigarettes devices are more expensive than conventional cigarettes and 40.0 per cent of respondents feel that electronic cigarettes could be reasonably affordable.

None of these respondents considers enjoying electronic cigarettes because they provide more variety in flavours, and more than half (58.3 per cent) believe that smoking electronic cigarettes may cause addiction. Hence, it is no wonder that 98.3 per cent of respondents approve that taxes and excises on e-cigarettes must be greater than those for conventional cigarettes.

**Figure 37: Respondents' perspectives on cigarette consumers**

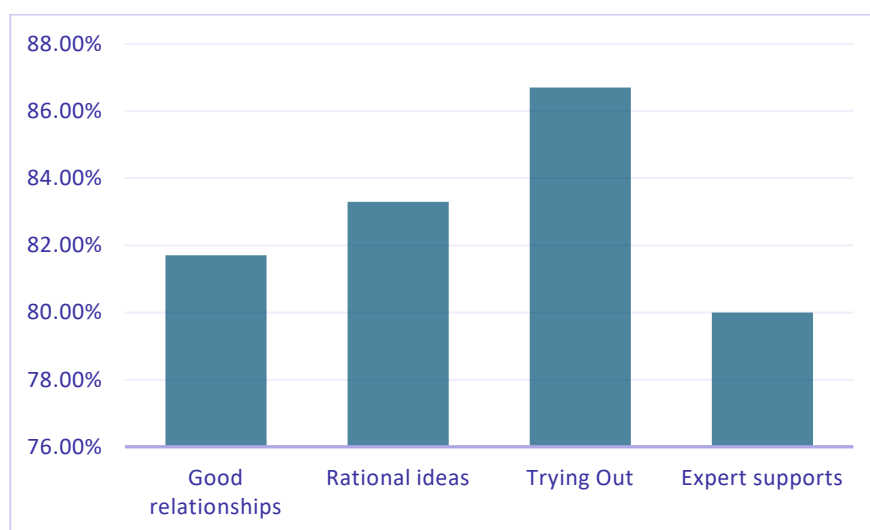


Source: Field survey data, Lombok and Temanggung

77. Respondents' adaptive capacity to changes was also mentioned in the survey. The measurement of adaptation capacity is also carried out through a scoring system with closed questions (with a list of options for answers). The score was compiled by considering the respondents' experience and their capacity to learn or to adopt new things that may be different from their ordinary daily life. It must be remembered that questions will always be related to the attitudes and views of the respondents, what they like and how they feel.
78. When they were asked about their work as tobacco farmers, the feeling was said to play a major role in the farming activities (supported by 98.3 per cent of respondents), in the sense of how they should make a good decision in every step of their tobacco business activities. Most of the respondents (91.7 per cent) also like to think about ideas in their work, and they understand that they cannot work individually, yet 20.0 per cent of respondents said that working individually is still possible. Not surprisingly, 95.0 per cent said that they like to see or hear from their group on how to get the most of their work, even among those who said they like to work independently.
79. In their production process, 100 per cent of respondents stated that they do carefully observe the production process and prefer to think about the quality of their products. All of them pay attention to best practices and apply them in their farms, although they were divided about doing the farm their way, where 36.7 per cent of respondents considered it better to farm tobacco following their ways.
80. Entering the commercial stage of their tobacco business might involve farmers' best intuition and feel in their decision-making process, especially on when and how they must release their products to get the best prices. Around 23.3 per cent of respondents disagree, however, considering that there must be some other aspects to consider in entering tobacco markets, and that intuition and feeling are not enough for making such a decision. That these aspects could be logic and proper reaction to tobacco market demand was agreed upon by 81.7 per cent of respondents. Proportionally, around 76.7 per cent of respondents rely on intuition and feeling in commercializing their products, while 81.7 per cent of respondents rely on logic and proper reaction, and it seems logical and more meaningful in farmers' decisions to enter tobacco markets. Almost all respondents (98.3 per cent) are likely responsible for every decision taken. Staying silent and waiting in facing the tobacco market seems to be out of the question, as most respondents (80.0 per cent) prefer to be more proactive in selling their products.
81. Regarding farming behaviour, respondents stated some aspects that persuade them to change, which include: (1) good relations between co-workers, (2) proven rational concepts and ideas, (3) trying out or having the opportunity to practice, and (4) being accompanied by experts in every step of their tobacco business. Some may disagree or strongly disagree with these four aspects, yet the majority of respondents supported all four at 80.0 per cent and above on each of the specified aspects. In order, respondents seem to consider trying out as the most important aspect for changing their farming behaviour (preferred by 86.7 per cent), then rational ideas

(83.3 per cent), followed by good relations among farmers or with other tobacco stakeholders (81.7 per cent), and lastly being supported by experts (80.0 per cent).

**Figure 38: Factors contributing to farming changing behaviours**



Source: Field survey data, Lombok and Temanggung.

82. The respondents were also asked how strongly they belong to the community by looking into predefined answers, such as whether they are primordially bounded by culture or religion, occupationally bounded by equality of works, spatially tied with location, and leisurely bounded by similar hobbies or interests. Most of the responses leaned towards agreeing with the stated answers. 83.4 per cent of respondents said that there are primordial reasons to be bounded in the community, while 68.3 per cent of respondents were bounded occupationally by equality of work. The majority of respondents (86.7 per cent) also support that they are tied spatially to their location in terms of having business and residency in the same area. Also, 68.4 per cent feel that they are bounded by similar hobbies and interests, particularly in making their tobacco business work well.

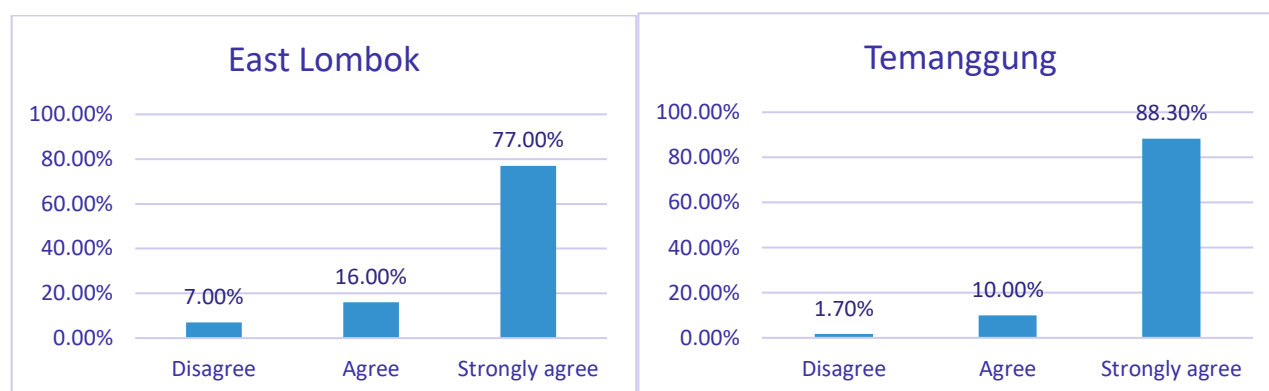
83. The view that smoking is not good for health reasons because it leads to non-communicable diseases was disapproved by most respondents (55.0 per cent). This implies precautions to the effectiveness of government efforts in advising or acknowledging that smoking is harmful to health. Conversely, 81.7 per cent of them agree or strongly agree that the government has taken some actions and advice through prohibiting smoking in almost all public spaces and putting warning labels on cigarettes boxes regarding smoking risks to health. (88.3 per cent of respondents disagree with family anti-smoking attitudes and also are not caring enough about public interests and views about the risks of second-hand smoking. However, there is 38.4 per cent of respondents still caring about public interest surrounding second-hand smoke, relatively higher than their interests (11.7 per cent) in the family anti-smoking issues.

### 5.3. Comparison of Tobacco Farmers in East Lombok in Response to the Impact of Tobacco Control

#### Tobacco as a main source of income

The majority of respondents in East Lombok and Temanggung (93 per cent and 98,3 per cent respectively) stated that their source of income was from tobacco farming, but only a small percentage of the respondent in East Lombok (7,0 per cent) and Temanggung (1,7 per cent) stated tobacco farming is not their major income-earning activity.

Figure 39: Tobacco as a main source of income

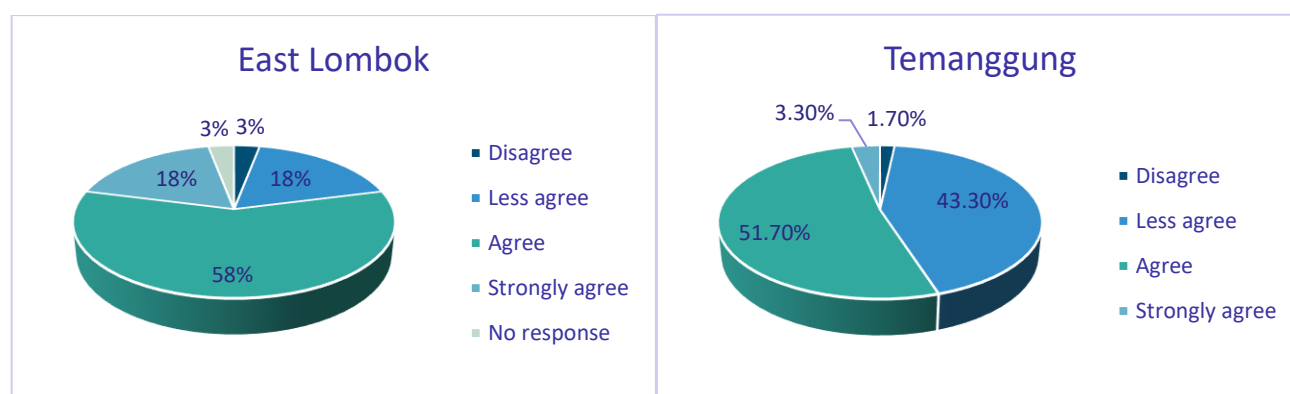


Source: Field survey data, Lombok and Temanggung (2020)

#### Economic improvement from tobacco farming

The majority of tobacco farmers in East Lombok (76.8 per cent of 68 respondents) stated that their lives have improved after farming tobacco. Results were similar among farmers in Temanggung, where up to 95 per cent of respondents stated that their life had improved from tobacco farming.

Figure 40 Economic improvement from tobacco farming

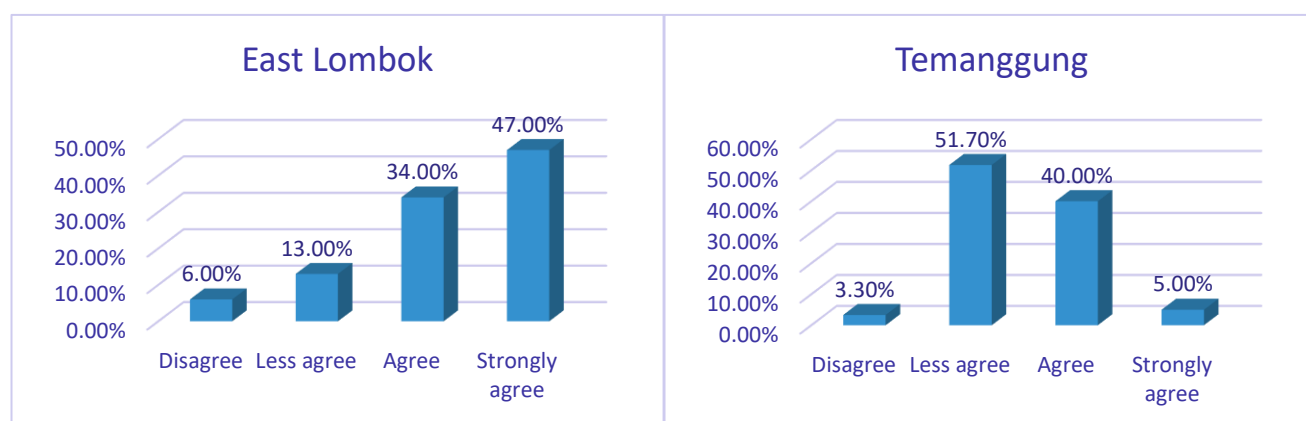


Source: Field survey data, Lombok and Temanggung (2020)

## Income from tobacco farming to support daily needs

The majority of respondents in East Lombok (81 per cent) stated that farming tobacco could generate enough profit for daily expenditure, while only a small percentage of the respondent (19 per cent) believed that income from tobacco farming was not sufficient to meet their basic needs. In contrast, most respondents in Temanggung (55 per cent) stated that tobacco farming is not a profitable business, and less than half of respondents (45 per cent) revealed that tobacco farming could generate enough revenue for daily household needs.

**Figure 41: Income from tobacco farming to fulfil daily needs**

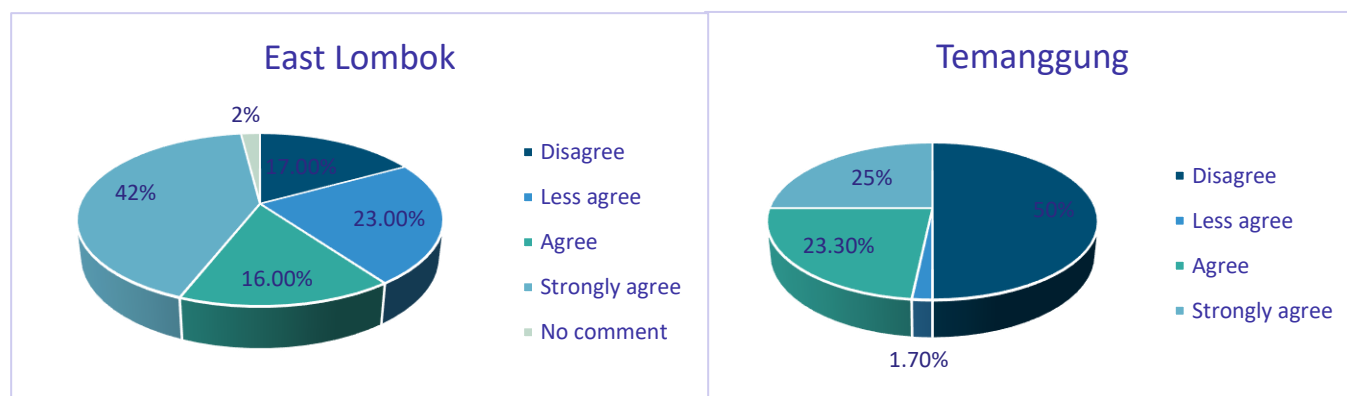


Source: Field survey data, Lombok and Temanggung (2020)

## It is easier to grow tobacco than other crops

The majority of respondents in East Lombok (58 per cent) agreed that farming tobacco was much easier than other crops, while the rest (40 per cent) stated that in general cultivating tobacco or other crops have similar challenges and difficulties. Respondents in Temanggung expressed the other way around. More than half of respondents (52 per cent) perceived that farming tobacco has the same level of difficulties as other crops, while 48,3 per cent of respondents agree that cultivating tobacco is easier than other crops

**Figure 42: Growing tobacco versus other crops**



Source: Field survey data, Lombok and Temanggung (2020)

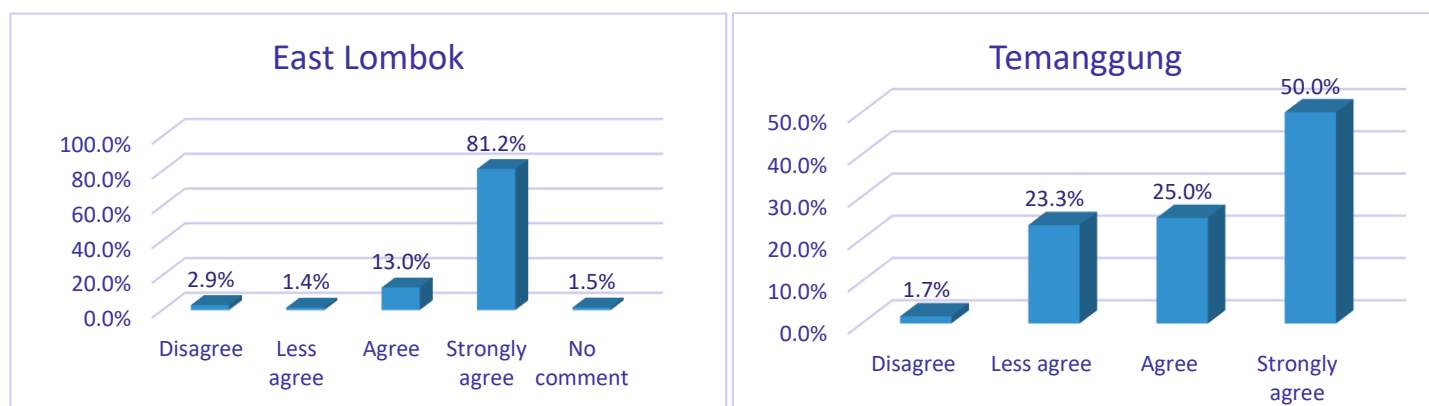


## Farmer's guidance, coaching and capital facility

The majority of respondents in East Lombok (94.2 per cent) and in Temanggung (75 per cent) stated that coaching and capital facility are important to enable them to run professional farms and farm productivity.

The percentage of those who stated that they agreed less or disagreed with the notion that they needed assistance was higher in Temanggung compared to East Lombok (25 per cent versus 4,3 per cent)

**Figure 43: Farmers' guidance, coaching and capital facility**

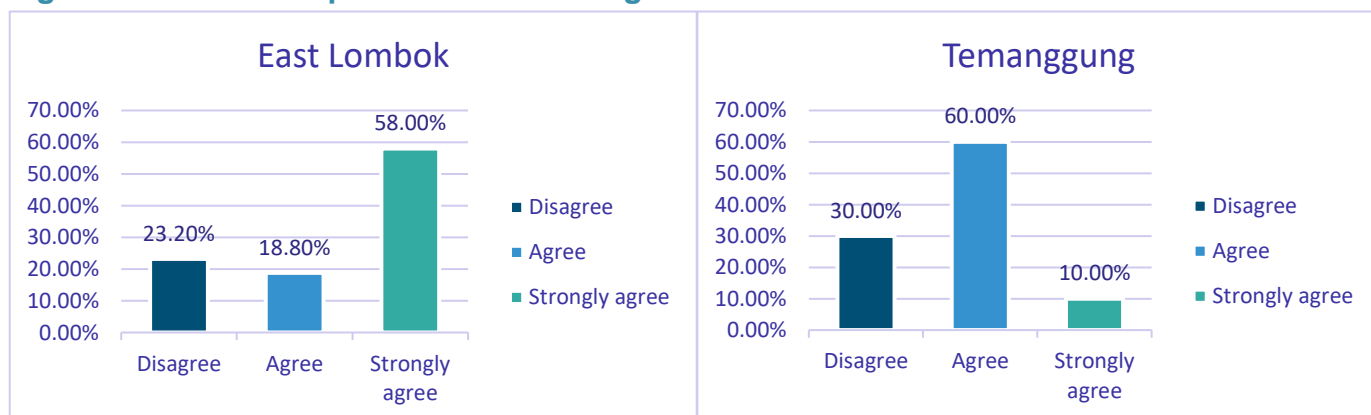


Source: Field survey data, Lombok and Temanggung (2020)

## Partnership in tobacco farming

Most respondents from East Lombok (76.8 per cent) agreed that they should partner in farming tobacco, and a similar response was conveyed by 70 per cent of the respondent in Temanggung. However, there was 30 per cent of respondents in Temanggung and 23,2 per cent in East Lombok believed that partnerships in cultivating tobacco were not an essential part of the tobacco farming business.

**Figure 44: Partnership in tobacco farming**

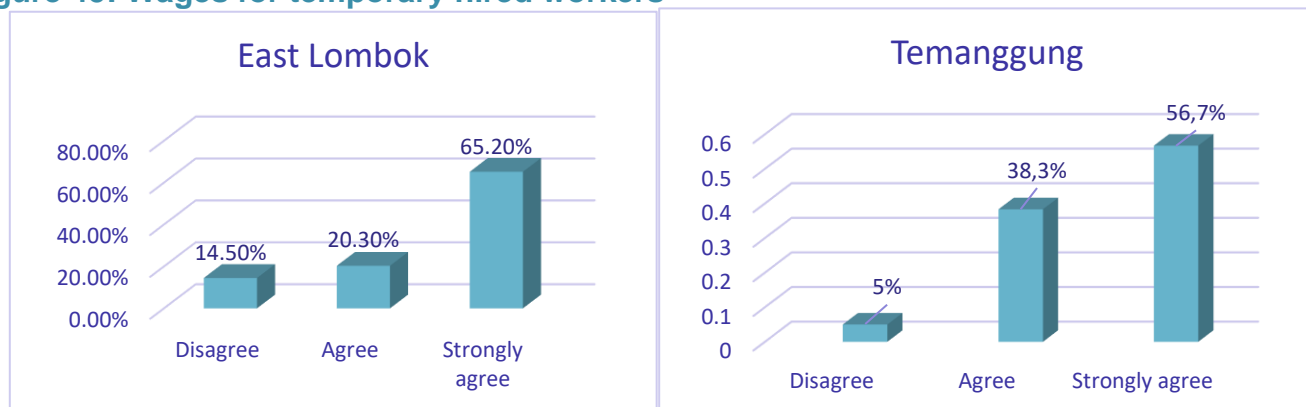


Source: Field survey data, Lombok and Temanggung (2020)

## Wages for temporary hired workers

In the two study locations, East Lombok and Temanggung, the majority of respondents (85.5 per cent of respondents in East Lombok and 95 per cent in Temanggung) stated that they paid wages for workers, including families involved in tobacco production.

**Figure 45: Wages for temporary hired workers**

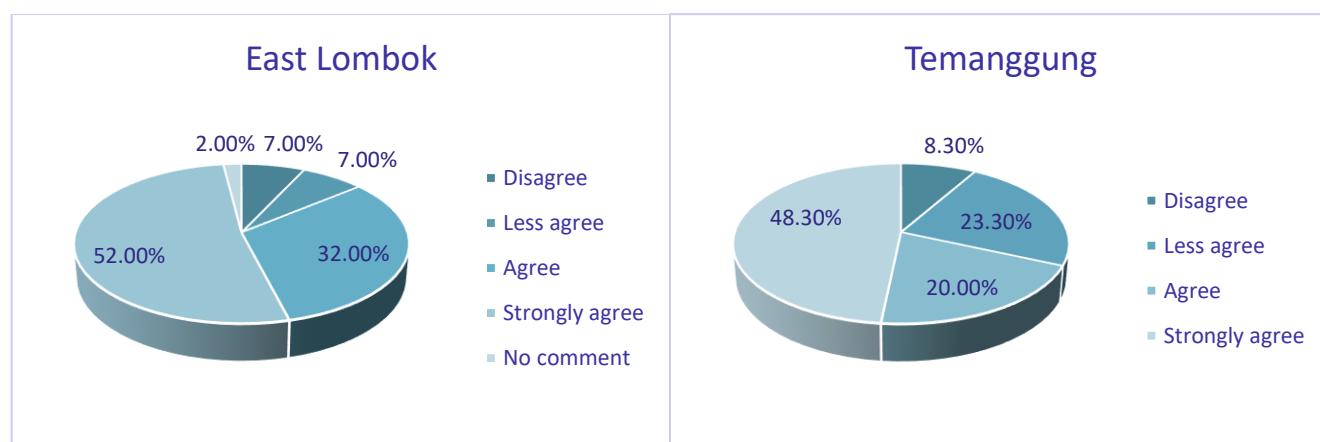


Source: Field survey data, Lombok and Temanggung (2020)

## Growing additional crops for daily needs

Food insecurity was common among smallholder farmers in both study locations. 84 per cent of the respondent in East Lombok and 68,3 per cent of the respondent in Temanggung considered growing other local crops, particularly during dry seasons, to cope with food security issues and to generate more income for daily needs. In East Lombok, there was only 17 per cent of respondent who depended solely on tobacco farming and had not considered growing alternative crops. Unlike in East Lombok, the percentage of respondents who were not considered to grow nontobacco crops in Temanggung was higher (31,6 per cent).

**Figure 46: Growing additional crops for daily needs**

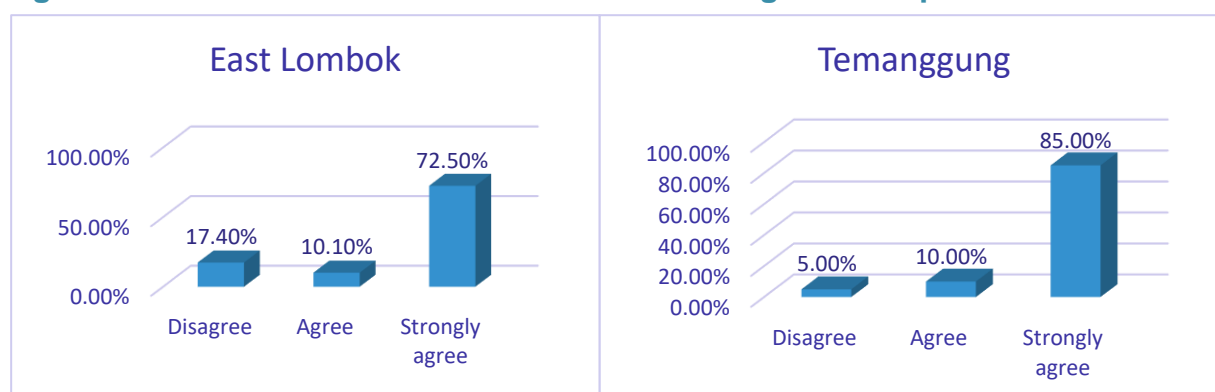


Source: Field survey data, Lombok and Temanggung (2020)

## Government involvement in determining tobacco prices.

Most of the respondents in East Lombok and Temanggung have not been satisfied with the situation where the grade of tobacco leaves, prices, and other guidelines were highly determined by the industry's assessment, which led the farmers to have a weak bargaining position. The finding of the study also revealed that 82.6 per cent of respondents in East Lombok and 95 per cent of respondents in Temanggung stated that the government should take the lead to control the tobacco businesses, particularly the prices of tobacco. Although there were also a small percentage of the respondent (5 per cent in Temanggung and 17,40 per cent in East Lombok) who enjoy the industry-led environment.

**Figure 47: Government involvement in determining tobacco prices**

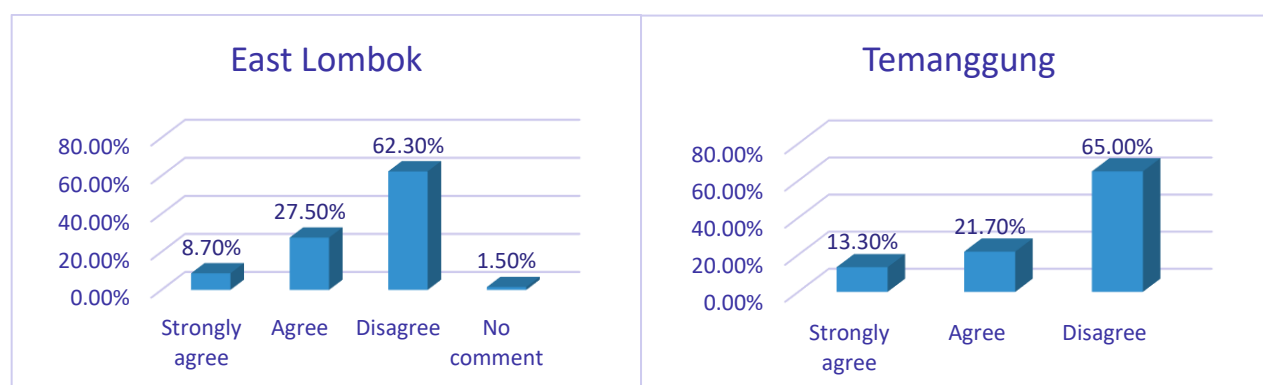


Source: Field survey data, Lombok and Temanggung (2020)

## Middlemen offer the best price for tobacco products

Most farmers in both study locations often complain about the selling price of tobacco. Industry and middlemen play a significant role in assessing the quality of tobacco leaves and determining the price. The majority of respondents in East Lombok (62,3 per cent) and Temanggung (65 per cent) disagreed with the statement that middlemen have provided the best price for the tobacco leaves. However, there were also some respondents (36,2 per cent in East Lombok, and 35 per cent in Temanggung) who stated that the middlemen have provided the best price for their tobacco.

**Figure 48: Middlemen offer the best price for tobacco products**

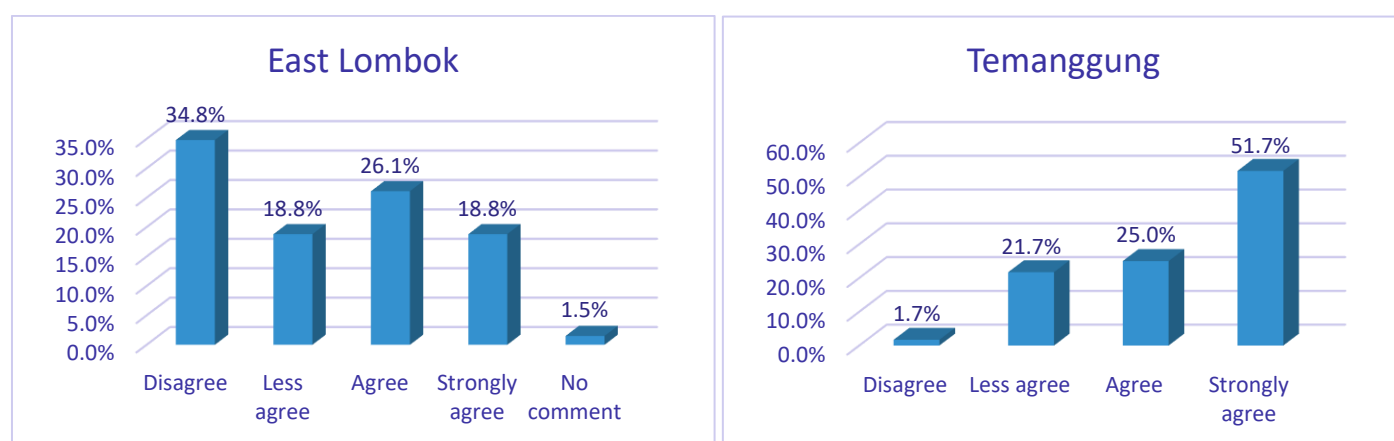


Source: Field survey data, Lombok and Temanggung (2020)

## Cigarette companies offer the best prices for tobacco products

In most cases in both East Lombok and Temanggung, middlemen valued low prices for tobacco leaves from farmers, and sometimes even way below the prices estimated by the industries' warehouses. But unlike farmers who have affiliated with industries (partnering farmers), non-partnering farmers have never been able to sell the tobacco directly to the companies. In the case of Temanggung, the number of partnering farmers is higher than those in East Lombok (76,7 per cent vs. 44,9 per cent) and these respondents have access to sell their product to the industries and get a better price. In East Lombok, generally, the number of non-partnering farmers is higher than in Temanggung. This is represented by the percentage of respondents (53,5 per cent) who disagree with the notion that companies offer better prices for tobacco products, while in Temanggung the number of non-partnering farmers is represented by 23,4 per cent of the respondent.

Figure 49: Cigarette companies offer the best prices for tobacco products

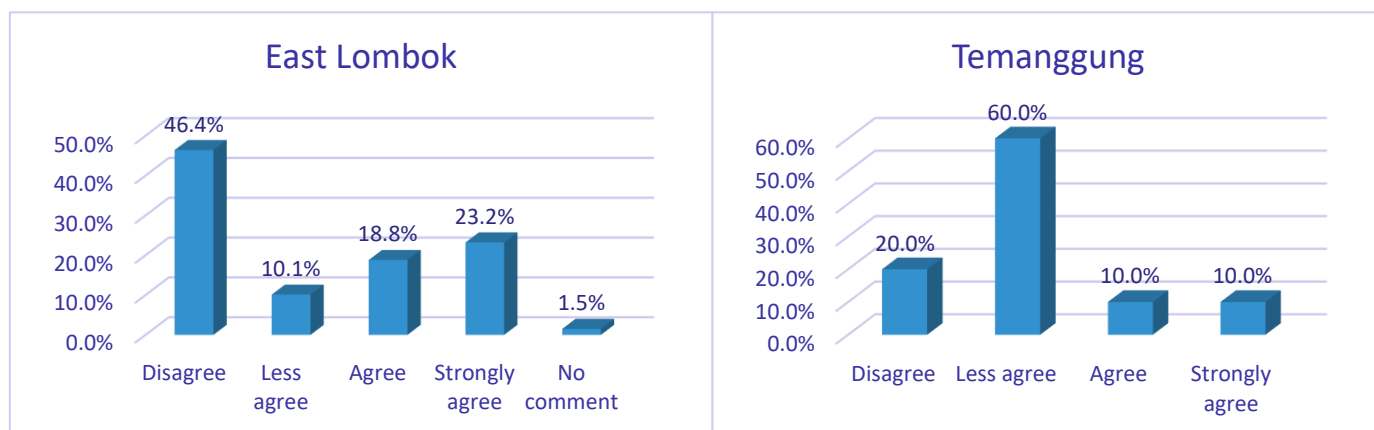


Source: Field survey data, Lombok and Temanggung (2020)

## The ease of selling tobacco directly to cigarette companies

Most tobacco farmers in both study locations, East Lombok and Temanggung, sold the tobacco leaves on the open market through middlemen. These intermediaries will pool all tobacco from farmers and sell them to industrial warehouses. In this instance, farmers have no direct interaction with the companies. There was also the case where some farmers have the ability to sell directly to companies only when the farmers have a relation with the companies under a certain agreement. In East Lombok, there was 42 per cent of the respondent and in Temanggung 20 per cent who has contracts with the companies and has access to sell the tobacco directly. However, the majority of the respondent in both locations (56,5 per cent in East Lombok and 80 per cent in Temanggung) did not have the privilege to sell the tobacco directly to companies and were trapped in a situation where they have a weak bargaining position to determine quality and prices.

**Figure 50: The ease of selling tobacco directly to cigarette factories.**

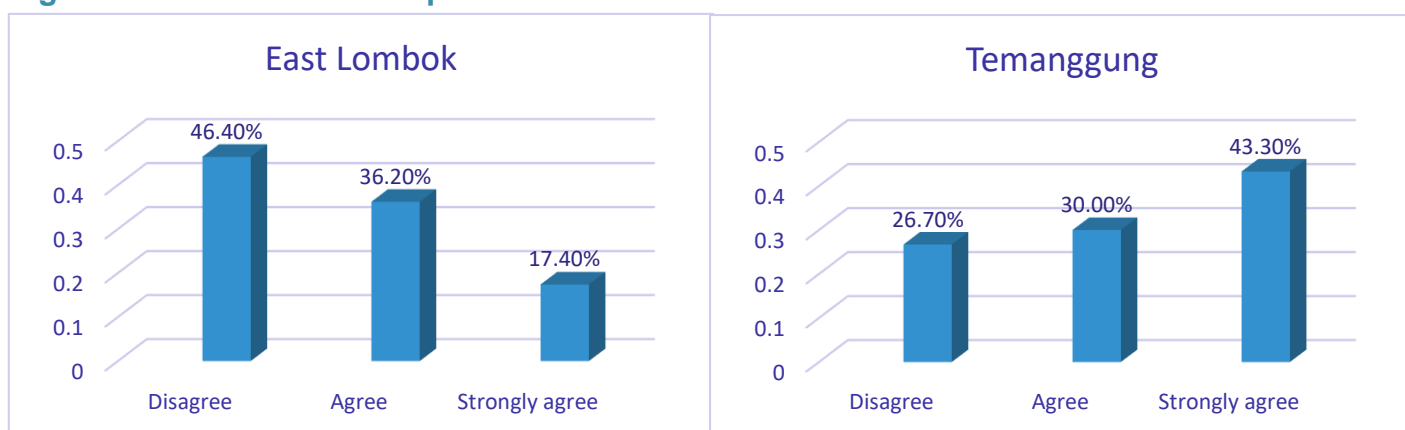


Source: Field survey data, Lombok and Temanggung (2020)

## Tobacco market price

Generally, the tobacco companies made market price information ready for farmers. Partnering farmers mostly have better access to the price information. In Temanggung for instance, 73,3 per cent of respondents received regular updates on tobacco prices and only 26,7 per cent who have less access to update information. While in East Lombok, as a number of partnering farmers lower than those in Temanggung, the percentage of respondents who received regular updates on tobacco prices was slightly lower than in Temanggung, which was 53,6 per cent and farmers who have no direct information from industries was 46,4 per cent.

**Figure 51: Tobacco market price**



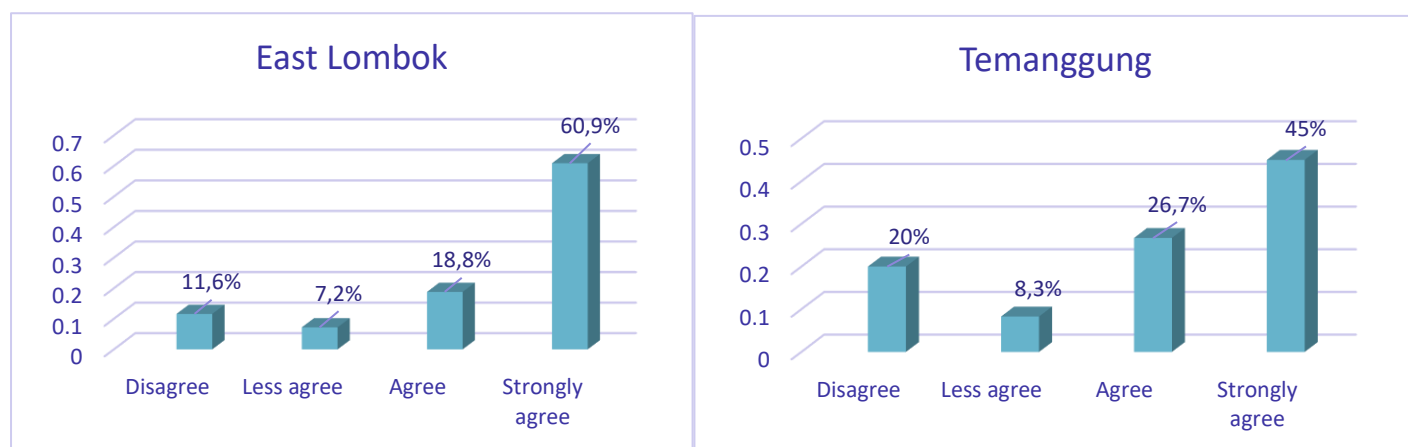
Source: Field survey data, Lombok and Temanggung (2020)

## How cigarette market prices affect tobacco prices

The majority of the respondent in both study locations (53,6 per cent in East Lombok and 73,3 per cent in Temanggung) stated that the cigarettes price is often used by industries and middlemen to determine tobacco purchase prices from the farmers. When cigarette prices went down, industries valued tobacco from farmers at a low price, the middlemen even valued it lower than the price estimated by the industries. Interestingly, the price of tobacco has not increased even when the cigarettes price has increased, and this was represented by 46,4

per cent of the respondent in East Lombok and 26,7 per cent in Temanggung who did not agree that tobacco price is determined by the cigarette price.

**Figure 52: The extent cigarette market prices affect tobacco prices**

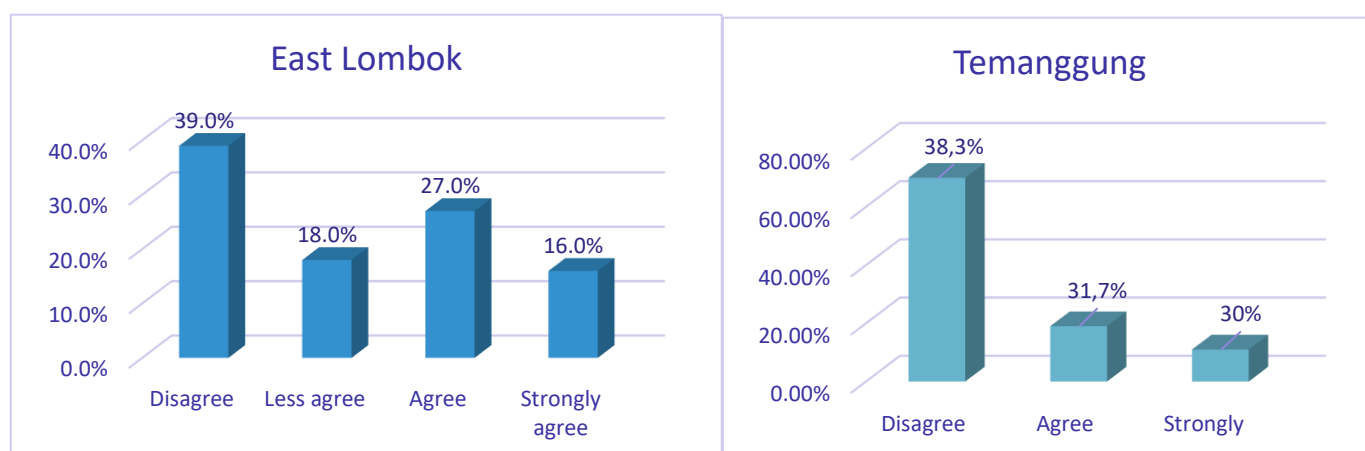


Source: Field survey data, Lombok and Temanggung (2020)

## DBHCHT role in assisting tobacco farmers

Some of the Tobacco excise revenue sharing funds (DBH-CHT) objectives are to improve the quality of raw materials and to create social environment development, but in practice, DBH-CHT has not been able to fully achieve its objectives, for instance, to improve farmers social welfare. A total of 57 per cent of respondents in East Lombok, and 38,3 per cent in Temanggung stated their disagreement that DBHCHT had contributed to farmers welfare. Although there was 43 per cent of the respondent in East Lombok and more than half of respondents (61,7 per cent) in Temanggung believed that DBHCHT has provided some level of contribution to the farming process.

**Figure 53: DBHCHT role in assisting tobacco farmers**

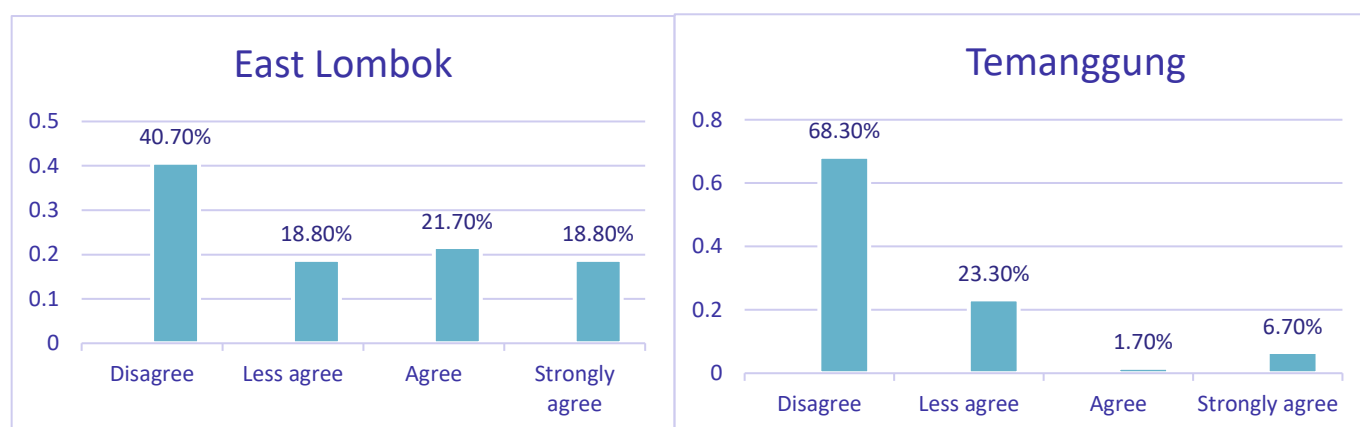


Source: Field survey data, Lombok and Temanggung (2020)

## The increase of cigarette excise taxes

The evidence demonstrates that cigarette tax increase has a marginal effect on farmers' welfare. The increase in cigarette prices due to taxes increase often used by the companies or middlemen as an excuse to determine the purchase price of tobacco from farmers. Therefore, most farmers have not supportive of a rise in tobacco tax. In East Lombok, 59,5 per cent of respondents disagree with the tax increase, while in temanggung the percentage was even higher (91,6 respondents) and only 8,4 per cent of respondents were supportive of a tax increase.

**Figure 54: The increase of cigarette excise tax**

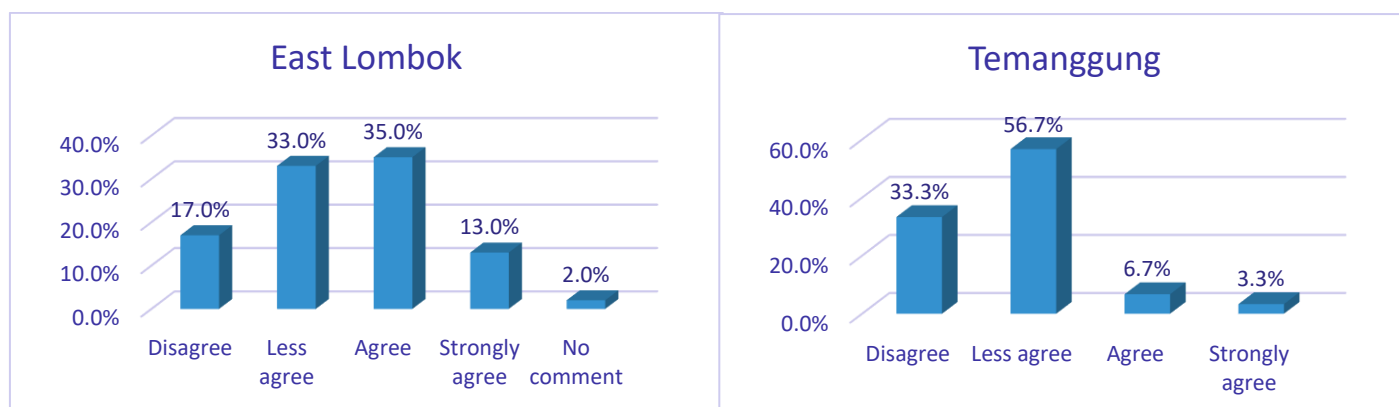


Source: Field survey data, Lombok and Temanggung (2020)

## The current price of tobacco is considered reasonable and profitable

The tobacco price tends to be fluctuating which make tobacco farming is no longer lucrative, but farmers who depend on tobacco for a share of family income just accept whatever market prices for their products will be. In Temanggung, only 10 per cent of respondents believed that the current tobacco prices are reasonable but the majority of respondents (90 per cent) stated that the recent prices are even lower than previous years. This statement is similar to 50 per cent of the respondent in East Lombok, while the percentage of respondent who was happy with the current tobacco prices was higher than those in Temanggung, which was 48 per cent.

**Figure 55: Respondents' opinion on the current price of tobacco**



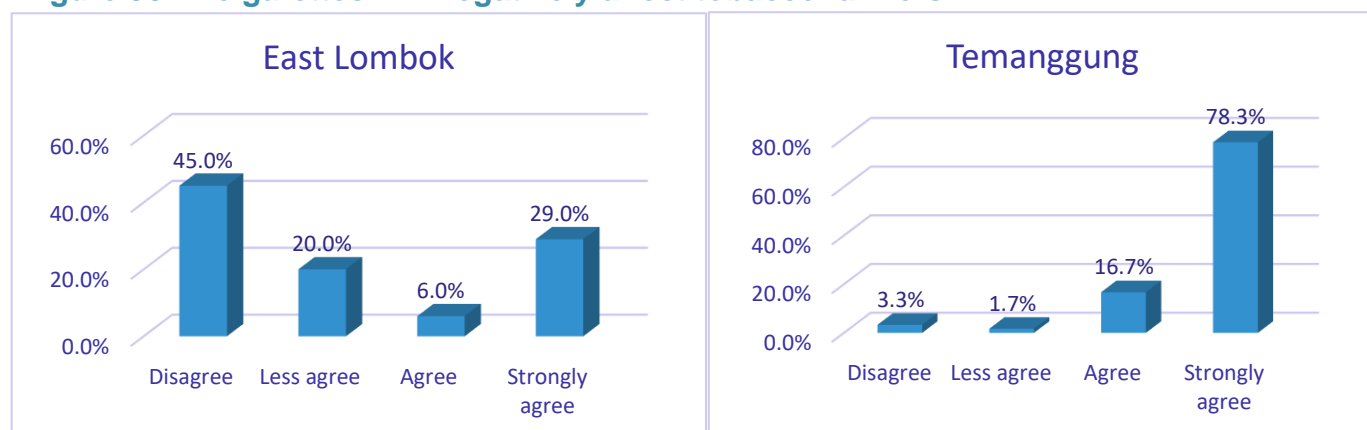
Source: Field survey data, Lombok and Temanggung (2020)



## The E-cigarette will negatively affect tobacco farmers

Although there was no in-depth study on relationships between the increase in e-cigarettes use and tobacco farmers welfare, farmers felt that the existence of e-cigarette would threaten the sustainability of tobacco farmers. In Temanggung 95 per cent of respondents agreed with this statement and only 5 per cent of respondents felt that the existence of e-cigarette wouldn't affect tobacco farming, and this opinion was also similar to the majority of respondents' in East Lombok (65 per cent). While there was 35 per cent of respondents stated that e-cigarette will threaten tobacco farming.

**Figure 56: E-cigarettes will negatively affect tobacco farmers**



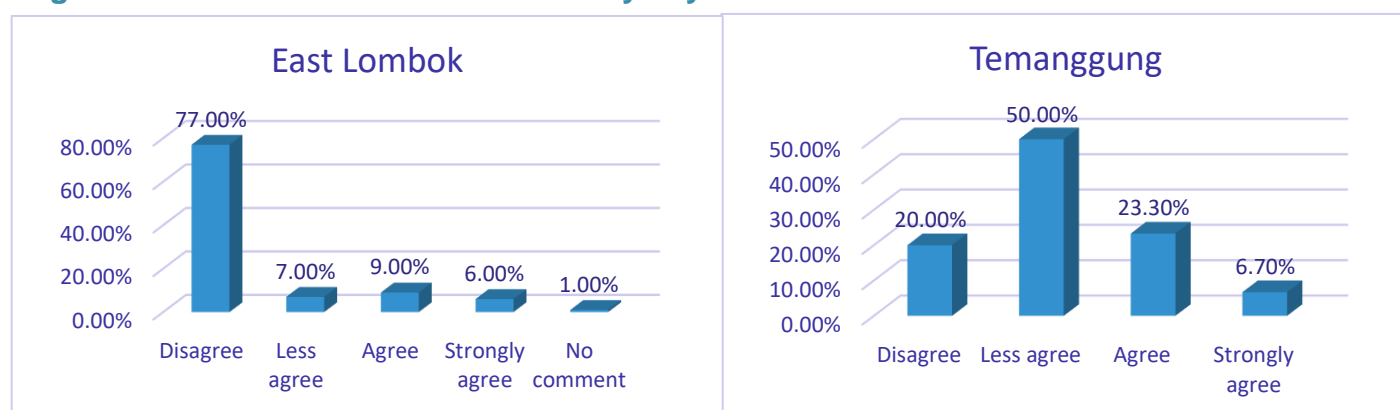
Source: Field survey data, Lombok and Temanggung (2020)

## Tobacco can be consumed by anyone

Most farmers are aware of the health risks of smoking (including second-and third-hand smoke), and green tobacco sickness from working in tobacco farms but the economic benefit of tobacco farming has driven the farmers to continue working in tobacco farming.

The majority of respondents In East Lombok and Temanggung (84 per cent and 70 per cent respectively) had not recommended that tobacco be consumed by anyone, particularly children. There were only 15 per cent of the respondent in East Lombok and 30 per cent of the respondent in Temanggung who believed that anyone, including children, could consume tobacco at a certain rate.

**Figure 57: Tobacco can be consumed by anyone**



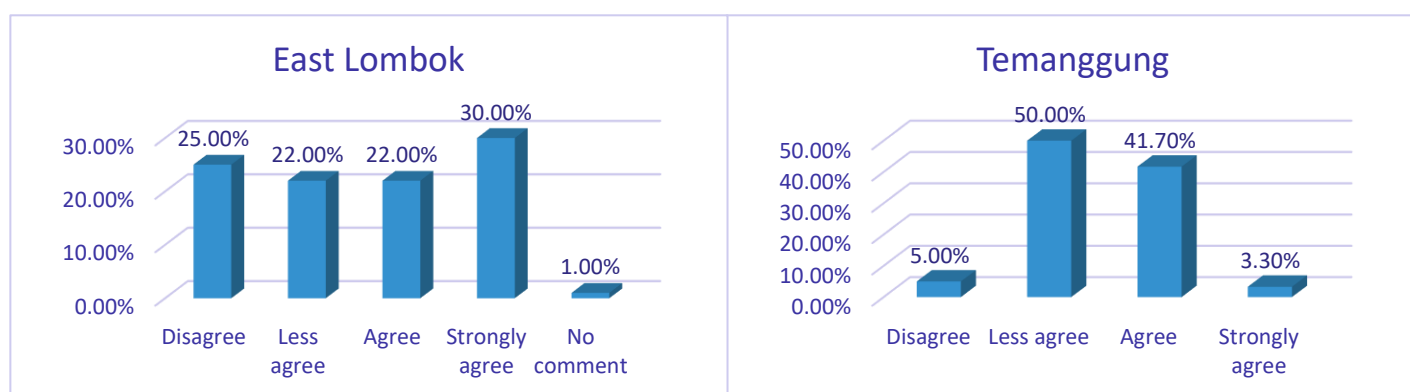
Source: Field survey data, Lombok and Temanggung (2020)

## Tobacco attributable diseases

There have been many studies that disclosed that tobacco is one of the leading causes of death, illness and impoverishment but many farmers in study locations either unaware or neglected the aftereffect of tobacco consumption.

In Temanggung, the number of respondents who did not consider the tobacco attributable diseases reached 55 per cent, compared to 45 per cent of respondents who were aware of the diseases caused by tobacco consumption. While in East Lombok 52 per cent of respondents have aware of the health risks caused by tobacco and 47 per cent did not consider tobacco as a health treats.

**Figure 58: Tobacco attributable diseases**

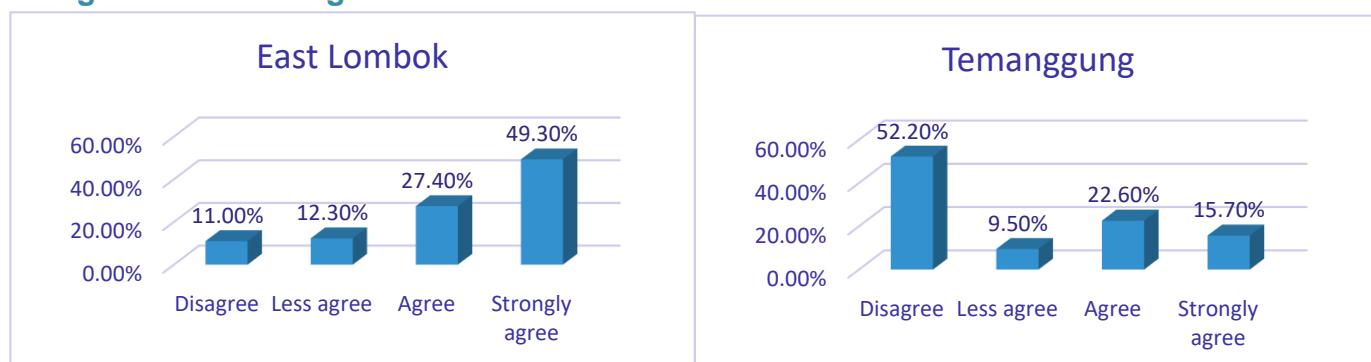


Source: Field survey data, Lombok and Temanggung (2020)

## Smoking is harmful to smokers and other non-smokers

When discussed the negative effect of tobacco to the smokers and people surrounding, respondent in Temanggung consistent with their opinion that smoking is not harmful, nor cause major health issues to the smokers and second-hand smokers, the answer was represented by 61,7 per cent of respondents, and only 38,3 per cent believed that smoking brings more harm than good to the smokers and second-hand smokers. It was a different case with participants in East Lombok, where the majority of respondents (76,7 per cent) stated the harmful effect of smoking, and only 23,3 per cent said that smoking didn't bring any serious harm to smokers and second-hand smokers. This group of the respondent was those who were not aware of tobacco attributable diseases.

**Figure 59: Smoking is harmful to smokers and other non-smokers**

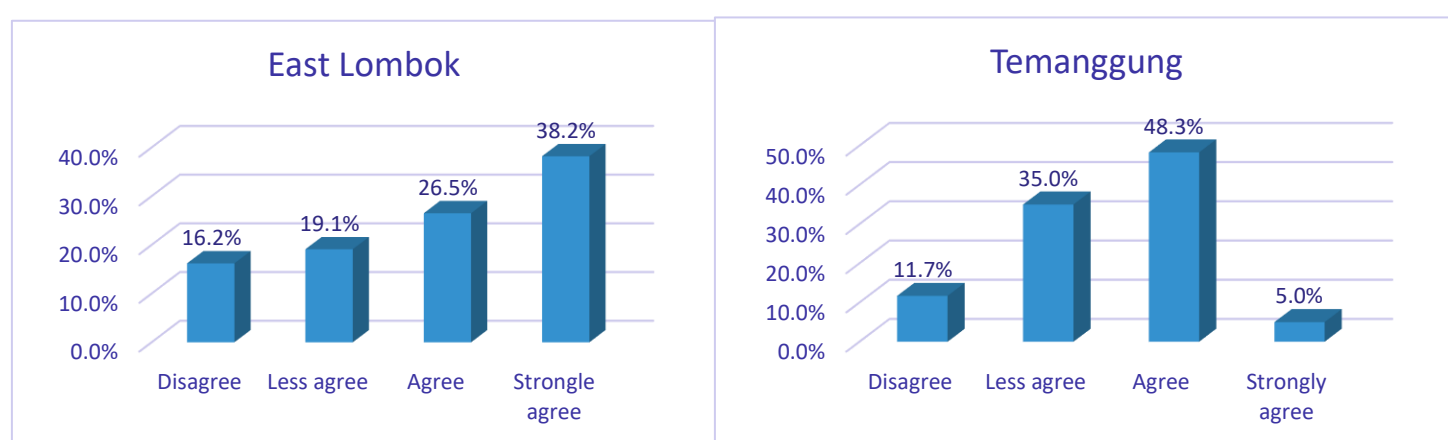


Source: Field survey data, Lombok and Temanggung (2020)

## The government's recommendation is to ban smoking in public areas.

One of the national tobacco control programs is that the prohibition of smoking in public spaces, public transportations and educational facilities. Most farmers in both study locations were supportive of the government tobacco control program, despite the lack of control and smokers' obedience to program implementation. But the majority of respondents (64,7 per cent in East Lombok and 53,3 per cent in Temanggung) believed that the program is a good initiative to reduce second-hand smoke. There were still 46,7 per cent of respondents in Temanggung and 35,3 per cent in East Lombok who disagree with the regulation. This subjective response seems to link with the group of the respondent who was the addicted smokers.

Figure 60: Government's recommendation to ban smoking in public areas

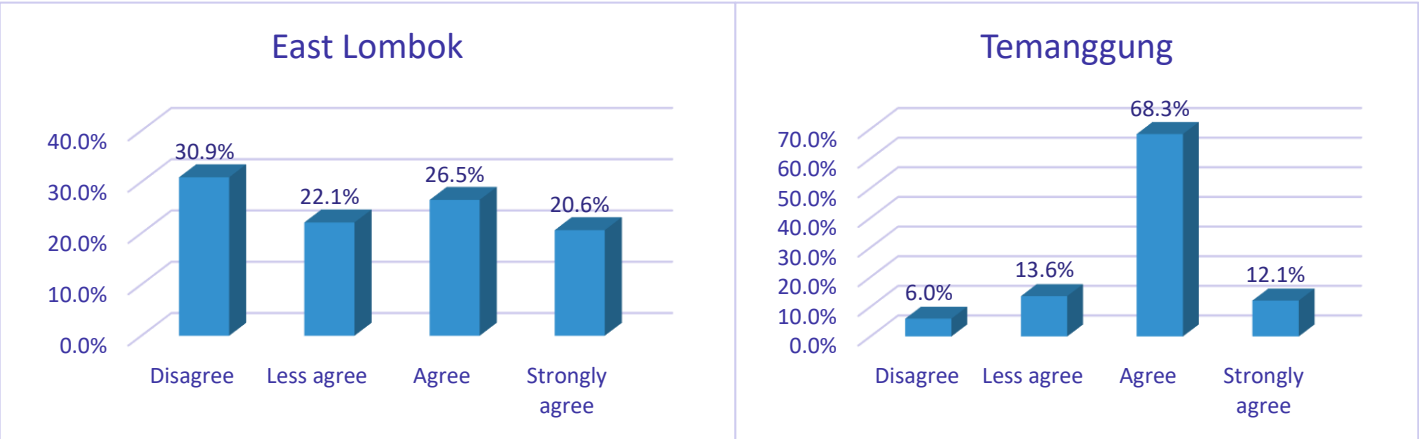


Source: Field survey data, Lombok and Temanggung (2020)

## Non-smoking family members are among the reasons to claim smoking is harmful

When discussed smoking and its effect on family members, respondents of East Lombok and Temanggung have a different judgement. In Temanggung, although there was only 38,3 per cent believed that smoking is harmful (as discussed above) but when it linked to family members, the majority of respondents (80 per cent) stated the reason they believed smoking is harmful was family members. Conversely, in East Lombok there was 47,1 per cent of respondents agreed that their non-smoker and anti-smoking family members were their reasons for thinking that smoking is harmful. This indicated that respondents in East Lombok believed that smoking harms everyone who inhales it, not only the smokers and their family members.

Figure 61: Reasons to claim that smoking is harmful: Non-smoking family members

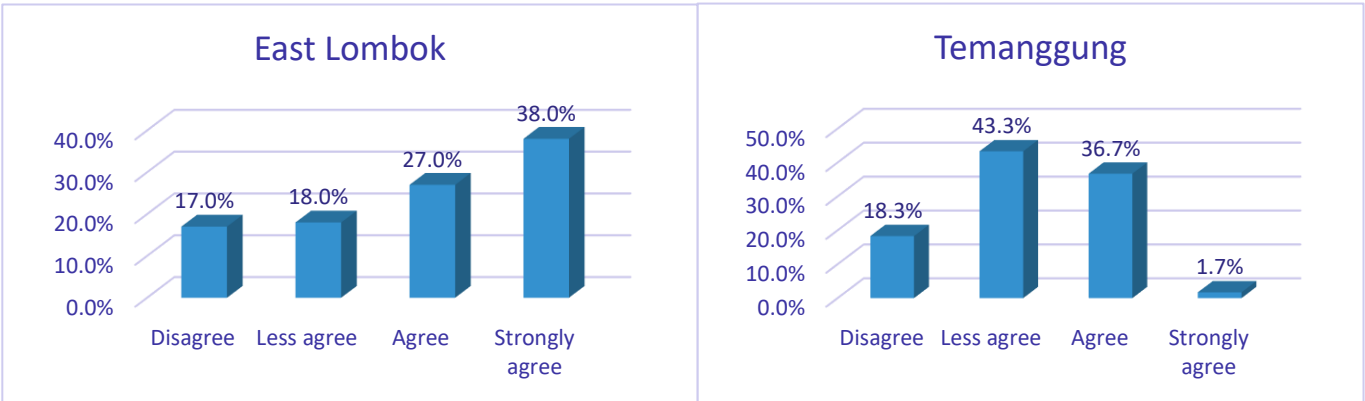


Source: Field survey data, Lombok and Temanggung (2020)

Public interest as the reason for the opinion that smoking is harmful

Public interest was not the main justification for the majority of respondents (61,6 per cent) in Temanggung to claim that smoking is harmful. Of those respondents in Temanggung, only 38,4 per cent stated that smoking is harmful, not only to smokers but also to surrounding people. In East Lombok. This opinion was similar to the majority of respondents in East Lombok (65 per cent), but 35 per cent of respondents in East Lombok believed that public interest was not the only reason to claim to smoke is harmful.

Figure 62: Reasons to claim to smoke is harmful: second-hand smoke



Source: Field survey data, Lombok and Temanggung (2020)

Conclusion

This field study was conducted in two provinces, as main tobacco producers in Indonesia to gather primary data on tobacco smallholder farmers, which complement the literature study conducted simultaneously in this scoping study. This field study aimed to give a broader picture of the tobacco economic ecosystem in Indonesia. To collect the primary data, the study utilised a smallholder farmers-level survey, with questionnaires used as a survey instrument, combined with other data collection methods such as in-depth interviews, group discussions and visual methodologies.

Using a simple random sampling method to select study population sampling, researchers had a total of 160 respondents, 60 sampled in the Temanggung district and 100 sampled in the East Lombok district.

The majority of respondents were middle-aged married males who were contributing meaningfully to tobacco farming in their respective regions. The average work tenure of the survey respondents was 23 years in tobacco farming, and apart from the main tobacco plant, these groups of respondents also planted side crops such as chilli, vegetables, and corn. These side crops grow outside of the tobacco session and were mostly used to fulfil daily needs, and therefore were not well recorded across all respondents.

In running their tobacco businesses, only a few respondents possess more than just land, but also machinery and warehouses. Initial capital ranged between IDR 1.3 million up to IDR 60 million, with a median value of IDR 15 million. Most of this capital was taken from personal savings and only a few respondents applied for a bank loan.

Tobacco has been a hereditary business across generations since the 19th century, with the expectation that it could improve the local economy, but during the process, there have been many factors that influence the respondents' profit from growing tobacco. The survey revealed that most determinant factors in tobacco price are weather (75 per cent), and quality of leaves (43.3 per cent), followed by middlemen (18.3 per cent), making most respondents believe that current tobacco market conditions are unfavourable (uncertain, confusing, less promising), and expect the government can take the lead to control tobacco prices.

This condition has led a few respondents to think of switching to alternative crops, but the majority of them (78.3 per cent) have difficulty in switching to non-tobacco products for many reasons. Among these reasons are no profitable substitute plants for tobacco, particularly during dry seasons. Most respondents (83.3 per cent) also lack knowledge about the most profitable tobacco substitute crops, and 40.0 per cent of respondents indicated the need for government supports when deciding to switch to alternative crops.

As most respondents are also active smokers, there seemed to be a conflicting interest between increasing spending on cigarette consumption and collecting more savings from the tobacco business, which means the more they spend on cigarette consumption, the less they can save for family needs, however, most have no desire to quit or reduce smoking. Monthly costs incurred for cigarette consumption involve a wide range of spending from IDR 150,000 to IDR 1,500,000, and a small percentage of respondents (25 per cent) believe that regulations on smoking restrictions through price or non-price policies (such as Smoke-Free Zones and pictorial warnings) are harmful to their tobacco business.

## 6. OTHER PROCESSING TOBACCO PRODUCTS (HPTL) AS ALTERNATIVES FOR SMOKING HARM REDUCTION

### 6.1. HPTL and Electronic Nicotine Delivery Systems

84. **Other tobacco processing products (*Hasil Pengolahan Tembakau Lainnya* or HPTL) is an Indonesian classification of products using tobacco or extracts of tobacco apart from combustible cigarettes.** HPTL include products using the essence of tobacco, molasses tobacco products, snuff tobacco, chewing tobacco and heated tobacco products (HTP). The HPTL excise tax of 57% and its category is regulated under MOF Regulation No. 146/PMK.010/2017<sup>108</sup>. The HPTL excise tax only applies to tobacco essences or juices that contain traces of tobacco in the HPTL devices<sup>109</sup>.

85. **Among HPTL products circulating in Indonesia, the e-cigarette is the more popular and widely used compared to HTP.** A study conducted by Kantar Group for HEALTH Diplomats regarding usage and attitudes towards vaping, tobacco products and cigarettes across several countries, revealed that Vape is more favourite to Indonesian respondents compared to HTP, the percentage of respondents using Vape was more than three times higher than those using HTP (85% versus 25%)<sup>110</sup>. WHO refers to this electronic cigarette as an Electronic Nicotine Delivery System (ENDS) or an Electronic Non-Nicotine Delivery System (ENNDS) if the liquid being used does not contain nicotine. Electronic cigarettes are known by various terms such as e-cigs, vapour, green cig, smart cigarette or e-cigarette. In Indonesia, this last term, e-cigarette, is more commonly used and the activity of smoking is called vaping. E-cigarettes began to circulate in the Indonesian market in 2010. On the market, e-cigarettes are available in various shapes and sizes (models), variations in taste and of course prices and brands.

86. **E-cigarettes use in Indonesia has increased over the years. In 2018 the number of e-cigarette users in Indonesia exceeded one million, and by 2020 the number increased to 2,2 million users<sup>111</sup>.** The findings of a field study in Jakarta show that the majority (78 per cent) of respondents bought e-cigarette liquid or refills at e-cigarette stores or specialty shops. Indeed, along with the rapid growth of e-cigarette

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<sup>108</sup> Ministry of Finance Law no. 146/PMK.010/2017, retrieved from <https://jdih.kemenkeu.go.id/fullText/2017/146~PMK.010~2017Per.pdf>

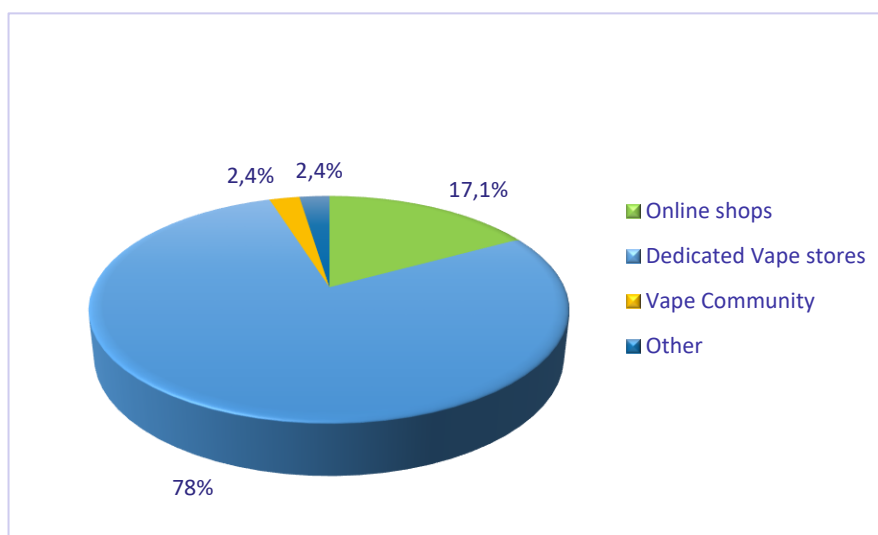
<sup>109</sup> Reuters (2018), Indonesia to impose excise tax on liquids for e-cigarettes, retrieved from <https://www.reuters.com/article/indonesia-tobacco-tax/indonesia-to-impose-excise-tax-on-liquids-for-e-cigarettes-idUSL3N1T71WG>

<sup>110</sup> Health Diplomat (2020) Multi-country vaping research; Summary of results from Indonesia, retrieved from <https://inovasitembakau.com/wp-content/uploads/2021/01/CP-Study-F-Indonesia-Health-Diplomats-Population-Research-Indonesia-Report-Read-Only.pdf>

<sup>111</sup> Putra, D A (2021) Pengguna Rokok Elektrik Meningkat, Penerimaan Cukai Naik 59 Persen Jadi Rp680 Miliar, Merdeka.com, <https://www.merdeka.com/uang/pengguna-rokok-elektrik-meningkat-penerimaan-cukai-naik-59-persen-jadi-rp680-miliar.html?page=2>

users, there has been an increase in the number of e-cigarette shops from year to year. Current estimates are that there are around 300 liquid producers and 4000 e-cigarette retailers throughout Indonesia<sup>112</sup>, most of which (2,300 stores) are centralized in Java Island, with the rest located in Sumatra, Kalimantan, Sulawesi and Bali<sup>113</sup>.

**Figure 63: E-cigarette purchasing locations**



Source: Indonesian Personal Vaporizer Association (APVI)

87. **Heated tobacco products, another innovation in addition to the e-cigarette, were introduced in Indonesia in 2019.** One of the HTP products that are starting to circulate in the Indonesian market is IQOS from Philip Morris. As its name suggests, the way the HTP works is by heating the tobacco which the user then smokes. There are two main variants of HTP in the market, namely products that use stick tobacco and loose tobacco. In other words, the main difference between e-cigarette and HTP lies in the material being heated. E-cigarette heats the liquid (e-liquid), whereas HTP uses real tobacco as the heated material<sup>114</sup>.

88. **As e-cigarettes became more popular in Indonesia, e-cigarette associations and communities also sprung up in various locations.** Among the e-cigarette business associations that seem active lately as pressure groups that seek to influence public policy are the Indonesian Personal Vaporizer Association (APVI), the Indonesian E-cigarette Association (AVI), and the Indonesian Electronic Nicotine Entrepreneurs Association (Appnindo), which are grouped under the National E-cigarette Association

<sup>112</sup> Wibawa. T., (2019), Tackling Indonesia's smoking addiction a 'double-edged sword', ABC News, Australia, retrieved from <https://www.abc.net.au/news/2019-09-01/tackling-indonesias-smoking-addiction-harder-than-it-seems/11430638>

<sup>113</sup> VapeMagz (2020) Kontribusi Industri Rokok Elektrik untuk Penerimaan Cukai dan Lapangan Kerja Terus Meningkat, retrieved from <https://vapemagz.co.id/news/kontribusi-industri-rokok-elektrik-untuk-penerimaan-cukai-dan-lapangan-kerja-terus-meningkat/>

<sup>114</sup> Rahman,R., (2019), HM Sampoerna to launch iQos smoking device in Indonesia, The Jakarta Post, retrieved from <https://www.thejakartapost.com/news/2019/05/13/hm-sampoerna-to-launch-iqos-smoking-device-in-indonesia.html>.



Association. For example, throughout 2019-2020 they actively encouraged the government to issue special regulations regarding the use of e-cigarettes.

89. **Not only e-cigarette business associations but various e-cigarette user communities have also started to grow in Indonesia.** At present, the Indonesian E-cigarette Association appears to be the largest and most active organization for e-cigarette users to give statements to the mass media. On social media, for example on Facebook, communities of e-cigarette users -- sometimes they call themselves e-cigarettes -- can easily be found across regions. In Jakarta, for example, there is the Indo E-cigarette Squad Community that claims to be the oldest e-cigarettes community with 25 chapters throughout Indonesia. Dedicated e-cigarette stores are now not only a place to buy and sell e-cigarettes but also often have become a hangout place for e-cigarette users. The e-cigarette cafe and e-cigarette community are thus effective as a means of connecting fellow e-cigarette users. Both e-cigarette shops and e-cigarette communities have now become a place where e-cigarette users exchange information as well as being an effective marketing medium for the e-cigarette. There is also a special e-cigarette magazine called *E-cigarette age* with a stylish, classy, and young look that is published online. It can be said that e-cigarette already resembles a separate lifestyle among their users, endorsed by their supporting infrastructures such as e-cigarette shops or cafes and various e-cigarette communities.

### 6.1.1. HPTL economic impact

90. **State revenue from taxes and excise on other tobacco processed products (HPTL) has increased.** Official data released by the Directorate General of Customs and Excise states that the excise revenue in the first year (2018) of the imposition of excise on HPTL amounted to IDR 154 billion and a year later in 2019 increased to IDR 426 billion<sup>115</sup>. In 2020 HPTL excise revenue amounted to 515.9 billion<sup>116</sup>.
91. **The total labour working in the HPTL industry is increasing.** Particularly e-cigarette such as Vape, by 2020 the industry has absorbed 50,000 workforces, 5000 retailers across Indonesia, and more than 300 liquid producers and 100 device and accessories producers<sup>117</sup>.

### 6.1.2. HPTL regulation

92. **Although they have been circulating since 2010, there has been no specific and comprehensive regulation covering all aspects governing HPTL products.** Provisions on imports and excise tariffs are the only regulations that regulate HPTL products as stipulated in the Finance Minister Regulation No. 156/2018 concerning Tobacco Products Excise Tariff as an amendment to Regulation No. 146/2017. In this

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<sup>115</sup> Siregar, H. (2020), Prospek Cukai E-cigarette Tingkatkan Penerimaan Negara, BeritaSatu, retrieved from <https://www.beritasatu.com/ekonomi/669635/prospek-cukai-e-cigarette-tingkatkan-penerimaan-negara>

<sup>116</sup> Suryanto, V. (2020), Hingga Agustus 2020, penerimaan cukai HPTL mencapai Rp 515,9 miliar, Kontan, retrieved from <https://nasional.kontan.co.id/news/hingga-agustus-2020-penerimaan-cukai-hptl-mencapai-rp-5159-miliar>.

<sup>117</sup> Dinisari, M, C (2020) Industri Vape Diklaim Serap 50.000 Tenaga Kerja, bisnis.com, <https://ekonomi.bisnis.com/read/20200826/12/1283520/industri-vape-diklaim-serap-50.000-tenaga-kerja>

regulation, HPTL products cover four categories: tobacco extracts and essences; molasses tobacco; snuff tobacco; and chewing tobacco<sup>118</sup>.

**93. HPTL products are subject to maximum excise rates. In Regulation No. 156/2018, the excise rate for HPTL products is set at 57 per cent<sup>119</sup>.** The excise for HPTL is based on ad valorem rates<sup>120</sup>. In November 2020, the government through the Finance Minister Regulation No. 176/PMK.04/2020 defined electronic cigarette cartridges as excisable goods (BKC), which means that e-cigarette cartridges are subject to the applicable tariff and will have an excise stamp attached<sup>121</sup>.

**94. In public policy areas, policies on HPTL appear uncoordinated between regulators.**

The national Food and Drug Monitoring Agency (BPOM) maintains a position to prohibit HPTL products from circulation in Indonesia with the consideration of negative impacts on society, especially the younger generation<sup>122</sup>. BPOM has also submitted a proposal to amend the existing law in a bid to push for a permanent ban on the use of e-cigarette and vape in the country<sup>123</sup>. According to BPOM, HPTL products have the potential to become a gateway for young age groups to consume conventional cigarettes. To strengthen its opinion, BPOM cites research findings on the harms of e-cigarettes<sup>124</sup>. The Health Ministry's stance tends to be more moderate by encouraging the regulation of electronic cigarettes to be included in the same provisions as conventional tobacco products that are currently in effect, namely Law No. 109/2012<sup>125</sup>. Since 2019 the amendments of the Law No. 109/2012 has been discussed among the ministerial committee, which will also include guidelines on the e-cigarette<sup>126</sup>, regardless pros and cons of the effectiveness of the amendment. The Ministry of Agriculture is not supportive of the proposal and consider the amendment

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<sup>118</sup> Ministry of Finance (2018) Regulation No. 156/2018, p.10, retrieved from <https://jdih.kemenkeu.go.id/fullText/2018/156~PMK.010~2018Per.pdf>

<sup>119</sup> Ministry of Finance (2018) Regulation No. 156/2018, p.10, retrieved from <https://jdih.kemenkeu.go.id/fullText/2018/156~PMK.010~2018Per.pdf>

<sup>120</sup> World Bank Group (2019) E-cigarette: Use and taxation, p.11, WBG Global Tobacco Control Program Team, retrieved from <https://documents1.worldbank.org/curated/en/356561555100066200/pdf/E-Cigarettes-Use-and-Taxation.pdf>

<sup>121</sup> Ministry of Finance (2020) Regulation No. 176/PMK.04/2018, retrieved from <https://peraturan.bcperak.net/sites/default/files/peraturan/2020/176pmk042020.pdf>

<sup>122</sup> BPOM letter of recommendation to the Finance Minister on prohibition of the circulation of electronic cigarettes No. HM.03.01.1.35.11.17.5381 dated Nov. 7, 2017.

<sup>123</sup> Xuxin (2019) Indonesia pushes for e-cigarette ban over public health concern, Xinhuanet.com, [http://www.xinhuanet.com/english/2019-11/11/c\\_138546810.htm](http://www.xinhuanet.com/english/2019-11/11/c_138546810.htm)

<sup>124</sup> BPOM (2017), *Kajian Rokok Elektronik di Indonesia, Directorate of Narcotics, Psychotropic and Addictive Substances Control*, BPOM, Jakarta, retrieved from <https://komnaspt.or.id/wp-content/uploads/2019/10/Kajian-Rokok-Elektronik-di-Indonesia-2017-BPOM.pdf>

<sup>125</sup> MoH Act no. 109/2012 concerning materials containing addictive substances in the form of tobacco products for health.

<sup>126</sup> Mutiara, P (2019) Pemerintah Matangkan Muatan Revisi PP 109/2012, Coordinating Ministry of HR Development and Culture, retrieved from <https://www.kemenkopmk.go.id/pemerintah-matangkan-muatan-revisi-pp-1092012>

will burden the tobacco farmers<sup>127</sup>. Similarly, members of the House of representative also believe that the amendments will foster the spreading of illicit trade<sup>128</sup>

95. **BPOM refuses to recommend the import of electronic cigarettes (HPTL).** In line with the BPOM's position of proposing a ban on the circulation of electronic cigarettes in Indonesia, BPOM refused to provide recommendations for electronic cigarette import licenses by stating that they would only conduct an evaluation, following their authority, of products registered as medicines. That way, the requirements for obtaining a recommendation (if an electronic cigarette is registered as a drug) must also be treated the same as an evaluation of the drug which includes an evaluation of the safety, efficacy, and quality of the drug<sup>129</sup>. On another occasion, the Trade Ministry issued Law No. 86/PMK.02/2017 concerning Provisions for the Import of Electric Cigarettes, which regulates the import of electronic cigarettes and stipulates the requirements for obtaining import permits<sup>130</sup>. However, in 2020 the Trade Minister revoked Law No. 86/2017 to give more room for e-cigarette industry players in the country<sup>131</sup>.

96. **Different views on how to treat electronic cigarettes (HPTL) also occur between public interest groups such as anti-tobacco activists and business interest groups.** The HPTL business association, particularly the e-cigarette cigarette group, demanded the government regulation on HPTL products to be separated from conventional tobacco regulations as the difference in the nature of the product<sup>132</sup>. They also argue that a regulation will provide business certainty to the HPTL industry, which they claim to be a small business, as well as provide protection for consumers. On the other hand, anti-tobacco activists and the Indonesian Doctors Association (IDI) reject the distribution of HPTL products for both health reasons and because these products are considered to encourage the emergence of novice smokers among adolescents and children<sup>133</sup>.

97. **The absence of regulation is detrimental to consumers and tobacco control efforts.** While at the same time the product is still available in the market with a growing trend in the number of users, the absence of regulation will harm consumers and non-users because there is no control over the safety, content and impact of electronic cigarettes circulating in Indonesia on health. In addition, a regulation on

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<sup>127</sup> Kominfo JATIM (2021) Beratkan Petani Tembakau, Tunda Revisi PP NO. 109 Tahun 2012, Kominfo JATIM news room, retrieved from <http://kominfo.jatimprov.go.id/read/umum/beratkan-petani-tembakau-tunda-revisi-pp-n0-109-tahun-2012>

<sup>128</sup> Rahmad, R, B (2021) DPR: Revisi PP 109/2012 Dorong Rokok Ilegal, RRI news, retrieved from [https://rri.co.id/jakarta/1672-polhukam/1114879/dpr-revisi-pp-109-2012-dorong-rokok-ilegal?utm\\_source=news\\_recommendation&utm\\_medium=internal\\_link&utm\\_campaign=General%20Campaign](https://rri.co.id/jakarta/1672-polhukam/1114879/dpr-revisi-pp-109-2012-dorong-rokok-ilegal?utm_source=news_recommendation&utm_medium=internal_link&utm_campaign=General%20Campaign)

<sup>129</sup> BPOM (2017), Kajian Rokok Elektronik di Indonesia, Directorate of Narcotics, Psychotropic and Addictive Substances Control, BPOM, Jakarta

<sup>130</sup> Trade Ministry regulation No. 86/2017, Ketentuan impor rokok elektrik, <https://peraturan.bpk.go.id/Home/Details/160231/permendag-no-86-tahun-2017>

<sup>131</sup> Trade Ministry regulation No. 05/2020, Revocation of Trade Minister No. 86/2017, <http://jdih.kemendag.go.id/peraturan/detail/1954/2>

<sup>132</sup> CNN Indonesia (2019), Asosiasi E-cigarette Minta Regulasi Atur Rokok Elektrik, CNN Indonesia, retrieved from <https://www.cnnindonesia.com/gaya-hidup/20191014065021-255-439171/asosiasi-e-cigarette-minta-regulasi-atu-rokok-elektrik>

<sup>133</sup> CNN Indonesia, (2019), Bahaya untuk Kesehatan, IDI Larang Penggunaan E-cigarette, CNN Indonesia, retrieved from <https://www.cnnindonesia.com/gaya-hidup/20190924203037-255-433578/bahaya-untuk-kesehatan-idi-larang-penggunaan-e-cigarette>.

electronic cigarettes is also needed to be in line with tobacco control strategies and efforts. A more in-depth and comprehensive study is needed by considering various interests, especially public health interests, regarding the most appropriate regulations for electronic cigarettes, whether electronic cigarettes will be regulated as tobacco products, other tobacco products or therapeutic products as a quit-smoking therapy.

### 6.1.3. E-cigarettes as an alternative for smoking harm reduction and a tool for smoking cessation.

98. **Different opinions and debates about perceived costs and benefits of HPTL product use as an alternative to reduce the harm of cigarette smoking are of particular importance in the development of national tobacco control strategies.** Considering that the policies related to tobacco control are classified as evidence-based policies, the pros and cons of electronic cigarettes will not be resolved until scientific evidence that is acceptable to all parties is obtained.

The Ministry of Health and the Indonesian Medical Association (IDI) has been a vociferous opponent of e-cigarettes use as an alternative strategy to quit smoking. IDI even contended that e-cigarettes can cause several complications such as cardiovascular disease, lung disease, tuberculosis, cancer, and others<sup>134</sup>. Similarly, online News media in Indonesia has been influencing the public of the negative effect of e-cigarettes by publishing more articles framing the harms of e-cigarettes than articles showing the benefits of these devices. Despite some opponents of the circulation of e-cigarette in the country, the government has yet to make a firm decision about e-cigarette either to issue a total ban or a comprehensive regulation<sup>135</sup>.

99. **Some studies have revealed that ENDS products could be an alternative tool for smoking cessation**<sup>136</sup>. In some countries, these products are used as a therapy to help quit smoking at clinics, whereas in some other countries suggests that the product is rather an additional source of nicotine versus an effective tool to quit smoking<sup>137</sup>.

A study conducted by researchers at Georgia State University, Atlanta, of 1,284 U.S. adult smokers revealed that the odds of quitting smoking were lower for those who used ENDS at baseline (9.4 per cent) compared with smokers who did not use ENDS (18.9 per cent). The researchers found no evidence to indicate that ENDS marketed and used in the United States are effective at helping cigarette smokers quit at a population level<sup>138</sup>. However, a study conducted by researchers of the National Centre For Youth Substance Use Research – the University of Queensland, concluded that e-

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<sup>134</sup> Ministry of Health (2019), IDI Sangsikan Rokok Elektrik Sebagai Solusi Berhenti Merokok, retrieved from <http://p2ptm.kemkes.go.id/kegiatan-p2ptm/idi-sangsikan-rokok-elektrik-sebagai-solusi-berhenti-merokok>

<sup>135</sup> Ratih, S., Damayanti, R., Maycock, B., Anshari, d. (2019) How Indonesian Media Frame the Harms and Benefits of E-cigarette, *Advances in Health Science Research (AHSR)*, (7), Atlantis Press. Retrieved from

<sup>136</sup> Rahman, M. A., Hann, N., Wilson, A., et al. (2015). E-cigarettes and smoking cessation: evidence from a systematic review and meta-analysis. *PloS one*, 10(3), e0122544. <https://doi.org/10.1371/journal.pone.0122544>

<sup>137</sup> Knura, M., (2017), E-cigarette: An effective tool to quit smoking or an additional source of nicotine?, *Porto Biomedical Journal*, Vol. 2. Issue 5. P.188

<sup>138</sup> Weaver SR, Huang J, Pechacek TF, Heath JW, Ashley DL, Eriksen MP (2018) Are electronic nicotine delivery systems helping cigarette smokers quit? Evidence from a prospective cohort study of U.S. adult smokers, 2015–2016. *PLoS ONE* 13(7): e0198047. <https://doi.org/10.1371/journal.pone.0198047>

cigarettes are 50 per cent more effective than nicotine replacement therapy, and more than 100 per cent more effective than the placebo in helping smokers quit as it delivers a small amount of nicotine to alleviate withdrawal symptoms and provide a similar sensory experience as to smoking tobacco products<sup>139</sup>. A study examining the association between e-cigarette use and smoking cessation in the European Union (EU) in 2017 revealed that daily e-cigarette use is positively associated with smoking abstinence, and the increase in e-cigarette use is positively related to quitting smoking attempts and abstinence<sup>140</sup>. Other studies concluded that the effectiveness of electronic cigarettes as an independent component of smoking cessation programs is relatively low<sup>141</sup>, and even considered ineffective due to the adverse effects on health<sup>142</sup>.

100. **There is a lack of evidence to support the effectiveness of the use of electronic cigarettes as an effective smoking cessation tool in Indonesia.** E-cigarettes alternative strategy is based on unproven assumptions that e-cigarettes products are effective as a smoking cessation aid<sup>143</sup>. A cross-sectional study in Jakarta involving a total of 767 students revealed that the main reason among 11.9 per cent of e-cigarette users using the e-cigarette was to reduce and ultimately quit conventional cigarette smoking, but the result was doubtful. 51,1 per cent of e-cigarette users in this study were also cigarette smokers (dual users). The high number of dual users might show that e-cigarette use is not yet effective as an aid for quitting smoking<sup>144</sup>. Research conducted by Istiqomah et al, for example, in a community of e-cigarette users in Semarang found that the reason most respondents used electronic cigarettes and then joined the e-cigarette community was because of the desire to quit smoking<sup>145</sup>. (Damayanti, 2016) indicated similar findings from research on the 31 Surabaya Personal Vaporizer Community, which showed that 80.6 per cent of community members stated that wanting to quit smoking was their reason for using electronic cigarettes<sup>146</sup>. The findings of the research team in Jakarta also confirm this reason, as discussed in the next section of this report.

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<sup>139</sup> Chan, G, C.K et al (2021) A systematic review of randomized controlled trials and network meta-analysis of e-cigarettes for smoking cessation, *Addictive Behaviors*, vol 119, ScienceDirect, <https://doi.org/10.1016/j.addbeh.2021.106912>

<sup>140</sup> Farsalinos KE, Barbouni A. (2019) Association between electronic cigarette use and smoking cessation in the European Union in 2017: Analysis of a representative sample of 13.057 Europeans from 28 countries. *Tobacco Control*, 30(1), BMJ Journal

<sup>141</sup> Dmytriiev, K, Mostovoy, Y, Slepchenko, N, et al (2018), Role of e-cigarettes in the smoking cessation, *European Respiratory Journal*, 52: PA1726; DOI: 10.1183/13993003.congress-2018.PA1726

<sup>142</sup> Amber Famiglietti, A., Memoli, JW, Khaitan, PG, (2021) Are electronic cigarettes and vaping effective tools for smoking cessation? Limited evidence on surgical outcomes: a narrative review, *Journal of Thoracic Disease*, 13:1, doi: 10.21037/jtd-20-2529

<sup>143</sup> Elsa, M, S., Nadjib, M., (2019) Determinan rokok elektrik di Indonesia: data SUSENAS (Survei Sosial Ekonomi Nasional) tahun 2017, *BKM Journal of Community Medicine and Public Health*, 35(2), p.41-48

<sup>144</sup> Bigwanto, M., Nurmansyah, M. I., Orlan, E., Farradika, Y., & Purnama, T.B., (2019) Determinants of e-cigarette use among a sample of high school students in Jakarta, Indonesia, *Journal International Journal of Adolescent Medicine and Health*, <https://doi.org/10.1515/ijamh-2019-0172>

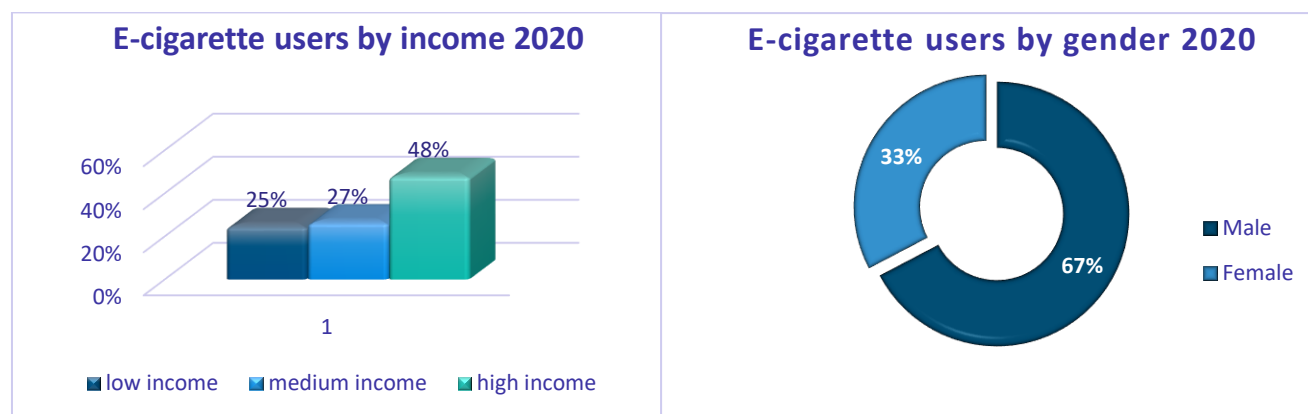
<sup>145</sup> Istiqomah, D, R. at al, (2016), Gaya Hidup Komunitas Rokok Elektrik Semarang E-cigarette Corner, *Jurnal Kesehatan Masyarakat*, Vol.4, No.2, (ISSN: 2356-3346).

<sup>146</sup> Apsari D (2016) Electronic cigarette using in Surabaya's Personal Vaporizer Community, *Jurnal Berkala Epidemiologi*, 4(2), doi: 10.20473/jbe.v4i2.2016.250–261

#### 6.1.4. Prevalence in the use of electronic cigarettes

101. There have not been many comprehensive surveys on e-cigarettes. Data on electronic cigarettes typically refers to the Ministry of Health database, which discloses some facts regarding the characteristic of e-cigarette users. As these devices are considerably more costly compared to conventional cigarettes, the majority of users are a high income (48 per cent), followed by medium income users (27 per cent). Males dominate the user database (67 per cent) while females account for 33 per cent.

**Figure 64: E-cigarette users characteristics, by incomes and by gender 2020**



Source: Ministry of Health (2020)

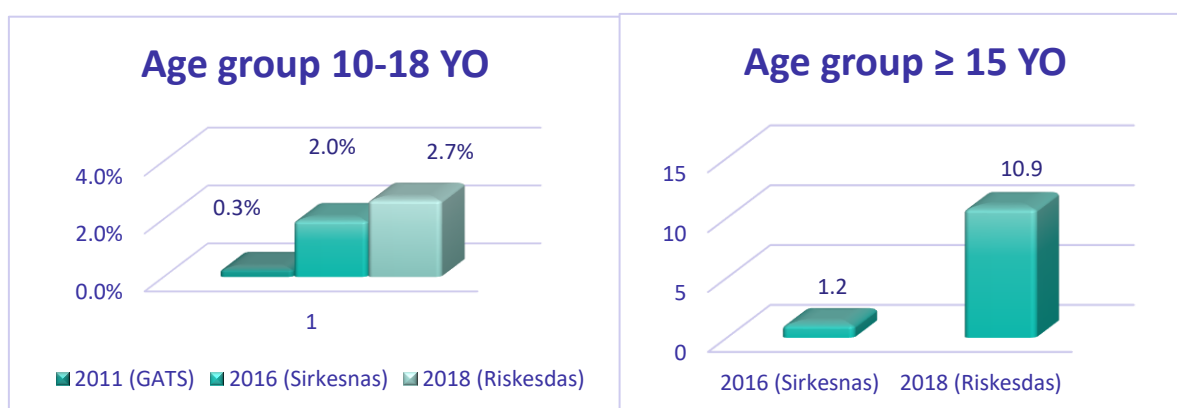
102. The prevalence of the use of e-cigarettes increases from year to year according to data released by the National News Agency (Antara News). The interview session with the SEATCA – Southeast Asia Tobacco Control Alliance revealed that e-cigarette use among adolescents and young adults is increasing due to digital media promotion and ranges of product variety over to the market that intriguing youth to try<sup>147</sup>. This information is supported by the data released by the Ministry of Health through GATS (2011), Sirkesnas (2016) and Riskesdas (2018), that shows an increase in the average prevalence of electronic cigarette use from 2011 to 2018 in the age group of 10-18 years and aged  $\geq 15$  years. In the aged 10-18 years, the average prevalence in 2011 was 0.3 per cent, with an increase of 2 per cent in 2016 and 2.7 per cent in 2018. The trend of the increasing average prevalence was also seen in the smokers' group aged  $\geq 15$  years: from 1.2 per cent in 2016, increased dramatically to 10.9 per cent in 2018<sup>148</sup>.

<sup>147</sup> Samodro, D. (2021) Peneliti: Penggunaan rokok elektronik meningkat karena promosi, AntaraNews.com, retrieved from <https://www.antaranews.com/berita/1968952/peneliti-penggunaan-rokok-elektronik-meningkat-karena-promosi>

<sup>148</sup> Ministry of Health (2020), Pengendalian Konsumsi Hasil Produk Tembakau Lainnya (HPTL), *Media Briefing* 15 Januari 2020, retrieved from [http://p2ptm.kemkes.go.id/uploads/VHcrbkVobjRzUDN3UCs4eUJ0dVBndz09/2020/01/Pengendalian\\_Konsumsi\\_HP\\_TL\\_Media\\_Briefing\\_15\\_Januari\\_2020.pdf](http://p2ptm.kemkes.go.id/uploads/VHcrbkVobjRzUDN3UCs4eUJ0dVBndz09/2020/01/Pengendalian_Konsumsi_HP_TL_Media_Briefing_15_Januari_2020.pdf)



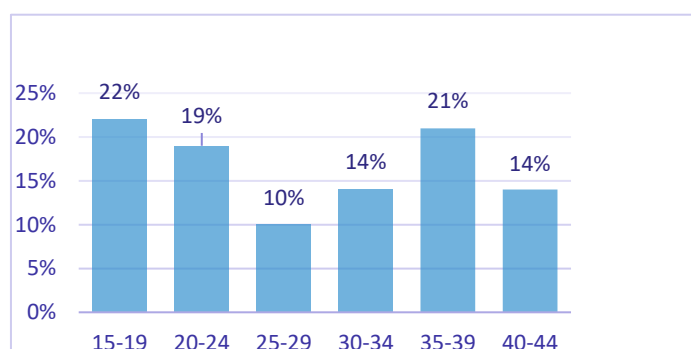
**Figure 65: Prevalence of e-cigarette use by age group ( 2011-2018)**



Source: Ministry of Health (2018)

Age has a close relation with e-cigarette use in Indonesia. Data released by Lokadata Indonesia in 2019 showed that e-cigarette use is dominated by adolescents aged 15-19 YO (22 per cent), followed by adults aged 35-39 YO (21 per cent), and youth aged 20-24 YO (19 per cent)<sup>149</sup>. In the case of a cross-sectional study on 767 students in Jakarta, the researchers found that family and environmental factors, perception of less contributing to secondhand smoke, and products that are less restricted in public areas are among other reasons the students aged 16-17 YO to use the e-cigarette<sup>150</sup>.

**Figure 66: E-cigarette users by age group 2019**



Source: Lokadata Indonesia (2019)

103. Statistics Indonesia data indicated that during 2018-2020 there was a decline in smoking prevalence among adolescents aged  $\leq 18$  YO (9,65 per cent in 2018 to 3,81 per cent in 2020)<sup>151</sup> and youth and adults aged  $\geq 15$  YO (32,20 per cent in 2018 to 28,69 per cent in 2020)<sup>152</sup>. However, an in-depth study is required to identify

<sup>149</sup> Lokadata (2019) Pengguna vape di Indonesia, 2019, <https://lokadata.beritagar.id/chart/preview/pengguna-vape-di-indonesia-2019-1583383920>

<sup>150</sup> Bigwanto, M., Nurmansyah, M. I., Orlan, E., Farradika, Y., & Purnama, T.B., (2019) Determinants of e-cigarette use among a sample of high school students in Jakarta, Indonesia, journal International Journal of Adolescent Medicine and Health, <https://doi.org/10.1515/ijamh-2019-0172>

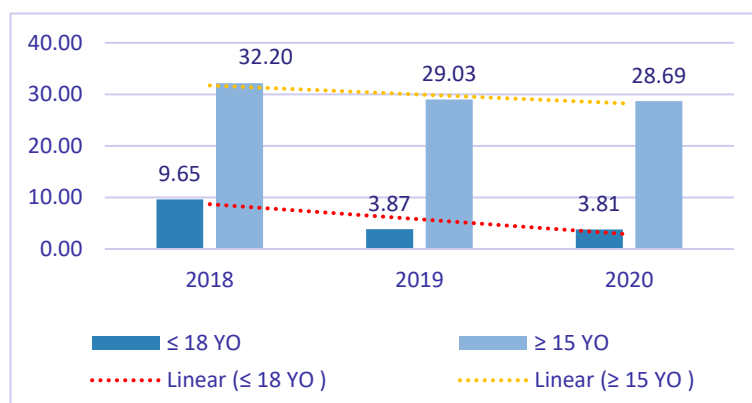
<sup>151</sup> BPS-Statistics Indonesia (2021) Persentase Merokok Pada Penduduk Usia  $\leq 18$  Tahun Menurut Kelompok Umur (Persen), 2018-2020, retrieved from <https://www.bps.go.id/indicator/30/1535/1/persentase-merokok-pada-penduduk-usia-18-tahun-menurut-kelompok-umur.html>

<sup>152</sup> BPS-Statistics Indonesia (2021) Persentase Merokok Pada Penduduk Umur  $\geq 15$  Tahun Menurut Provinsi (Persen), 2018-2020, retrieved from <https://www.bps.go.id/indicator/30/1435/1/persentase-merokok-pada-penduduk-umur-15-tahun-menurut-provinsi.html>



relationships between the decrease in smoking prevalence and increasing in e-cigarette using rate.

**Figure 67: Smoking prevalence among  $\leq 18$  YO and  $\geq 15$  YO, 2018-2020**



Indonesian Statistics; SUSENAS data 2020

## Conclusion

A literature study was conducted to provide secondary data on other tobacco products to complete the scoping study. HPTL is an Indonesian classification of products using tobacco or extracts of tobacco apart from combustible cigarettes, including e-cigarettes, chewing tobacco and heated tobacco products (HTP). Among the alternative tobacco products circulating in Indonesia, HTP was introduced in the market in 2019 and is still less popular compared to e-cigarettes, which are widely used in Indonesia. By the end of 2018, the number of e-cigarette users in Indonesia exceeded one million people. One year later, in 2019, the number increased by more than 100 per cent to 2.5 million people.

As e-cigarettes became more popular in Indonesia, e-cigarette associations and communities also emerged in various locations. State revenue from taxes and excises on e-cigarette has also increased significantly. In 2018 excise taxes on these products amounted to IDR 154 billion, one year later in 2019 this increased to IDR 426 billion, and in 2020 HPTL excise revenue amounted to IDR 515.9 billion.

Although it has been circulating since 2010, as yet there is no specific and comprehensive regulation covering all aspects governing e-cigarette. The same case also applies to HTP, and the only regulation is law no. 146/2017 and law no. 156/2018 on the excise rate for HPTL products, which is set at 57 per cent.

In public policy areas, policies on HPTL appear uncoordinated between regulators. Different views on how to treat HPTL also occur between public interest groups such as anti-tobacco activists and business interest groups. Differences of opinions and debates about the perceived costs and benefits of HPTL product use as an alternative to reduce the harm of cigarette smoking have not yet been taken into account for policy directions.

Regardless of its importance in the development of national tobacco control strategies, there have not been many comprehensive surveys on HPTL as an alternative to reduce the risk of addicted smokers and as a tool to quitting smoking, either funded by the

government or independent bodies. Some studies have revealed that HPTL could be an alternative tool for smoking cessation, but there is no evidence about the effectiveness of the use of HPTL on smokers' decisions to quit smoking in Indonesia.

## 6.2. HPTL economic ecosystem: the case of Jakarta

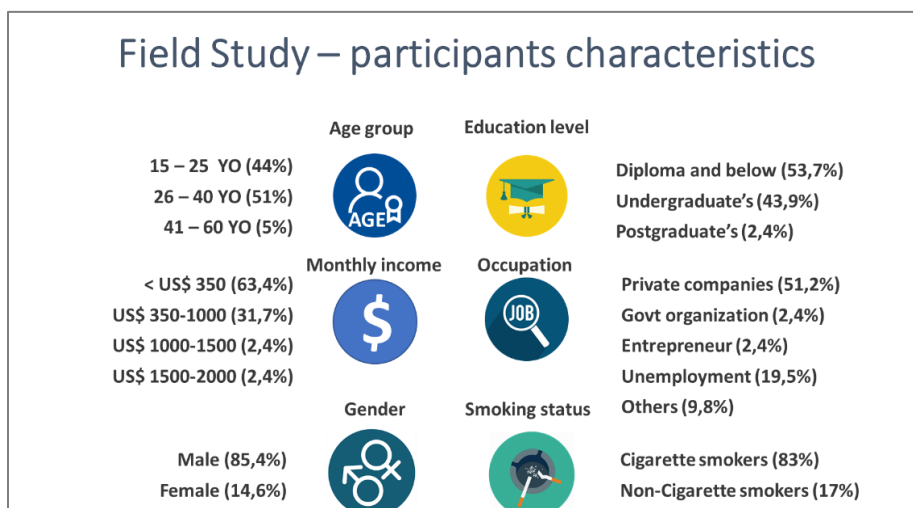
### 6.2.1. Methodology and data sampling

104. **The survey method we used to collect primary data for the study in Jakarta was an in-person interview with selected population sampling.** These interviews were recorded to allow our researchers to develop an interview script for further data analysis. The survey instrument used to obtain primary data in the field was a questionnaire, coupled with group discussion sessions. The focus of these interviews was to collect data on e-cigarette customer behaviour, their preferences for e-cigarette, and direct and indirect costs related to e-cigarette consumption.
105. While a more in-depth study on e-cigarette consumers' behaviour, market analysis and government regulations will be conducted in 7 capital cities in Indonesia, during the phase II project, this scoping study report will provide a brief analysis of a small population sampling selected from Jakarta, one of the cities with the largest e-cigarette users in Indonesia. The target population for this study was e-cigarette users who have switched from combustible cigarettes to e-cigarettes, and some new e-cigarette users with no experience in smoking combustible cigarettes. Using a simple random sampling method in selecting the population sampling, we then selected 41 study participants, consisting of 34 ex-smokers and 7 new e-cigarette users.

### 6.2.2. Respondent socio-demographic profile

106. **Part of the scoping study was a survey conducted in Jakarta, which involved 41 respondents.** Respondents comprise of both ex-cigarette smokers who switch to e-cigarette (83 per cent) and new e-cigarette users (17 per cent). The characteristics of the respondents captured in this study were mostly male (85.4 per cent), with an age range between 15-60 years old, with the most respondents in the age range of 15-40 years (95 per cent). In more detail, 44 per cent were aged 15-25 years, 51 per cent were aged 26-40 years, and the rest were over 40 years old. The average education level was high school (53.7 per cent) and undergraduate (43.9 per cent); types of work were generally private employees (51.2 per cent), students (19.5 per cent) and the rest are entrepreneurs, government employees and other professions. 63.4 per cent had a monthly income of less than IDR 5 million per month, 31.7 per cent were between IDR 5 million and IDR 10 million, the remainder had income between IDR 15 and IDR 30 million per month.

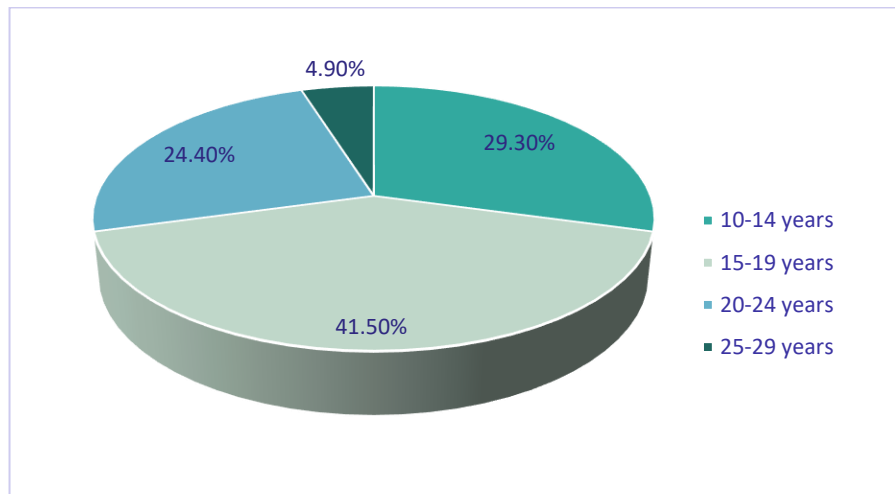
**Figure 68: Respondents' socio-demographic profile**



Source: Field survey Jakarta (2020)

107. **Most of the respondents started smoking between the ages of 10-19 years old (70.8 per cent).** The diagram below illustrates that among this age range, the range of 15-19 years is when most respondents started smoking (41.5 per cent), followed by those who started smoking at a younger age range, 10-14 years. Only 29.3 per cent of respondents disclosed that they first smoked at an older age, 20-29 years old.

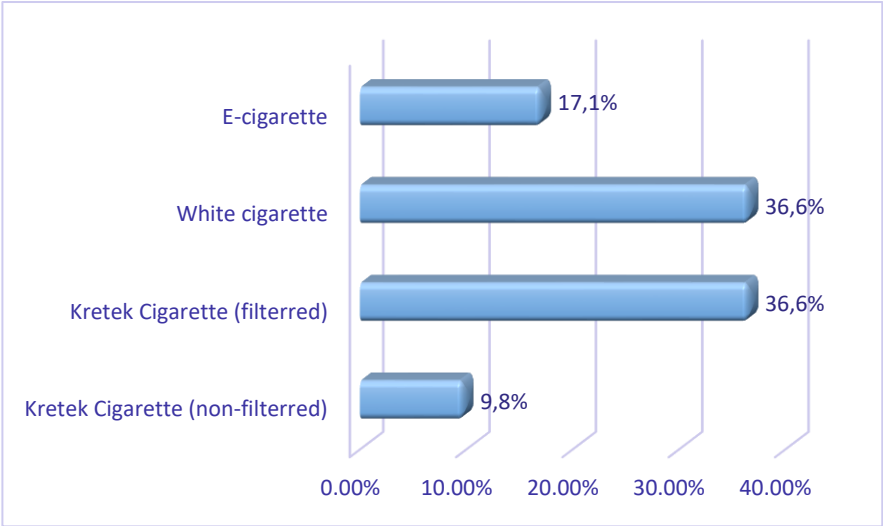
**Figure 69: Respondents' ages of smoking for the first time**



Source: Field survey Jakarta (2020)

108. **The majority of e-cigarette users, who previously had a history of smoking conventional cigarettes, said that white cigarettes and filtered clove cigarettes were the first types of cigarettes they consumed.** The diagram below shows that only 9.8 per cent of respondents consumed unfiltered *kretek* cigarettes as their first cigarette before switching to e-cigarettes.

Figure 70: Type of cigarette consumed for the first time

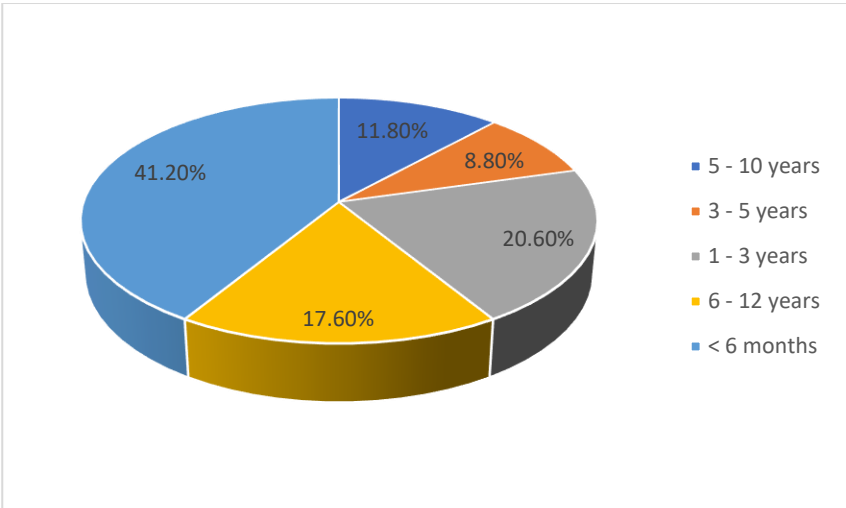


Source: Field survey Jakarta (2020)

6.2.3. E-cigarette economic ecosystem

109. **Almost half of the former conventional cigarette smokers switched to e-cigarette over the past 6-12 months.** The diagram below shows that more than half of former conventional tobacco smokers being interviewed had switched to e-cigarette smoking over the past 6-12 months. 34.1 per cent have just smoked e-cigarettes since the past month. Almost half (48.7 per cent) of respondents have just started vaping in the past year. Only 9.8 per cent of them had started vaping between more than five years and 10 years ago.

Figure 71: Respondents' period for switching to e-cigarettes



Source: Field survey Jakarta (2020)

Table 4 is a summary of the findings of this study regarding the various considerations of respondents who previously smoked a conventional cigarette and then switched to consuming e-cigarettes (34 respondents). Details regarding the respondents' considerations are described in the explanation below.

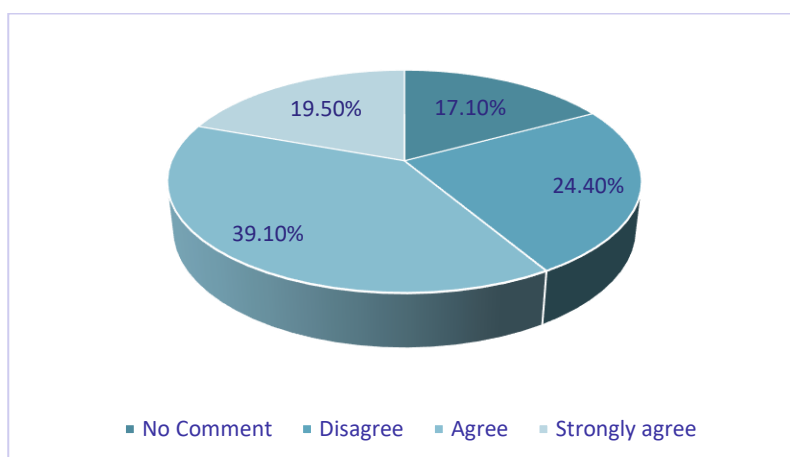
**Table 4: Reasons for switching to e-cigarettes**

| Reasons for Switching to E-cigarette           | Response of 34 respondents |           |                |              |
|--|----------------------------|-----------|----------------|--------------|
|  | Strongly agree (%)         | Agree (%) | Less agree (%) | Disagree (%) |
| Health Reason                                  |                            |           |                |              |
| Reduce harm impact on health                   | 23,5                       | 47,2      | 29,4           | 0,0          |
| Pathway to quit smoking                        | 17,7                       | 35,3      | 23,6           | 23,6         |
| Price Reason                                   |                            |           |                |              |
| Cheaper compared to conventional cigarette     | 20,6                       | 56,0      | 20,6           | 3,0          |
| Social Reason                                  |                            |           |                |              |
| Reduce the second-hand smoke effect            | 23,5                       | 52,9      | 20,6           | 2,9          |
| Pleasure Reason                                |                            |           |                |              |
| The sensation from tobacco smoking is stronger | 5,9                        | 38,3      | 26,5           | 29,4         |
| More choices of flavours                       | 58,8                       | 35,3      | 5,9            | 0,0          |
| Lifestyle and Social Interaction               |                            |           |                |              |
| Lifestyle                                      | 29,4                       | 23,6      | 38,3           | 8,9          |
| Social Interaction/Environment                 | 29,4                       | 32,4      | 32,4           | 5,9          |
| Follow others                                  | 3,0                        | 23,6      | 50,0           | 23,6         |
| Increasing confidence                          | 11,8                       | 29,4      | 41,2           | 17,7         |
| Appearance Reasons                             |                            |           |                |              |
| Not damaging clothes                           | 64,8                       | 32,4      | 3,0            | 0,0          |
| Not causing a bad smell on the mouth           | 47,2                       | 44,1      | 8,9            | 0,0          |
| Not causing bad smell on clothes               | 56,0                       | 35,3      | 8,9            | 0,0          |

Source: Field survey Jakarta (2020)

110. **More than half of respondents believe that e-cigarettes are healthier.** Figure 48 shows that more than half of respondents (19,5% Agree, and 39,1% Strongly Agree) who previously smoked conventional tobacco concurred that e-cigarette cigarettes were safer and have minimal harmful effects on health compared to conventional cigarettes that they previously consumed. Meanwhile, 4 out of 7 respondents who had never previously smoked conventional tobacco also believed that e-cigarettes were safer to consume.

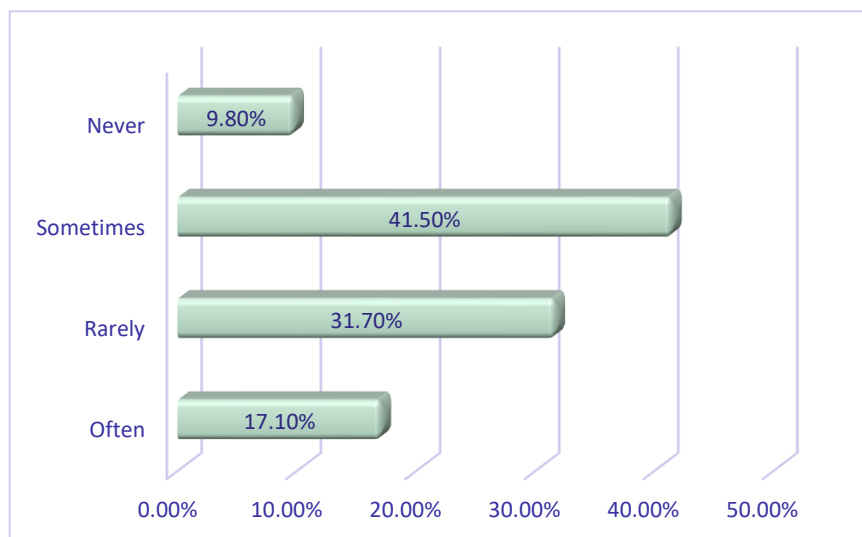
**Figure 72: Respondents' perception of e-cigarette effects on health**



Source: Field survey Jakarta (2020)

111. **Less than half of respondents stated that they “want to quit smoking” as their consideration of switching to an e-cigarette.** Table 4 shows e-cigarette smoking as a consideration “to quit smoking” was agreed upon by 44 per cent of 34 respondents, 14.7 per cent of whom strongly agreed and 29.3 per cent of whom agreed. Conversely, 39,2 per cent agree less or disagree with the statement “want to quit smoking” as the reason they switch to using e-cigarettes. This finding looks somewhat different from previous study results, as mentioned in the previous section of this report where the majority of respondents said “want to quit smoking” as one of the common reasons for conventional tobacco smokers switching to consuming e-cigarettes. This is probably related to the low intensity in following information on health issues related to smoking. Of the 41 respondents, only 17.1 per cent of respondents admitted that they often follow information about health-related to smoking, while the rest answered: rarely (31.7 per cent), sometimes (41.5 per cent) and never (9.8 per cent), as shown in Figure 49 below.

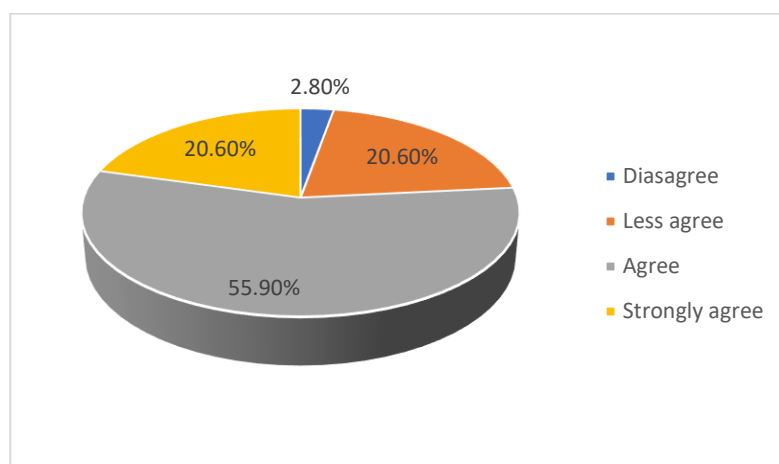
**Figure 73: Respondents Intensity in accessing the information on health-related to cigarettes**



Source: Field survey Jakarta (2020)

112. **Cheaper prices are one of the considerations for switching to e-cigarette cigarettes.** As shown in Figure 48, 63.4 per cent of respondents who were previously conventional cigarette smokers agreed that the price of e-cigarettes was cheaper than that of conventional cigarettes, and was one of the reasons they switched to using e-cigarettes. 17.1 per cent of them strongly agree and 46.3 per cent agree with this statement. Meanwhile, of the 7 respondents who did not have a history of smoking conventional tobacco, 4 of them agreed that the price of e-cigarette was affordable for them and the rest stated that they didn't agree, meaning that price was not a consideration for them in deciding to smoke an e-cigarette.

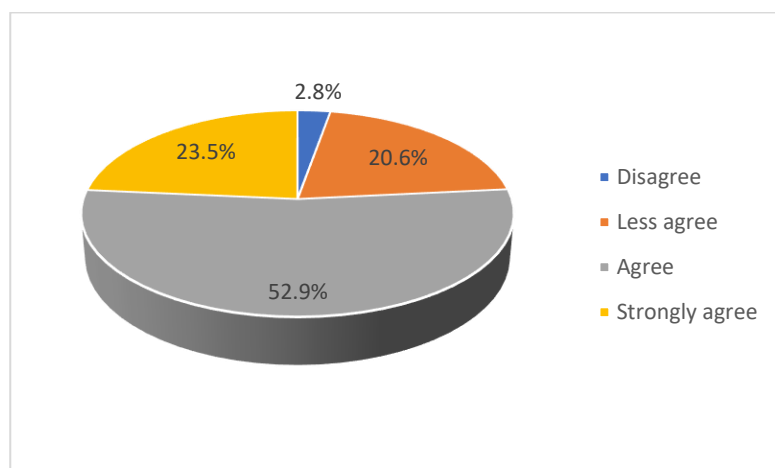
**Figure 74: Respondents price consideration for switching to e-cigarettes**



Source: Field survey Jakarta (2020)

113. **Concerning second-hand smoke exposure, 76,5 per cent of respondents believe that smoke from e-cigarette use does not disturb people in the surrounding environment.** This was one of the considerations to switch to e-cigarettes. Only 23,4 per cent disagreed with this idea, and for them, the less second-hand smoke effect is not a consideration when switching to e-cigarettes.

**Figure 75: Respondents' perceptions of e-cigarette and their second-hand smoke effects**



Source: Field survey Jakarta (2020)

114. **The majority of respondents agreed that e-cigarettes are better than conventional cigarettes** in that they do not damage clothes, do not cause bad breath, and do not leave cigarette smells on clothes, which affect their appearance. Table 4 above shows that the majority of respondents agreed that these three negative effects of conventional tobacco cigarettes were not found in e-cigarettes, so it became a consideration in switching to e-cigarettes. 32,4 per cent of respondents agreed and 64,8 per cent strongly agreed with the statement that e-cigarettes did not cause their clothes to be damaged. Only 3,0 per cent expressed less agree with this statement. Meanwhile, the majority of respondents (91,3 per cent) support the statement that e-

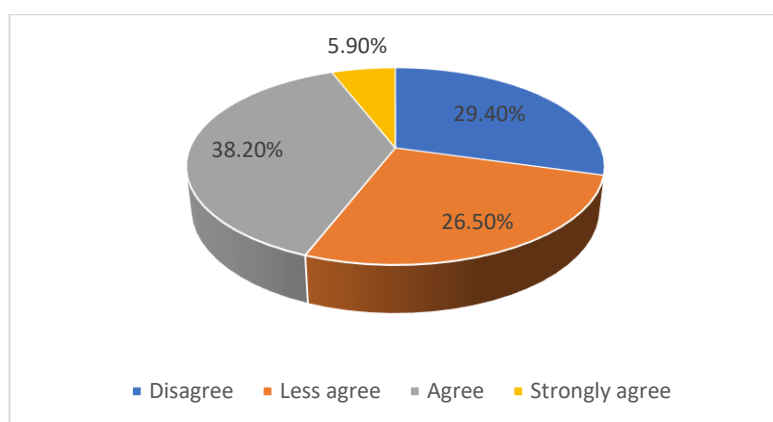


cigarettes "do not cause smoker's distinctive bad breath " and "do not leave cigarette smell on clothes" (91,3 per cent) and only 8,9 per cent disagreed with these ideas. From this point of view, aspects related to personal appearance are also considered by conventional cigarette smokers when switching to consuming e-cigarettes.

115. **Various flavours and different sensations are considerations for switching to e-cigarettes.** Switching to e-cigarettes because they offer more enjoyment is also a consideration for former conventional cigarette smokers to switch to e-cigarettes. The majority (78.1 per cent) of respondents agreed that e-cigarettes provide more flavour choices than conventional cigarettes. 48.8 per cent of those who agreed stated that they strongly agreed with the many flavour choices in e-cigarette and 29.3 per cent agreed.

116. **Nearly half of respondents believed that e-cigarettes could replace the sensations of smoking conventional tobacco.** There was 44,3 per cent of respondents agreed that e-cigarettes still provide the "smoking sensation" of a conventional cigarette, and that was one of the factors that encouraged them to switch. While more than half of respondents (56% per cent), however, do not agree that e-cigarettes can replace the sensation of smoking a conventional cigarette, so they do not make this reason one of the considerations for switching to e-cigarettes.

**Figure 76: Considerations for switching to an e-cigarette: flavour and sensations**

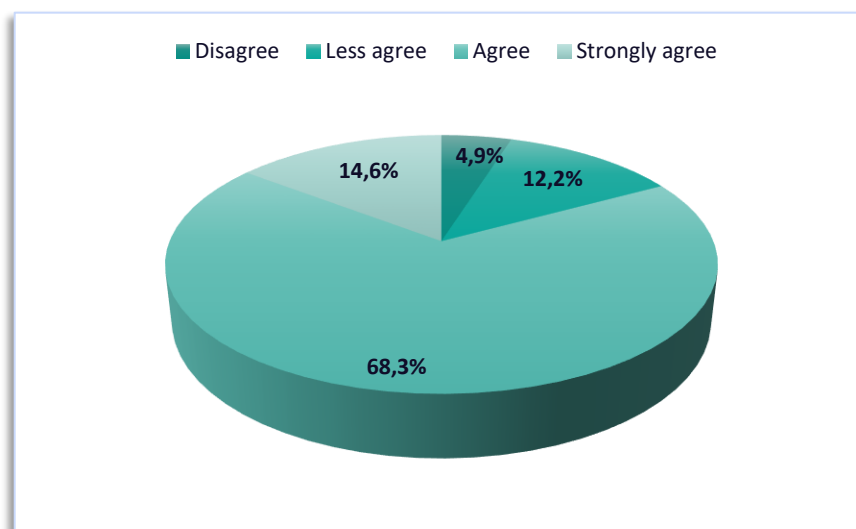


Source: Field survey Jakarta (2020)

117. **Social interaction and lifestyle become considerations for switching to e-cigarettes.** Considerations related to lifestyle (53,1 per cent) and peer interaction effects (61,9 per cent) are also cited by respondents as their reason for switching to e-cigarettes. However, less than half of respondents agreed that "increasing self-confidence" (41.2 per cent) and "social factors" (26,7 per cent) were the reasons they chose for switching to an e-cigarette. Meanwhile, 6 out of 7 respondents who did not have a history of smoking conventional tobacco agreed that "social factors" is one of the reasons they smoke an e-cigarette. 5 out of 7 respondents in the same category agreed with the statement that "socializing" is one of the reasons they smoke an e-cigarette.

118. **The price of e-cigarette liquid is affordable for the majority of respondents.** The majority of respondents (82.9 per cent), both those with a history of smoking or not, agreed that the price of e-cigarette liquid in the market was affordable. Only 17.1 per cent stated that they agreed less or disagreed with this statement. Details of the respondents' answers can be seen in Figure 51 below.

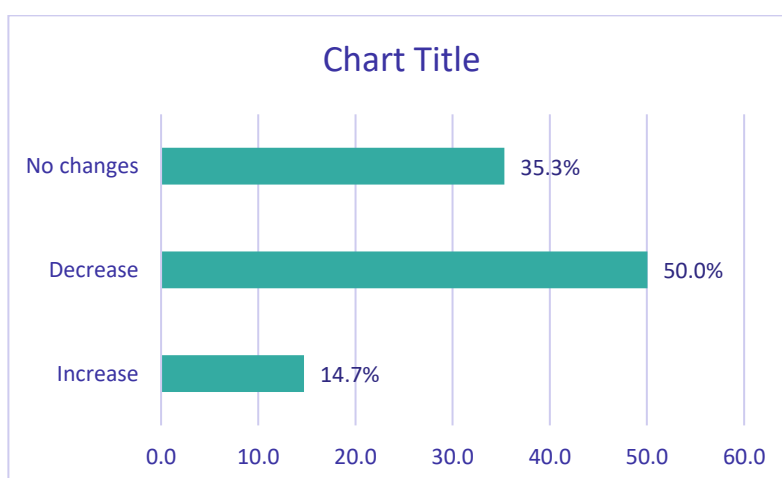
**Figure 77: E-cigarette liquid price and affordability**



Source: Field survey Jakarta (2020)

119. **Respondents who previously smoked conventional tobacco were further asked about the difference in their share of spending on e-cigarettes** compared to when they still smoked a conventional cigarette, half of the respondents (50 per cent) answered that there was a decrease in spending. Meanwhile, those who answered that there was no reduction in their financial expenses amounted to 35.30 per cent. And 14.7 per cent answered that their financial expenditure increased after switching to e-cigarettes.

**Figure 78: Respondents' spending on cigarettes after consuming e-cigarette**

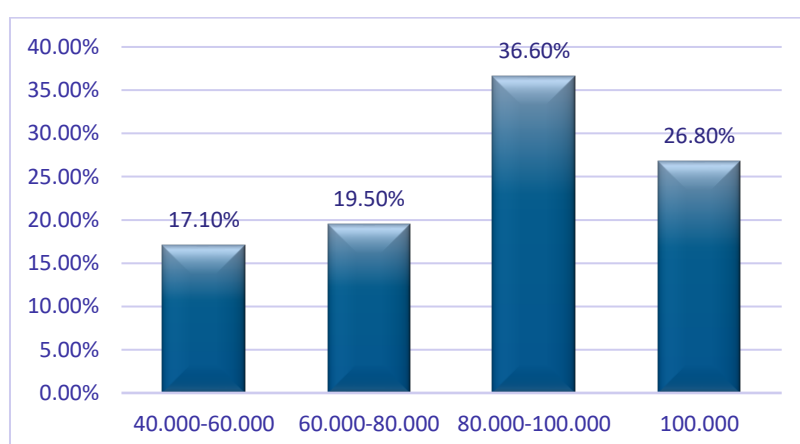


Source: Field survey Jakarta (2020)

120. **What is the ideal price of e-cigarette liquid according to the respondents?**

Figure 53 shows that 36.6 per cent of respondents - both former cigarette smokers and first-time e-cigarettes smokers answered that the ideal price of e-cigarette liquid is around IDR 80,000 to IDR 100,000. 26.8 per cent answered that the ideal price for e-cigarette liquid was above IDR 100,000. Meanwhile, 36.6 per cent believed that the ideal price was less than IDR 80,000. The answers of these respondents may be related to news about the circulation of cheap fake refill liquid in the market, which is suspected to contain hazardous substances, so that e-cigarette consumers prefer a reasonable price that is not too cheap as the ideal price.

**Figure 79: Respondents' opinions on Ideal price of e-cigarette liquid**



Source: Field survey Jakarta (2020)

## Conclusion

The survey on HPTL users in Jakarta was part of the primary data collection activities in this scoping study. The instruments used to collect the primary data for this survey were questionnaires combined with an in-person interview and group discussion with the selected population sampling.

Population sampling was selected from Jakarta as the city with the largest number of e-cigarette users in Indonesia. Using the purposive sampling method, researchers selected 41 respondents consisting of ex-cigarette smokers who switched to e-cigarettes (83 per cent) and new e-cigarette users (17 per cent).

The characteristics of the respondents who were captured in this survey were mostly male (85.4 per cent) with an age range between 15-60 years old, with the majority of respondents in the age group between 15-40 years (95 per cent), while 70.8 per cent of ex-smoker respondents had started smoking since being 10-19 years old with SPM and SKM cigarettes.

There were various reasons that these respondents switched to e-cigarettes, which include health reasons, where the majority of respondents (70,7%) believed that e-cigarettes reduced more health risks compared to conventional cigarettes, and half of the respondents believed that e-cigarettes are a pathway to quitting smoking. 76,5 per cent of respondents also believe that e-cigarettes decrease exposure to second-hand smoke.

Price factors were another reason urging them to switch, apart from the flavour, social interaction and lifestyle also become considerations for switching to e-cigarettes.

Unlike Heated Tobacco Products, the increased exposure to e-cigarette advertisements particularly in major capital cities such as Jakarta has been associated with the increase in E-cigarette using among adolescents. Meanwhile, media advertisements and promotion of the HTPs are limited to increase public awareness of the products and their potential of reducing the harm of smoking conventional cigarettes.

## 7. DRAFT ROADMAP ON THE TOBACCO CONTROL POLICY AND STRATEGY

### 7.1. Advisory and Steering committee members.

121. **The Advisory and Steering committee was formed during the scoping study as one of the deliverables of the study project.** During the project, the committee has conducted its first task to the draft roadmap on tobacco control transformation program, which aimed to complement the existing national tobacco control policies to reduce the prevalence of smoking, particularly among youth, children, and new smokers<sup>153</sup>, with risk reduction strategies targeting the addict smokers who have not been targeted in the existing tobacco control program.
122. **In the next phase of the project, the committee will collaborate with all stakeholders,** including the internal management team, researchers, government partners, academic institutions, government institutions at central and regional levels, and media partners, to provide legislative advocacy addressing Indonesian government policymakers associated with harm reduction strategy as part of the existing policies. The introduced harm reduction strategy and the existing tobacco control policies are envisaged to structure a more comprehensive tobacco control transformation program, with both targeting the youth, children, and new smokers as well as a 67 million addicted smokers' group.
123. **The committee team will be led by the Indonesian Development Planners Association (PPPI) as the consortium's project implementing partner.** The PPPI itself is an association under the Ministry of National Development Planning (BAPPENAS) and has developed an inclusive partnership with the consortium to implement the tobacco control transformation program in Indonesia. This partnership was stipulated in a Memorandum of Understanding no. 003/MoU/PPPI/07/2020 between the consortium and the PPPI.
124. **The structure of the committee is 'functional' in nature where it consists of Advisory members and steering committee members.** Advisory members will provide more strategic direction in legislative advocacy, while the Steering committee takes more responsibility for the implementation issues associated with the Strategic Plan in engaging with the government. The committee will also appoint some Technical Assistants placed in government agencies. The committee members will consist of:
- The government partners – the representative from BAPPENAS, Ministry of Home Affairs, Ministry of Health, the Ministry of Finance.

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<sup>153</sup> RPJM 2015-2019, RPJM 2020-2024, Act No. 36/2009 concerning community health, Act no.109/2012 concerning smoke-free zones and product with additive substance, Act no.23/2002 concerning child protection, Act no 39/2007 concerning cigarette excise tax,

- Academic group – the representative from the University of Gadjah Mada, University of Indonesia, Bogor Agriculture University, and Sahid University.
- A non-profit organisation – representatives from SMI, Prolitera, LPSPDM Lombok, The committee will conduct regular meetings, focus group discussions, seminars, dissemination of research findings and other networking sessions with government officials, aimed at discussing the issues and promoting alternative solutions for policy formulation.

## 7.2. Draft roadmap of tobacco control transformation program

125. The draft roadmap of the tobacco control transformation program was developed by a team of the committee during the scoping study phase and is expected to be executed in the next phase of the program. This roadmap serves as a communication tool targeting government policymakers and aims to articulate strategic thinking and plans for the improvement of the national tobacco control strategy, which include major milestones to be achieved.

**The draft roadmap consists of:**

### **1. Diminishing substantial economic costs and productivity losses associated with cigarette smoking.**

The myriad substantial economic costs that smoking imposes on society include direct costs such as healthcare expenditure due to smoking-attributable diseases and in-direct costs representing the productivity loss from morbidity and mortality. Our research team will conduct comprehensive studies to identify, measure and compare the costs of illness of cigarette smoking-attributable diseases, and the economic costs of harm reduction products use. The committee will use these findings to develop a policy brief disclosing the economic costs and productivity losses of cigarette smoking and harm reduction product use, and a comparative analysis of the economic costs and productivity losses of the two product ranges.

### **2. The formulation of a comprehensive cessation strategy that includes the development of a blueprint for tobacco harm reduction strategies.**

The committee will provide technical supports and policy recommendations to succeed the government's smoking cessation program and introduce a risk reduction strategy targeted at 67 million active smokers in the country while protecting the community from the harms of second-hand smoke. Our committee's strategy is to advocate for policy directions through the introduction of harm reduction strategies to reduce the health risks of 67 million addict smokers, which will be complemented with population-based approaches, including advocacy for the simplicity of the tobacco excise structure, strengthening of tobacco advertisement regulations, improving smoke-free zones regulations, and campaigning for cigarette plain packaging.

### **3. The formulation of the excise tax increase and extensification policy, and strategic use of Revenue Sharing Funds of Tobacco Products Excise (DBH-CHT)**

The committee will advocate for policy changes for a further tobacco tax increase, excise extensification strategy, and strategic utilisation of DBHCHT using our research findings in several regions, and simulation of the tax increase on smoking prevalence rate, tax revenue, and potential economic benefits in the health and employment sectors. The advocacy attempt will also be supported by the simulation of the degree of potential savings from health costs and productivity losses by using harm reduction products.

### **4. Encouraging a stronger political will and advocacy to achieve a smoke-free Indonesia with an enforcement system by involving multiple stakeholders.**

In supporting the transformation tobacco control program, the committee will also approach multiple stakeholders including the industry associations, Regional Representative Council (DPD), House of Representative (DPR), Civil Society Organisations (CSOs), and local governments at provincial and district levels -through collaboration with Ministry of Home Affairs, which aims to form an enforcement system to ensure the successful implementation of the transformation tobacco control program. The committee will also advocate for a review of the FCTC harm reduction agenda in Indonesia to be adopted as a policy measure – consideration for implementation as part of government regulatory support to reduce health costs and economic loss.



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