

BEYOND THE OFFICIAL ESTIMATE: tobacco use may push 8.8 million Indonesians into poverty

This policy brief showcases the extract of CISDI's latest study on the impoverishing effect of tobacco consumption in Indonesia (2022)

KEY POINTS

- ▶ Tobacco spending is wasteful because it diverts household resources from spending on essential goods. Also, tobacco consumption increases healthcare costs and hampers productivity.
- ▶ Smoking households divert 11% of their budget on tobacco products. Hence, household welfare measurement on an expenditure basis should not include tobacco purchases in order to reflect the actual welfare status.
- ▶ If tobacco direct spending and tobacco-attributable healthcare cost are excluded from the household's total expenditure, 8.8 million more people would fall into poverty. These are people who have de facto spending below the poverty line but are not officially deemed as poor due to distortion incurred by tobacco use.
- ▶ The tobacco-adjusted poverty rate is more prominent among the rural population than the urban. It is because the rural area has a higher share of the near-poor population which makes them prone to falling into poverty. In addition, rural has a higher smoking rate, which is partly due to more affordable cigarettes in the area. Rural smokers, compared to their urban counterparts, tend to consume cheaper cigarettes.
- ▶ There is an urgent call for effective tobacco-control policies to reduce tobacco consumption. The design of tax policies should help make all-brand cigarette prices significantly less affordable in the hope for smokers to cut down on smoking and no longer have access to cheaper alternatives.

SMOKING HOUSEHOLDS DIVERT A SIGNIFICANT SHARE OF THEIR EXPENDITURE TO TOBACCO

Tobacco consumption is relatively high in Indonesia. According to Global Adult Tobacco Survey (2021), around 34.5% of adult populations, mostly male, consume tobacco products. Compared to 2011, the estimated number of adult smokers has now increased by 8.8 million people[1].

The outstanding number of smokers has made most Indonesian households (6 out of 10) have tobacco spending. The National Socioeconomic Survey (2018–2021) reported that smoking households divert 11% of their monthly budget to tobacco products – a higher proportion than staples, meat, or vegetable purchases. Similarly, poor and near-poor households divert 9.2% and 10.4%, respectively, of their expenditure on tobacco[2].

TOBACCO PURCHASES ARE WASTEFUL SPENDING

Tobacco purchases are considered wasteful spending due to the following reasons:

First, cigarette consumption does not contribute to nutrition intake. Instead, tobacco purchases have diverted the resources that are supposedly reserved for essential needs. A study by CISDI demonstrates that tobacco purchases have evidently crowded out the allocation of household expenditures for other goods and services, including food, housing, education, and healthcare[3].

Likewise, another study indicates that poor household has sacrificed the quality and quantity of food to compensate for tobacco purchases[4]. Consequently, lower daily protein intake is observed among smoking households rather than the non-smoking ones[5]. This



sparked concerns that human capital investment, especially in children, would be adversely affected. It is indicative that Indonesian children who live in smoking families are exposed to a higher risk of stunting, which is anticipated to have detrimental impacts in the longer term[6].

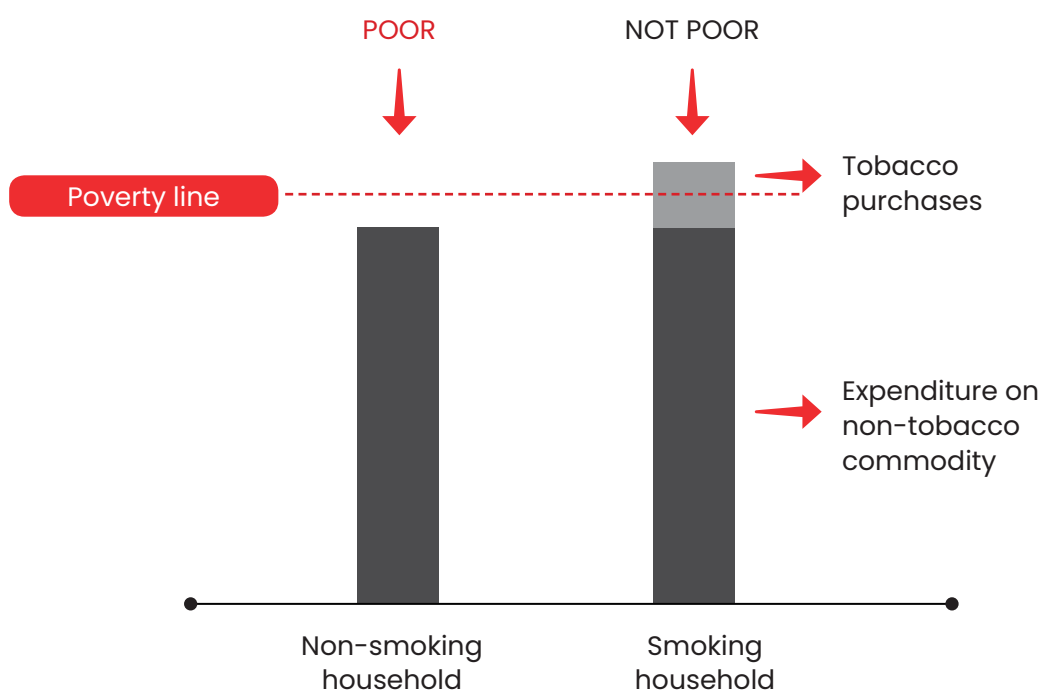
Secondly, smoking increases healthcare costs and hampers productivity due to the incurred disability and premature death. The death toll from tobacco consumption in Indonesia (2019) was estimated to reach 290,000 or approximately 17% of all-cause death[7]. CISDI's study has shown that smoking-attributable healthcare costs in 2019 ranged between Rp17.9 trillion and Rp27.7 trillion. Meanwhile, when accounting for the indirect costs of cigarette consumption, the predicted economic loss due to tobacco use was Rp410.8 trillion or 2.6% of GDP[8].

TOBACCO SPENDING DISTORTS THE TRUE LEVEL OF HOUSEHOLD WELFARE AND CONSEQUENTLY DISTORTS THE POVERTY RATE

Statistics Indonesia (BPS) utilizes per capita household expenditures to measure the welfare status (fulfillment of calorie and non-food basic needs) of a household and to determine whether the household lives under the poverty line. Today, tobacco purchases are included in the calculation of total household expenditures. It distorts the information about welfare status because tobacco spending has inflated the total expenditure, which might create an illusion of a higher welfare status than the actual condition.

Figure 1 illustrates two households with a similar amount of non-tobacco expenditure. Since their expenditure is under the poverty line, they should naturally belong to the poor household. However, tobacco purchases in smoking households have inflated the total household expenditure above the poverty line. Therefore, although smoking households have a standard of living (fulfillment of calorie and non-food basic needs) under the poverty line, they are not officially deemed as poor population.

Figure 1. Illustration of cigarette expenditure distorting household welfare and poverty rate



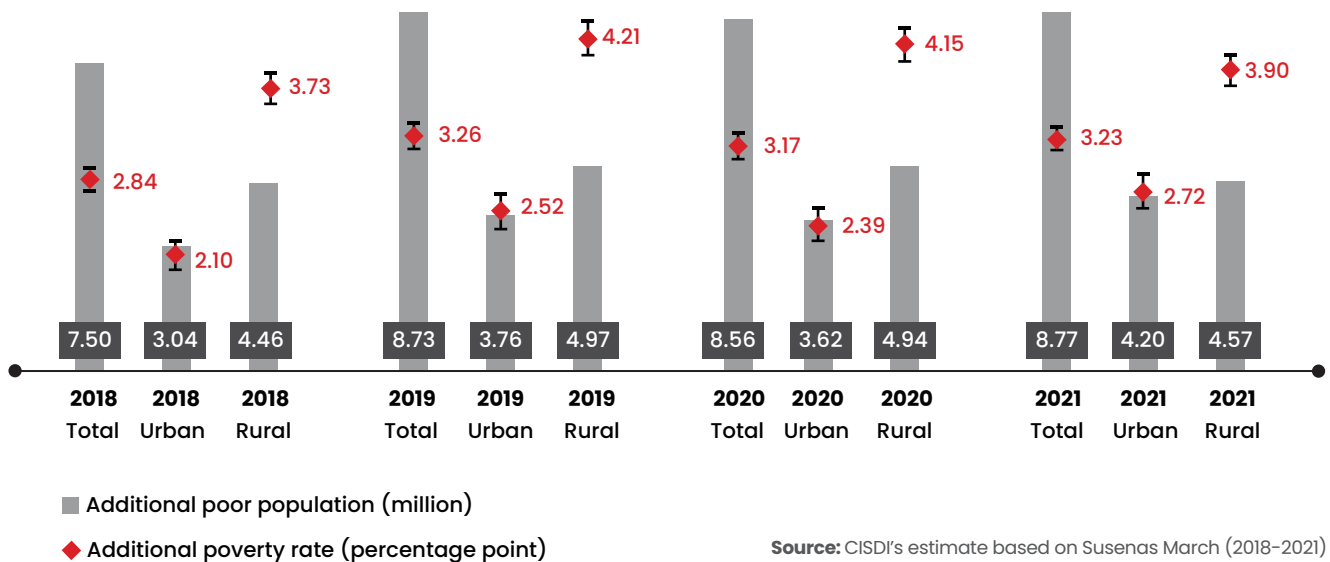


8.8 MILLION MORE PEOPLE WILL FALL INTO POVERTY IF WASTEFUL SPENDING DUE TO TOBACCO USE IS EXCLUDED FROM THE HOUSEHOLD EXPENDITURE

If tobacco purchases and tobacco-attributable healthcare costs are excluded from the total household expenditure, the poverty rate in 2021 was estimated to increase by 3.23 percentage points (pp) from 10.14% to 13.37% (Figure 2). This number is equivalent to additional 8.8 million poor people from 1.9 million smoking households. In other words, there are nearly two million

households that actually lived below the poverty line but are not officially classified as poor due to the distortion of tobacco spending. Most households that fall under the poverty line after this adjustment are the 'near-poor' households, those whose per capita expenditure is just above the poverty line.

Figure 2. Additional poverty rate after excluding cigarette purchases and cigarette-attributable healthcare costs from household expenditures



THE TOBACCO-ADJUSTED POVERTY RATE IS HIGHER AMONG THE RURAL POPULATION: CIGARETTE AFFORDABILITY PLAYS A ROLE

Figure 2 shows that the increase in poverty rate after removing tobacco wasteful spending is higher in rural than urban areas. For example, in 2021, while the rural poverty rate increased by 3.9 pp, the urban counterpart was only risen by 2.72 pp.

There are two contributing factors to this finding. **First**, there are more near-poor households in rural areas, which makes them prone to fall under the poverty line. **Second**, since the smoking rate is higher among the rural population (30.8%) than the urban (27.5%), rural

households divert a higher share of expenditure on tobacco (11.3%) compared to their urban counterparts (9.9%).

High cigarette consumption in rural areas is due partly to affordable cigarettes. Rural smokers typically purchase cheaper cigarettes (Rp970) than their urban counterparts (Rp1,050). One reason behind this affordability is the wide range of cigarette prices sold in the country. As a result, Indonesian smokers have the luxury of choosing cheaper cigarettes.



AN EFFECTIVE TOBACCO CONTROL POLICY IS VITAL TO SIGNIFICANTLY REDUCING TOBACCO CONSUMPTION

High tobacco consumption in Indonesia needs to be addressed through effective policies to decrease tobacco use significantly. Therefore, optimizing the role of tobacco tax and excise is crucial to cutting down cigarette consumption

1 TOBACCO EXCISE SHOULD BE APPLIED TO SIGNIFICANTLY REDUCE CIGARETTE AFFORDABILITY TO SUCH A LEVEL THAT CHANGES SMOKERS' CONSUMPTION BEHAVIORS. Previous studies have reported that if cigarette prices become less affordable, cigarette consumption will diminish^[9]. Other studies have also demonstrated that reducing cigarette affordability in Indonesia has potentially brought a positive impact on household welfare in the long run, especially due to the extended life expectancy and reduced healthcare costs^[10]. Less-affordable cigarette is expected to help reduce cigarette consumption, particularly among low-income smokers and young smokers because they tend to be more responsive to changes in cigarette price^[10].

2 TO BETTER INFLUENCE SMOKERS' BEHAVIOR, TOBACCO EXCISE SHOULD BE IMPOSED UNIFORMLY ON ALL CIGARETTE BRANDS. It will help reduce the variability of cigarette prices and limit cheaper alternatives, which has been one of the reasons behind high cigarette consumption in Indonesia. The equal imposition of the tobacco excise is based on the argument that cigarette products, regardless of the type and brands, shared negative externality, and therefore should be treated equally. Additionally, the uniform tobacco excise would increase tax revenue and enable easier monitoring^[11].

REFERENCES

- 1 World Health Organisation. 2021 GATS Fact Sheet Indonesia. 2021. <https://www.who.int/publications/m/item/2021-gats-fact-sheet-indonesia>
- 2 Badan Pusat Statistik. Survei Sosial Ekonomi Nasional. 2021.
- 3 Center for Indonesia's Strategic Development Initiatives (CISDI). The Crowding-out Effect of Tobacco Consumption in Indonesia. 2022.
- 4 Block S, Webb P. Up in Smoke: Tobacco Use, Expenditure on Food, and Child Malnutrition in Developing Countries. <http://www.journals.uchicago.edu/t-and-c>
- 5 Djutaharta T, Wiyono NH, Monica Y, et al. Cigarette Consumption and Nutrient Intake in Indonesia: Study of Cigarette-Consuming Households. *Asian Pacific Journal of Cancer Prevention* 2022;23:1325–30. doi:10.31557/APJCP.2022.23.4.1325
- 6 Teguh D, Moeis FR, Nurhasana R, et al. Parental Smoking Behavior and its Impact on Stunting, Cognitive, and Poverty: Empirical Evidence from the IFLS Panel Data. 2018.
- 7 Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2019 (GBD 2019) Smoking Tobacco Use Prevalence 1990–2019. Seattle, United States of America: 2021. <https://ghdx.healthdata.org/record/ihme-data/gbd-2019-smoking-tobacco-use-prevalence-1990-2019>
- 8 Meilissa Y, Nugroho D, Luntungan NNHW, et al. The 2019 economic cost of smoking-attributable diseases in Indonesia. *Tobacco Control* 2022;:1–7. doi:10.1136/tobaccocontrol-2021-056890
- 9 WHO. Raising Tobacco Taxes and Prices for a healthy and prosperous Indonesia. 2020. https://cdn.who.int/media/docs/default-source/searo/indonesia/indonesia-tobacco-tax-paper-2020.pdf?sfvrsn=67c3d89a_2
- 10 Fuchs A, Carmen G del. The Distributional Effects of Tobacco Taxation: The Evidence of White and Clove Cigarettes in Indonesia. 2018. <https://documents1.worldbank.org/curated/en/849901529997406429/pdf/127593-REVISED-PUBLIC-WBGIndoWhiteFINALweb.pdf>
- 11 Chaloupka, F.J., Drope, J., Siu, E., Vulovic, V., Stoklosa, M., Mirza, M., Rodriguez-Iglesias, G., & Lee, H.M. (2020). Cigarette Tax Scorecard. *Tobacconomics*. <https://www.tobacconomics.org/files/research/636/uic-tobacco-scorecard-report-eng-v7.1.pdf>