



Sugar-Sweetened Beverage (SSB) Tax: A Necessary Policy to Address Overweight & Obesity (O&O) in Bangladesh

Executive Summary

Overweight and obesity (O&O) are on the rise in Bangladesh. The burden anticipates the complication of Non-communicable diseases, which is the world's leading mortality cause. Bangladesh has approached some strategies to improve the nutritional status of the people. However, in existing policies, no population-based measure to tackle the O&O problem is in place. SSB tax is a cost-effective and revenue-generating population-based policy measure that can reduce the obesity burden and complications.

Submitted to



National Board of Revenue, Bangladesh
জাতীয় রাজস্ব বোর্ড, বাংলাদেশ



Ministry of Health and Family Welfare
Government of the People's Republic of Bangladesh

Context

The O&O was previously common to high-income countries, but O&O now become increasingly prevalent in low-and-middle-income countries(1). On the current trend, the national obesity risk of Bangladesh gets a rating of 7/10, which is in the high-risk category(2).

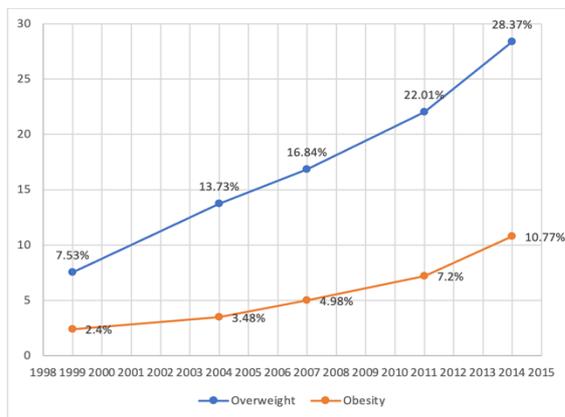


Figure 1: Prevalence of overweight and obesity by survey year
Source: Bangladesh Demography and Health Survey, 1999, 2004, 2007, 2011 and 2014

This fact is evident by the significant increase in obesity in Bangladesh. From 1999 to 2014, overweight and obesity have increased by four and five times respectively(3)(Fig:1). This disturbing trend suggests that we should adopt effective strategies to address O&O. Left untreated, O&O increases the likelihood of non-communicable diseases such as cardiovascular diseases, diabetes, stroke, or hypertension(2).

Existing Policies

Bangladesh has made a fair commitment towards improving the nutritional status of

the people since the National Food and Nutrition Policy in 1997(4). However, the policy focused more on the elimination of malnutrition as a public health problem. In 2015, the country developed another plan, the National Nutrition Policy, to address the double burden of nutrition(5). The goal strategy was to attain healthy and productive lives, especially among disadvantaged groups, including mothers, female adolescents, and children. The year 2017 saw the Non-Communicable Disease Control(NCDC) Operational Plan introduction under the 4th Health, Population and Nutrition Sector Programme(6). The plan promotes a healthy diet and practises at community and facility levels through campaigns and mass media, including collaborative efforts of salt/sodium reduction programme and nutritional labelling to control risks factor of NCDs mortality and morbidity(6).

Box 1: Existing Policies

- National Food and Nutrition Policy 1997
- National Nutrition Policy 2015
- Multisectoral Action Plan for Prevention and Control of NCDs
- Non-Communicable Disease Control (NCDC) Operational Plan

However, the prevalence of NCDs in Bangladesh remains static due to its chronic nature irrespective of the interventions(7). Multisectoral Action Plan for Prevention

and Control of NCDs came to light in 2018(8). This operational plan draws on the- Health in All Policies approach, which includes implementable, cost-effective and broader health impact.

The overview of existing policies directs us to the following summary. Due to the enormous amount of associated cost and resource constraint, we cannot implement policy measures adequately. That results in low coverage of policy implementing activities. For reducing the calorie content of food, policies rely on the voluntary nature of the industry. Besides, adopted policies are specific group focused and most significantly, **no population-based approach is in place**(4–6,8).

the evidence of increased SSB consumption, we can look at the study of Blecher and colleagues. That assessed the global availability of SSBs. They found that from 1990 to 2006, SSBs have become more available in Bangladesh(10). Sometimes SSB becomes cheaper than before; people’s income increases over time and the combined effect of both factors. As a result of increased availability, consumption follows an upward trend in Bangladesh(11,12). For addressing the increased consumption of SSBs, we recommend SSB tax. It is a form of price regulation mechanism to influence the consumption pattern of sugary beverages for exerting public health impact by reducing the burden of the O&O(9).

Proposed Policy: SSB Tax



Fig 2: Link between SSB and O&O. (↑=increase; ↓=decrease)

Based on the limitations of existing policies and the absence of an overwhelming population-based approach, we propose Sugar-Sweetened Beverage or SSB tax as a population-based fiscal intervention. SSB is one of the significant sources of high calorie, and consumption of SSBs is associated with the O&O of people(9). For

Why SSB Tax?

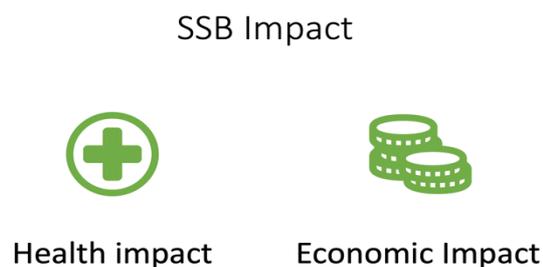


Fig 3: SSB impact.

For substantiating SSB tax, we will focus on two facets of that tax. The health impact of the tax, which is the reduction of O&O, and economic impact(Fig:3).

Health Impact

We can have a look at this logical pathway of SSB taxation(9). The logic of this tax is a simple supply-demand theory of economics. Higher the price, lower the demand. Taxation on SSB will increase the beverage price. That results in reduced purchase and consumption of SSBs. Reduction in consumption means decreased calorie intake, which will lower the burden of overweight and obesity(Fig:4). That will reduce the risk of cardiovascular diseases, diabetes, stroke, or hypertension eventually.



Fig 4: SSB taxation pathway.

Economic Impact

SSB tax is a cost-effective measure compared to other risk-based strategies. The World Health Organization assessed the associated cost of the different interventions in low and middle-income countries, including Bangladesh(13). They found this taxation policy economical. In

addition to cost-effectiveness, the SSB tax generates a considerable amount of revenue for the government(14). In our analysis, we have found resource constraint for implementing existing policy measures. The generated revenue can fill the resource gap. Again, fruit and vegetable intake are substantially low in Bangladesh(15). We can subsidize fruits and vegetables to increase intake. The low-cost revenue-generating policy measure can provide fiscal space for the National Board of Revenue.

Implementation Challenges

Regressivity

Due to the regressivity of SSB tax, the tax burden will fall upon more on poor people. They will spend more money to maintain their consumption pattern, which results in pulling resources from other household expenditure. But in the real world, people consume less rather than spending more and people from lower socioeconomic context are more price sensitive(9). A systematic review showed that the SSB tax reduces beverage consumption, particularly in a lower socioeconomic group(9). The study found no evidence of cutting household expenditure for purchasing sugary drinks.

Other Interventions

Another argument is to focus on other factors of the O&O like sedentary lifestyle or lack of physical activity. But these approaches do not have a revenue impact like SSB tax. Moreover, we propose to strengthen these interventions using generated revenue from SSB tax.

Conclusion

In summary, the Sugar-Sweetened Beverage (SSB) tax will be a beneficiary intervention to reduce the burden of overweight and obesity in Bangladesh. At the same time, it will also be an effective tool to fill the resource gap in implementing other interventions.

Reference

1. WHO. Obesity and overweight [Internet]. 2020 [cited 2021 Mar 31]. Available from: <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>
2. WOF. Obesity: missing the 2025 global targets: Trends, Costs and Country Reports. 2020.
3. Chowdhury MAB, Adnan MM, Hassan MZ. Trends, prevalence and risk factors of overweight and obesity among women of reproductive age in Bangladesh: a pooled analysis of five national cross-sectional surveys. *BMJ Open*. 2018 Jul 1;8(7):e018468.
4. GoB G of B. National Food and Nutrition Policy [Internet]. 1997. Available from: <https://extranet.who.int/nutrition/gina/sites/default/filesstore/BGD%201997%20National%20FN%20Policy%201997.pdf>
5. GoB G of B. National Nutrition Policy 2015 [Internet]. 2015. Available from: <http://extwprlegs1.fao.org/docs/pdf/bgd152517.pdf>
6. DGHS DG of HS. Operational Plan (OP) Non-Communicable Disease Control [Internet]. 2017. Available from: <https://dghs.gov.bd/images/docs/OP/2018/NCDC.pdf>
7. Islam M, Noor I, Zaman M, Rani M, Xu YY, Agarwal N, et al. National STEPS Survey for Non-communicable Diseases Risk Factors in Bangladesh 2018. 2020.
8. GoB G of B, editor. Multisectoral Action Plan for Prevention and Control of Noncommunicable Diseases 2018-2025: with a three year operational plan. Dhaka, Bangladesh: Noncommunicable Disease Control Programme, Directorate General of Health Services, Health Services Division, Ministry of Health & Family Welfare; 2018. 66 p.
9. Nakhimovsky SS, Feigl AB, Avila C, O'Sullivan G, Macgregor-Skinner E, Spranca M. Taxes on Sugar-Sweetened Beverages to Reduce Overweight and Obesity in Middle-Income Countries: A Systematic Review. *PLOS ONE*. 2016 Sep 26;11(9):e0163358.
10. Blecher E, Liber AC, Drope JM, Nguyen B, Stoklosa M. Global Trends in the Affordability of Sugar-Sweetened Beverages, 1990–2016. *Prev Chronic Dis* [Internet]. 2017 May 4 [cited 2021 Mar 14];14. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5420443/>
11. Bhuiyan MU, Zaman S, Ahmed T. Risk factors associated with overweight and obesity among urban school children and adolescents in Bangladesh: a case-control study. *BMC Pediatr*. 2013 May 8;13(1):72.
12. Bipasha M, Raisa T, Goon S. Sugar Sweetened Beverages Consumption among University Students of Bangladesh. *Int J Public Health Sci IJPHS*. 2017 Jun 1;6:157.
13. WHO. WHO | Scaling up action against NCDs: How much will it cost? WHO [Internet]. 2011 Sep [cited 2021 Feb 4]; Available from: http://www.who.int/nmh/publications/cost_of_in_action/en/
14. Popkin BM, Ng SW. Sugar-sweetened beverage taxes: Lessons to date and the future of taxation. *PLOS Med*. 2021 Jan 7;18(1):e1003412.
15. Karim MN, Zaman MM, Rahman MM, Chowdhury MAJ, Ahsan HAMN, Hassan MM, et al. Sociodemographic Determinants of Low Fruit and Vegetable Consumption Among Bangladeshi Adults: Results From WHO-STEPs Survey 2010. *Asia Pac J Public Health*. 2017 Apr 1;29(3):189–98.