

# **A review of the impact of sugar-sweetened beverage taxes on health outcomes in LMICs: Implications for food-related fiscal policies in Ghana**

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**The HD4HL Project Multi-stakeholder Technical Task Team  
(M3T) Retreat**

**|| Capacity Building | Stocktaking | Policy Dev't ||**

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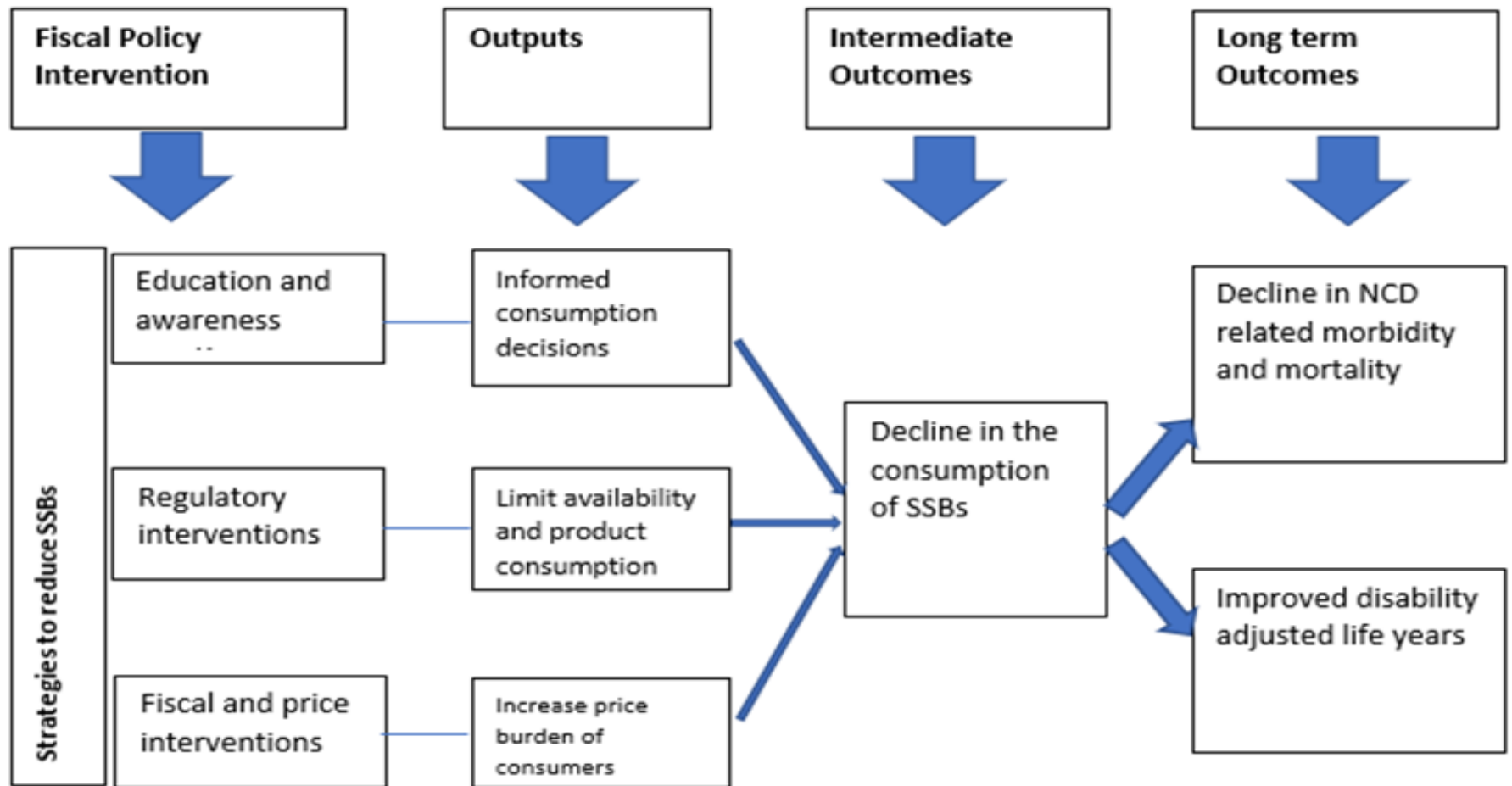
## BACKGROUND–(1/2)

- SSBs are any liquids that are sweetened with various forms of added sugars like brown sugar, corn sweetener, corn syrup, dextrose, fructose, glucose, high-fructose corn syrup, honey, lactose, malt syrup, maltose, molasses, raw sugar, and sucrose (CDC, 2022).
- Extensive research has shown that frequent intake of SSBs is associated with weight gain and development of certain DR-NCDs: i.e. obesity, type 2 diabetes, CVDs, and dental problems (Malik et al., 2010; Yang et al., 2017).

## BACKGROUND–(2/2)

- Nearly 180,000 deaths and 8.5 million DALYs are lost due to NCDs that were a direct consequence of SSB consumption (Singh et al., 2015)..
- Measures aimed at tackling SSB consumption are therefore a great way to reduce the prevalence of NCDs and related consequences.
- SSB-related fiscal policy promises to be one of the great measures.

# Link between SSB related fiscal policy, consumption of unhealthy SSBs, and health outcomes



# AIM AND OBJECTIVES

## Aim

The aim of this systematic review was to evaluate the impact of existing SSB fiscal policies on health outcomes in LMICs

## Specific Objectives

To synthesize available evidence on the impact of SSB related fiscal policy on SSB consumption and health outcomes in LMICs

To identify the challenges and opportunities associated with implementation of SSB related fiscal policy

To provide some recommendations for SSB-related fiscal policy in Ghana

# METHODOLOGY – (1/2)

- **Inclusion criteria: PICO**

- Population
- Intervention
- Comparata/Control
- Outcome

- **Search strategy:**

- An initial limited search of PubMed and Google scholar
- A second search using all identified keywords and index terms
- Thirdly, the reference list of all identified

- **Databases:**

- PubMed
- Embase
- Cochrane Central
- Google scholar

- **Study selection**

- Mendeley software was used to de-duplicate citations
- All citation details were exported to excel for screening
- Tittle screening; Abstract screening; Full text review
- The review was reported in Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram

# METHODOLOGY – (2/2)

- **Data Extraction**

- A data extraction form was designed and piloted prior to deployment.
- The extraction form was subsequently used by three independent reviewers to extract data or relevant information from the selected studies
- The included papers were categorized into two: empirical papers, and policy/forecast papers, which informed the kind of data that was extracted.

- **Data Synthesis**

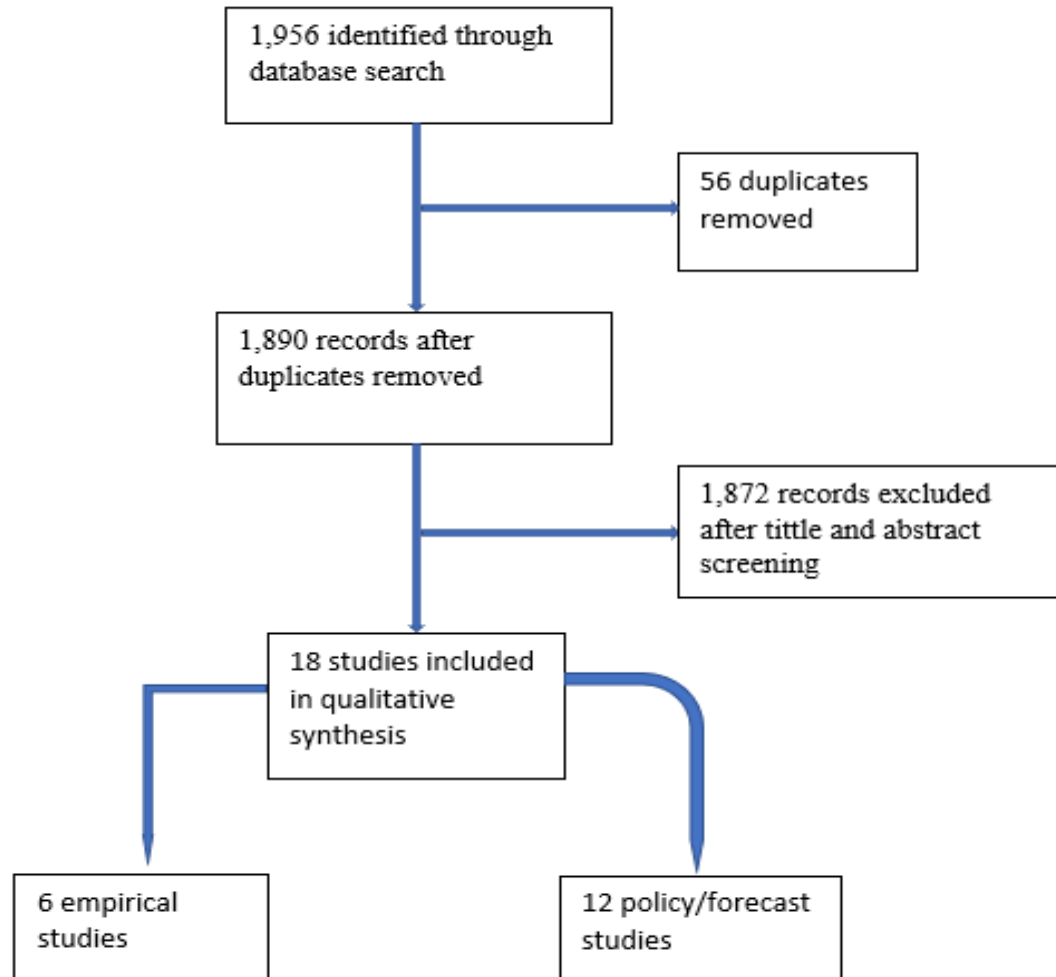
- Given the heterogeneity in both the study designs and the measures of intervention effect, a narrative synthesis of the study findings was done

# WHAT HAS BEEN ACHIEVED THUS FAR

- **The review**
  - The review process has been completed
- **Reporting**
  - First draft of the review report has been generated
  - Comments and inputs from all authors received
  - Currently working on finalizing the report



# FINDINGS



# FINDINGS

- **Potential gains**
- In South Africa, a 20% SSB tax over a 20 yr period
  - Could reduce DM incident cases by 106 000 in women and by 54 000 in men and prevalence in all adults by 4.0%
  - Approximately 21,000 T2DM-related deaths and 374,000 DALYs attributed to T2DM may be prevented
  - Incident stroke cases may be reduced by approximately 85,000
  - Over USD860 million healthcare cost may be averted
- In Zambia, a 25% SSB-related tax has potential to raise about US\$ 5.46 million annually which could be used to support health promotion interventions

# FINDINGS

- **Potential gains**

- A 1% increase in the price of SSBs can lead to a 0.85% reduction of SSB calories consumed (1.3% reduction for the poor and 0.63% for the nonpoor)
- Reduced BMI and obesity prevalence
- Could lead to increased consumption of water, fruits and milk

# FINDINGS

- **Limitations**

- Limited consumption data
- Limited empirical evidence
- Inability to incorporate the effect of changes in wider variables such as per capita income and proportion of households consuming SSBs
- Inability to account for seemingly ‘irrational’ behavioral and psychological responses
- Poor industrial representation
- Employment losses

# FINDINGS

- **Limitations**

- Lack of national consensus to support implementation of SSB tax
- Low literacy, poverty and unemployment

# FINDINGS

- **Enablers**

- Local and regional or international evidence to inform and guide decisions on the development and implementation of SSB tax-related policies
- Civil society and the Ministry of health play key advocacy and lobbying roles
- Adequate consultation prior to policy development
- Government preparedness
- Existing legal frameworks that could be cited

## LESSONS/RECOMMENDATIONS FOR GHANA

- Fiscal policy on SSBs has the potential to mitigate NR-NCDs
- Public and policy maker education is critical to challenge the prevailing attitudes towards sugar-sweetened beverages
- Government and stakeholders need to be united on SSB-related tax implementation
- Revenue accruing from SSB-related fiscal policy should be channeled towards addressing NR-NCDs
- Identified enabling factors may also help in SSB-related fiscal policy formulation

# CONCLUSION

- SSB-related fiscal policy adoption processes should ensure a 'win-win' balance between protecting public health and achieving revenue.
- Lessons shared, when harnessed will help with development of a successful SSB-related fiscal policy.



**THANK YOU!**