

A Systematic Scoping Review of Global Sugar- Sweetened Beverage Tax Policy Implementation

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SSB consumption and adverse outcomes

- SSBs are non-alcoholic beverages containing free sugars from diverse sweeteners. E.g. soda (not sugar-free), fruit drinks, sports drinks, energy drinks, sweetened waters, etc
- Established Link between SSB consumption and suboptimal health outcomes
 - Metabolic conditions: weight gain, Diabetes II, CVD, kidney disease, non-alcoholic liver disease, some cancers
 - Dental Caries

Strategies to control SSB

1. **Fiscal strategies (including taxes, price restrictions, incentives)**
2. Advertising strategies (using labeling measures, warning messages, marketing restrictions)
3. Availability strategies (including healthy retail, beverage procurement, and exclusion from government assistance programs)
4. Defaulting to healthier beverage alternatives

Gap in evidence

- Growing evidence on impact of SSB taxes
- Limited evidence on implementation processes for SSB

REVIEW

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Sugar-sweetened beverage tax implementation processes: results of a scoping review

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Abstract

Taxing sugar-sweetened beverages (SSB) is seen as a win-win situation for governments. It is argued that SSB taxes are relatively easy to implement from a practical perspective compared to for example other nutrition policies. However, the implementation of SSB taxation laws does not happen by itself. Therefore, this work examines implementation processes for SSB taxation in terms of (1) pre-implementation context, (2) taxation instruments used and (3) interactions in the implementation process. Ten databases and grey literature were systematically searched for studies reporting on SSB taxation implementation processes up to February 2020. All studies ($N=1248$) were screened independently by two reviewers according to predefined criteria. The selection of variables to be extracted was based on the policy cycle heuristic and informed by intervention implementation research. Information on the process of implementing SSB taxation is limited. Only six cases based on three publications were identified, indicating a gap in this research area. SSB taxation implementation was accomplished by hiring a subcontractor for the implementation or using pre-existing tax collection structures. Political and public support within the implementation process seems to be supportive for the city of Berkeley and for Portugal but was not reported for the Pacific Islands. However, the existing data are very limited, and further research on SSB taxation implementation processes is needed to determine whether the aim of the policy and the envisaged outcome are linked in practice.

Registration The protocol was registered with the Open Science Framework (OSF) (osf.io/7w84q/)

Keywords: SSB taxation, Public policy, Implementation, Implementation process

Background

The consumption of sugar-sweetened beverages (SSB) is positively associated with a number of health risks (Table 1). Further, obesity rates in men and women have increased worldwide and are still on the rise [1, 2].

Therefore, reducing high-calorie beverage consumption may help to reduce obesity [3–5].

SSB taxation is seen as a win-win situation for governments. The tax can trigger shifts in consumption and purchasing behaviour, incentivize product reformulation, and increase government revenues to fund public services and goods [6–17]. Currently, over 45 countries worldwide have implemented a tax on SSBs (Additional file 1: Appendix 1 Table A.1, Fig. 1; [18–20]).

However, little is known about the actual implementation process, namely what happens after the tax legislation is passed [21, 22].

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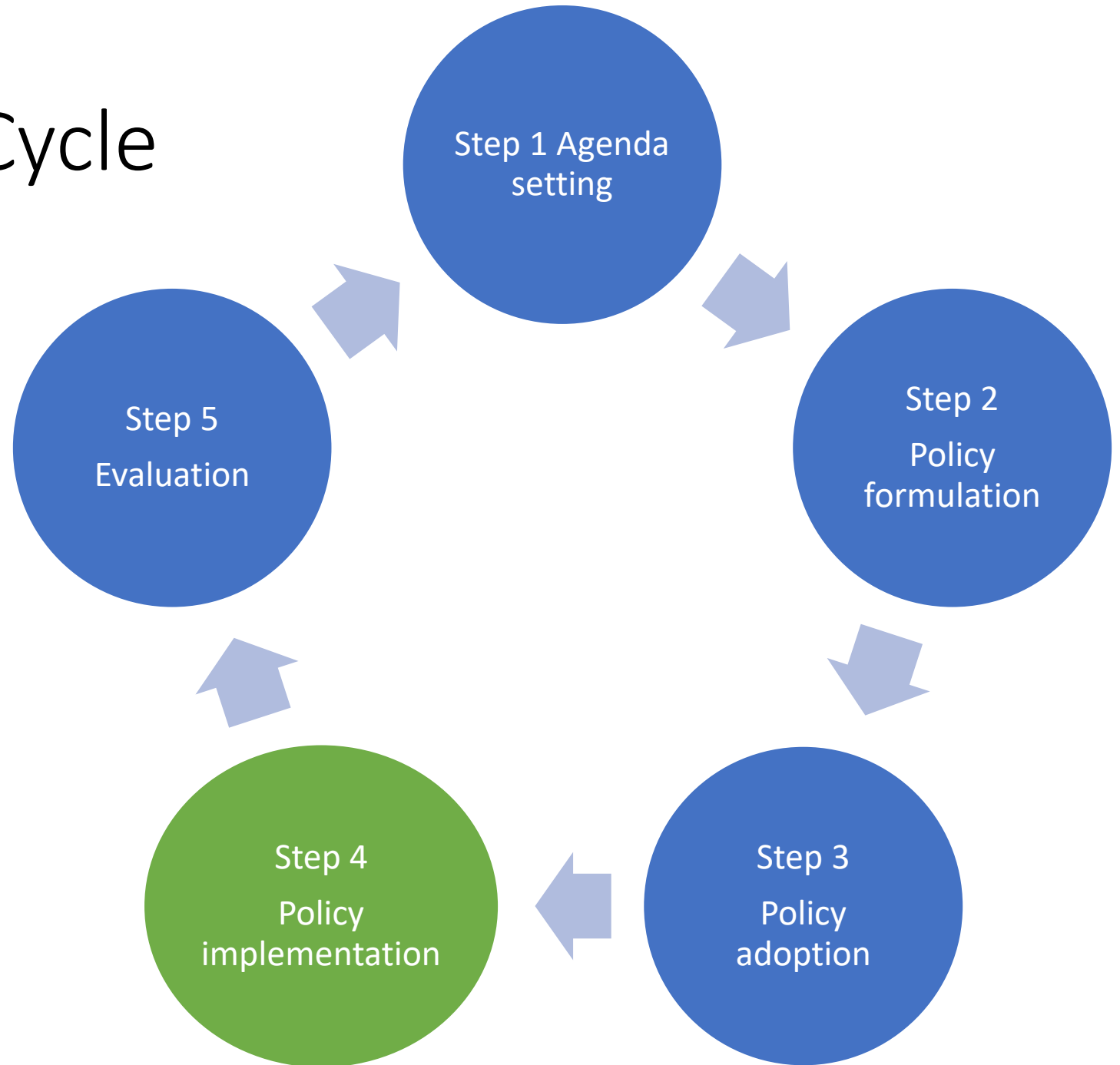
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Objectives of review

- Identify types of SSB tax policies are being developed/implemented
- Characterize existing SSB fiscal policies that have been developed/implemented
- Describe the process for developing SSB tax policies?
- What lessons have been learned from implementation?

SSB Tax Policy Cycle



Methods

Scoping review, based on Arksey and O'Malley

Established clear review questions



identifying relevant studies: Search strategy



Screening of Titles, Abstracts, and full-text



Synthesizing data



collating, summarising and reporting results.

Box 1: Inclusion criteria for review on sugar sweetened beverage tax policies

Inclusion Criteria	Exclusion Criteria
<ol style="list-style-type: none">1 Published in English2 Published between 1970 and 20223 Has information on tax/legislation/tariffs or other fiscal policies for sugar and sugar sweetened beverages4 Focused on implementation characteristics including type of tax policy, rate of tax, how it is collected, which products its collected on, etc (refer to template)5 Primary peer-reviewed papers and grey literature6 Documents from all countries (Low-, Middle-, and high-income countries)	<p>Solely focused on outcomes of implementation of Sugar Sweetened Beverage tax policy</p> <p>Review articles</p>

Findings

Review stage	output
Citations identified	3194
Citations screened at Title/Abstract level	2711
Citation screened at full text level	194
Final included citations	65

Countries with SSB

Continent	Total countries	countries with	SSB adoption rate (5)
North America	23	8	34.8
Latin America and the Caribbean	33	15	45.5
Europe	44	13	29.5
Oceania	14	7	50.0
Asia	48	10	20.8
Africa	54	5	9.3

South Africa

Zambia

Seychelles

Egypt

Mauritius

Types of SSBs

Characteristic	#
Jurisdictions (countries) with Uniform tax policies	33 (23)
Jurisdictions (countries) with tiered tax policies	16 (15)
Jurisdictions (countries) with excise tax policies	59 (52)
Volumetric excise tax policies	25
Ad valorem tax policies	19 (12)
Tiered tax policies	7
Mixed tax policies	5
Countries using import tax tariffs	2
Countries without clear information on tax type	9

Types of taxes

- Excise tax- tax on manufactured goods
- Volumetric tax – tax on total sugar volume per volume of SSB product
- Ad valorem tax- tax based on % value of the produce eg VAT
- Tiered tax- tax rate is based on concentration of sugar in product; increases with higher concentration
- Tarrif- tax on imported goods

Examples of taxes

Country	Type of tax	Tax rate	Taxable products	Revision
Hungary	Excise; volumetric (tiered by sugar content)	5HUF/l for >8g sugar/100 ml 250HUF/l for energy drinks	Non-alcoholic beverages (such as soft drinks, energy drinks) Substances intended for preparation Flavoured alcoholic beverages (sugar sweetened or sweeteners)	NI
Finland	Excise; volumetric/quantity	75 cents/kg or 7.5 cents/l for liquids. 75 cents/kg for solid ingredients of soft drinks	Non-alcoholic beverages— including soy and oat drinks, sports drinks (unsweetened <0.5% sugar, sugar sweetened >0.5% sugar) Fruit and vegetable juices Substances intended for preparation	NI
Belgium	Excise; volumetric	6.8133euros /hectolitre for all non-alcoholic beverages (sugar sweetened or other sweeteners)	Non-alcoholic beverages (sugar sweetened or other sweeteners) Substances intended for preparation	NI

Country	Type of tax	Tax rate	Taxable products	Revision
Berkeley*	Excise; volumetric	\$0.01 per ounce	regular soft drinks, sports and energy drinks, sweetened teas, and juice drinks (not pure juice	NI
Philadelphia*	Excise; volumetric	\$0.015 per ounce	sugar (regular soda, fruit, and energy) and sugar- substitute (“diet soda, diet fruit, diet energy) beverages	NI
Oakland *	Excise; volumetric	\$0.01 per ounce	Regular or calorically sweetened soda, sports drinks and energy drinks, and juice drinks)	NI

Purpose of implementation of Sugar Sweetened Beverage tax policy

Aim of SSB Tax Policy	Countries	State or Cities	Total number of countries	Total number of Jurisdictions
Discourage consumption or reduce SSB consumption	Australia, Cook Island, Uruguay, Suriname, Barbados, Argentina, Belize, Bolivia, Brazil, Chile, Costa Rica, Dominica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Paraguay, Peru, Saints Kitts and Nevis, Saint Vincent and the Grenadines, India, Brunei, Saudi Arabia, United Arab Emirates, Thailand, Bahrain, Qatar, Seychelles, Canada, Tonga, Zambia	Catalonia	32	33
Discourage Consumption and Generate revenue for health-promoting activities	Mexico, French Polynesia, Nauru, Ecuador, Bermuda, Samoa	Berkeley, Philadelphia, Oakland, Boulder, Cook County and Seattle	6	12
Incentivize manufacturers to reformulate	South Africa, Ireland, Latvia, Portugal, UK, France, Finland	NI	7	7
Incentivize manufacturers to reformulate and Generate revenue	Malaysia, Belgium, Hungary, Monaco, Norway,	NI	5	5
Revenue Generation without health promotion intention	Fiji	NI	1	1

Revision of SSB tax policies

Type of revision implemented or proposed	Jurisdiction	Number of countries
Increase in tax rate	Tonga, Samoa, Malaysia, Philippines, Bermuda, Costa Rica, Ecuador, Honduras, Mexico, Bolivia	10
Decrease in tax rate	South Africa, Zambia, Fiji	3
Expansion of tax base	Tonga	1
Change in tax design or structure	Tonga, Cook Island, Samoa	3

Pre-implementation phase

- Limited information
- advocacy activities and proposals for developing SSB taxes often emerged from either Ministries/Departments of Health, Academia, or other health-related civil society organizations.
- Stakeholder engagement activities included workshops, public demonstrations, media publications, and lay public engagement forums.
- These advocacy processes culminated in the drafting of the tax policy.
- next step of political adoption executed by political actors including parliamentarians, and executive government officials.

Implementation phase

- Limited evidence reported
- Tax policy mainstreamed into existing tax systems.
- In a few cases, **special purpose processes** were used to implement/enforce policy (observatory).

- In Mexico
 - the policy was implemented alongside a media promotion campaign that communicated the health harms associated with consuming SSBs.
 - Further, policy briefs and simple documentation was created based on existing scientific evidence to create awareness among the lay population.

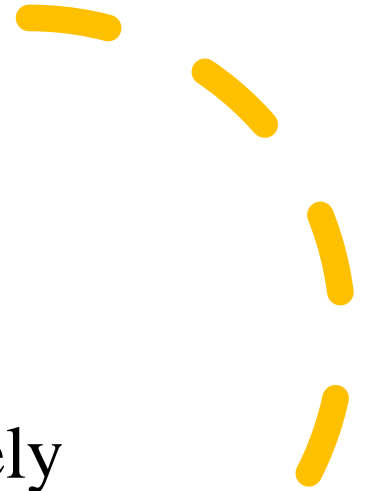
- In some countries, philanthropists and advocacy organizations donated funding to support the advocacy efforts.



Key stakeholders

Limited information

- The actors who were actively involved in implementation varied across countries:
- Customs authorities (eg Malaysia, Fiji, Samoa, Nauru , French Polynesia)
- Health Ministries/Departments (16 countries)
- Finance Ministries (16 countries).



Lessons learned from implementation

- targeting SSB tax policy process around political activities (e.g. election time) considered beneficial since prospect of politicians taking up challenge was high.
- Tax policies alone not sufficient to address SSB consumption. Other strategies needed to complement taxes: eg framing and communication campaigns, subsidies for healthy foods targeting low-income households
- Leverage broad coalition of stakeholders (consumer groups, civil society, etc) to mount a strong advocacy and communication campaign
- Earmark revenue from SSB taxes to promote healthy lifestyles/activities
- address industry-driven policy-opposing campaigns



- Thanks for listening