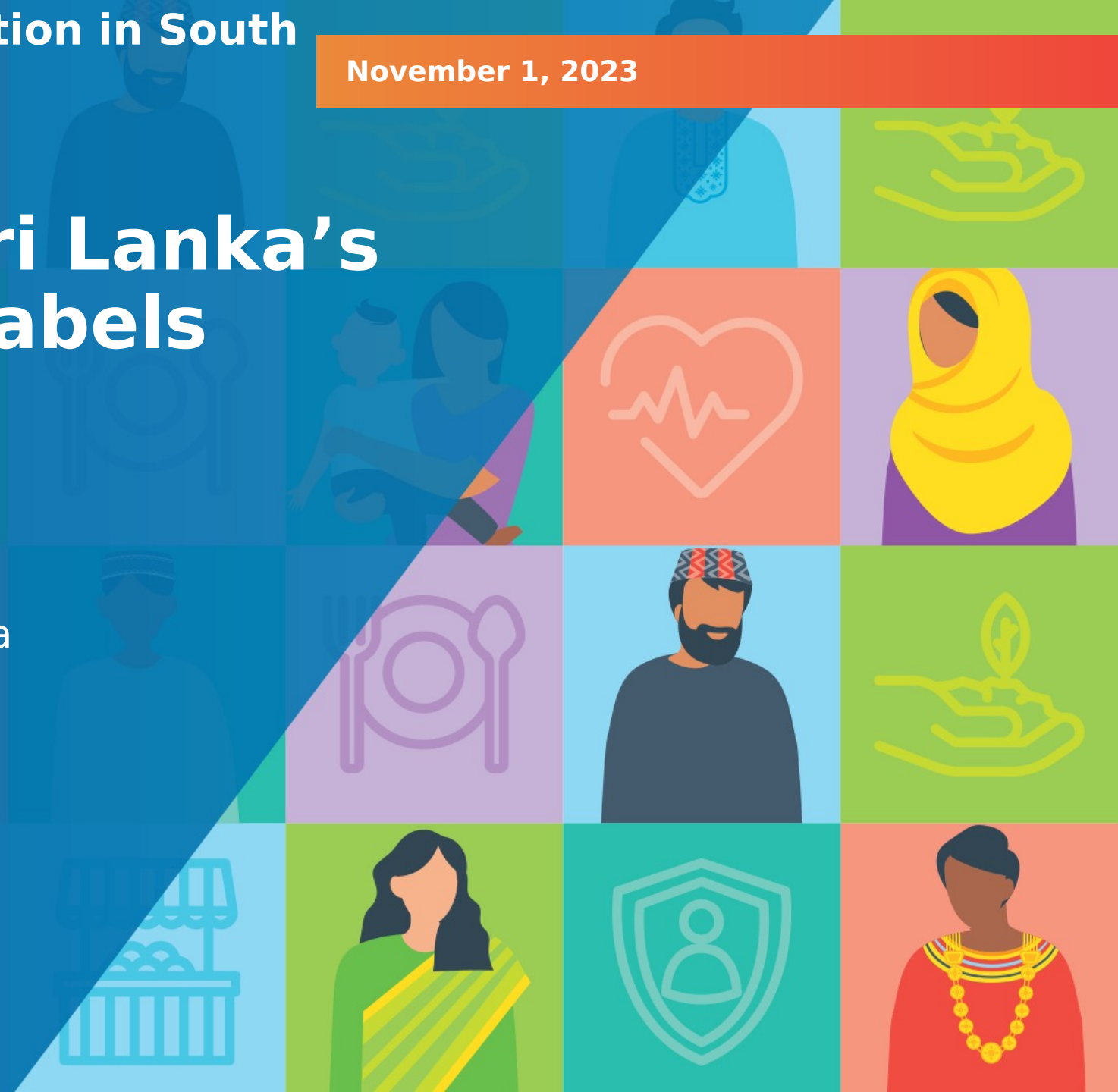


Effectiveness of Sri Lanka's SSB Traffic Light Labels

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Motivation

Background

NCDs are a growing health concern in Sri Lanka
NCDs - 83% of all deaths, diabetes – second highest causes of deaths

Fiscal policies and regulations to control high-risk dietary habits

SSB regulation (2016) – Traffic Light Labeling (TLL)

SSB taxes (2017)– to reduce affordability

The effectiveness of the SSB control policies have not been formally evaluated

Objectives

Assess effectiveness of TLL on reducing unhealthy SSB choices

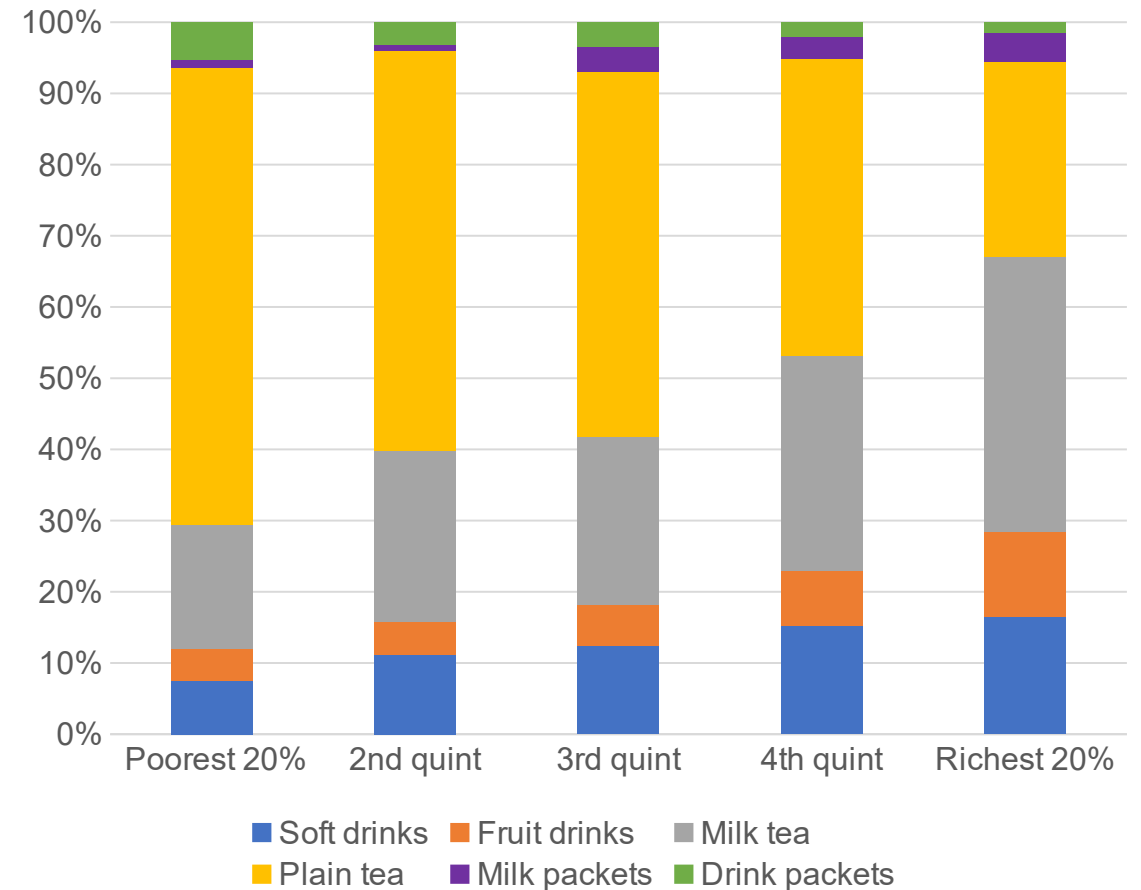
Examine the impact of nutrition labelling by socio-economic groups

Background

- SSB regulation TLL : Mandates labeling the sugar content of their products using the traffic light colours.

Pre-packed SSBs -- Carbonated beverages, Fruit nectar, Fruit juices Ready-to-serve beverages –other than milk-based beverages

- Around 75% of sweetened beverages fall outside the SSB regulatory framework
- Bottom 40% of households -- 85% of SSB consumption does not come under the SSB regulation



Data and methodology

- Consumer survey -- in-person survey using CAPI
 - 2500 consumers – urban rural representation
 - 3 attributes -- each with 4 levels
 - Discrete Choice Experiment (DCE) method, 50 pairs generated
 - 10 choice sets per each respondent
 - Mixed Logit Model (MXL)
- Dependent V : SSB choice (0,1)
- Explanatory vls : beverage category, TLL, price

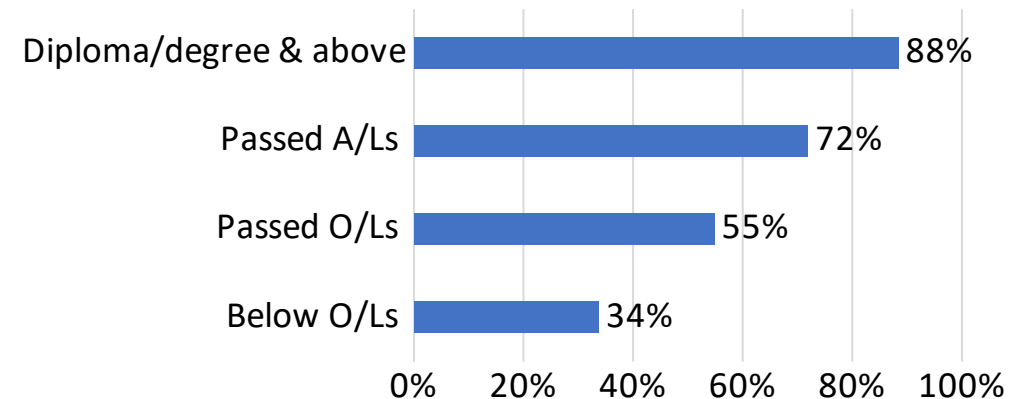
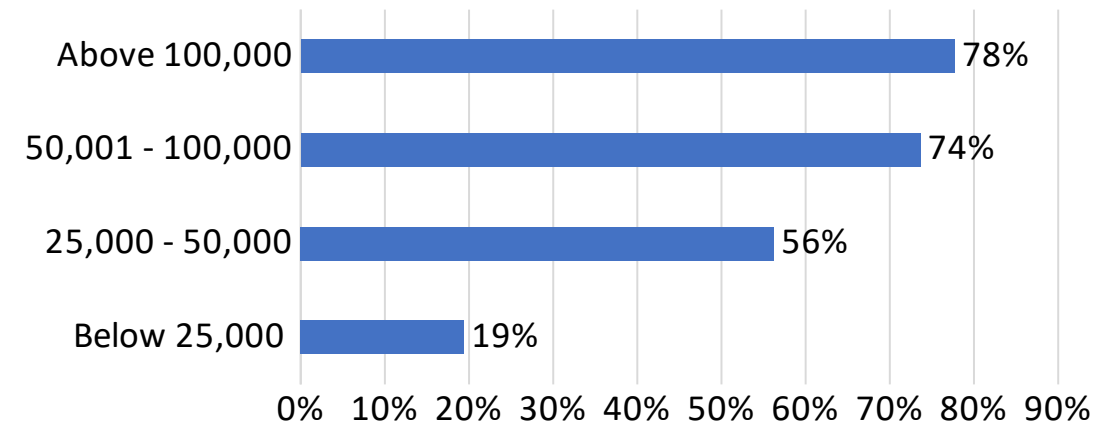
Attributes	Levels
Beverage category	<ul style="list-style-type: none"> • <i>Carbonated beverages</i> • <i>Fruit nectar</i> • <i>Fruit juices</i> • <i>Milk based beverages</i>
TLL code	<i>Red, Amber, Green, No label</i>
Price (Rs.)	<i>4 price levels (small, big) for each beverage type</i>



Findings

Descriptive Analysis

- Only 66% people are aware of the TLL system
- Consumer awareness differ by population groups
- Awareness of TLL is less among disadvantaged socio-economic groups



Factors Affect on Consumers' SSB Choices

- Awareness of TLL is clearly associated with making low-sugar SSB choices
- Consumers more likely to choose a healthy SSB and avoid an unhealthy SSB --*opt for green or amber while not go for red*
- SSB choices are also significantly negatively affected by price
- Milk based beverages are widely used than other SSBs

Variable	Aware of TLL		Not aware of TLL	
	Coef.	P> z	Coef.	P> z
TLL (base -- no TLL label)				
Red	-0.551	***	-0.261	**
Amber	0.673	***	-0.041	
Green	1.782	***	0.183	**
Beverage type (base -- Carbonated bvg)				
Fruit nectar	0.895	***	0.596	***
Fruit juices	0.538	***	-1.016	***
Sweetened milk	1.765	***	0.860	***
Price	-0.001	***	-0.003	***

Impact of TLL on Consumers' SSB Choices

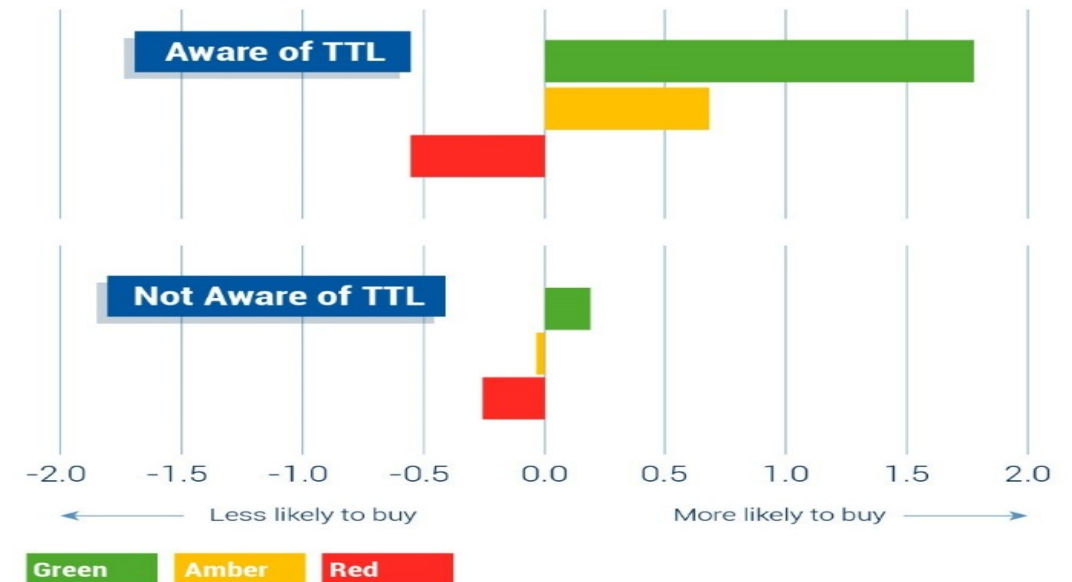
- Consumers aware of the TLL system :

TLL is significantly associated with making low-sugar SSB choices

- Consumers more likely to choose a healthy SSB and avoid an unhealthy SSB when TLL appears on the pack

Compared 'no TLL' option people opt for green or amber while not go for red

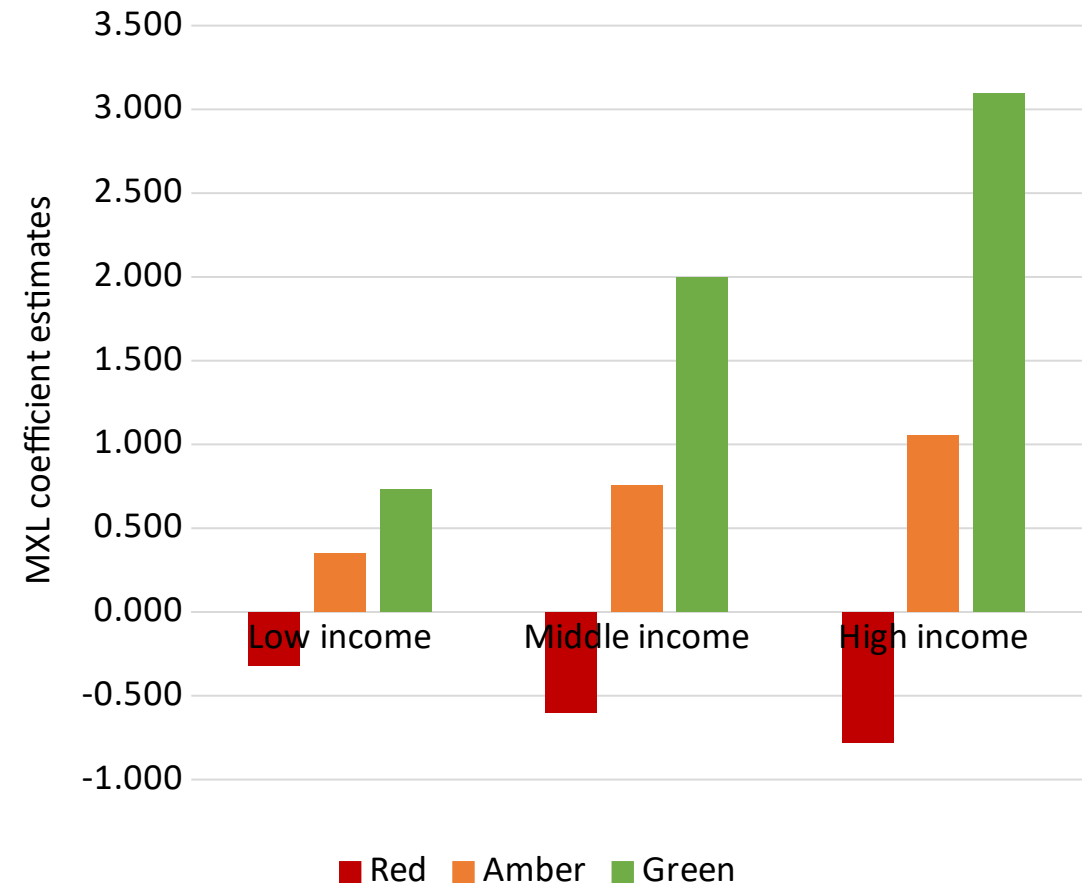
How Traffic Light Labels (TLL) In Sugar-Sweetened Beverages (SSB) Affect Consumer Choices



Note: Relative preference compared to SSBs without TLLs.
Source: Consumer Survey conducted by the Institute of Policy Studies Sri Lanka (2022)

Effectiveness of TLL by Socio-economic Groups

- Among people who are aware of the TLL effectiveness of TLL varies considerably by socio-economic group
- Low-income groups are not very concerned about the TLL when making SSB choices –*Choosing TLL-green is not significant for low-income groups*
- Low-income & middle-income group consumers SSB choices are significantly negatively affected by the price.



Conclusion

- Consumer awareness of the TLL system is associated with making low-sugar SSB choices -- *only two thirds of the sample were aware of TLL while awareness on TLL is not uniform across population groups*
- Information on the sugar content of beverages using TLL helps consumers to make informed choices – *Compared 'no TLL' option people opt for green or amber while not go for red*
- Effectiveness of TLL system differ by socio-economic groups -- *Low-income groups are not very concerned about the TLL when making SSB choices*
- The unavailability of healthy SSB choices at an affordable price could discourage consumers from consuming healthy SSB choices -- *'price' has a negative impact on the purchase probability of SSBs*

Policy Implications

- Awareness on TLL is key factor to promote healthy SSB choices

Awareness raising campaign targeting different groups of people is necessary to increase consumer awareness of the TLL system

- Awareness programmes should target low - income groups and less affluent people
 - Community-driven programmes have a significant role in raising awareness of TLL labels among consumers in rural areas
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- The SSB regulations should be strengthened to cover a wider range of products, particularly sweetened milk-based beverages

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