

**STOP.
RETHINK
YOUR
DRINK.
GO ON GREEN.**

Steer your health in the right direction
by making the smart choice.



Impact of Traffic Light Labelling (TLL) on SSB Choices

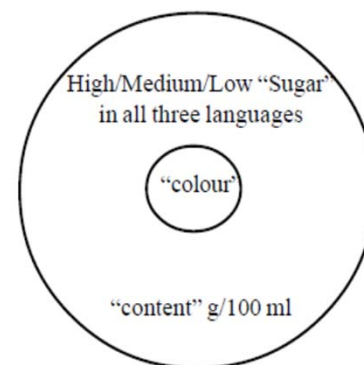
Strengthening Fiscal Policies to Promote Healthy Diets in Sri Lanka

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Background : TLL on SSBs



SSB
Regulations

Symbolic colours are very important to educate the public, when making the food choices

TLL was introduced for SSBs in 2016

Mandates sweetened beverage makers to label the sugar content of their products using the traffic light colours

TLL
applicable
SSBs

Carbonated beverages

Fruit Nectar

Fruit juices

Ready-to-serve beverages –other than milk-based products



Motivation

TLL on SSBs has been adopted for more than five years

The effectiveness of the TLL has not been formally evaluated

Evaluation of the SSB regulations -- to assess compliance, effectiveness and public understanding is vital for successful implementation



Research Objectives

Assessing effectiveness of TLL on reducing unhealthy SSB choices.

Provide recommendations for strengthening the implementation of SSB regulations to improve food environment.



Methodology

Discrete Choice Experiment (DCE)

Widely use in health and food research

Identified the relevant dimensions (attributes) and assigning levels of SSB choices

Applied experimental design
(combination of choices for survey)

Econometric analysis using Mixed Logit Model



DCE Method Application : SSB Choice Attributes

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 products</i>
TLL code	<i>Red, Amber, Green, No label</i>
Price (Rs.)	<ul style="list-style-type: none">• <i>Carbonated -- small (70, 100) big (150, 220)</i>• <i>Fruit Nectar -- small (60, 70), big (150, 270)</i>• <i>Fruit juices-- small (90, 220), big (450, 730)</i>• <i>Milk-based products -- small (50, 65, 70) , big 290</i>

Methodology : Sample Choice Panel (10 per each Respondent)

Beverage choices/ පැණිරස බීම තේරීම්

BL1_CH1- Which of the following options do you prefer the most when purchasing / මිලදී ගැනීමේදී ඔබ වඩාත්ම කැමති පහත සඳහන් කුමන බීම වර්ගයද ? *

BL1_CH1

OPTION "A"
CARBONATED DRINK

OPTION "B"
FRUIT JUICE

THIS OR THIS

RS 70

RS 730

MEDIUM SUGAR LEVEL
0g/100ml

LOW SUGAR LEVEL
0g/100ml

Absolute JUICE
NO ADDED SUGAR
100% Fruit Content
nothing BUT Orange

- Option A
- Option B
- None of the above

Methodology : Econometric Analysis

Mixed Logit
Model

Dependent variable – SSB choice (1,0)

Explanatory variables --

TLL (base level – No TLL)

Beverage type (base level - carbonated bvg)

Price

Sample size 25,000 ---- 2500 (respondents) X 10 (choices)



Data Collection

- MRI survey team carried out the survey
- 14 districts in 9 provinces
- In each district – 50% DS with urban rural representation
- 2,500 customers (proportion to district population)
- Super markets / Mini-markets / Sathosa customers

District	Sample	DS
Colombo	365	13
Gampaha	362	13
Kalutara	191	14
Kandy	216	20
N ' Eliya	111	5
Galle	167	19
Matara	128	16
Jaffna	92	15
Batticaloa	82	14
Ampara	102	20
Kurunegala	253	30
A' pura	134	22
Badulla	128	15
Ratnapura	170	17
Total	2500	



FINDINGS

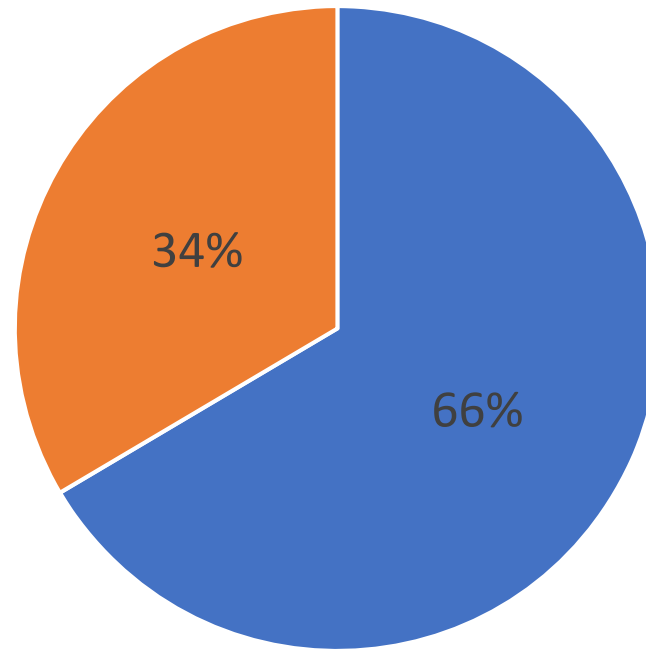


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Consumer Awareness of TLL

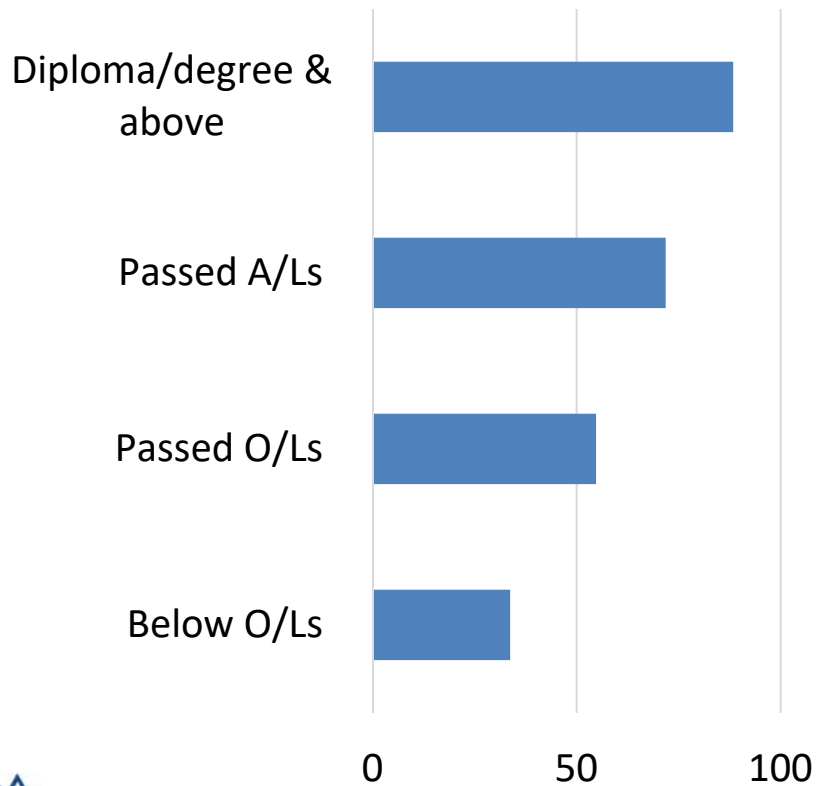
- Only 66% people are aware of the TLL system
- Consumer awareness differ by population groups



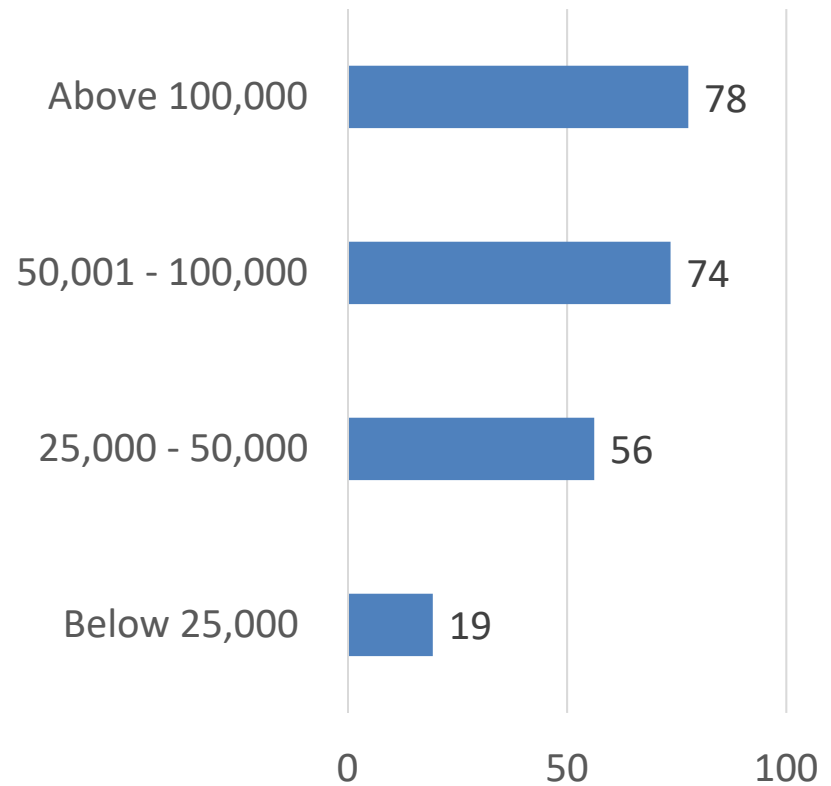
■ Aware of TLL ■ Not aware of TLL

Consumer Awareness of TLL by Socio-economic Characteristics

TLL Knowledge, by Education

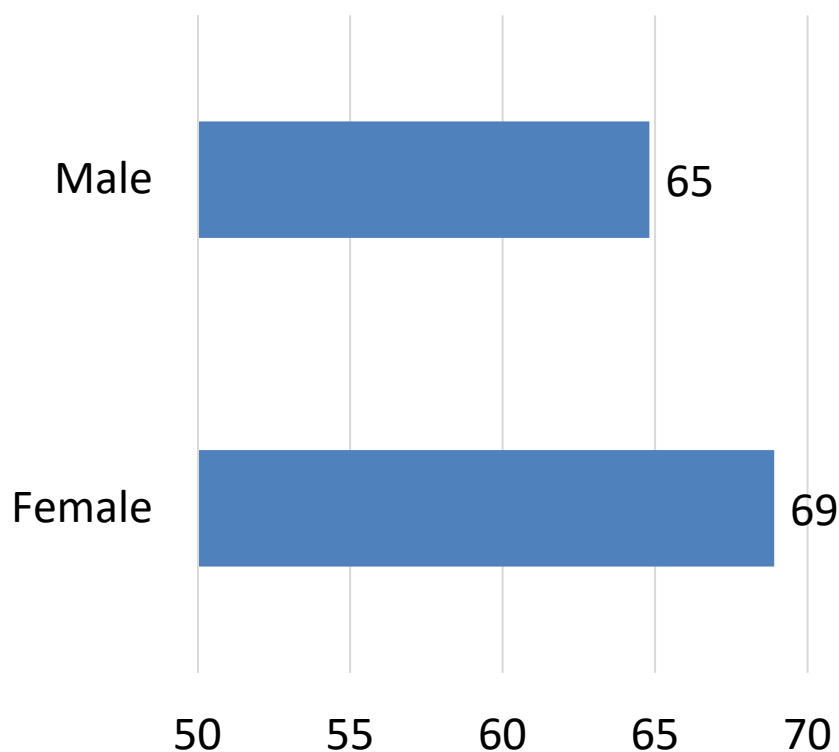


TLL Knowledge, by Income

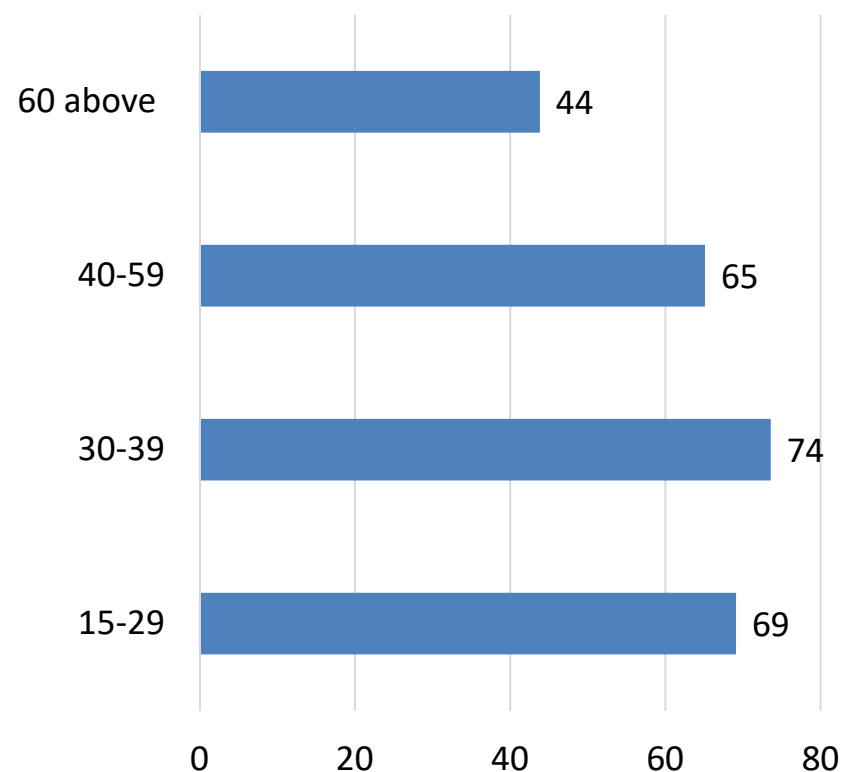


Consumer Awareness of TLL by Demographic Characteristics

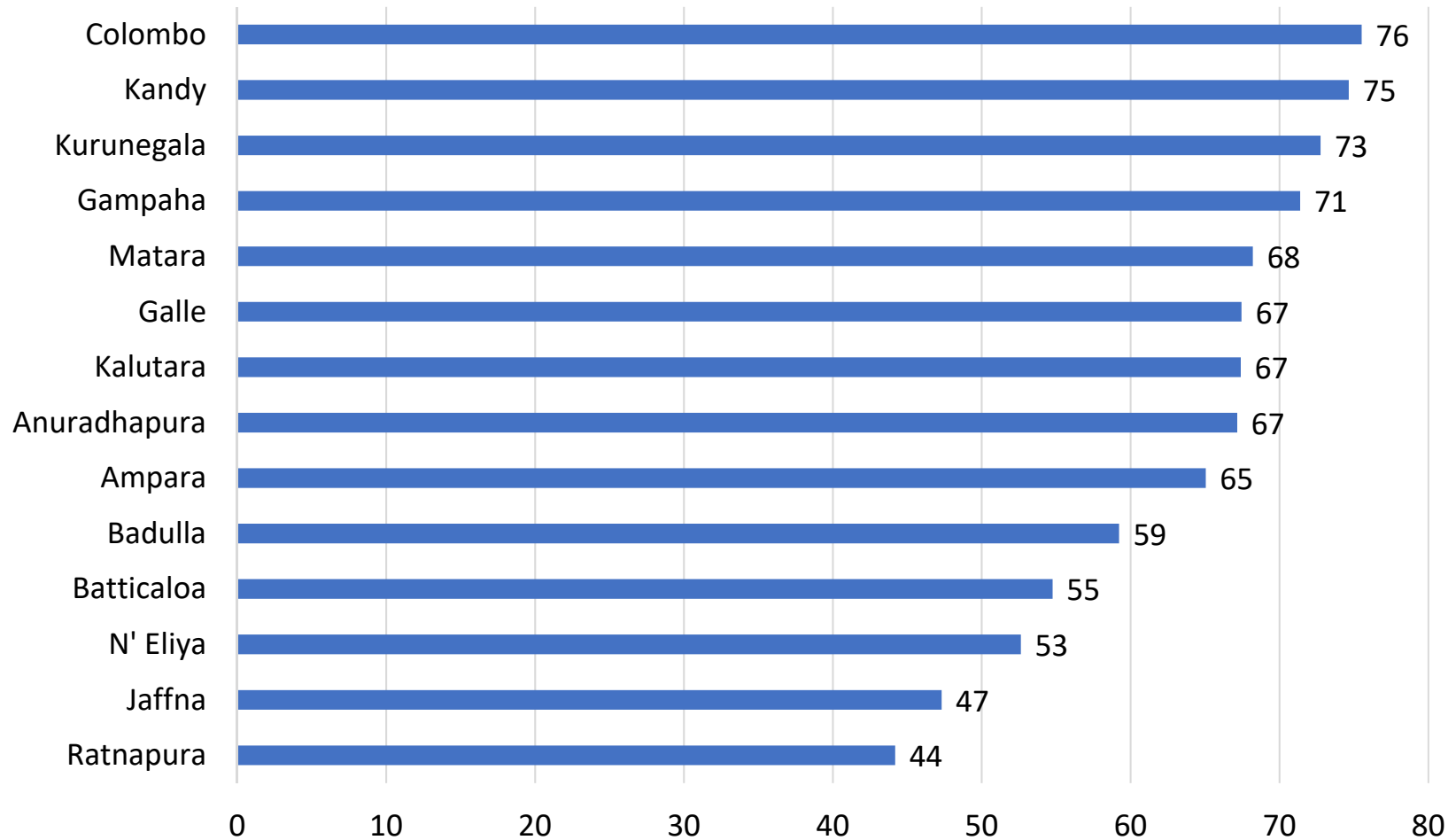
TLL Knowledge, by Gender



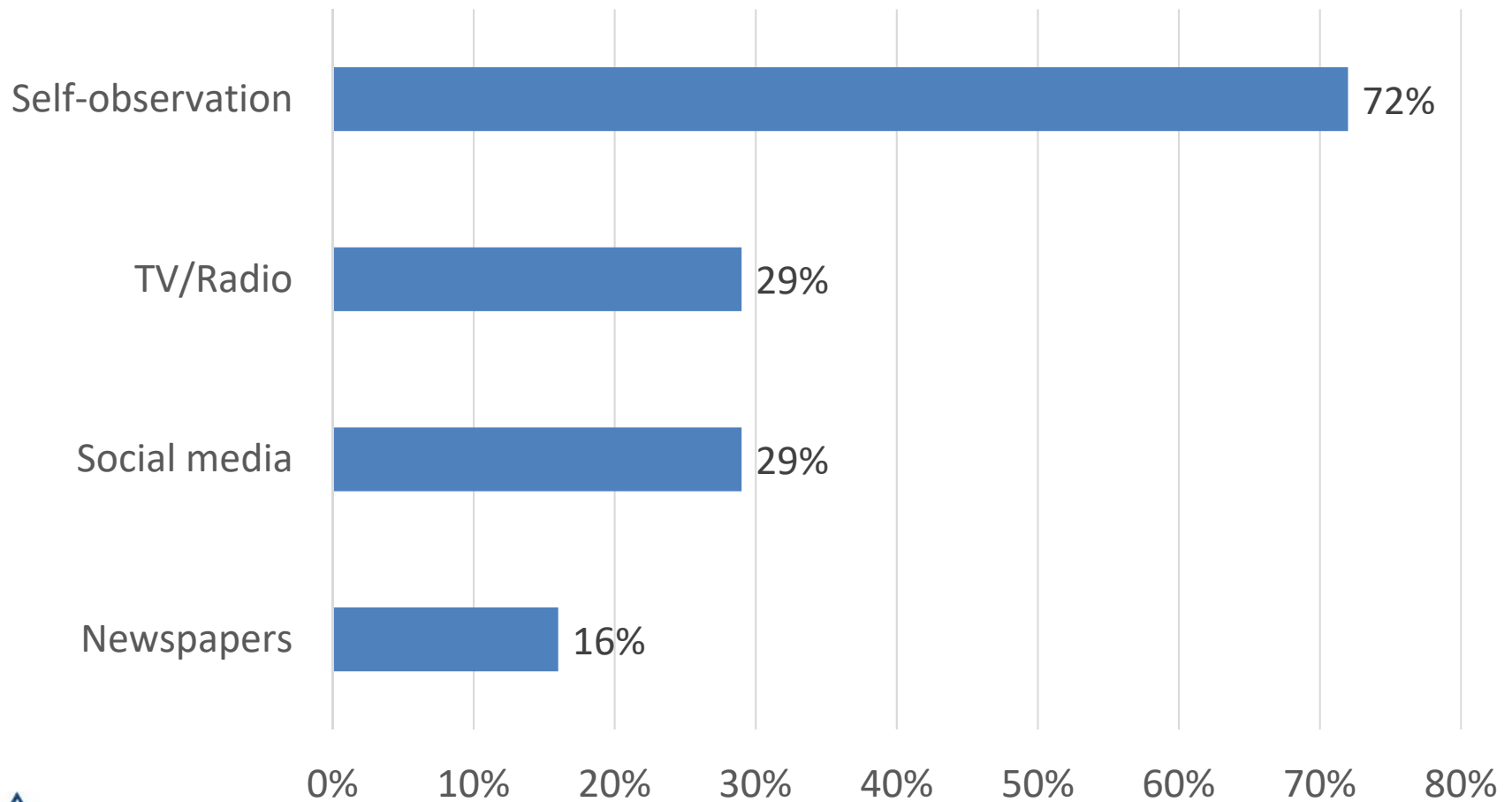
TLL Knowledge, by Age



Consumer Awareness of TLL by District

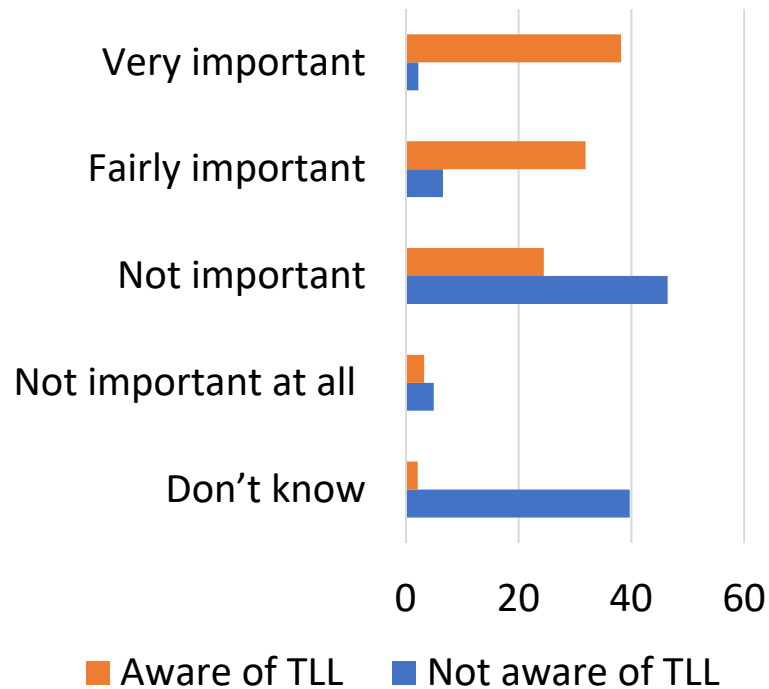


Source of TLL Information

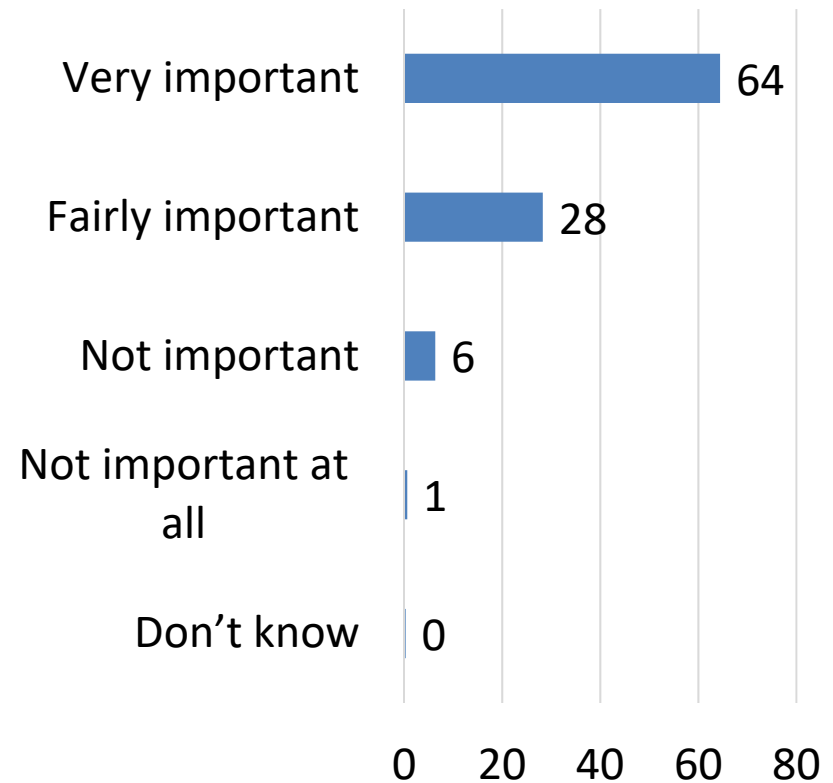


Consumer Attitudes : Importance of the TLL & Price on SSB Choices

TLL on SSB Choices



Price on SSB Choices



Impact of TLL on SSB Choices

Variable	Aware of TLL		Not aware of TLL	
	Coef.	P> z	Coef.	P> z
TLL (base -- no TLL label)				
Red	-0.549	0.000	-0.260	0.002
Amber	0.674	0.000	-0.040	0.618
Green	1.779	0.000	0.185	0.025
Beverage type (base -- Carbonated bvg)				
Fruit nectar	0.896	0.000	0.599	0.000
Fruit juices	0.532	0.000	-0.998	0.000
Sweetened milk	1.763	0.000	0.873	0.000
Price	-0.001	0.000	-0.003	0.000



Key Findings

- Awareness of the TLL system is clearly associated with making healthy food choice

Those aware of TLL bought healthier beverages -- more likely opt green and less likely go for red

- The probability of choosing a healthy product and avoiding an unhealthy one is greatest when TLL appears on the pack

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

- SSB choices are also significantly negatively affected by price
- Milk based products are widely used than other SSBs
- Awareness of TLL differ across socio-economic groups

Better educated and more affluent know more about it



Conclusion

- Information on the sugar content of beverages using TLL helps consumers to make informed choices
- Consumers can use labels as a shopping aid if they are familiar with them. It can also influence the general decision to buy or not buy a product.
- Affordable prices can promote healthy SSB choices
- Awareness on TLL is not uniform across population groups. *Better awareness can improve food choices*



Policy Implications



- Sweetened milk-based products are widely consumed -- SSB regulations should be strengthened by expansion to cover milk-based products
- 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
 - Health authorities can bundle awareness programmes with the primary healthcare services programmes
- Introducing subsidies may improve the affordability of healthy SSBs

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Acknowledgements



IDRC • CRDI

International Development Research Centre
Centre de recherches pour le développement international



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