

# GEOSPATIAL MAPPING OF FOOD ADVERTISEMENTS IN THREE LOW-INCOME COMMUNITIES IN CAPE TOWN, SOUTH AFRICA

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## Aim:

This study examined the extent of outdoor food and beverage advertising in 3 low-income communities in Cape Town.

## METHODS



**Delimited 3 target communities** (Kensington, Gugulethu, and Nyanga) and delimited a 100m buffer zone surrounding primary and secondary schools within target communities using Geographic Information System (GIS) software.



### Data collection in communities:

food and beverage-related branding, product type, placement, pictures, and GPS coordinates were collected by trained fieldworkers using smart devices and a web-based survey.



**Geospatial mapping of data** and spatial analysis using GIS software, product categorisation according to the INFORMAS Outdoor Advertising Protocol\*, and statistical data analysis using Microsoft Excel.



## DISCUSSION AND CONCLUSION

Multinational corporations are exploiting the lack of public health policies regarding outdoor advertising surrounding schools.

Adolescents are more likely to be targeted by SSB advertising compared to primary school-aged children.

Stronger policies are required to protect school-aged children from targeted food and beverage advertisements.

## RESULTS

Total advertisements recorded

**986**

**263**

duplicates removed

**723**

food and beverage advertisements analysed

**177** (24.5%)

were combined product advertisements

**546** (75.5%)

were single product advertisements

**120** (22.0%)

Core and Healthy Food products\*

**417** (76.4%)

Non-Core and Unhealthy Food products\*

**9** (1.6%)

Miscellaneous Food products\*

**360** (49.8%)

were sugar-sweetened beverage (SSB), including energy drinks

**126** (35.0%)

were within a 100m buffer zone surrounding primary and secondary schools

The mean number of SSB advertisements within the 100m buffer zone was significantly higher for secondary vs primary schools ( $p=0.038$ ).

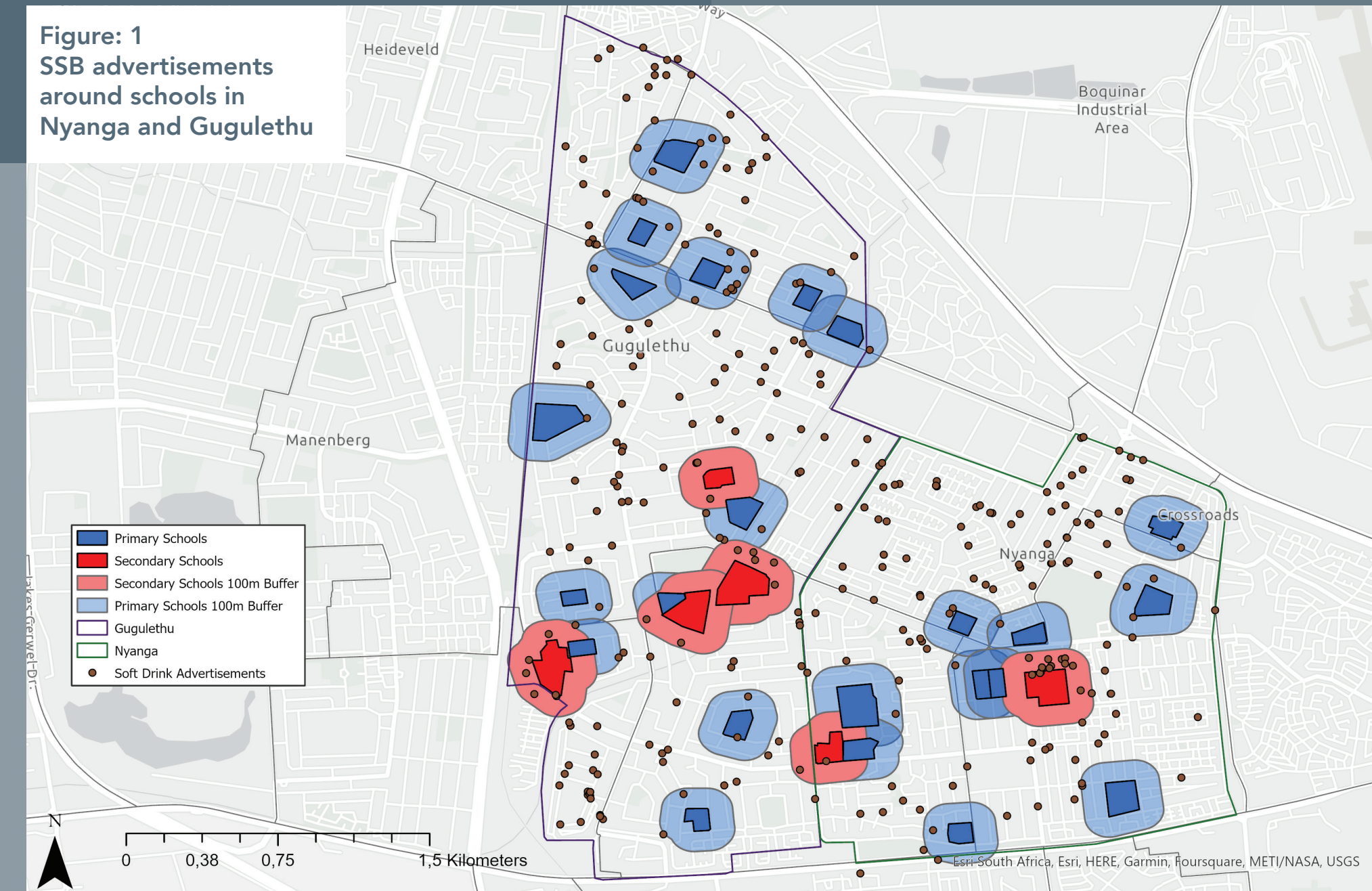
Table 1: Number of primary and secondary schools by community

	Primary	Secondary
Nyanga	10	2
Gugulethu	13	4
Kensington	3	1

Table 2: Number of SSB advertisements by school type and community

	Primary	Secondary
Nyanga	34	37
Gugulethu	38	17
Kensington	2	1

Figure 1: SSB advertisements around schools in Nyanga and Gugulethu



\*References: Mackay, Sally; Molloy, Janine; Vandevijvere, Stefanie (2017). INFORMAS protocol: Outdoor advertising (school zones). The University of Auckland. Journal contribution.



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