



Investigating the possibilities for using scanner data for the CPI compilation in Namibia

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Meeting of the Group of Experts on CPI
07 June 2023

Introduction

The environment in which statistical agencies operates is changing. New opportunities to access and interrogate big data are becoming available, increasing the potential to provide new insights into matters of importance.

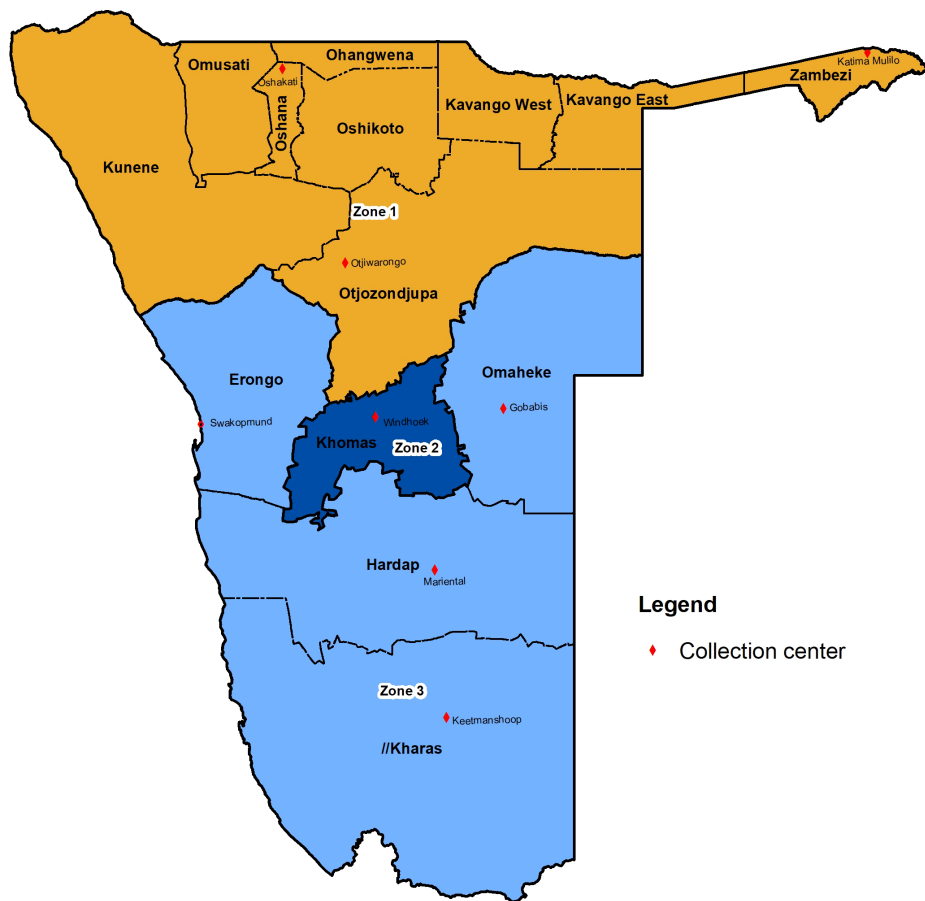
The **Namibia Statistics Agency (NSA)** has the mandate and responsibility of producing and compiling statistical information in Namibia including "Price Statistics". **NSA** has embarked on the exploration of using Scanner data by setting up meetings with selected major Supermarkets, Headquarters. Although, most of the visited Supermarkets have agreed to be submitting scanner data by filling in price collection questionnaires, there have been some inconsistencies in data submission and some outlets have argued that it is extra work for them.

Scanner data are digital transaction data on turnover, sales, price, and type of items sold, which are recorded by bar code at the cash registers of retail shops.

Introduction: current practice

At the moment, prices used for the compilation of the **Namibia Consumer Price Index (NCPI)** are collected by personal visits to selected retail outlets by **Price Agents (PAs)**/ field officers every month. This exercise is undertaken during the first two weeks of every month by **PAs** from all fourteen regions of the country in 8 localities/towns on handheld computers. This is a time-consuming processes as everything is excel based, From price collection, data entry which is done manually to data analysis, making the production of the **NCPI** tedious. Additionally, the price data collection covers retail outlets (such as supermarkets, butcheries, bottle stores, pharmacies, salons, private doctors, rescue services, school fees, renting fees, clothing shops, hotels etc.,) on sampled items. This means that not all shops / outlets are covered by this exercise, due to resource constraints. The office, therefore, statistically selected several outlets and items which can be covered using the resources available.

NCPI geographical coverage



Why Scanner Data?

Data confrontation and quality assurance

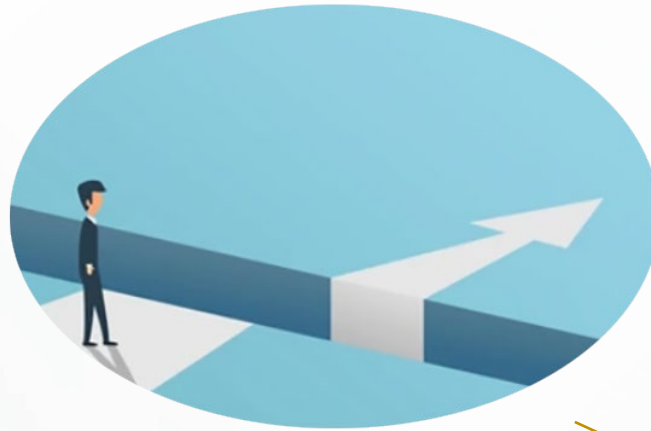
Updates pricing samples



Resources having by the Agency

To update CPI weights

Challenges encountered: The Namibian supermarkets experience



The Agency shares excel price collection questionnaires with the retail outlet via email during the first week of every month.

Access to Scanner Data

Delayed data submission, multiple follow ups to remind the outlet to submit the requested data.

Data transmission to the Agency

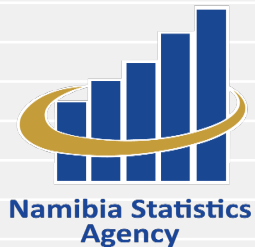
There are data disparities between the SD and field collected prices received

Quality of data received and the preparation of SD for use

Poor response rate by the data providers

Cooperation with data providers

Challenges encountered: The Namibian supermarkets experience cont..



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CPI Region: Khomas **Checked by:** **Location:** East
Locality: Windhoek **Date:** **Contact**
Outlet Name: Outlet A **Details:**
Collector's Name:
Collection Date:

COICOP Code	Group/Section/Item	UoM	Specification	Jun-22	Jul-22 Scanner Data	Jul-22 Field Data	Collector's remarks	Office use
1112.01	Bread			N\$	N\$	N\$		
01112.01.01	White bread	each	Own Bakery: sliced	11.99	12.99	11.99		
1115.01	Breakfast cereals							
01115.01.04	Wheat biscuit cereal	450g	Bokomo: Weetbix 24 biscuits	28.99	40.49	28.99		

Challenges encountered: The Namibian supermarkets experience cont..

COICOP Code	Group/Section/Item	UoM	Specification	Jun-22	Jul-22	Jul-22	Collector's remarks	Office use
1151.01	Butter							
01151.01.01	Butter	500g	Lurpak danish butter	65.99	92.99	79.99	Price increased	
1154.01	Cooking oil							
01154.01.02	Sunflower blend	2litre	Nola: sunflower oil	104.99	109.99	109.99	Price increased	
1152.01	Magarine & fatspreads							
01152.01.02	Magarine in tubs	500g	Sunshine: in tubs original	39.99	77.99	n/s		
1163.01	Apples							
01163.01.02	Apples, loose:	per kg	Apple loose yellow	31.99	31.99	31.99		
01163.01.03	Apples, loose:	per kg	Starking	33.99	33.99	33.99		
1168.1	Nuts							
01168.10.01	Peanuts, roasted	150g	Safari: Roasted & salted in plastic bag	25.49	39.99	23.99	Price decreased	
1212.01	Tea							
01212.01.01	Tea bags	125g	Five roses: Tagless tea bags, in cardboard box 50bags	36.49	56.99	36.49		
12131.04	Other; toilet paper, serviettes, facial tissues, paper towels, sanitary towels, cotton wool, cotton tops, toilet sponges, etc.							
12131.04.03	Cotton wool.	25g	Dove: 100% pure cotton wool, roll	12.99	43.99	12.99		

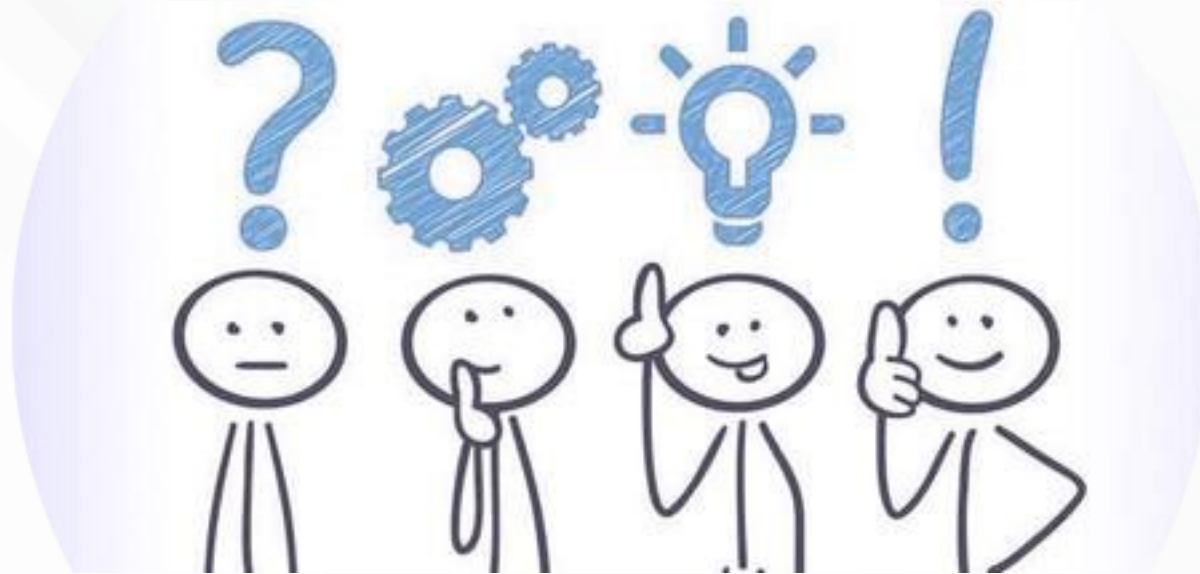
Way forward

1. To outline contracts with all major Supermarket headquarters who have agreed to be providing the Agency with Scanner Data
2. To compile the **NCPI** using Scanner Data in accordance with international standards and best practices.
3. To save resources i.e., field officers would no longer be required to visit businesses where prices were collected. The potential for **National Statistics Office (NSO)** resource savings is influenced by the size of the field officer reductions and the increase in resources required by the **NSO** to manage and process scanner data sets.

Conclusion

The NSA could possibly benefit from the use of Scanner Data which presents the potential to improve the accuracy, timeliness and quality of CPI index through the cooperation of several NSOs who have successfully negotiated the supply of scanner data direct from retail businesses and used this data in the compilation of their Consumer Price Index (CPI).

Questions and Discussions



thank you!

