



# Comparative Spatial Analysis of Vitamin A Supplementation in Children (6–59 Months) in North Ubangi: UNICEF and Helen Keller Approaches



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## Introduction

- Vitamin A deficiency affects six out of ten children in the DRC, putting half of them at risk of serious complications such as blindness, stunted growth and increased mortality.
- Supplementation campaigns are being implemented to alleviate this problem.
- Two strategies exist: UNICEF's, which goes from the community to health centers, and Helen Keller's, which aims to reach children at home from health centers.

**Objective:** To compare Vitamin A supplementation coverage between two approaches:

**2022:** UNICEF's community-based approach relying on health facilities.

**2023:** Helen Keller International's home-based approach directly engaging communities

## Methods

A secondary data analysis

**Data Sources:** PRONANUT campaigns (Dec 2022, June 2023).

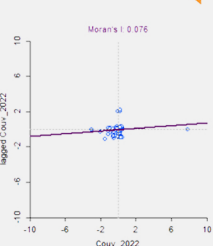
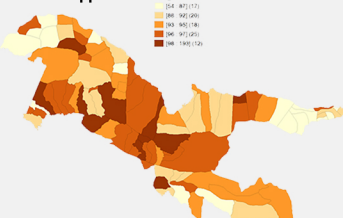
**Target population:** Children aged 6–59 months in 92 health areas, Nord-Ubangi.

**Spatial Analysis:** LISA (Local Indicator of Spatial Autocorrelation)

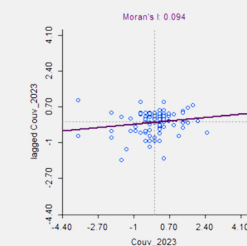
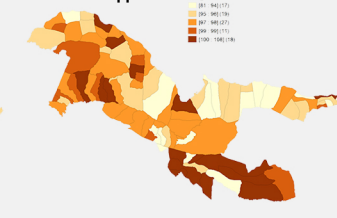
**Spatial Analysis Tools:** Geoda and ArcGIS.

## Results

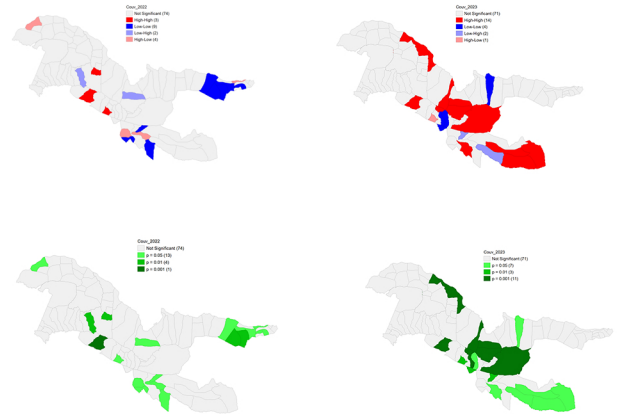
UNICEF's Approach



Helen Keller's Approach



## Results



## Interpretation

### Moran I Analysis:

**2022** (UNICEF Approach) : Weak positive autocorrelation (Moran I = 0.076) means random coverage.

**2023** (Helen Keller Approach) : Slightly stronger autocorrelation (Moran I = 0.094) means better clustering.

### LISA Analysis:

**2022** (UNICEF Approach) : 3 high-high (high coverage) clusters, 9 low-low clusters (low coverage).

**2023** (Helen Keller Approach) : 14 high-high clusters, 4 low-low clusters – marked improvement.

## Implications

**Successes:** The Helen Keller home-based approach led to a substantial increase in high-coverage clusters.

**Challenges:** Persistent low coverage in some areas due to infrastructural limitations.

**Recommendations:** Expand home-based strategies to more regions. Focus efforts on improving coverage in the remaining low-coverage areas.

