



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

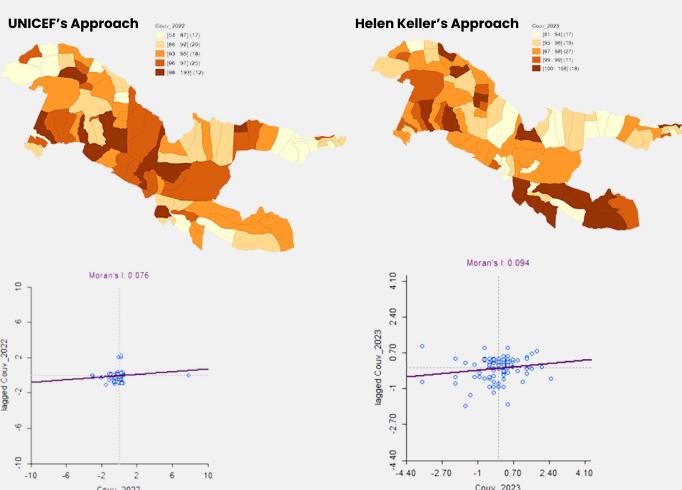
Data Sources: PRONANUT campaigns (Dec 2022, June 2023).

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

Spatial Analysis: LISA (Local Indicator of Spatial Autocorrelation)

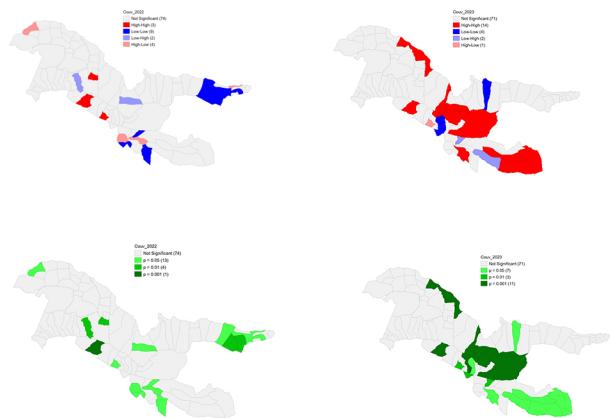
Spatial Analysis Tools: Geoda and ArcGIS.

Results



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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.



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