



XXVII FIG CONGRESS

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Regional reorganization in Ghana: Implication on spatial extent and proximity to equitable access to critical public services

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Presentation Outline



Introduction



Our Approach



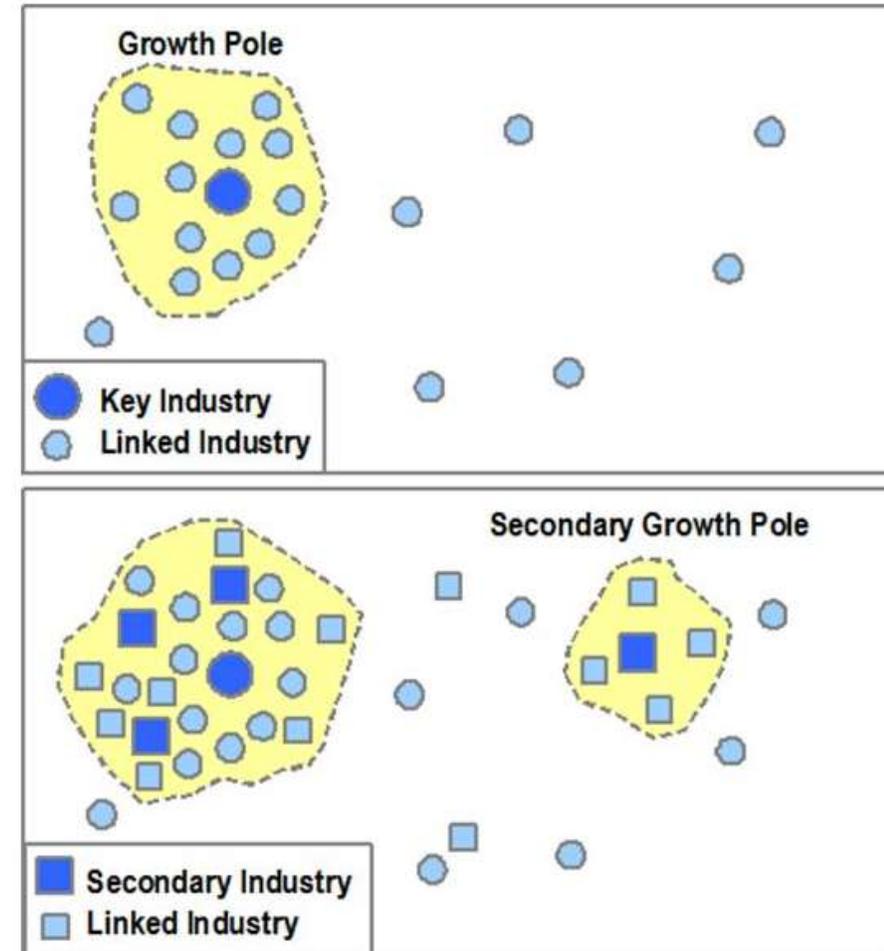
Findings



Conclusion and policy implication

Introduction

- **Territorial divisions** into smaller functional units are mostly for *“effective and easy administration”* and *“equitable development.”*
- Theoretical underpinning – **The Growth Pole Theory**
- Spatial extent has an effect on resource allocation and Development

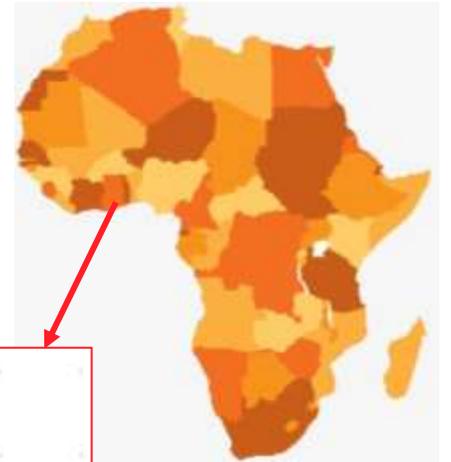


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Context of the study area

- ❑ Ghana is located in West Africa
- ❑ Population – **30.8 million** (2021 Census)
- ❑ Decentralisation regime – **Four levels of authority**
 1. **National** - Central Government
 2. **Regional** – Regional Coordinating Councils
 3. **Metropolis/Municipality/Districts (MMD)**– MMD Assemblies
 4. **Sub-district structures** – Urban or zonal councils and Unit Committees



Regional Restructuring in Ghana – **Main Drivers**

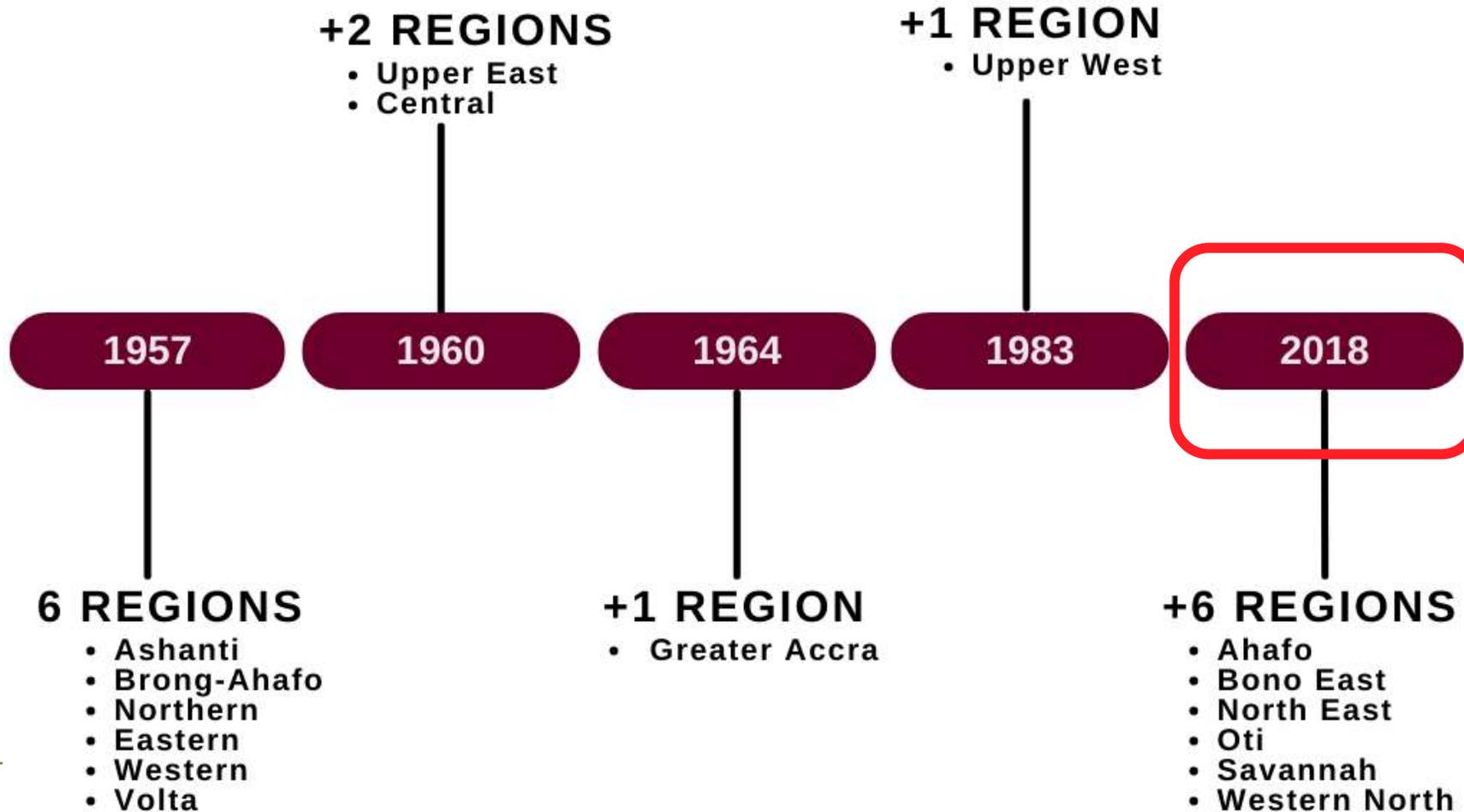
Colonial epoch

- Cultural,
- Linguistic, and
- Kinship bonds

Post-colonial epoch

- Development
- Political dimension

Regional restructuring since Ghana's independence



- Commission of Inquiry set up

The **8 thematic areas** identified



- **Accessibility to critical services** were linked to **spatial extent**.
- New regions birth new regional capitals – *epicentres of development*
- Main measurement indicator – **Travel distance**

The four regions restructured in 2018

Northern region (old)

1. Northern region*
2. North East region
3. Savannah region

Brong-Ahafo region (old)

1. Ahafo region
2. Bono region*
3. Bono East region

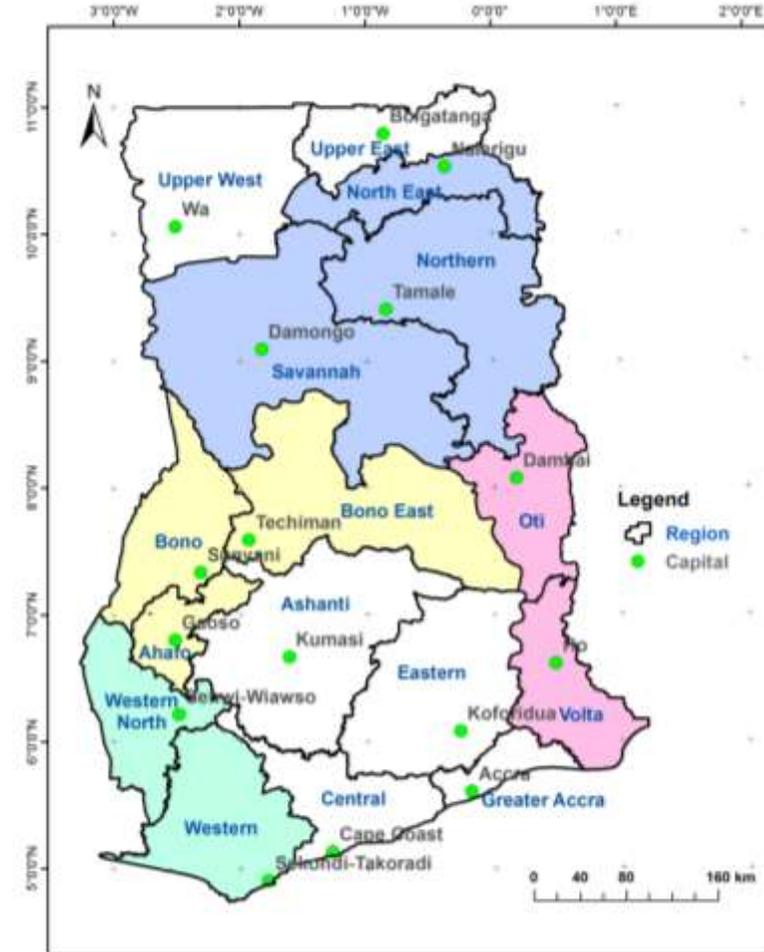
Volta region (old)

1. Volta region*
2. Oti region

Western region (old)

1. Western region *
2. Western North region

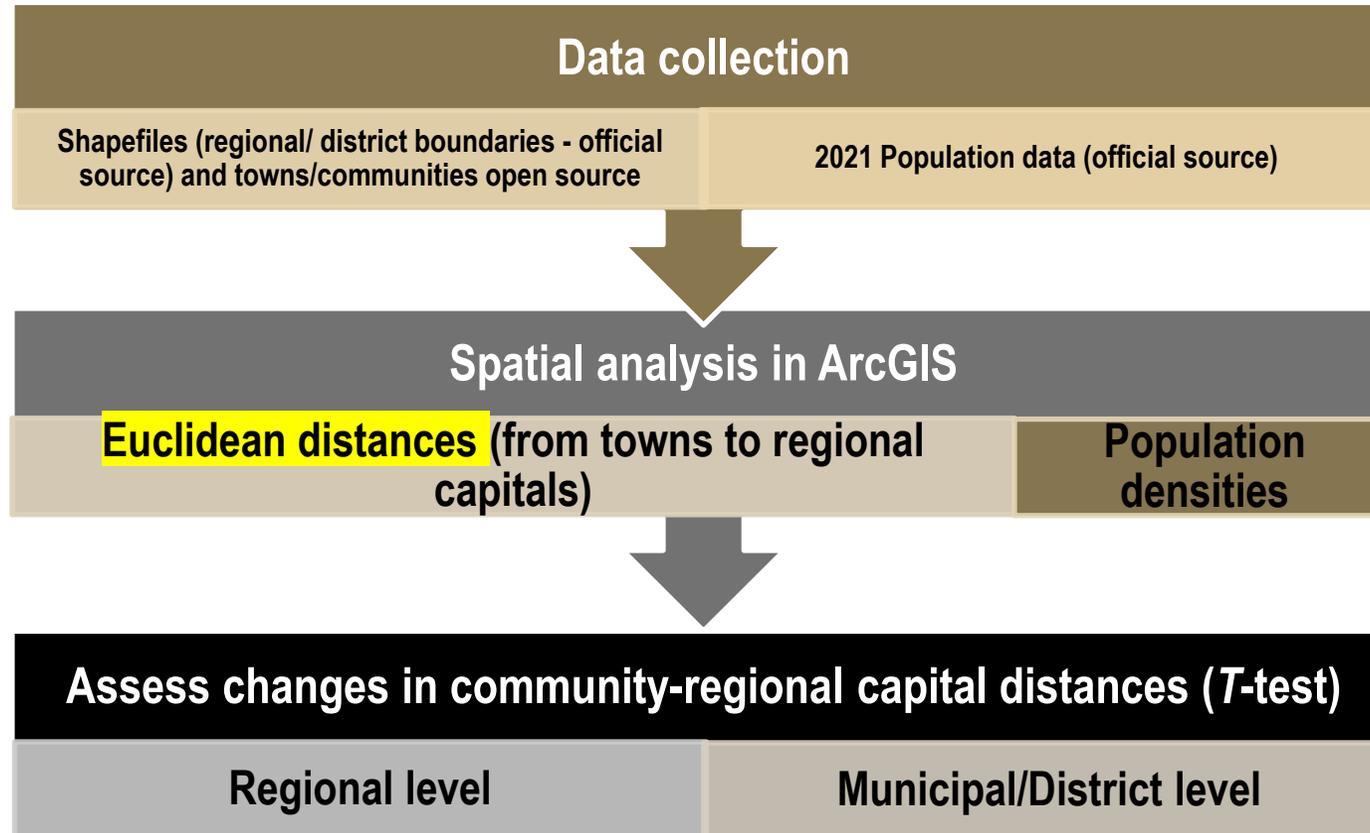
Forty-four (44) municipalities and districts affected



Siting regional capitals in Ghana – **The Gaps**

- No legal framework for regional capital selection
- A criteria exists for **District** capital – (based on centrality, population, accessibility, resource base, etc.)
- Criteria subject to manipulations and arbitrary decisions due to data paucity
- Limited use of scientific approaches (e.g. GIS applications)

Materials and Methods



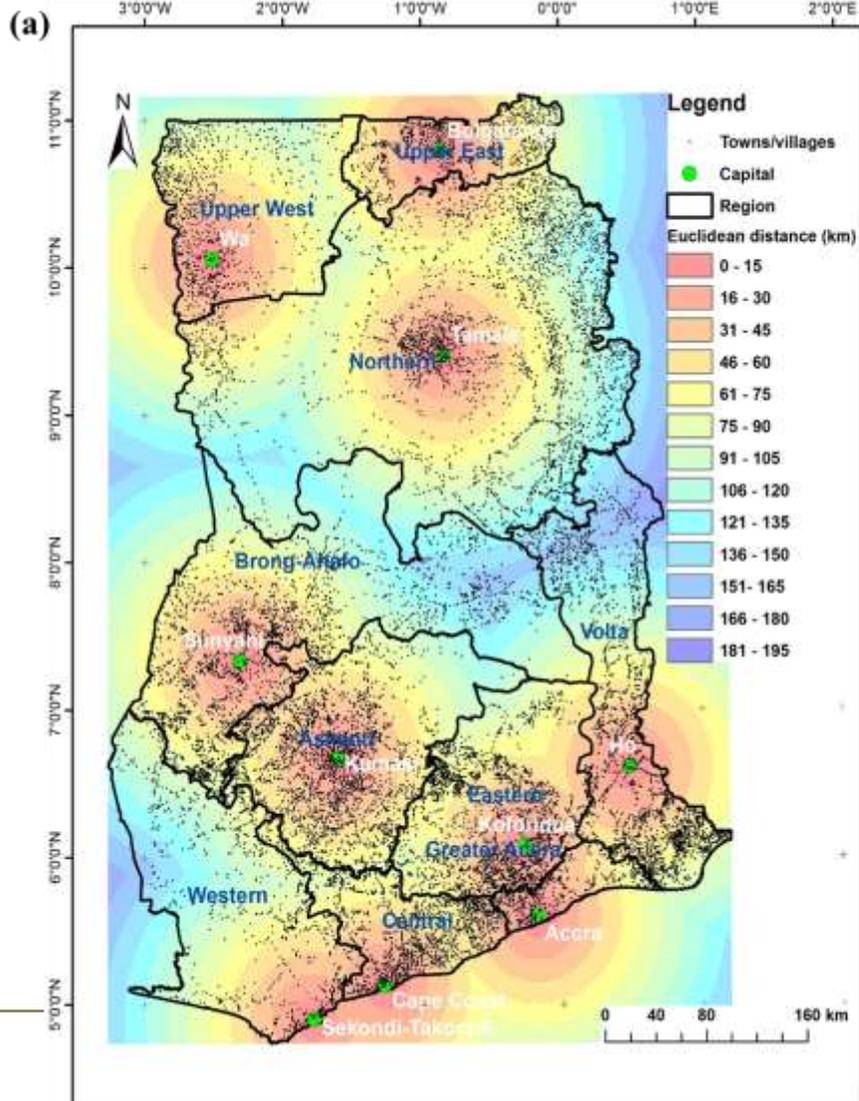
Findings

Landmass and population density before and after the reorganisation

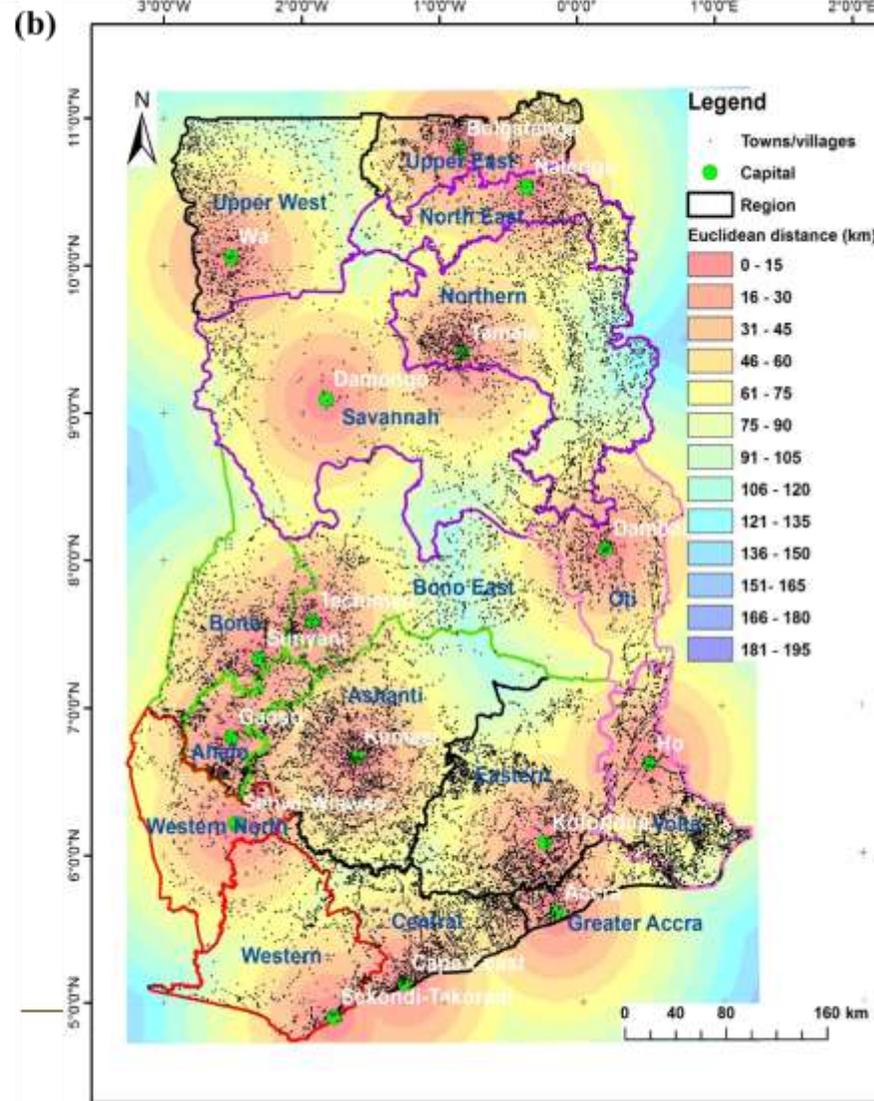
Old region	Land size (km ²)	Population density (cap/km ²)	Newly created region	Land size (km ²)	Population density (cap/km ²)
Northern	70,384	51.5	Northern	26,524	87.1
			North East	9,070	72.7
			Savannah	34,790	18.8
Brong-Ahafo	39,557	75.3	Bono	11,113	108.8
			Bono East	23,248	51.8
			Ahafo	5,196	108.7
Western	24,457	123.0	Western	13,842	148.9
			Western North	10,079	72.7
Volta	20,990	117.0	Volta	9,504	174.7
			Oti	11,066	67.5
Greater Accra	3,721	1,681.3	-	-	-
Ashanti	24,542	223.1	-	-	-
Eastern	19,087	151.4	-	-	-
Central	9,726	217.3	-	-	-
Upper East	8,702	118.9	-	-	-
Upper West	18,913	36.4	-	-	-

- Greater Accra region remains the smallest and most densely populated region.
- Savannah region currently the largest and most sparsely populated region

Findings

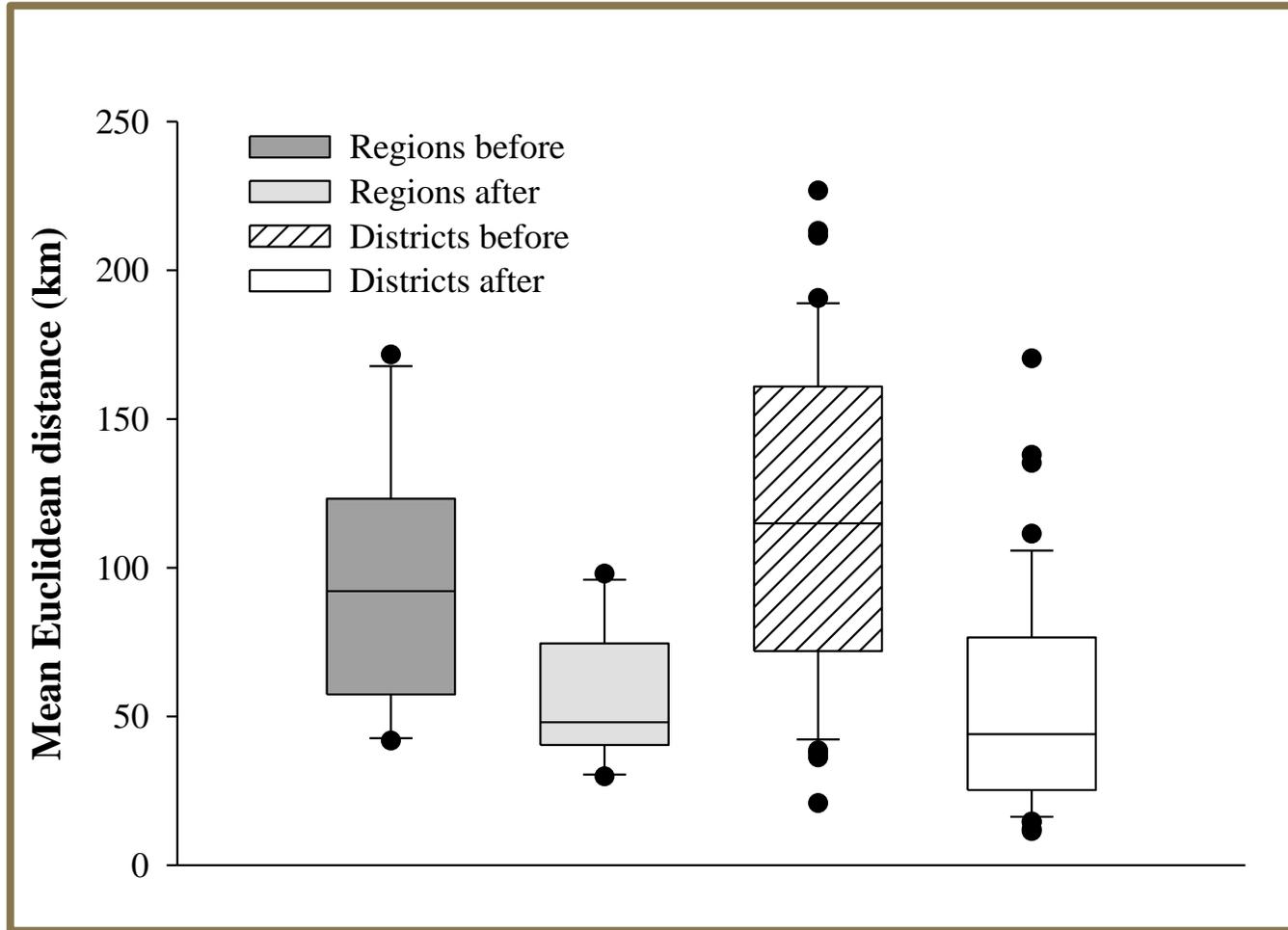


Before



After

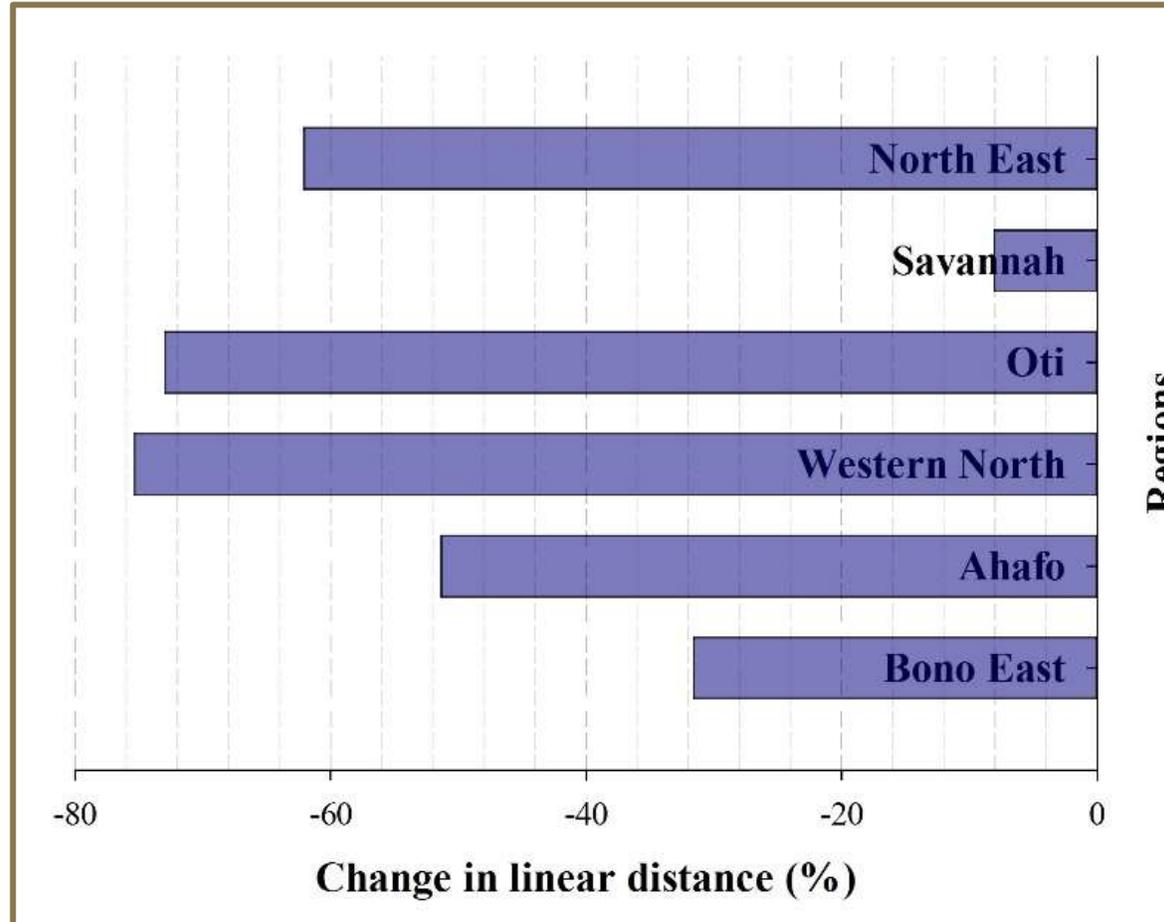
Findings



Reductions in the median linear distances:

- **Regional level**
from 92.1 km to 48.1 km
- **Municipality/district levels**
from 122.0 km to 46.4 km

Findings



REGIONAL LEVEL

- Reductions = **8.1% to 75.3%**
- Statistically significant ($T = 3.340, p = 0.02$)

- The reduction in linear distance was highest in the Western North region (75.3%), followed by the Oti (72.9%),
- North East (62.1%), Ahafo (51.3%), Bono East (31.6%), and lastly the Savannah region (8.1%)
- A paired *T*-test indicated that the decrease in linear distance after the restructuring was statistically significant ($t = 3.340$, $p = 0.02$).

Conclusion and policy implications

- The general reduction in travel distance could improve accessibility to critical public services.
- Potential decrease in Ghana's transportation sector carbon footprint.
- Seven districts/municipalities were adversely affected and would require interventions that would help mitigate the time loss to business
- GIS tools can aid future decision-making regarding the alteration of regional boundaries and the selection of capital towns and new Districts
- Use many more indicators beyond linearity of Distance



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