

**L'enfant et ses proches.**  
**Dynamiques familiales en Afrique Subsaharienne**  
*Children and family dynamics in sub-Saharan Africa*

**26-28 octobre 2016**

Institut national d'études démographiques (Ined)  
133, boulevard Davout, 75020 Paris

**Distance or location? How the geographic distribution of kin networks shapes support given to single mothers in urban Kenya /**

*À distance ou sur place ? Comment la répartition spatiale des réseaux familiaux influence le soutien donné aux mères seules en milieu urbain kenyan*

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Comment saisir l'environnement familial des enfants ?  
*Grasping the family environment of children: methodological issues*

# ***DISTANCE OR LOCATION?: HOW THE GEOGRAPHIC DISTRIBUTION OF KIN NETWORKS SHAPES SUPPORT FOR SINGLE MOTHERS IN URBAN KENYA***

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- 1) Describe the geo-spatial positioning of non-residential kin;
- 2) Examine the relationship between distance and location of individual kin and support for single mothers;
- 3) Analyze the relationship between kin clustering around the mother and location clustering and support for single mothers.

## Main Objectives

# Importance

- Increasing urbanization and mobility across Africa
- Labor migration is a family based decision
- Kin groups are becoming spatially dispersed
- Need to better understand how geospatial attributes define family and family support provided to poor women and children

# Data Gaps

- Most data collection is restricted to co-residential household
- Most data collection equates structure with support
- Where we do have data on non-residents, it is restricted to financial transfers
  
- As a result, we DO NOT KNOW:
  - Much about non-resident kin
  - How distance and location influence intra-familial support

# Conceptual Grounding

- 1) Are kin obligations changing?
  - Spatial dispersion has liberated individuals from kin obligations (Aboderin 2004, Cliggett 2005)
  - Kin linkages continue to be important (Ferguson 1999, Kakonde 2010, Smith 2011)
- 2) Employment/financial constraints limit kin support
  - (Eloudoun Enyege & Stokes 2002, Simone 2009, Setel 2010)
- 3) Technological innovations facilitate kin linkages
  - (Fischer 1983; Williams & Merlen 2011)

## Research Site – Korogocho slum, Nairobi, Kenya

- Densely populated
- Poor housing quality/Minimal sanitation/high crime
- High unemployment
- High infant/child mortality
- Main ethnic groups include Kikuyu (30%), Luhya (18%), Luo (29%), and Kamba (7%)
- Mobile technology is ubiquitous
- Home of Nairobi Urban Health and Demographic Surveillance Site (NUHDSS)

# Kinship Support Tree

- Purpose is to measure kinship structure and kinship support (resident and non-resident) for poor single mothers and their children
- Differentiate between all kin, potential kin and functional kin:
  - Start with enumeration of all close kin (surviving and deceased) from perspective of child
  - Collect demographic data on all (survival status, age, location, education, employment)
  - Collect support data from only those identified as potential kin (known to be alive, over the age of 7)



# Analytic Sample

Mother: 462 single mothers with at least one child aged born 2009-2015 drawn from NUHDSS

Kin: 2868 non-resident potential kin (alive and over the age of 7)

## Outcomes of interest (support)

- Financial support to mother and child
  - Has the kin member provided monetary or in-kind support to household or child in last month?
- Strong emotional support to mother & child
  - Based on strong agreement to 4 questions about relationship between kin member and mother & child

# Key Geo-Spatial Measures

- Dyadic:
  - Distance between mother and kin using GPS
    - Used google maps to get GPS coordinates as part of the questionnaire administered on tablet computers
  - Type of location of kin member
    - Urban slum/urban non slum/rural
  - Subjective assessment of distance to kin
    - Do you think the person lives far away?”
    - What are the biggest obstacles to visiting the person?”
- Kin Clustering:
  - Proportion of kin group within 10 km of mother
  - Majority of kin group living in slum, urban non slum, or rural

		Missing GPS	Interviewer Accuracy (mean)
Korogocho	29.1% (689)	2.80%	4.1
Other NBO slum	4.1 (97)	3.10%	4
NBO non-slum	19.5 (461)	2.80%	4.4
Other urban Kenya	9.9 (234)	4.70%	4.1
Rural Kenya	28.1 (665)	3.00%	4.1
Outside Kenya	2 (48)	2.10%	3.6
Don't Know	7.4 (174)	n/a	n/a
<b>N</b>	2368	242	2194

## GPS Data Quality

# Methods

- Dyadic Models
  - Multilevel random effects models with two levels (kin level and mother level) to account for one mother linked to many kin
- Clustering Models
  - Logistic with mother as unit of analysis

# Selected Descriptives

Kin Level		Mother Level	
Provides Financial Support	10.8	Receives Financial Support	64.9
Provides Strong Emotional Support	36.0	Receives Strong Emotional Support	74.1
<b>Distance to mother</b>		<b>Proportion of kin in 10 km of mother</b>	
<=1 km	23.8	0-.25	26.6
1-10 km	22	>.25 & <=.6	22.7
11-500 km	27.7	>.6	44.8
greater than 500 km	11.8	missing	5.8
Unknown	14.7		
<b>Type of Location</b>		<b>50% or more of kin living in slum areas</b>	
Slum	33.2	50% or more of kin living in urban non slum	26
urban non slum	31.4	50% or more of kin living in rural areas	30.4
Rural	28.1	All proportions under 50%	13.2
Missing	7.4		

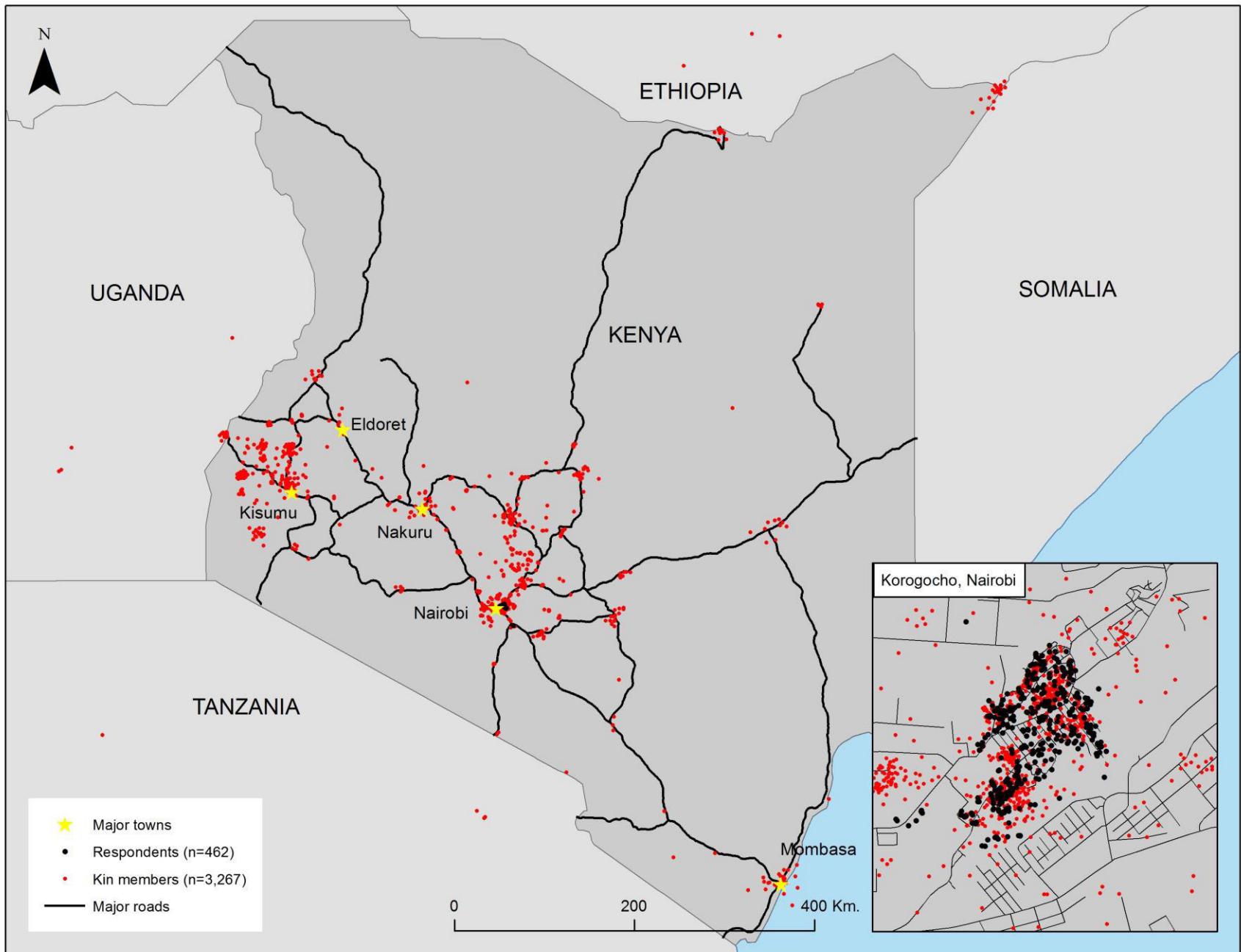


Figure 1. Kin Location in Kenya and Korogocho

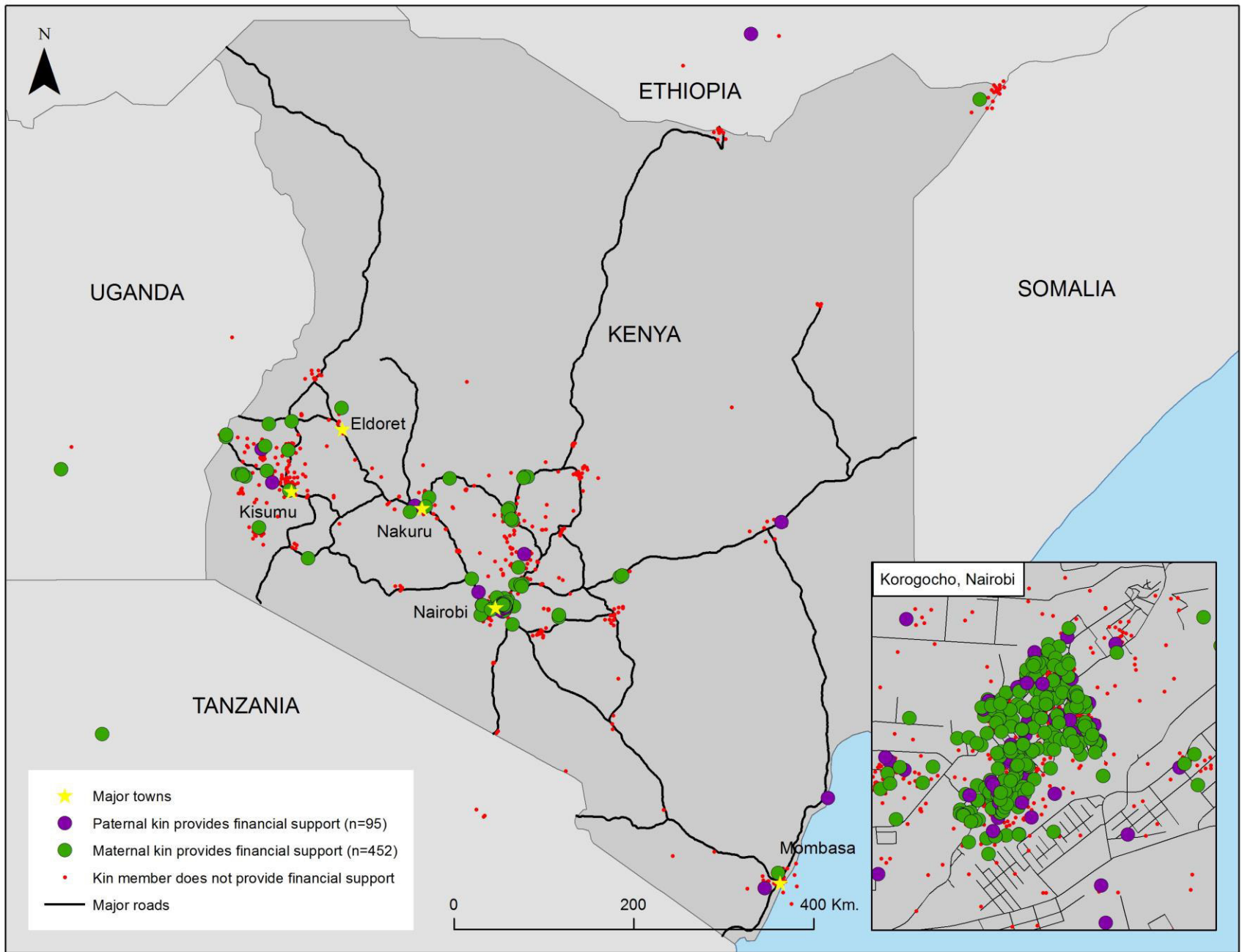


Figure 2. Financial Support by Kin Type



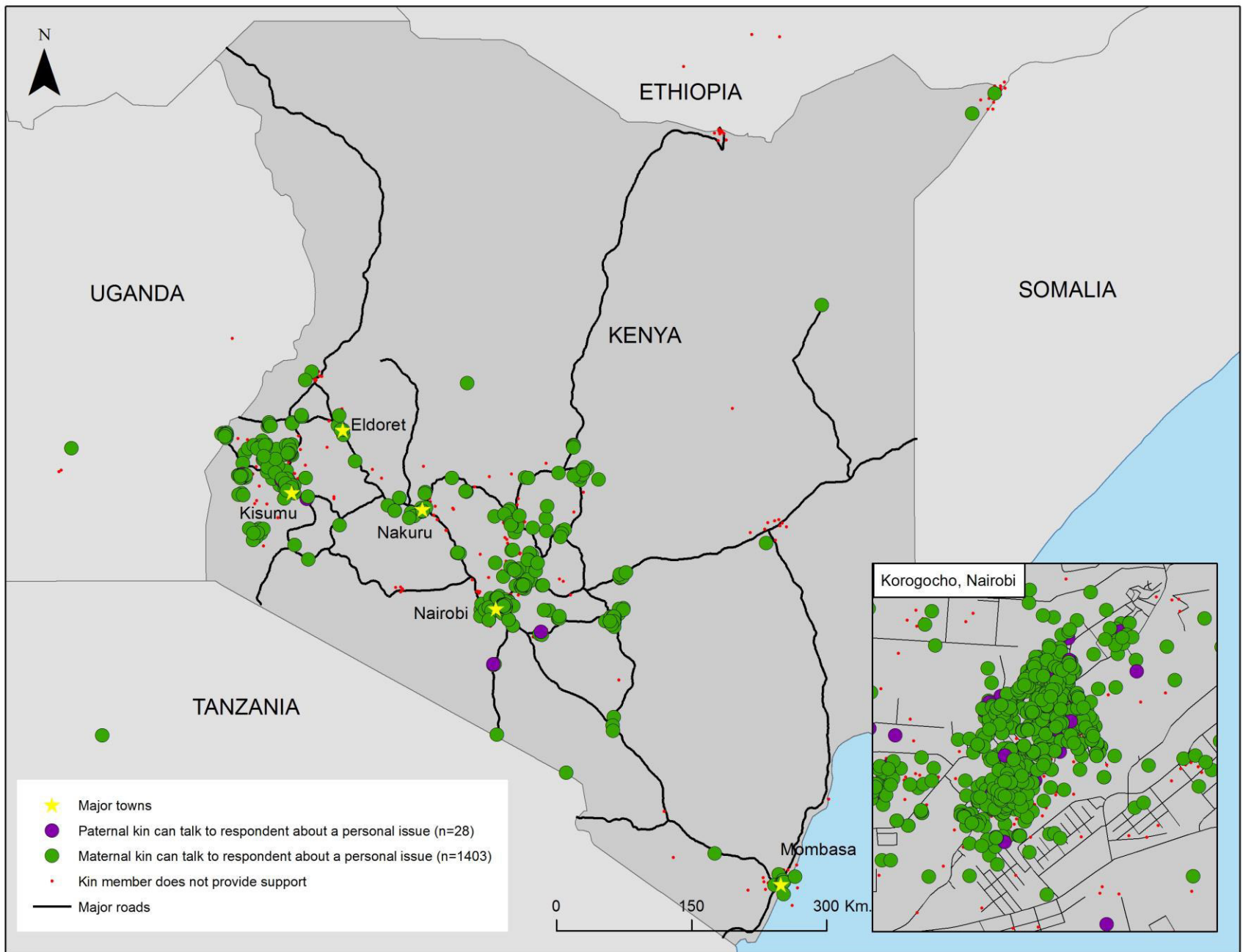


Figure 3. Emotional Support to Mother

	Objective Measures		Subjective Measures	
	Only Road Distance	Only Location Type	Perception of Distance	Perception of Obstacles
	OR (SE)	OR (SE)	OR (SE)	OR (SE)
<b>Road Distance from kin to mother</b>				
<=1 km ( ref)	1.00			
>1 & <=10	0.92 (.22)			
>10 & <=500 km	0.67 (.19)			
> 500 km	0.53 (.22)			
missing	0.94 (.31)			
<b>Type of Location of Kin</b>				
Slum area (ref)		1.00		
Urban/Non Slum		0.98 (.21)		
Rural		0.43**(.31)		
<b>Perceived Distance to Kin</b>				
Close (ref)			1.00	
Far			0.44*(.14)	
Don't Know			0.37***(.09)	
<b>Perceived Obstacles to Visiting Kin</b>				
No (ref)				1.00
Yes				0.59* (.12)
Don't Know				0.11* (.09)
<b>Number of resident potential kin</b>	1.07 (.07 )	1.06 (.07)	1.06 (.08)	1.09 (.08)

### Dyadic Geospatial Measures and Receiving Financial Support (at kin level)

## Dyadic Geo Spatial Characteristics and Receiving Strong Emotional Support (at kin level)

	Objective Measures		Subjective Measures	
	Only Road Distance	Only Location Type	Perception of Distance	Perception of Obstacles
	OR (SE)	OR (SE)	OR (SE)	OR (SE)
<b>Road Distance from kin to mother</b>				
<=1 km ( ref)	1.00			
>1 & <=10	0.94 (.21)			
>10 & <=500 km	0.91 (.21)			
> 500 km	0.58 (.18)			
missing	0.58 (.19)			
<b>Type of Location of Kin</b>				
Slum area (ref)		1.00		
Urban/Non Slum		0.91 (.18)		
Rural		0.75 (.16)		
<b>Perceived Distance to Kin</b>				
Close (ref)			1.00	
Far			0.95 (.22)	
Don't Know			0.35***(.07)	
<b>Perceived Obstacles to Visiting Kin</b>				
No (ref)				1.00
Yes				0.69* (.12)
Don't Know				0.13* (.11)
<b>Number of resident potential kin</b>				
	.89 (.06)	.89 (.06)	.90 (.07)	.89 (.06)

## Clustering and Mother Receiving Financial and Strong Emotional Support

	Financial Support		Strong Emotional Support	
	Distance Clustering OR (SE)	Location Clustering OR (SE)	Distance Clustering OR (SE)	Location Clustering OR (SE)
<b>Proportion of potential non-resident kin in 10 km radius to mother</b>				
0-.25 (Ref)	1.00		1.00	
>.25 & <=.6	0.90 (.27)		0.86 (.29)	
>.6	1.21 (.32)		0.78 (.23)	
<b>Location Distribution of Potential Kin</b>				
50% or more living in slum areas (Ref)		1.00		1.00
50% or more living in urban non slum areas		0.60 (.17)		0.44** (.13)
50% or more living in rural areas		0.50* (.14)		0.46*(.14)
All under 50%		1.07 (.36)		0.45*(.17)
<b>Number of resident potential kin</b>	1.11***(.03)	1.12***(.03)	1.13 (.04)	1.10**(.04)
<b>Constant</b>	.35	.40	3.69	2.61
<b>Observations (n)</b>	430	455	430	455
<b>Pseudo R2</b>	.07	.09	.11	.12

# Summary of Findings

- Financial support from non-residential kin is geographically dispersed but found in labor market hubs.
- Emotional support is concentrated among kin living near the mother
- Distance has no bearing on support but rural location of kin has a negative effect on financial support
- Mothers' perception of distance and ease of access are associated with low financial and emotional support.
- Having a kin group concentrated in rural areas has a negative effect on both types of support
- Having a kin group concentrated in urban non-slum has a negative effect on emotional support

# Implications

- A more nuanced picture of family based labor migration strategies (NEM) –
  - Not just where people are but what they do for their kin
  - Rural location is a liability
- Support for both sides of debate about strength of kinship
  - Spatially dispersed kinship linkages are meaningful for poor women in particular ways
  - Some evidence of detachment from kin living in urban non –slum contexts
- While technology is useful in connecting kin, there continues to be value in having regular in-person visits in maintaining good relationships

# Funder Acknowledgement

- This project was funded by a grant from the Eunice Shriver National Institutes of Child Health (1R21-HD078763-01A1).