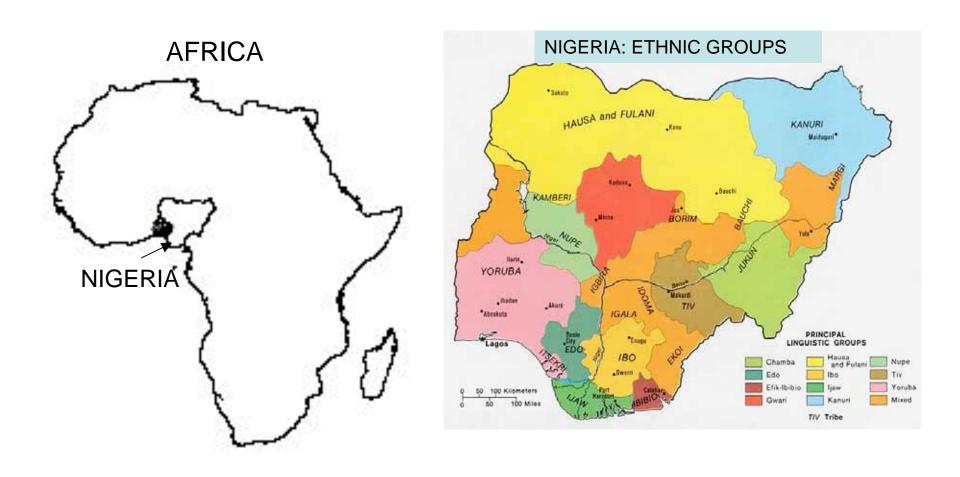
RURAL-URBAN MIGRATION, POVERTY AND SUSTAINABLE ENVIRONMENT: THE CASE OF LAGOS, NIGERIA

PRIPODE-NG1

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Map of Africa showing Nigeria



INTRODUCTION

- Rural-urban migration: An inevitable and sometimes a desirable resultant effect of industrialisation
- Population dynamics and demographic problems in places of origin and destination,
- Poverty
- pressure on fragile urban infrastructure and possible environmental degradation, for most migrants are relatively poor and live together.

RESEARCH QUESTION

Are these true in the case of Lagos,
Nigeria and what are its essential features and peculiarities?

 What can other developing nations learn from this experience?

METHODOLOGY 1

- •Six Local Government Areas (LGAs) representing relatively high-income, middle-income and low income
- •In each LGA, 10 respondents were selected on street listing making a total of 350 respondents for the 6 LGAs.
- •Migrants' States of origin and their LGAs informed the choice of areas covered in the second phase of the study. 180 respondents were covered from the three most prominent States of origin.

METHODOLOGY 2

 Samples of domestic water and street foods were collected for analysis in both Lagos and migrants' places of origin.

 Data analysis were done using GIS, descriptive statistics and difference of means, among others

Socio-Economic Considerations (1)

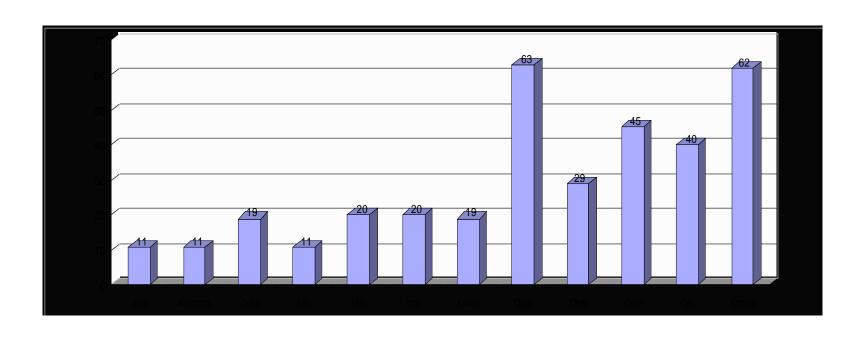
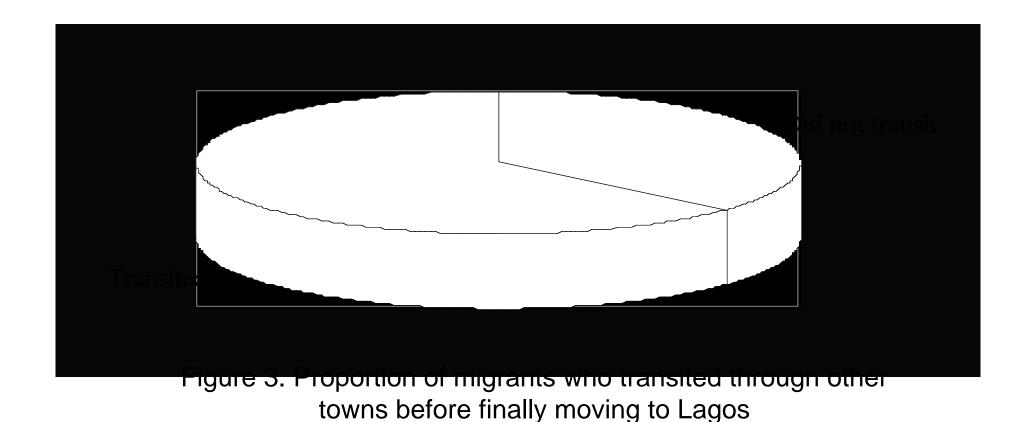
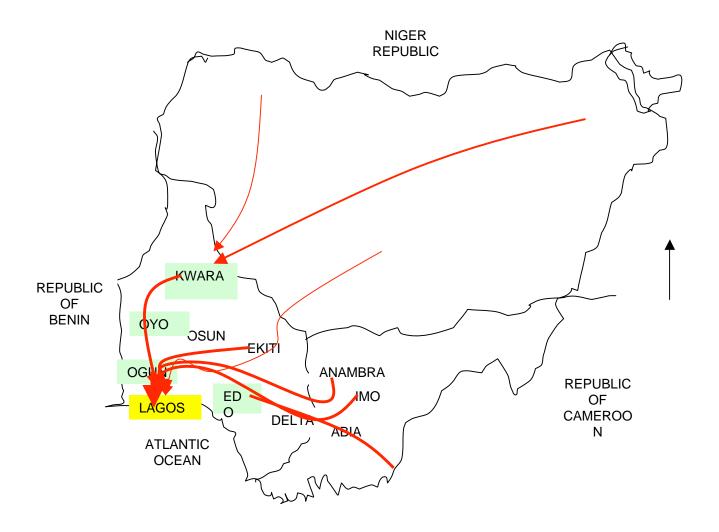


Figure 2. The States of origin of most migrants to Lagos

Socio-Economic Considerations (2)





Transition States

Lagos – The place of destination

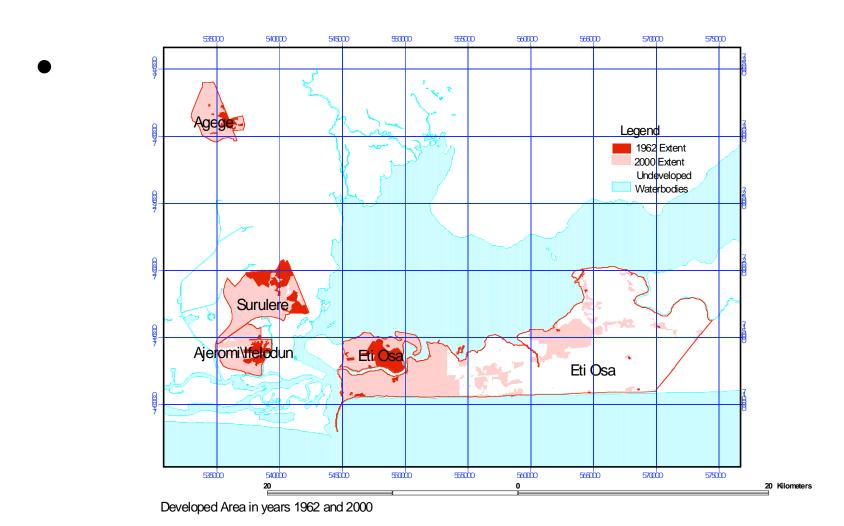
Socio-Economic Considerations (3)

- Over 60% of the respondents were students, unemployed or farmers before migrating to Lagos, but once in Lagos, farming was no longer a choice, but more of Civil service, Teaching and Business;
- Migration to Lagos was more for male and largely to seek better employment and then to enjoy social amenities not present in the migrants' places of origin.
- Migrants found it easier to get employment than to get accommodation and a net flow of remittances to rural areas.
- Consumption only improved for rice, beans, salt/spices electricity and rent after migrating to Lagos;
- Over 80% earned less than N5, 000 before moving to Lagos and more than 70% were earning incomes above N20, 000 thereafter;
- The average income of the migrants was higher than those of their contemporaries in their places of origin.

ENVIRONMENTAL ISSUES

- The GIS revealed a drastic expansion of developed areas in Lagos leading to a rapid loss of biodiversity and other forms of environmental degradation.
- This uncoordinated growth resulted into a mosaic of shanties/ blighted areas in many older areas of the city; Poorly serviced areas in terms of urban infrastructures such as roads, health centers, police stations, electricity, water, drainage systems, waste management, etc.
- Lagos parades one of the highest number of uncompleted buildings among major cities in the world today. Of greater importance is the high rate of the urban sprawl, high cases of property encroachment and rapid changes to unplanned land use types.
- The rate of Infrastructural development was lower than that of the population growth and hence heaps of wastes and infrastructural decay were noticed in many localities far more than in the 1990s.
- Whereas for low income areas of Agege LGA, the % of developed parts increased from 12.5 in 1962 to 100% in 2000 as against 3.4% increasing to 32.2% in high income Eti-Osa LGA for the same periods with concomitant high population density, heavy traffic and increased number of waste dump sites.

REMOTE SENSING MAP OF LAGOS SHOWING DEVELOPED AREAS: 1962-2000



EFFECTS OF ENVIRONMENTAL POLLUTION ON STREET FOODS QUALITY IN LAGOS AND THREE (3) STATES OF MIGRANTS' ORIGIN

- Street foods and water consumed in low income LGAs were more contaminated than those of high income LGAs. The quality of these foods and water were similar to those in places of origin of the migrants.
- All food and water samples collected had at least, a form of contamination at dangerous levels.
 - Domestic water quality in Lagos is generally better than those from places of origin. This may be partly due to regulations by government agencies on water quality standards that must be met in Lagos as against the inadequacy of such in places of origin;
- Levels of iron and nitrate were considerably higher in Lagos; this is indicative of technological/ industrial pollution
- Higher microbial load in water samples from states of origin suggests poor sanitation in those places

EFFECTS OF ENVIRONMENTAL POLLUTION ON STREET FOODS QUALITY IN LAGOS AND THREE (3) STATES OF MIGRANTS' ORIGIN: NG1

Some pollutant levels in street foods of Lagos and places of origin of migrants

| Pollutant | Lagos | Ogun | Oyo | Oshun | WHO Limit |
|------------------------|---------------------------|---|---|-------------------------------------|-----------|
| Lead μg/g | 135.43±0.09 | 0.055 ±0.21 | 0.049 ±0.01 | 0.061 ±0.04 | 0.001 |
| Iron μg/g | 28.07±0.03 | 12.65 ±0.19 | 11.65 ±0.52 | 14.51 ±0.47 | 0.3 |
| Total Counts cfu/ml | 10.00±0.23 | 1.35x10 ⁴ ±0.11 | 1.7x10 ³ ±0.89 | 2.1x10 ⁴ ±0.45 | Nil |
| Bacteria Isolated | Staphylococcus aureaus | Klebsiella sp, Staphylococcus aureaus | S. aureaus, Proteus spp | Klebsiella sp, Micrococcus sp | Nil |
| Moulds Isolated | Aspergillus niger | Rhizopus stolonifer, Asperpergillus. niger, Penincillium spp | Aspergillus niger, Yeast Rhizopus stolonifer | Rhiz stolonifer, Penincillium sp | Nil |

Some pollutants levels in domestic water samples of Lagos and places of origin of migrants

| Pollutant s | Lagos | Ogun | Oyo | Oshun | WHO Limit |
|-----------------------|-------------|-------------|-----------------|------------------|-----------|
| Lead mg/L | 0.99± 0.003 | 0.40±0.130 | 37.82±1.96 0 | 19.82±0.99 1 | 0.001 |
| Iron mg/L | 0.58±0.020 | 0.08±0.003 | 0.01±0.002 | 0.04±0.001 | 0.3 |
| Nitrate mg/ L | 4.96± 0.340 | 2.32±0.540 | 1.18±0.230 | 0.82±0.005 | |
| Coliform MPN/100ml | 9.90± 0.180 | 11.91±0.890 | 69.82±2.67 | 142.56±4.9 21 | Zero |
| Mould cfu/ml | 0.01±0.001 | 2.82±0.030 | 4.96±0.74 | 3.89± 0.615 | Zero |

CONCLUSION AND PRESCRIPTIVE MEASURES

- This study opine that In order to address the environmental and health problems faced in Lagos and other cities with high inflow of migrants, efforts to improve the socio-economic situations of rural and semi-urban areas as well as transit towns should receive greater attention.
- It is important that safety and quality control measures be put in place and also enforced to minimize risks associated with pollutants both on man and the larger environment.
- Policy plans for the place(s) of destination of migrants should also be extended to the places of origin to ensure sustainability of the resources (including humans) available in Nigeria.
- Functional facilities such as pipe borne water, electricity, tertiary institutions, and industries should be provided in the rural areas. NGOs such as Community Development Associations should be empowered to set up Agro-allied industries in the rural areas in order to provide job opportunities and minimise rural-urban migration.

WAY FORWARD

- It is necessary to assess the effects of housing policy on industrial growth and environmental sustainability in Nigeria;
- Capacity building scheme on appropriate types and funding of environmental management programmes is required in developing nations.

THANK YOU AND GOD BLESS U ALL!