Slums As Expressions of Social Exclusion: Explaining The Prevalence of Slums in African Countries

Ben C. Arimah
United Nations Human Settlements Programme (UN-HABITAT)
Nairobi, Kenya
Outline of Presentation

1. Introduction

2. Slum Policies in African Countries

3. Measuring the Incidence of Slums in African Countries

4. Empirical Framework for Explaining the Prevalence of Slums

5. Factors Explaining the Prevalence of Slums in African Countries

6. Conclusion: Some Policy Implications
Introduction

Aim of the Paper

• To account for variations in the prevalence of slums among African countries using data drawn from the global assessment of slums undertaken by the UN-HABITAT

• The availability of such data provides a unique opportunity to relate slums— which are physical manifestations of social exclusion – to various aspects of national development
Specific Questions to be Addressed

- What factors apart from the rapid pace of urbanization explain inter-country differences in the prevalence of slums?

- What is the nature of the linkages between the incidence of slums and the macroeconomic environment?

- What is the link between urban development policy and proliferation of slums?

- What role does the regulatory framework governing the delivery of residential land play in the formation and proliferation of slums?
Specific Questions to be Addressed (contd.)

• Do countries with lower levels of inequality and good governance have a lower incidence of slums?

• Do countries in armed conflict situation experience a higher prevalence of slums?
Slum Policies in African Countries

- Policy of benign neglect
- Forced eviction and slum clearance
- Resettlement/relocation programmes
- Slum upgrading programmes
  - Cities without Slums action plan under the auspices of the Cities Alliance
  - Slum Upgrading Facility— UN-HABITAT
- Security of tenure and the enabling approach to slums and squatter settlements
Measuring the Incidence of Slums in African Countries

• **Defining Slums**

  The operational definition of a slum household is that proposed by UN-HABITAT, which is a group of individuals living together under the same roof and lacking one or more of the following conditions:

  - Access to improved water;
  - Access to improved sanitation;
  - Structural quality/durability of dwelling;
  - Sufficient living space that is not overcrowded; and
  - Security of tenure

• A slum can then be operationally defined as an area or settlement of some scale which to varying degrees lacks a combination of the above conditions.
Operational Definitions

Access to improved water

- A household is considered to have access to improved drinking water if it has at least 20 litres/person/day for family use, at an affordable price of less than 10% of total household income
  - Piped connection to house or plot
  - Public stand pipe serving no more than 5 households
  - Bore hole
  - Protected dug well
  - Protected spring water
  - Rain water collection

Access to improved sanitation

- A household is considered to have access to improved sanitation if an excreta disposal system, either in the form of a private toilet or public toilet is shared with a reasonable number of people, is available to the household
  - Direct connection to public sewer
  - Direct connection to septic tank
  - Pour flush latrine
  - Ventilated improved pit latrine
Operational Definitions (contd.)

**Structural quality/durability of dwelling**

- A house is considered durable if it is built on a non-hazardous location and has a permanent structure adequate enough to protect its occupants from extremes of climatic conditions such as rain, heat, cold and humidity
  - Permanent building materials are used for walls, roof and floor
  - Compliance with building codes
  - Dwelling is not in a dilapidated state
  - Dwelling is not in need of major repairs
  - Dwelling is not located no or near toxic waste
  - Dwelling is not located on flood plain
  - Dwelling is not located on steep slope
  - Dwelling is not located on in a dangerous right of way

**Sufficient living space that is not overcrowded**

- A dwelling unit is considered to provide sufficient living area for household members if there are fewer than three persons per habitable room
  - Not more than two persons per room
Operational Definitions (contd.)

Security of tenure

• Security of tenure is the right of all individuals and groups to effective protection by the state against arbitrary unlawful evictions

• Evidence of documentation that can be used as proof of secure tenure status, as indicated by:
  - Households with formal title deeds to both land and residence
  - Households with formal title deeds to either land or residence
  - Households with enforceable agreements or any document as proof of a tenure arrangement
  - De facto or perceived protection from forced evictions
Methodology for Measuring the Prevalence of Slums

• The methodology adopted is one that estimates the percentage of a country’s urban population living in slums using 2001 as the base year.

• To achieve this, over one million household records from over 310 sources, which include: DHS, MICS, JMP, and other household surveys.

• Review of responses to questions on: water, sanitation, structural quality of housing, overcrowding and security of tenure.

• Interpretation of responses according to agreed slum definition criteria.
Methodology for Measuring the Prevalence of Slums (contd.)

- Identify slum households by tallying households lacking one or more of the 5 slum criteria—starting with lack of improved water and ending with secure tenure.

- The sequential order of the estimation procedure prevented the double counting, as each household was eliminated after being evaluated against a given indicator.

- If a household lacked both improved water and sanitation, it was counted once. Likewise, households lacking all five acceptable conditions were counted once.

- The order of the estimation procedure approximates the availability of data, with lack of access to improved water and sanitation being the major classifiers of slum households, while information on secure tenure was the least available.
### Process of Slum Dweller Estimation: Adding Attributes and Avoiding Double-Counting

<table>
<thead>
<tr>
<th>Order of estimation</th>
<th>Indicator</th>
<th>% of Households</th>
<th>Cumulative % of households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Lack of Improved water</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Step 2 ‘OR’</td>
<td>Lack of improved Sanitation</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Step 3 ‘OR’</td>
<td>Lack of durable Housing</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td>Step 4 ‘OR’</td>
<td>Lack of sufficient living area</td>
<td>5</td>
<td>65</td>
</tr>
<tr>
<td>Step 5 ‘OR’</td>
<td>Lack of secure tenure</td>
<td>5</td>
<td>70</td>
</tr>
</tbody>
</table>
### Variations in the Prevalence of Slums (2001)

<table>
<thead>
<tr>
<th>Countries with a very high prevalence of slums (&gt; 80%)</th>
<th>Countries with a high prevalence of slums (60-79%)</th>
<th>Countries with a moderate prevalence of slums (40-59%)</th>
<th>Countries with a low prevalence of Slums (&lt;40%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola, Benin, CAR, Chad, Congo, Equatorial Guinea, Ethiopia, Guinea Bissau, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Sierra Leone, Sudan, Tanzania, Togo, Uganda (42.6%)</td>
<td>Botswana, Burkina Faso, Burundi, Cameroon, Comoros, Cape Verde, Cote d’Ivoire, Eritrea, Gabon, Gambia, Ghana, Guinea, Kenya, Nigeria, Senegal, Zambia (34%)</td>
<td>DRC, Lesotho, Liberia (6.4%)</td>
<td>Algeria, Egypt, Libya, Morocco, Namibia, South Africa, Tunisia, Zimbabwe (17%)</td>
</tr>
</tbody>
</table>
Percentage of urban population living in slums
Inter-Country Variations in the Prevalence of Slums

- The very high prevalence of slums in the first two groups of countries is a reflection of their low levels of income, high levels of poverty, rapid pace of urbanization and other factors that are not readily apparent.

- A closer examination of the group of countries with a high prevalence shows that some high-income countries such as Botswana and Gabon have a high percentage of slum dwellers (61% and 66% respectively).

- Countries with a low incidence of slums have relatively high levels of income, more stable economies, lower rates of poverty and moderate to low urban growth rates.

- The low prevalence of slums particularly in Tunisia, Egypt, Morocco and South Africa reflect long-term political commitment to slum upgrading, slum prevention and service provision for the urban poor— all of which tend to reduce social exclusion and promote social cohesion.
Empirical Framework for Explaining the Prevalence of Slums

- The model hypothesizes that inter-country variations in the prevalence of slums can be accounted for by differences in the:
  - Macroeconomic environment;
  - Rate of urbanization;
  - Inherited urban planning tradition and official attitude toward slums;
  - Regulatory framework governing the delivery of planned residential land;
  - Investment in infrastructure;
  - Incidence of armed conflict; and
  - Quality of governance
Empirical Framework for Explaining the Prevalence of Slums (contd.)

- Formally, this can be expressed as:

\[ SLUM = f(MACRO, URBAN, PLAN, REG, INFRAS, ARMCON, GOVERN) \]

- Where:
  - \( SLUM \) is the percentage of a country’s urban population living in slums;
  - \( MACRO \) defines the macroeconomic environment;
  - \( URBAN \) measures the rate of urbanization;
  - \( PLAN \) is indicative of the inherited urban planning tradition;
  - \( REG \) describes the regulatory framework underlying the delivery of planned residential land;
  - \( INFRAS \) measures investment in infrastructure;
  - \( ARMCON \) indicates the incidence of armed conflict;
  - \( GOVERN \) is a measure of the quality of governance.
**Specification of Explanatory Variables**

- **Macroeconomic Environment**
  - Income $\rightarrow$ GDP per capita
  - Economic growth $\rightarrow$ annual growth in GDP per capita
  - Country’s financial depth $\rightarrow$ money supply as % of GDP
  - Inequality in the distribution of income $\rightarrow$ GINI index
  - External debt burden $\rightarrow$ Heavily Indebted Poor Countries (0, 1) and debt service to export ratio

- **Urbanization**
  - Urban growth $\rightarrow$ Annual growth in urban population
  - Rural-urban migration $\rightarrow$ Difference between urban population growth and total population growth
Specification of Explanatory Variables (contd.)

- Inherited Urban Planning Tradition
  - Country is former British colony (0, 1)

- Regulatory Framework Governing the Delivery of Residential Land
  - Number of days to register a property
  - Cost of registering a property as a % of its value

- Investment in Infrastructure
  - Paved roads as a % of total road network
  - Public expenditure on health as a % of GDP

- Armed Conflict
  - Country experienced armed conflict in the last decade (0, 1)

- Governance
  - Aggregate measure of the extent of government effectiveness
Factors Explaining the Prevalence of Slums in African Countries

- Results of the multiple regression models are summarized as follows:

**Macroeconomic Environment**

- **Income**: A 1% increase in GDP per capita will reduce the incidence of slums by between 7.0 and 7.3%.

- **Economic growth**: The impact of economic growth on the incidence of slums is counter-intuitive. The higher the level of economic growth the higher the incidence of slums. A 1% increase in economic growth is associated with a 3.8% increase in the prevalence of slums.

- **Financial depth**: A 1% increase in the supply of money will reduce the incidence of slums by 0.26%.

- **Income inequality**: An increase of 1% in the GINI index will increase the prevalence of slums by between 0.39 and 0.47%.

- **External debt burden**: Being a highly indebted poor country will increase the incidence of slums by more than 18%.
Factors Explaining the Prevalence of Slums in African Countries (contd.)

- **Urbanization**: Urban growth emerges as a key factor explaining the prevalence of slums. A 1% increase in urban population growth will occasion an increase of 1.8% in the prevalence of slums.

- The pernicious effect of urbanization on the incidence of slums is indicative of the peculiar nature of the process of urbanization in SSA *vis-à-vis* developed and other developing regions. In many parts of SSA, urbanization is occurring *without development* or with limited development.
Factors Explaining the Prevalence of Slums in African Countries (contd.)

- **Regulatory framework governing the delivery of planned residential land**
  - Countries in which the land registration process is characterized by highly bureaucratic procedures, have a higher percentage of their urban population residing in slum and squatter settlements.
  - The regression coefficient implies that a 1-day increase in the duration it takes to complete the procedures for registering a property will increase the prevalence of slums by 0.04%.
  - The land registration process is exclusionary, time-consuming and highly circuitous. In Nigeria and Tanzania for instance, this takes about 274 and 334 days with official fees accounting for 27 and 12.2% respectively of the property value.
  - In such situation, poor and low-income families have very limited housing options, which in most cases, lead to slum-like conditions.
Factors Explaining the Prevalence of Slums in African Countries (contd.)

- **Investment in infrastructure**
  
  - **Paved roads**: A 1% increase in paved roads will reduce the incidence of slums by between 0.32 and 0.38%.
  
  - This is a clear indication of the beneficial role that improved road network can play in reducing the level of social exclusion by improving the access of residents of slum and squatter settlements to various employment and activity nodes.
  
  - **Health expenditure as percentage of GDP**: An increase of 1% in health expenditure will reduce the prevalence of slums by between 5.1% and 5.7%.
  
  - Investment in infrastructure can also be seen as a way of legitimizing informal settlements or conferring *de facto* security of tenure, thereby encouraging families to gradually improve their houses.
  
  - Furthermore, investment in trunk infrastructure for access, water, sanitation and power supply can serve as a means for preventing the formation of new slums.
Conclusion: Some Policy Implications

• There is a need to improve the economic well-being of poor and low-income households, particularly in countries where inequality in the distribution of income is high.

• This could be achieved partly via income-generating programmes and support livelihood strategies to cater for those within the lowest 20% of the income distribution.

• The increase in economic growth being experienced by many African countries need to be better managed, and in part, be channelled towards improving the living and housing conditions of slum dwellers.

• Given that rapidly urbanizing African countries have a higher incidence of slums, cities need to adopt the principles of sustainable urbanization as a means of managing and guiding the process and consequences of urban development.

• Authorities in conjunction with relevant professional associations need to identify and remove those aspects of the regulatory framework that constitute bottlenecks and conflict points in the delivery of planned residential land, especially for low-income groups.
Thank you