A new global data collection process for understanding human development in slums

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An “Information Crisis”

Many of the phenomena and processes that characterize urbanization continue to be poorly documented,

The depiction of the city, its problems and its potential still remain sorely distorted.

Most cities in the developing world are suffering from an information crisis, which is seriously undermining their capacity to develop and analyse effective urban policy.
The SDI/SFI Collaboration

Clean & Organize SDI settlement profile data on

7,000 slums worldwide

Create a real-time intuitive process for analyzing data at many levels of analysis.

Create simple data entry, accuracy checks, immediate visualization and editing for each settlement.

Exploit handheld device technology to obtain time and spacial coordinates, settlement boundaries, services points.
Features of (new) data collection

Data must serve community purposes.

Data must be verifiable.

Data collection evaluates quality of services as monetary cost and use of time

Data evaluates collective efficacy, human and social capital.

Data is designed to be followed over time and enable cross-community learning.
Enable many uses of slum census data

Community

Enable the creation of verifiable information

Local authorities, land owners, utilities

Enable effective, evidence-driven urban planning

National Governments

International Agencies

Enable knowledge accumulation and a scientific approach to human development

Research Community
SLUMS OF THE WORLD

SELECT A COUNTRY
ABOUT THE DATA

ABOUT THE PROJECT

This interactive is the beginning of an open-ended process, by which informal communities can establish a set of best practices to collect data about themselves, train and educate their people, better articulate their needs and test new solutions. Understanding and leveraging this data may lead to breakthroughs in the development processes from the bottom up.

With funding from the Bill and Melinda Gates Foundation, Shack/Slum Dwellers International (SDI) and the Santa Fe Institute (SFI), collaborated to create this visualization. SDI and SFI have worked together to aggregate all of SDI’s historic data characterizing 7,000 of the world’s informal settlements and slums. The purpose of this interactive is to inform SDI partners and scientific research and to serve as a resource for general public interest. This visualization will continue to be updated as data becomes available for additional countries.

ABOUT THE DATA

The data shown is the aggregation of Settlement Profiles, which Slum/Shack Dwellers International (SDI) has collected over the last five years. SDI collects this data through community meetings in which community members answer questions about life in each settlement. The Settlement Profile creates a general picture of the settlement through data. Additionally, the data helps prioritize issues on a city level and identify the most needy settlements.

ABOUT SHACK/SLUM DWELLERS INTERNATIONAL (SDI)

Shack/Slum Dwellers International is a network of community-based organizations of urban poor in 33 countries in Africa, Asia and Latin America. For more information, visit www.sdinet.org.

ABOUT THE SANTA FE INSTITUTE (SFI)

The Santa Fe Institute is a transdisciplinary research community that expands the boundaries of scientific understanding. For more information, visit www.santafe.edu.

CONTACT US

For questions or inquiries, please contact Joe Hand at hand@santafe.edu.
INDIA

Total Settlements: 45,691
Total Households: 124,578,012

SELECT A CITY

NIZAMABAD
People per water source: 6.6

WATER
People per water source:
- Max: 0.6
- Avg: 12.5
- Min: 52.1

DRAG AND DROP TO COMPARE

COMPARE
# TIRUVANNAMALAI

## Location
- Province: Ahmedabad
- Slum Population: 904,560
- Total Settlements: 866
- Total Households: 183,953
- Median Family Size: 4

## Basic Information

### Infrastructure
- Bus Stops: 603
- Police Stations: 608
- Fire Stations: 400
- % Households with Electricity: 88.7%

### Religion
- Religious Structures: 1,221
- Mosques: 338
- Average Residents per Mosque: 2,676.21
- Churches: 18
- Average Residents per Church: 50,253.33

### Community
- Libraries: 4
- Average Residents per Library: 226,140
- % Settlements with Library Access: 0.4%
- Markets: 598
- Average Residents per Market: 1,512.64

### Toilets
- Individual Toilets: 114,146
- Community Toilets: 4,417
- Residents per Toilet: 7.63
- % Settlements with Sewer: 83.9%

## Water
- Residents per Tap: 6.58
- Residents per Well: 15,869.47
- Residents per Water Source: 22

## Health
- % of settlements without hospital access: 89.9%
**TIRUVANNAMALAI**

**BASIC INFORMATION**
- Province: Ahmedabad
- Slum Population: 904,560
- Total Settlements: 866
- Total Households: 183,953
- Median Family Size: 4

**HEALTH**
- % of settlements without hospital access: 89.9%

**WATER**

**BODI**

**BASIC INFORMATION**
- Province: Ahmedabad
- Slum Population: 1,204,560
- Total Settlements: 745
- Total Households: 135,615
- Median Family Size: 3

**HEALTH**
- % of settlements without hospital access: 93.1%

**WATER**

**COMPARE**
# KAMWOKYA

## Location
- **City**: Kampala
- **Slum Settlements**: 32
- **Slum Population**: 852,635
- **Households**: 11,057
- **Median Family Size**: 4.5

## Basic Information
- **Residents Without Water**: 16,144
- **Water Pumps**: 6
- **Water Springs**: 7
- **Water Taps**: 22
- **Water Wells**: 2

## Water
- **Health Clinics**: 29
- **Households with Access to Clinic**: 5,160
- **Settlements Without Clinic**: 19
- **% Settlements Without Clinic**: 59.4%
- **% Households with Clinic**: 48.6%

## Infrastructure
- **Settlements with Electricity**: 17
- **Settlements with Roads**: 29
- **Total Roads**: 60
- **Bus Stops**: 256
- **Residents per Bus Stop**: 3,331

## Religion
- **Religious Structures**: 18
- **Mosques**: 13
- **Settlements with Mosque**: 13
- **Churches**: 5
- **Settlements with Church**: 4

## Toilets
- **Toilets**: 3,208
- **Settlements with Toilet**: 28
- **Residents per Toilet**: 266
- **Private Toilets**: 0
- **Public Toilets**: 7

## Threats
- **Settlements Under Threat of Flood**: 3
- **Settlements Under Threat of Eviction**: 1
Spatial Boundary Mapping
Slums of Kampala, Uganda
Without a common framework to organize findings, isolated knowledge does not cumulate.

Elinor Ostrom

*Science* 2009
THE WORLD BANK GROUP GOALS

END EXTREME POVERTY AND PROMOTE SHARED PROSPERITY