

Applications of poverty maps in urban planning

The use of census microdata
in the case of Liberia, in Costa Rica

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Research Aim

To provide a conceptual framework that enables urban planners to comprehend and visualize the effects of land-based actions on poverty reduction in order to inform decision-makers, using evidence-based poverty maps

Research Strategy



Specific Problem

Poverty maps are seldom used to analyse, simulate or monitor the implementation of social policies at a small geographical scale, or as instruments to allocate resources into targeted small administrative units

Specific Objective

To analyse potential applications of poverty maps in urban planning, illustrated with the results of piloting a proposed tool in the medium-sized city of Liberia, in Costa Rica

Urban Planning

Aspects of urban governance that deal with the built environment, land-based affairs and the ways in which land is used, managed and controlled:

- Design of norms and regulations
- Diagnosis and simulation
- Assistance and information in decision-making
- Implementation and monitoring of land-based actions
- Coordination of views and efforts of different actors involved

Tool for Strategic Territorial Planning

TSTP™

The TSTP™ is an Internet-based information
tool

that presents urban-related indicators
disaggregated at small geographical scale
for monitoring land-based actions
related to urban planning

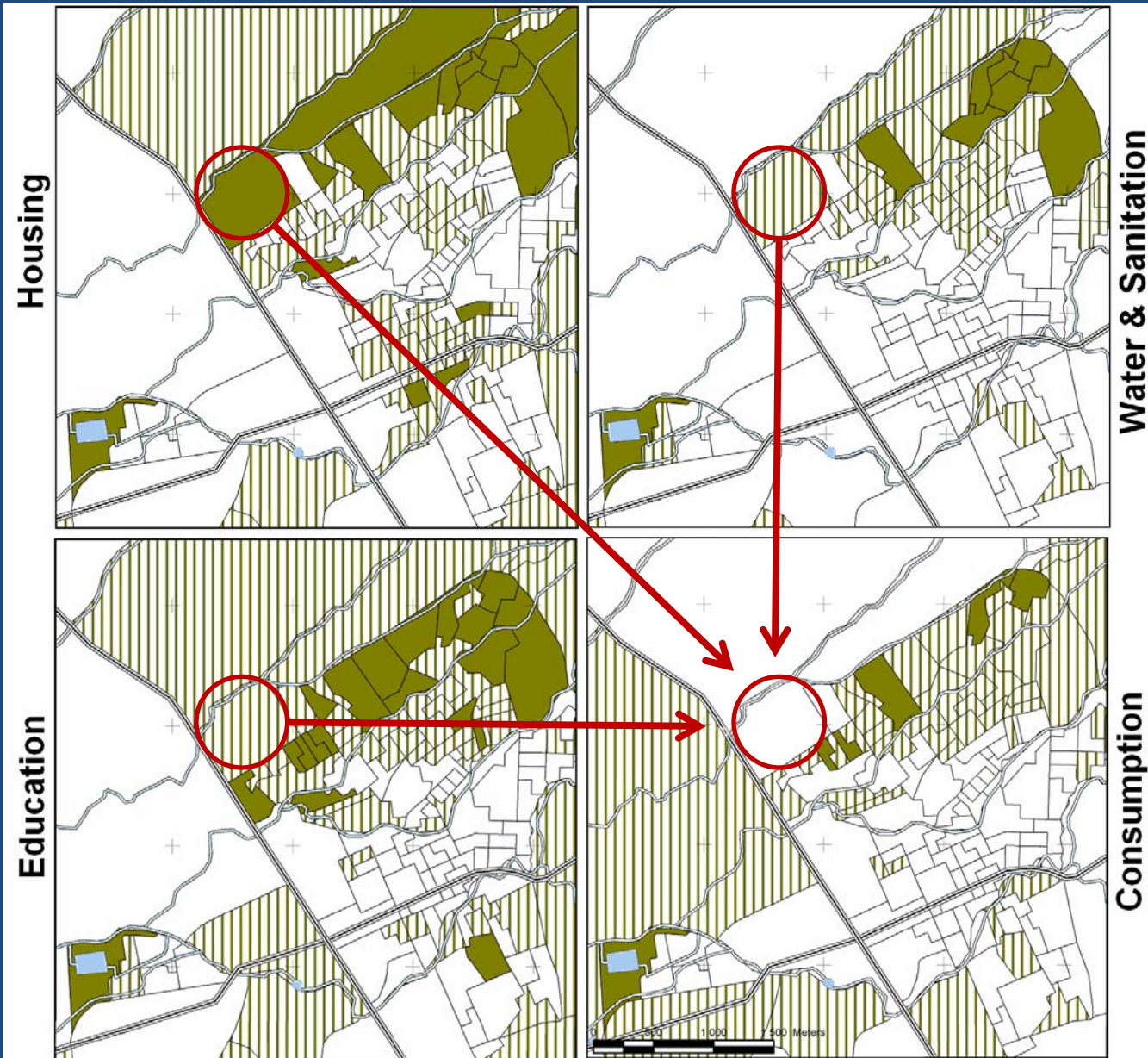
Objectives of the TSTP™

- To support the use of evidence in decision-making processes
- To support the integration of land-based actions
- To promote area-based targeting strategies
- To support a long-term approach to urban planning
- To promote popular participation
- To strengthen accountability & transparency in urban planning

Applications of the TSTP™

1. Diagnosis
2. Simulation
3. Decision-making
4. Monitoring

1. Diagnosis – single indicator

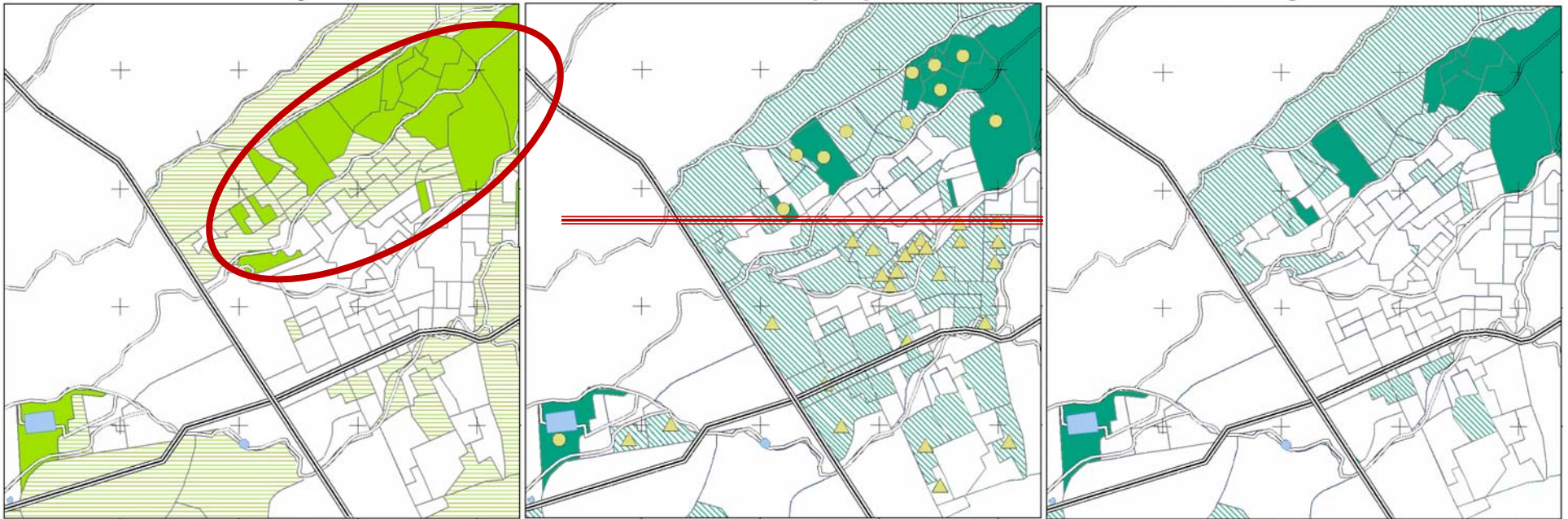


1. Diagnosis – compounded indicators

Total Poverty

Territorial Inequality

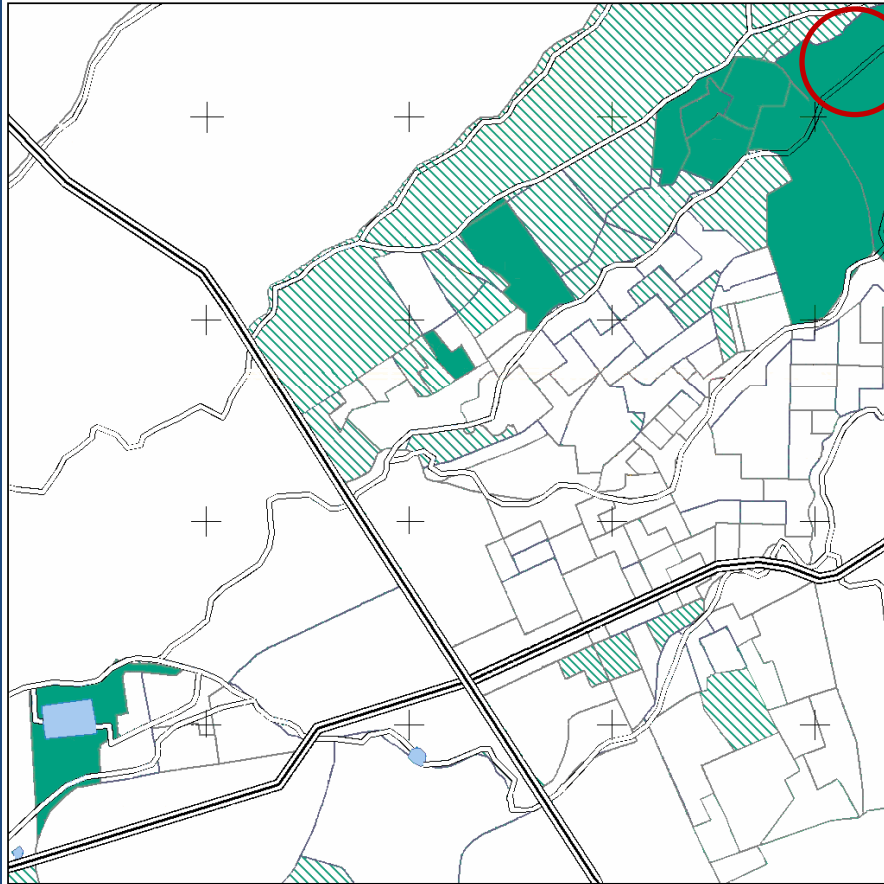
Target Area



2. Simulation

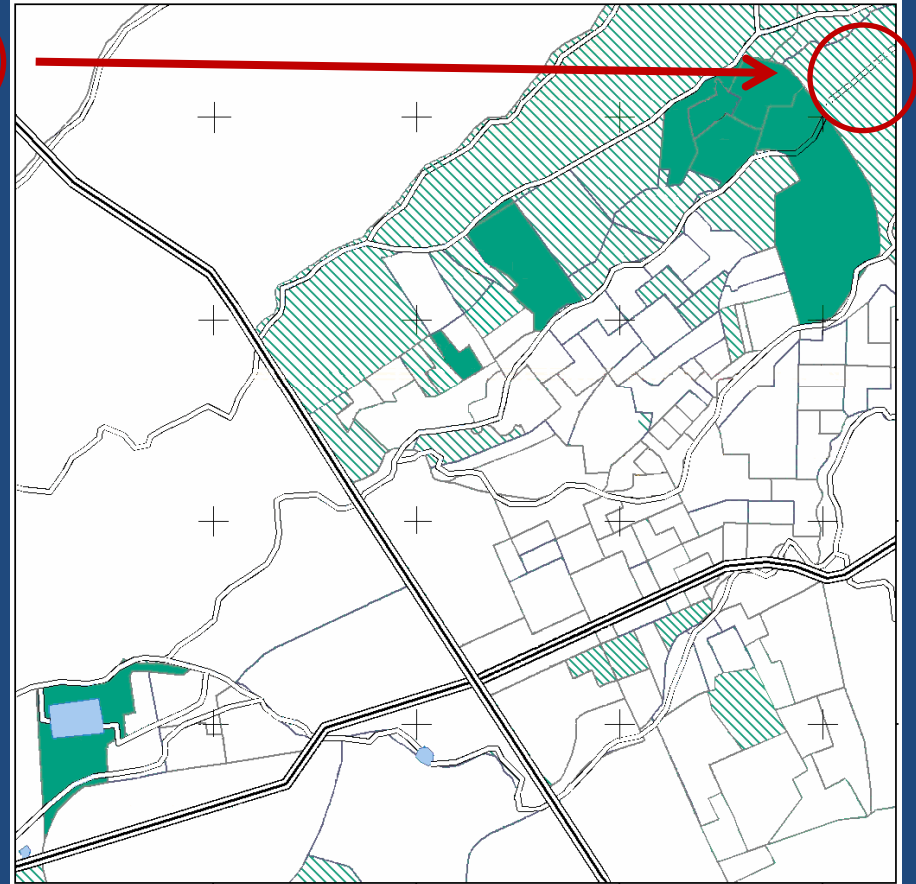
Target Area: Tract 1130

Current: 3.2% households with housing-related needs

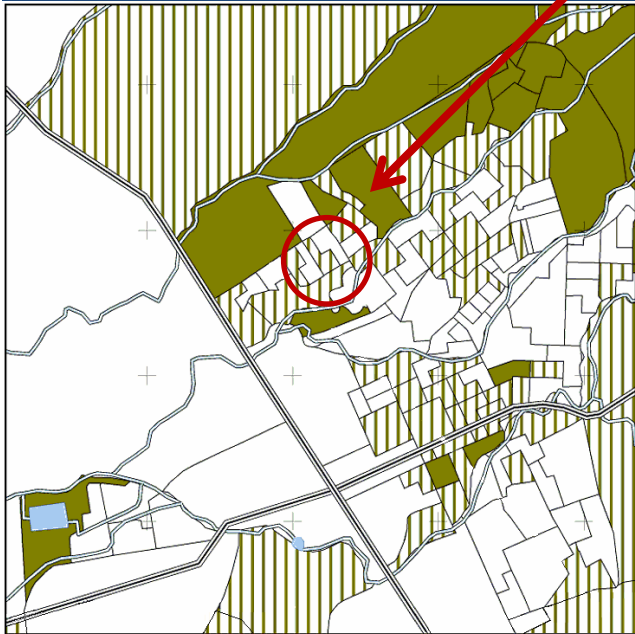
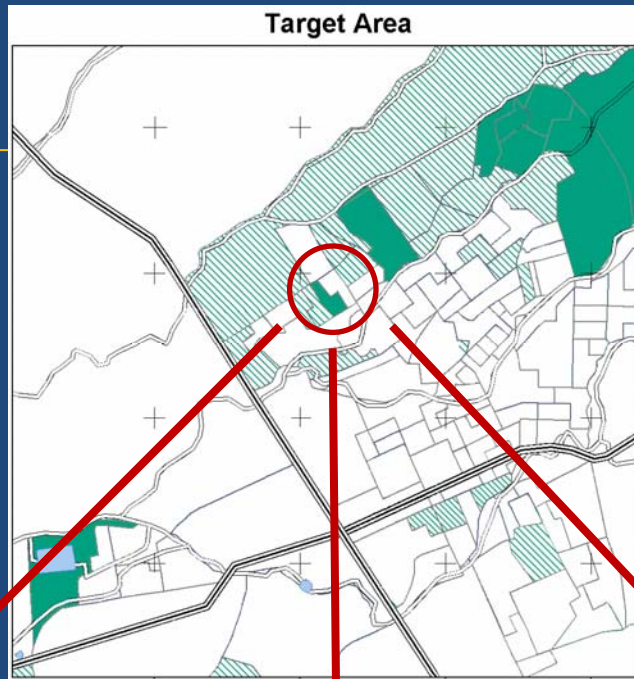


Target Area: Tract 1130

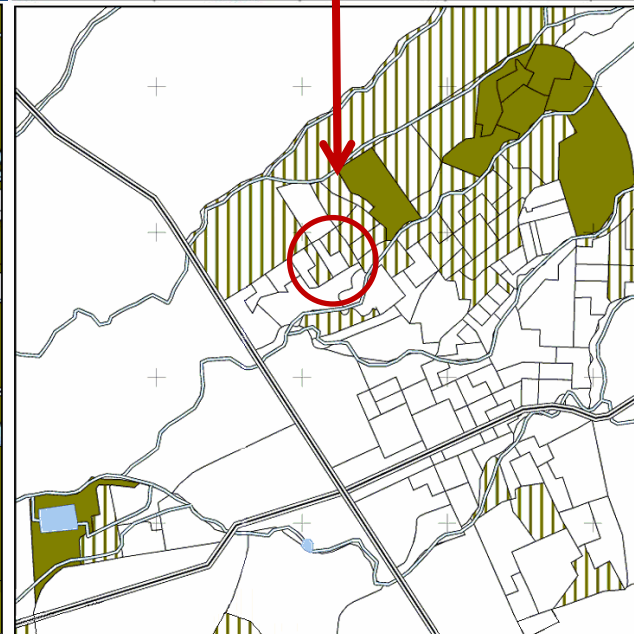
Simulation: 1.98% households with housing-related needs



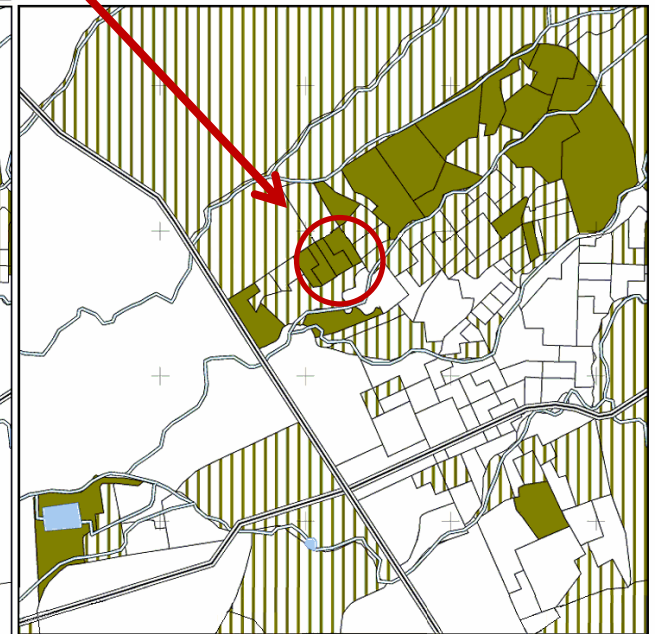
3. Decision - making



Housing

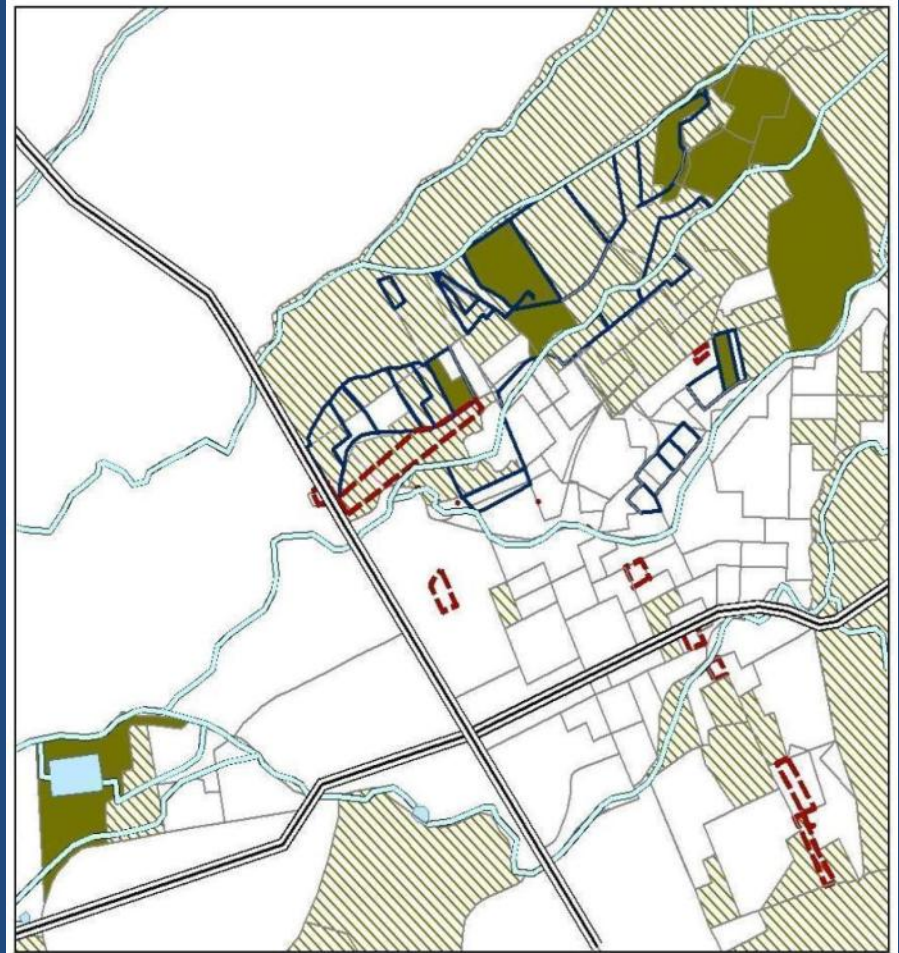
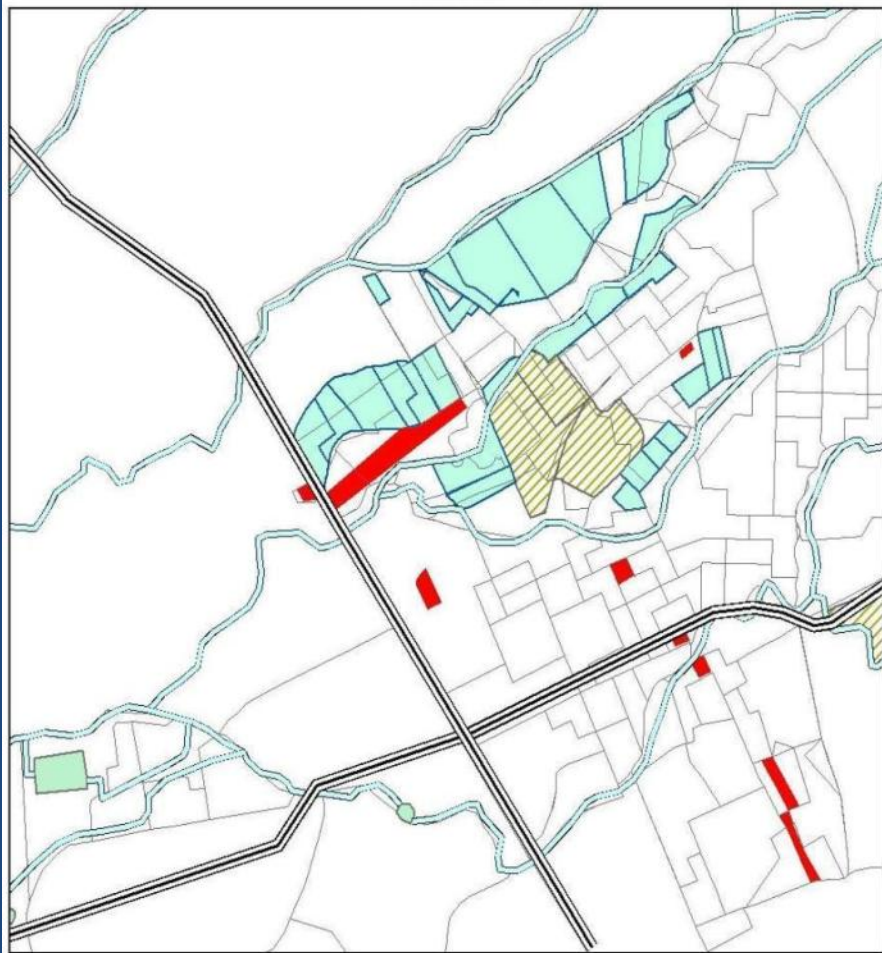


Water & Sanitation



Education

4. Monitoring



Conclusions

- The combination of poverty and inequality maps helps to identify deprived urban areas with clear boundaries and a limited territory
- The TSTP™ helps propose actions that may lead to prevent failed investments or overcome their current situation, with awareness of the resources, capacities and limits
- The TSTP™ can be used to promote dialogue between different actors involved in urban planning to reach a feasible pro-poor plan of actions
- The TSTP™ can be used to pay more attention to the long-term effects of the implementation of social policies by means of urban planning

Conclusions

There is a need to further develop statistical and cartographical information systems that reach small administrative units in cities of the South and use them to promote the dialogue between actors involved in urban planning, in order to attract popular participation, and enhance accountability and transparency of decision-making processes in a way that proposed land-based actions respond to local needs, including those of the poor

Thanks!

Functions of the TSTP™

1. Diagnosis
2. Simulation
3. Navigation

Diagnosis: single indicators

Country: Costa Rica
 City: Liberia
 Better Performance Filter

Indicators

- Education
- Water & Sanation
- Consumption
- Housing

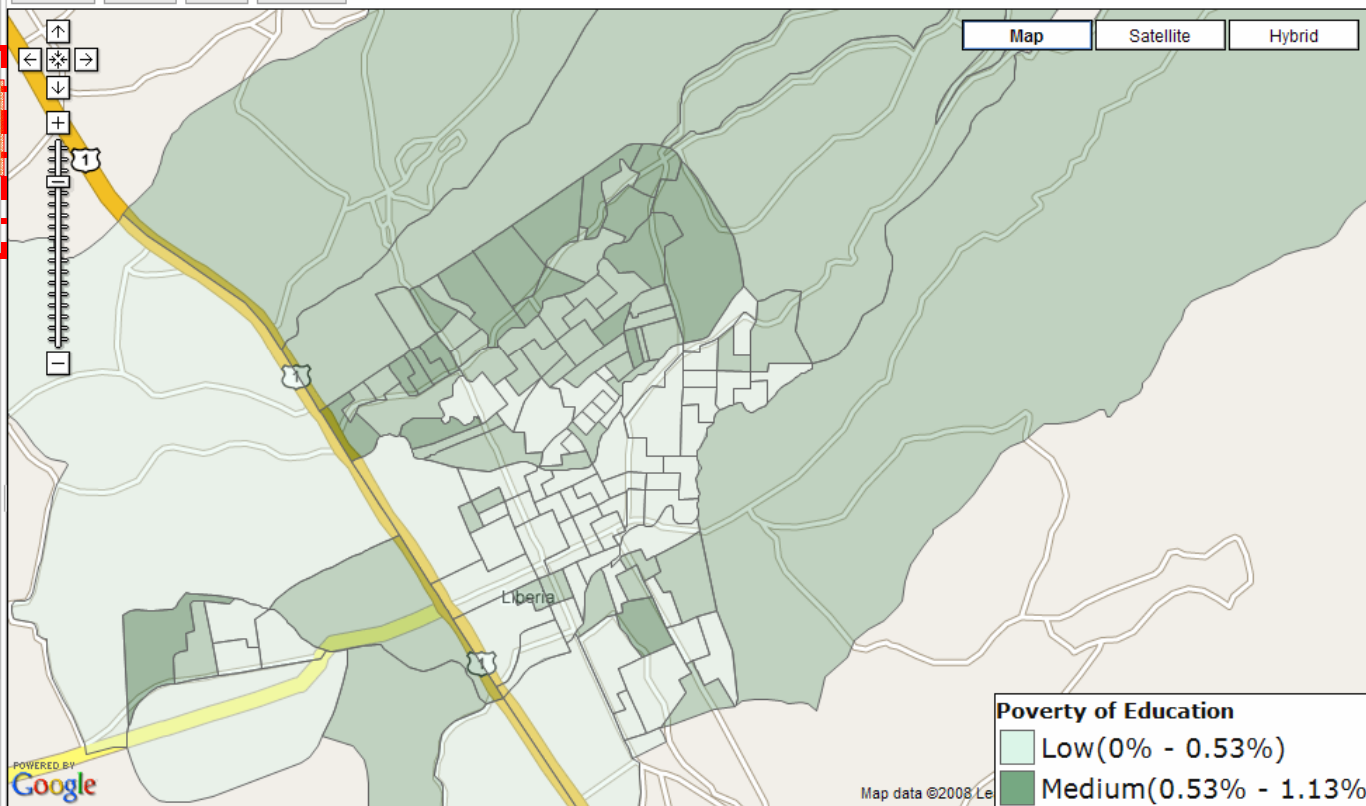
- Total Poverty (TP)
- Territorial Inequality (TI)
- Targeted Areas (TA)

Results :

Tract : 50101038

Indicator	% Poor	# Poor
Education	1.5926%	1507
Water & Sanation	0.7092%	987
Consumption	1.3514%	1110
Housing	1.8116%	7901
Compounded Indicator	Tract Value	City Avg.
TP	1.4407	0.00
TI	1.8722	1.14
TA	Medium	Medium

Tutorial Home Print Log Out



This education poverty-map shows the proportion of households per territorial unit (territorial unit) that needs in relation to those in the city as a whole. Its variables are: i) low attendance (households with at least one member aged 7-17 not attending school); and ii) low achievements (households with at least one member aged 7-17 attending school regularly, but behind by at least 2 years).

Source : UBN database of Liberia, Census 2000, INEC, in October 2005.

Diagnosis: compounded indicators

Country: Costa Rica
 City: Liberia
 Better Performance Filter

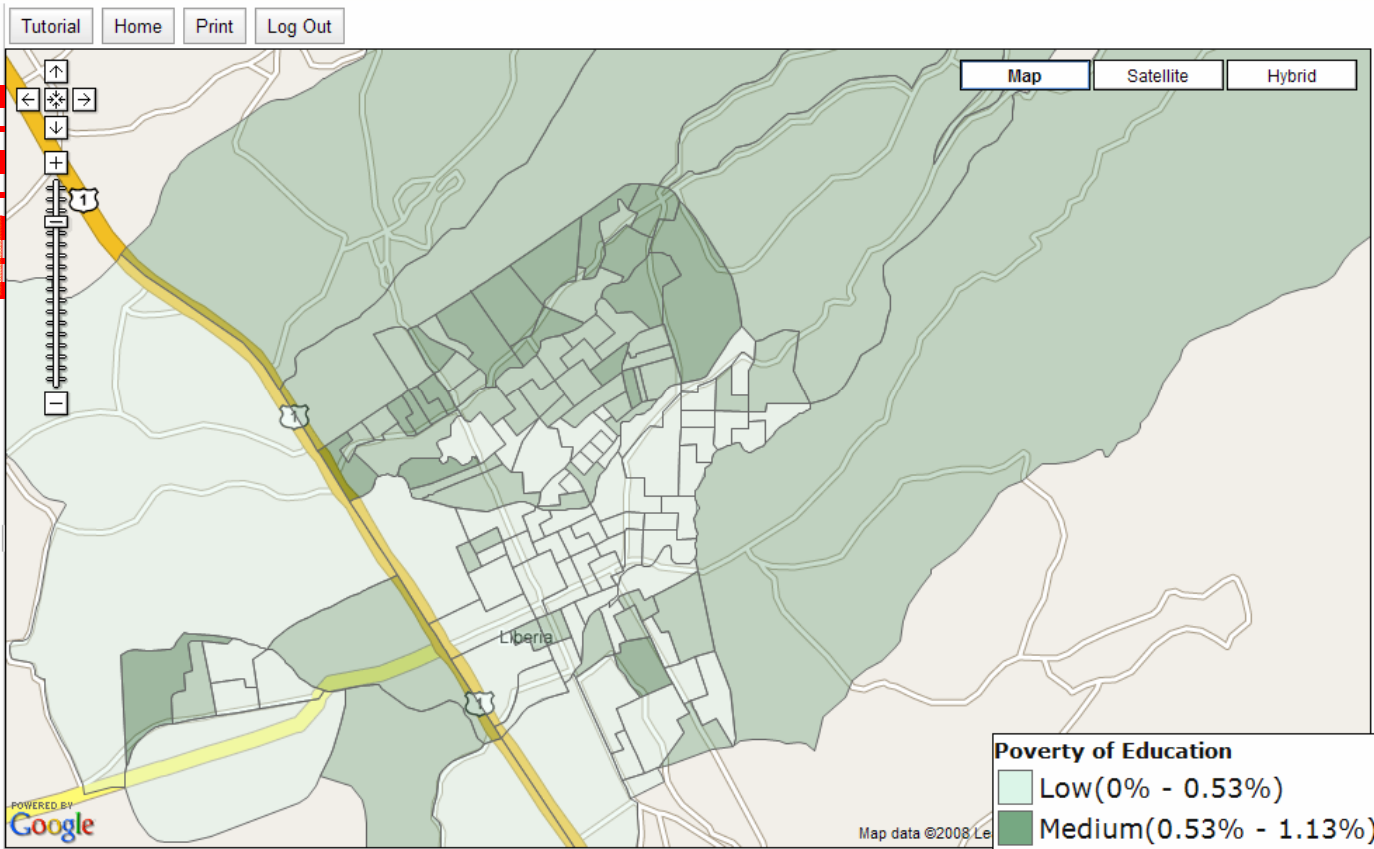
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Simulation

Country
 City
 Better Performance Filter

- Indicators**
- Education
 - Water & Sanation
 - Consumption
 - Housing

- Total Poverty (TP)
- Territorial Inequality (TI)
- Targeted Areas (TA)

Results :

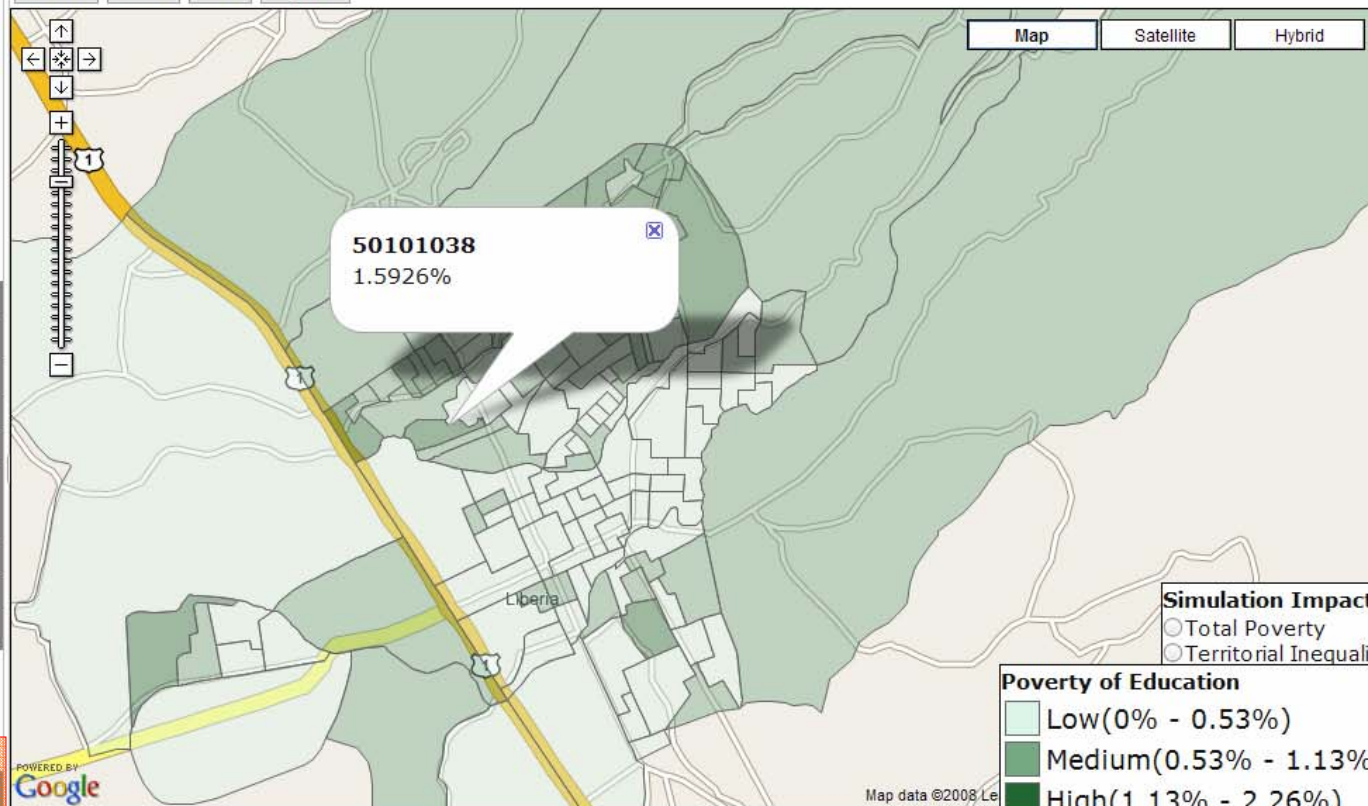
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Simulation : Education

Tract	Current %	Simulation %
50101038	1.5926%	<input type="text" value=""/> %

Simulation: Education



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Navigation

Country

City

Better Performance Filter

Indicators

- Education
- Water & Sanation
- Consumption
- Housing

- Total Poverty (TP)
- Territorial Inequality (TI)
- Targeted Areas (TA)

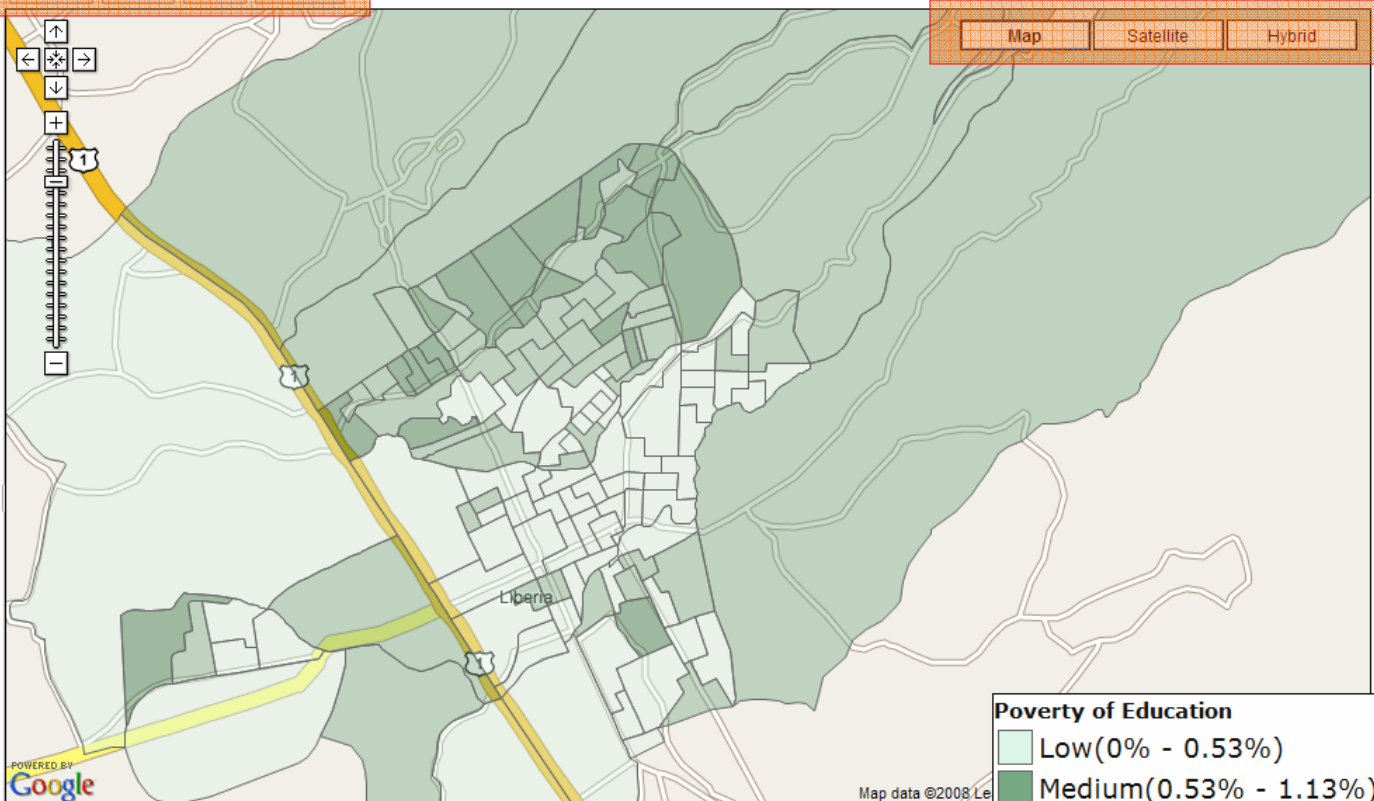
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Tutorial Home Print Log Out

Map Satellite Hybrid



Poverty of Education

- Low(0% - 0.53%)
- Medium(0.53% - 1.13%)
- High(1.13% - 2.26%)

Average : 0.64%
 at least one member aged 7-17

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