Enhancing Public Policy From Space

- Free public available satellite images provide current updates to our understanding of development.
- Tagging these images and combining them with existing survey data and Machine Learning they can accurately predict key indicators for public policy at very local levels.
- Below the approach is used to predict average PMT scores for inclusion in the urban Productive Social Safety nets Program (PASP).

Methodology

A. City is subdivided into small areas

B. All structures are tagged for visible characteristics plus some subjective observations to turn images into data.

C. Tagged data, public available GIS data, and survey data combined via Machine Learning makes an accurate prediction model.

First stage targeting for the urban Productive Social Safety nets Program

Background: The project was funded by the World Bank in order to support the Urban Productive Safety Nets Program (PASP) in identifying neighborhoods in most need of assistance.

Future use: The project also serves as proof of concept, as the data and method can be applied to a other areas of interest (example: malnutrition, poverty, electricity use, ownership of cars, school aged population). Further, as new images become available continuously the analysis can easily be updated and used to track changes over time. Using it for impact assessments would also be straight forward.

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