



Poverty Estimates in Mozambique and Zimbabwe Using High Resolution Satellite Data

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The UN high-level panel on post-2015 development goals called for a ‘data revolution’ to help overcome the poor quality of statistical data available in developing countries. However, most countries cannot afford to increase the number of surveys that they conduct to track all aspects of the Sustainable Development Goals. The Geospatial Livelihoods Group at the University of Edinburgh are working on several projects to examine how very-high spatial resolution satellite data could be used to update poverty estimates when survey and census data are not available. Earth Observing Satellites have been collecting imagery of the Earth’s surface since 1972. We examine how satellite data could be linked with household and census datasets to provide information on socioeconomic conditions. This internship project would work with Dr. Gary Watmough and Peter Hargreaves (3rd year PhD student) to support analysis in Mozambique and Zimbabwe. Tasks would include: (1) using existing land cover classification process trees developed in Mozambique and Zimbabwe to classify new imagery; (2) using an Object based image analysis approach applied to 50cm resolution satellite data in to identify building footprints and classify the building roof materials (3) linking these to survey data available for the regions.

