WorldPop Program
Erik Wetter, PhD

FLOWMINDER.ORG
What is it: Improving the spatial demographic evidence base for low- and middle income countries (LMIC).

- We partner with statistical agencies, health ministries and international agencies to assemble and harmonize existing spatial demographic data.
- We develop scalable methods and models for integrating ancillary data sources to complement and fill data gaps in census.
- Integrating new technologies, including high resolution satellite imagery and mobile data.
- Publish fully documented, peer-reviewed methods and make outputs open access.

Open access archive of spatial demographic datasets
Central and South America, Africa and Asia
Transparent and shareable methods
Support development and health applications

www.worldpop.org.uk
How does it lead to strengthening national statistical capacity and/or contribute to the SDG 2030 agenda

- National **census data** will continue to be our most important data source.
- But the 2015-2030 SDG period typically includes **just one census datapoint**
- We are using other available (survey, satellite, mobile) datasets to fill the gaps and produce **updated estimates on population characteristics**.
How does it work: Bangladesh wealth index example

GPS-located survey cluster data

Geospatial covariate layers (satellite, mobile data)

Socioeconomic data (1km x 1km)

Observed cluster-level variation represented by:
1. Sampling model (e.g. binomial)
2. Geospatial covariates (fixed effects)
3. Spatial covariance (random effects)
4. Gaussian noise term