

## **Measuring the value of high quality data in the implementation of SDGs: a study case in Southern Malawi**

In 2015 the United Nations set 17 Sustainable Development Goals (SDGs) that target the main challenges currently faced by the Earth and Society. The achievement of these goals has been shown to rely on the availability and improvement of data quality, thus allowing appropriate public policies to be put in place. Even though uncertainties in policy-making could be reduced through the availability of higher quality data, many countries still don't have the necessary information due to political instabilities or lack of investments. In this context, initiatives such as the GRID3 (Geo-Referenced Infrastructure and Demographic Data for Development) have been conceived, where low and middle income key countries are supported in the development and management of high-resolution geo-referenced data on settlements, boundaries and population. The present research aims to measure how valuable it is to have higher quality data in the implementation of a specific humanitarian policy. For this, we use AccessMod, a tool developed by the World Health Organization (WHO) that analyzes accessibility and geographic coverage of health facilities to a specific population. In order to measure a proxy to the Value of Information (VOI), we compare the outcomes of using different input data on the implementation of a health system plan in the Southern region of Malawi. We vary both population, in terms of administrative level, census base year and resolution, and road network data, where we use three different sources. The main results show that: (i) higher quality road network data has a striking impact on the investment of new health facilities, (ii) having higher resolution population data reduces the relative error in terms of residual population (population not covered by health services), (iii) outdated population data (based in an older census) may lead to the misplacement of health facilities by having catchment areas where no settlements are found, & (iv) population data at lower administrative unit levels prevent unnecessary investment in health facilities. Finally, the results found could have an even more important impact in other countries, in particular in the African continent, where Malawi has been shown to be an exception in terms of data quality and availability. Hence, more investment in the availability of higher quality data has a crucial impact in reaching the targets set in the SDGs and in implementing appropriate public policy.