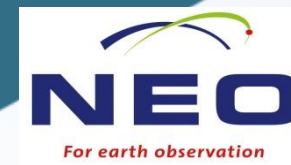


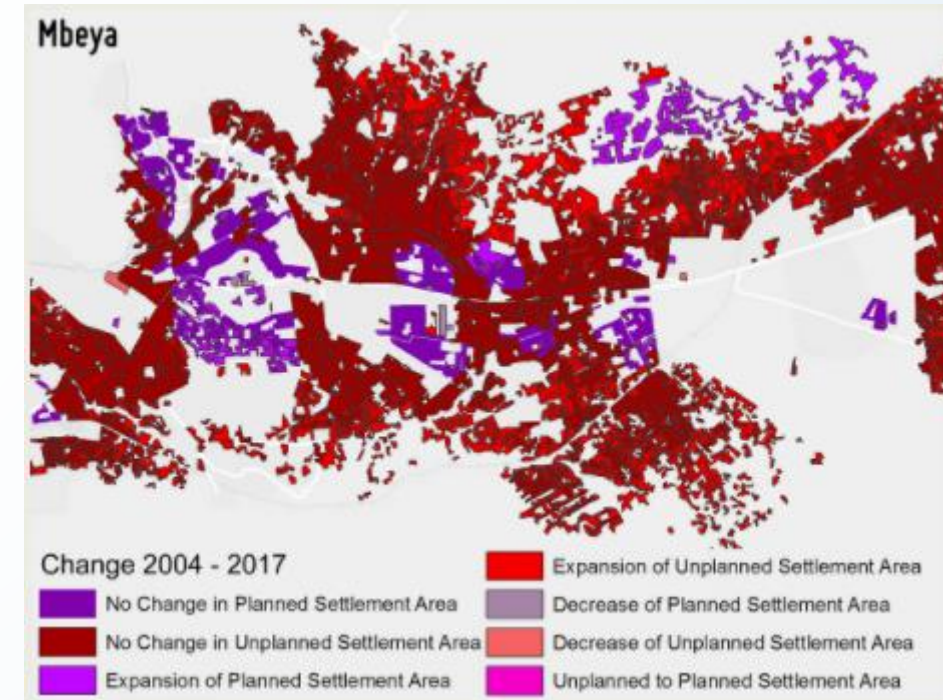
# EO services contributing to SDGs

## Informal settlement mapping



- User: city planner, policy makers, hazard management department
- Challenge/Needs: The haphazard development of informal settlements is in a consequence of uncontrolled urban growth and represents a major challenge for urban planners and city authorities. Many countries have inadequate data and little knowledge on informal settlement locations, their spatial extent and growth patterns. This product maps the slum and informal settlement areas and the changes through years to assist in a better understanding these areas by providing insights into the extent, spatial patterns, expanding trends. It also contributes to the estimation of the vulnerability to natural hazards and the assessment of related risks.
- Initiative: Earth Observation for Sustainable Development (EO4SD) – European Space Agency (ESA) program, aims to achieve increasing the uptake of satellite based information in the financial institutions' regional and global development programmes with a focus on urban development, agriculture and rural development . It aims to meet the long term, strategic geospatial information needs in the individual developing countries as well as international and regional development organisations.
- Results: 1) mapping the informal settlement areas from different years using EO data 2) mapping the changes through the years 3) derived the statistics on the changed extent
- Impact: The settlements are dynamic with frequent population fluctuations, temporal and spatial high resolution EO data can provide city planners with data which would be otherwise difficult to obtain. In developing countries, traditional field mapping is difficult as well as time and cost consuming. Satellite data based analysis is therefore a unique tool for rehabilitation activities.

**Target 11.1: By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.**



Informal settlement changes