

**UN-GGIM - World Bank Forum  
Geospatial Information for Development**

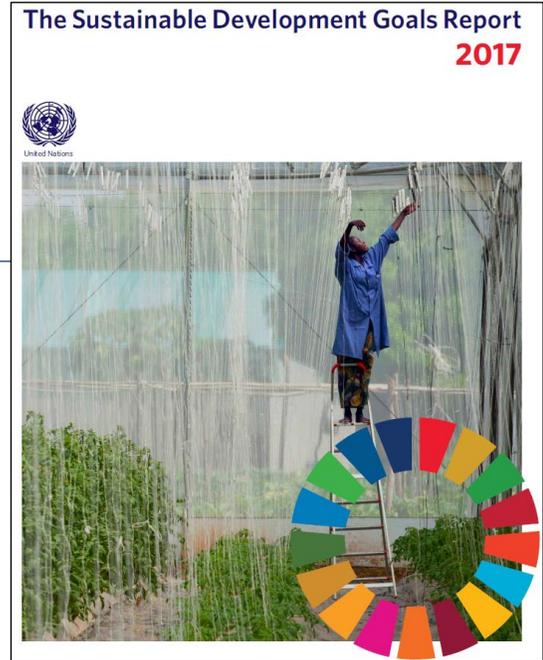
**The Data Challenge:  
Bridging the Geospatial Digital Divide**

**Greg Scott**

Global Geospatial Information Management  
United Nations Statistics Division  
Department of Economic and Social Affairs  
United Nations, New York



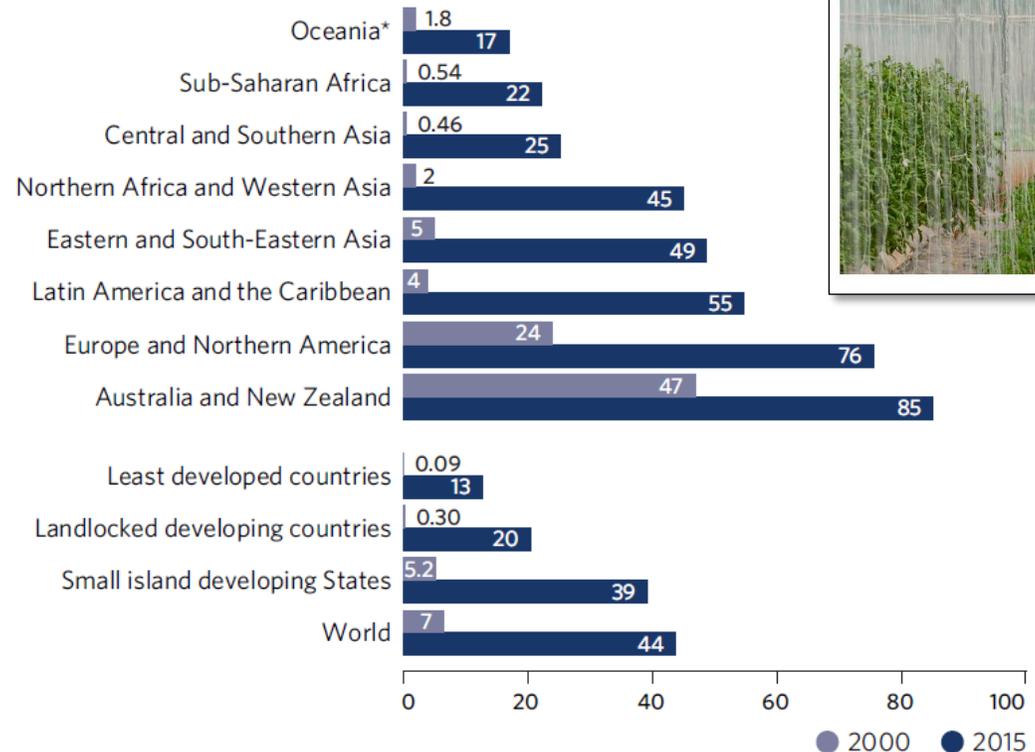
# The Digital Divide



## Internet services remain inaccessible across large swaths of the developing world

Fixed-broadband services remain largely unaffordable and unavailable across large segments of the developing world. In 2016, fixed-broadband penetration reached 30 per cent in developed countries, but only 8.2 per cent and 0.8 per cent in developing regions and LDCs, respectively. In the developed regions, about 80 per cent of the population are online, compared to 40 per cent in developing regions and 15 per cent in LDCs. Although Internet use in LDCs has tripled over the last five years, the percentage of users today reaches the level enjoyed by developed countries in 1998. However, the LDC average hides large disparities, with some countries doing much better than others. In 2016, levels of Internet use worldwide were 12 per cent lower for women than for men; the gender gap remains even larger in LDCs at 31 per cent. Both globally and in LDCs, this gender gap has widened in recent years.

Individuals using the Internet, 2000 and 2015 (percentage)



<https://unstats.un.org/sdgs/report/2017/>



UN-GGIM

United Nations Secretariat  
Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org

# The Geospatial Digital Divide

“The marketplace is not uniform. As Scott and Rajabifard point out in their paper, while the developed countries have an embarrassment of riches in terms of data, the vulnerable communities suffer from the lack of it. In such an unequal scenario how do we see (our technologies) developing?”

Prof. Arup Dasgupta, Managing Editor  
Editorial, Geospatial World, July-August 2017



UN-GGIM

United Nations Secretariat  
Global Geospatial Information Management

Research Paper: <http://www.tandfonline.com/doi/full/10.1080/10095020.2017.1325594>

*Positioning geospatial information to address global challenges*

ggim.un.org

# A Strategic Framework for Integrating a Global Policy Agenda into National Geospatial Capabilities

“Presently, the most developed countries are grappling with an abundance and oversupply of data, technology, and innovation, while in many parts of the world data scarcity prevails. When applied to sustainable development there is a greater concern. Those countries that are experiencing significant data scarcity are also those that tend to be the most vulnerable and at greatest risk of being left behind. A vast ‘geospatial digital divide’ remains.”

“While the challenges are immense, the digital technology that is available today allows the necessary transformation and being able to bridge the geospatial digital divide that exists among countries. But realizing this opportunity is complex in many dimensions, not the least being the lack of robust national information systems and associated geospatial frameworks. Achieving sustainable development through digital transformation, and an enabling ‘data ecosystem’ means we must first bridge the geospatial digital divide”

<https://www.geospatialworld.net/blogs/sustainable-development-and-geospatial-information/>

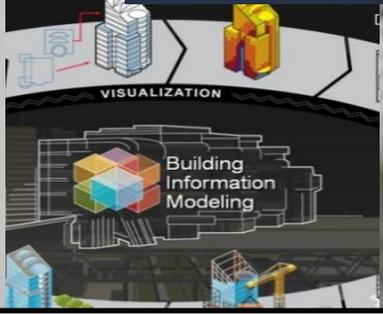
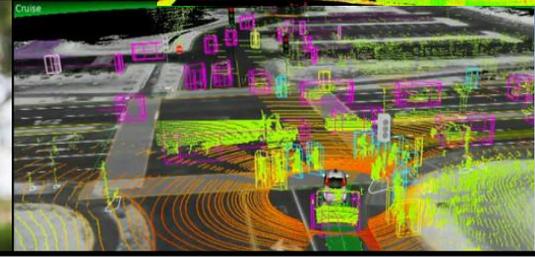
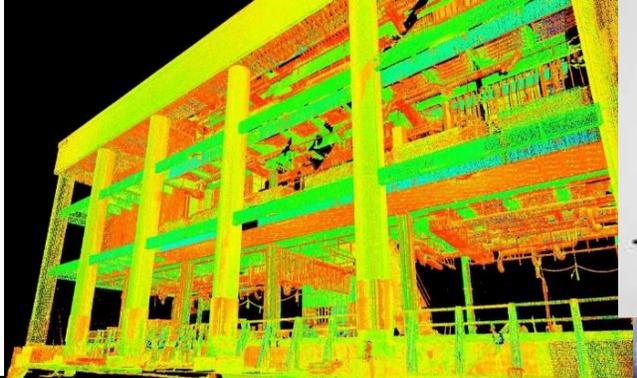
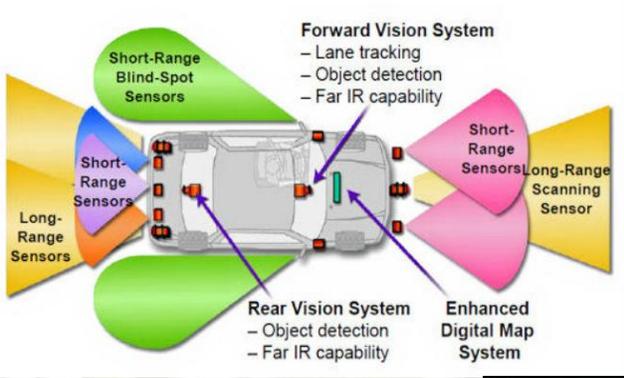


UN-GGIM

United Nations Secretariat  
Global Geospatial Information Management

*Positioning geospatial information to address global challenges*

ggim.un.org



**Technology and society are driving digital transformation, but are we yet leveraging this new 'data ecosystem' effectively?**



**Robotics**



# Cities of the Future..



Since 2007 more than half the world's population live in cities, where 80% of global GDP is now generated. By 2050, 2 out of 3 people will live in cities, with 90% of that growth in Asia and Africa.



UN-GGIM

United Nations Secretariat  
Global Geospatial Information Management

*Positioning geospatial information to address global challenges*

[ggim.un.org](http://ggim.un.org)

# Cities of the future will be integrative data ecosystems



**generating and consuming massive amounts of data related to people, their place, and their environment**



**UN-GGIM**

United Nations Secretariat  
Global Geospatial Information Management

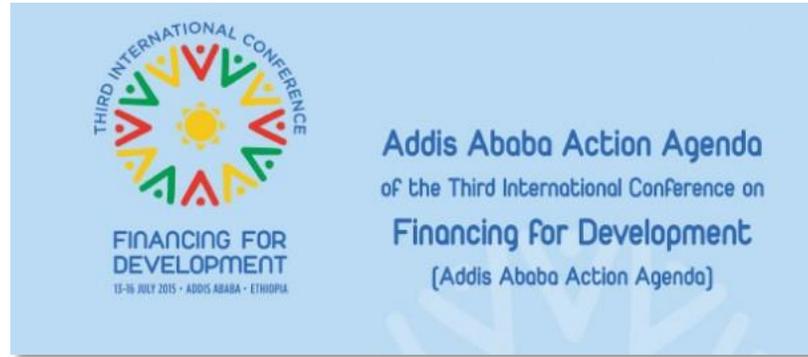
*Positioning geospatial information to address global challenges*

[ggim.un.org](http://ggim.un.org)

# Global development policy framework



United Nations  
Framework Convention on  
Climate Change



UNITED NATIONS  
PARIS CLIMATE  
AGREEMENT  
SIGNING CEREMONY  
— 22 APRIL 2016 —



UN-GGIM

United Nations Secretariat  
Global Geospatial Information Management





Do we really understand the scale of the problems, where they are, whom they impact, what are the causes, and how they can be remedied?

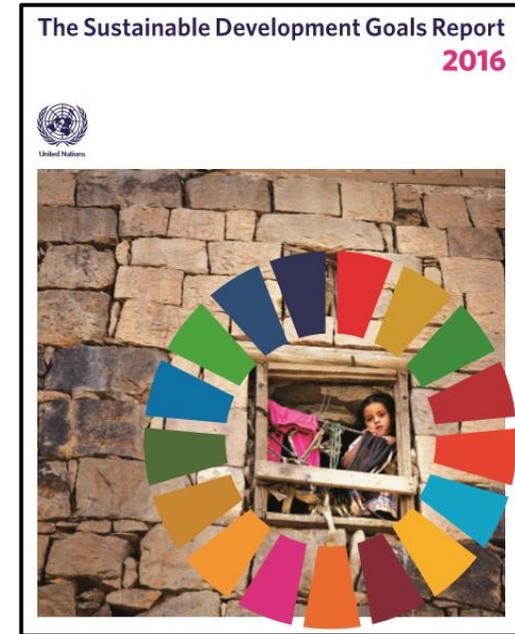


**Do we have the data for development??  
Can we make it 'production ready' information for all?**





# 2030 Agenda: Goals, targets, indicators



# The Sustainable Development Goals Report 2017

“Implementation has begun, but the clock is ticking. This report shows that the rate of progress in many areas is far slower than needed to meet the targets by 2030”

“This report provides a snapshot of our efforts to date. It stresses that high-level political leadership and new partnerships will be essential for sustaining momentum. It also underscores the need for reliable, timely, accessible and disaggregated data to measure progress, inform decision-making and ensure that everyone is counted”

António Guterres  
Secretary-General, United Nations



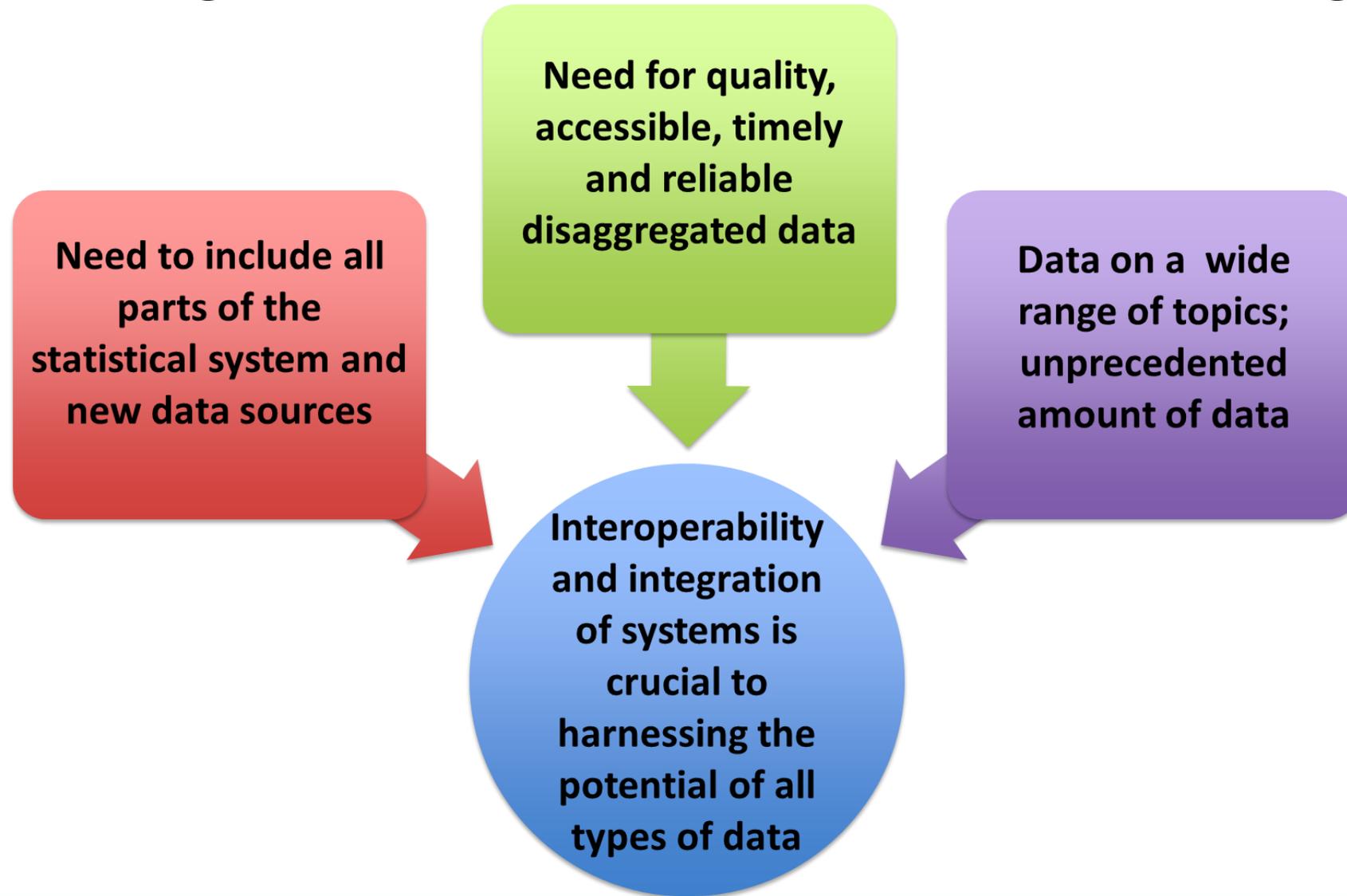
UN-GGIM

United Nations Secretariat  
Global Geospatial Information Management

*Positioning geospatial information to address global challenges*

[ggim.un.org](http://ggim.un.org)

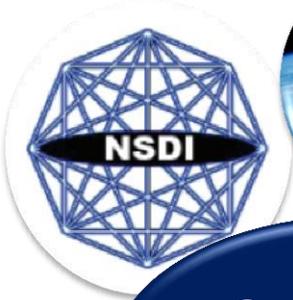
# Addressing the data needs for the 2030 Agenda



# Addressing the data needs for the 2030 Agenda

- The scope of the 2030 Agenda requires high-quality and disaggregated data that are timely, open, accessible, understandable and easy to use for a large range of users, including for decision making at all levels.
- There is a need for a reporting system on the SDGs that would have benefit from the sub-national (local) to the national level; and allow for global reporting that builds directly on the data shared by countries.
- Important to create an opportunity for countries to directly contribute to the global reporting. While the challenges are immense, the digital technology that is available today allows the necessary transformation.
- An aspiration is to strengthen countries' national geospatial and statistical information systems to facilitate and enable a '*data ecosystem*' that leverages an accessible, integrative and interoperable local to global system-of-systems.





**Digital Evolution**



**Geospatial Frameworks**



**Digital Transformation**

**Implementing Nationally Integrated Information Systems**



**Data Rich**

**Digital Maturity**

**Digital Divide**



**Data Poor**



**UN-GGIM**

United Nations Secretariat  
Global Geospatial Information Management

*Positioning geospatial information to address global challenges*

[ggim.un.org](http://ggim.un.org)