

Open/Big Data and Citizen Science for managing the Water, Food, Energy and Environment Nexus

ISPRA Headquarter - Rome, Italy
31.05.2019

Fernando Nardi

WARREDOC, Università per Stranieri di Perugia

Outlines

- Background of the workshop
- Program & Goals
- Info and communications

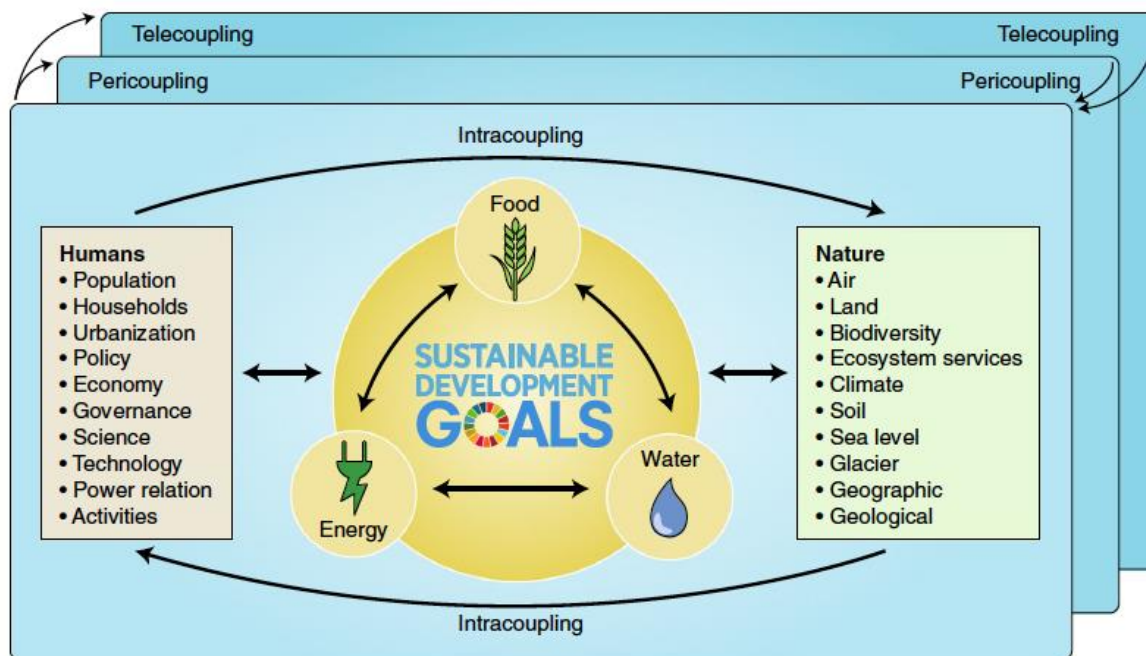
Why this workshop?



Urban/land development for supporting
changing population growth and dynamics

2 more billion people by 2050 globally & population redistribution

The Nexus: increasing (need of) resources and risks



Liu, J. et al. (2018). Nexus approaches to global sustainable development.
Nature Sustainability, 1(9), 466.

Understanding for acting (decision making)

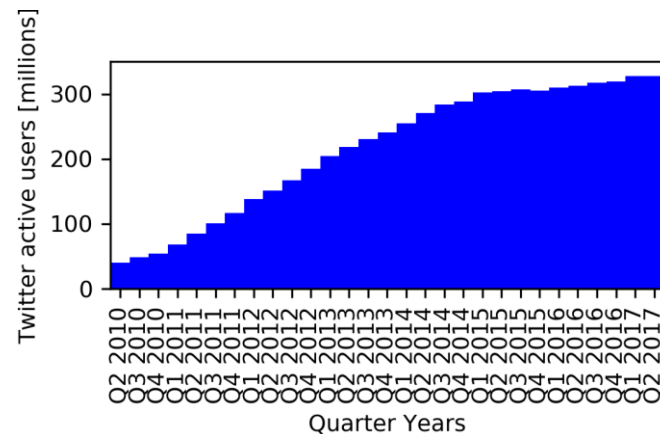
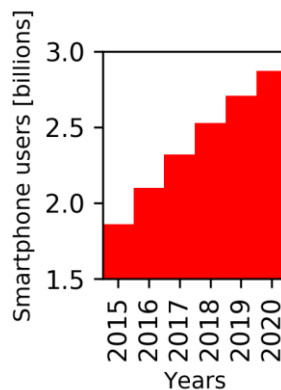
based on the quantification of the inter-linkages and coupling mechanisms

Open and Big Data



Sensors (satellites, drones, webcams ..) are here to stay and grow
Smartphones and mobile devices are transforming the way we work and communicate

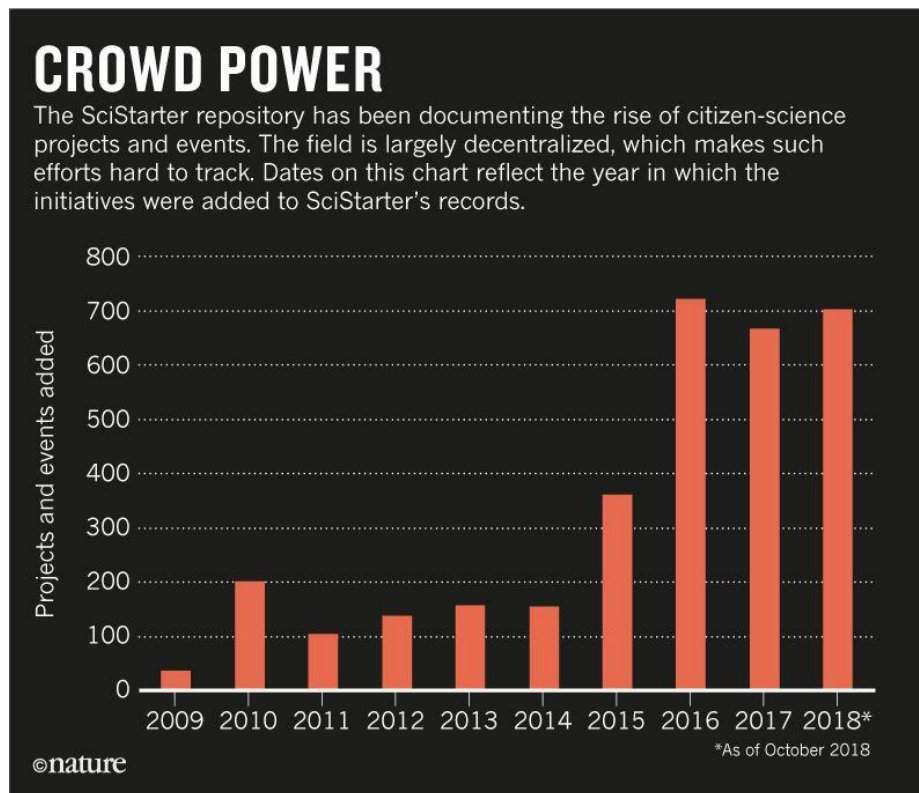
Big Data and Citizens



Statista (2017)

From Benedict XVI (2005) to Pope Francis (2013): citizens become “human sensors”, produce and receive information

Big Data and Citizen science



Citizen science is developed by means of the engagement of people in scientific processes. **Active citizenship** means people getting involved in their local communities and democracy at all levels, from towns to cities to nationwide and international activities.

Program and goals

- Define the **open questions**, the most **urgent and missing inter-linkages and gaps** to put Open/Big Data and Citizen Science into action for the Nexus
- Share **know how**, resources, **projects and ideas**
- **Networking and connect**
- Link and engage students and young researchers and professionals
- Convert outcomes of this meeting (starting from Minutes) into a Working document (White Paper) on the Workshop topic

Info and Communications

- #Watermanifesto by WaterOpenDay.org



22 MARCH 2017 | WORLD WATER DAY
#WaterManifesto #WaterOpenDay
Social Media Campaign



- CandHy (Citizen AND Hydrology) Working Group

by the International Association of Hydrological Sciences (IAHS)

<https://iahs.info/Commissions--W-Groups/Working-Groups/Candhy.do>



- Water & SME Working/Mirror Group:

- Water & Resources
- Water & Risks
- Water & Cultural Heritage



ROADMAP

- November 27-29, 2018 – Citizen Observatories Conference. Venice, Italy
- December 10-14, 2018 – American Geophysical Union Conference in Washington D.C., USA
- March, 11-13, 2019 – MOXXI-CANDHY Conference in New York, USA
- May 31st, 2019 – National Workshop (Rome)
- June 27, 2019 – Watershed Summit, Denver, USA
- July 8-18, 2019 - 27th IUGG General Assembly, Montreal (Canada)
- September, 2019 – Release of the White Paper (National and International launching events)

Contact info

fernando.nardi@unistrapg.it

@fnardi



Università
per Stranieri
di Perugia

warredoc@unistrapg.it

<http://warredoc.unistrapg.it>