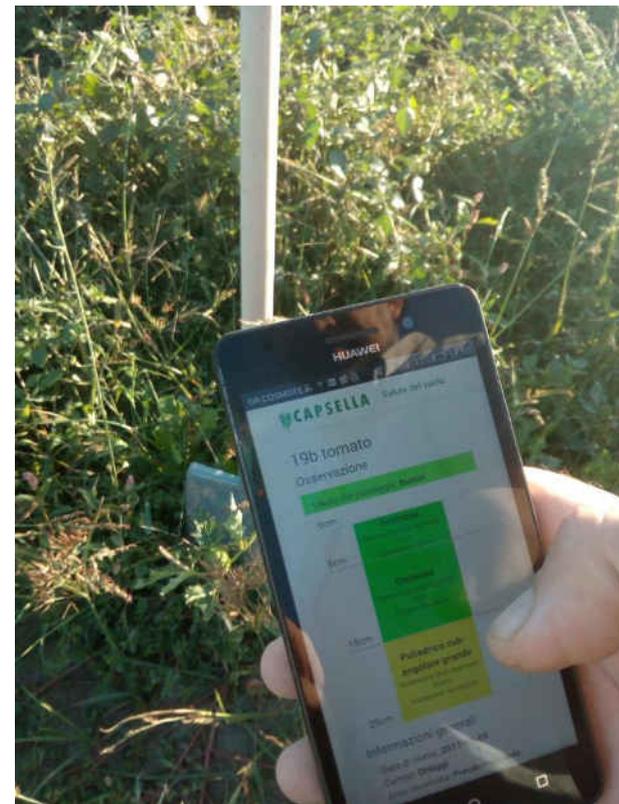


Co-creating innovation: the CAPSELLA approach

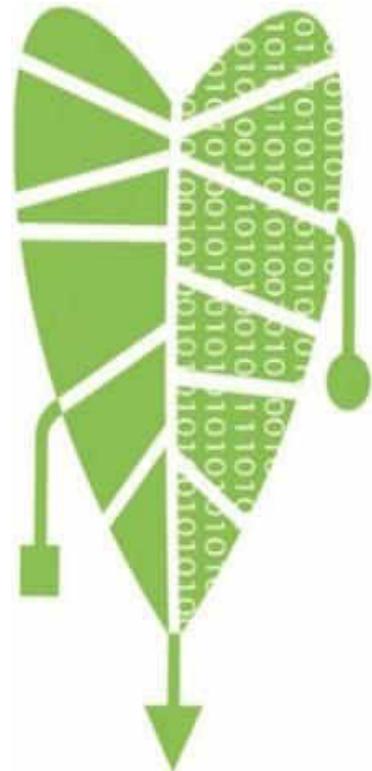


Paolo Bàrberi

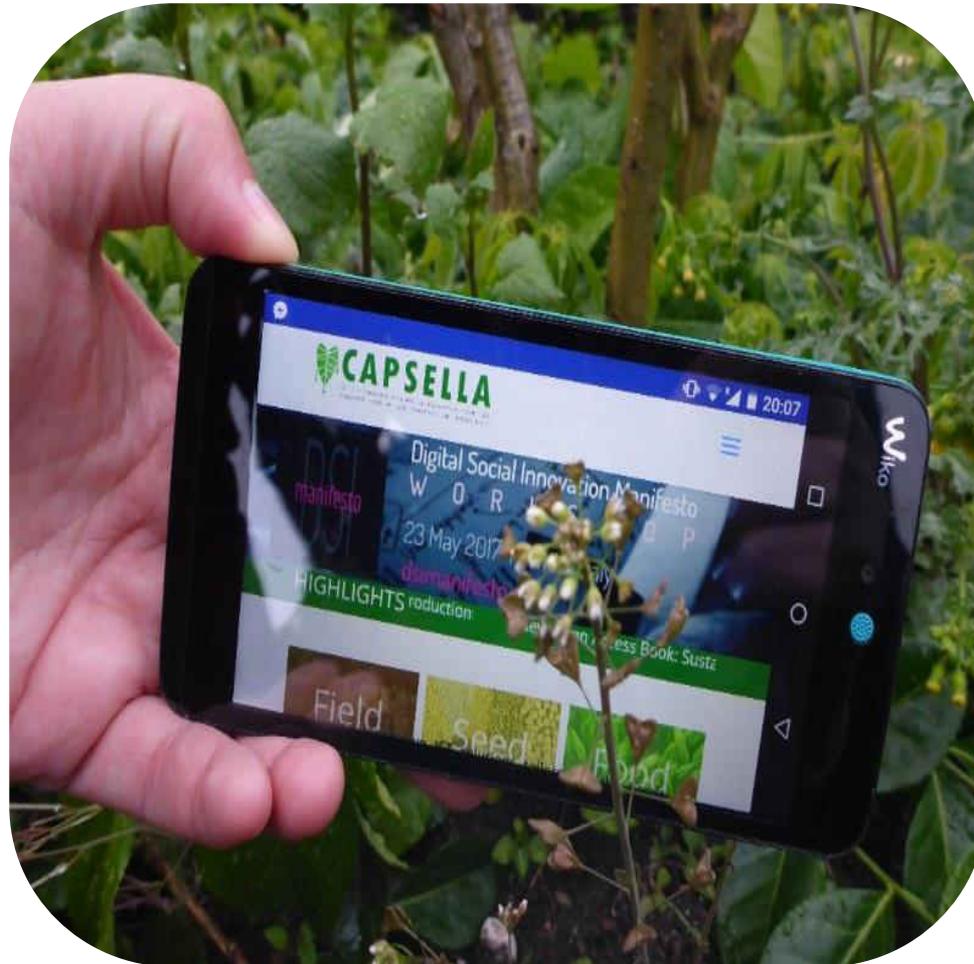
Group of Agroecology, Institute of Life Sciences, Scuola Superiore Sant'Anna, Pisa, Italy

paolo.barberi@santannapisa.it – www.researchgate.net/profile/Paolo_Barberi2

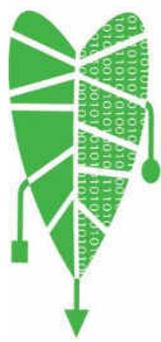




CAPSELLA



What are 'CAPS' in CAPSELLA?



CAPSELLA

COLLECTIVE AWARENESS PLATFORMS FOR ENVIRONMENTALLY-SOUND LAND
MANAGEMENT BASED ON DATA TECHNOLOGIES AND AGROBIODIVERSITY

Collective Awareness Platforms for Sustainability and Social Innovation (CAPS)

New models to create awareness of emerging sustainability challenges
Empower each and every one through **collective action**

CAPS aims at **designing and piloting online platforms** to create awareness on sustainability problems and putting in place collective solutions.
It fosters **collaborative solutions** based on **networks** (of people, of ideas, of sensors), enabling new forms of **digital social innovation**.





CAPSELLA

COLLECTIVE AWARENESS PLATFORMS FOR ENVIRONMENTALLY-SOUND LAND
MANAGEMENT BASED ON DATA TECHNOLOGIES AND AGROBIODIVERSITY

- **AGROBIODIVERSITY**
- **PARTICIPATION**
- **CO-INNOVATION**
- **ICT**
- **OPEN DATA**



‘When it comes to realising the full potential for open data, it is important to **start with real world problems** and to engage with problem owners, not simply focus on the data.’



Why?

The challenge

Conventional
agricultural
systems

Industrialised
mainstream
food
production

High use of
external
inputs

Food waste

Undernourish-
ment/obesity

Shrinking
farmers
incomes

Major sustainability challenge
Environmental threats
Economic threats
Social threats



AGROECOLOGY

To have long-term sustainability and resilience in food systems we need ...



FIELD



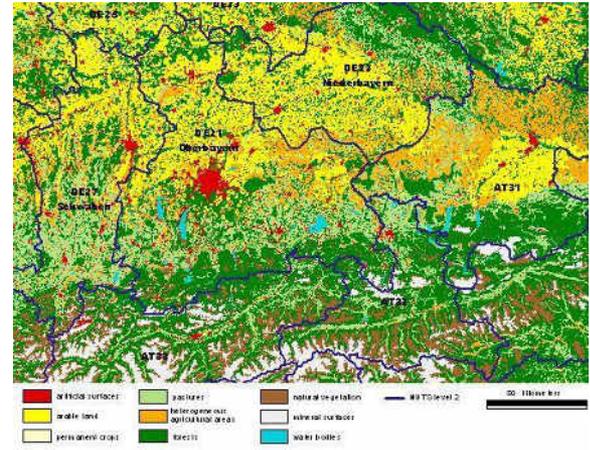
FARM

DIVERSITY

TERRITORY

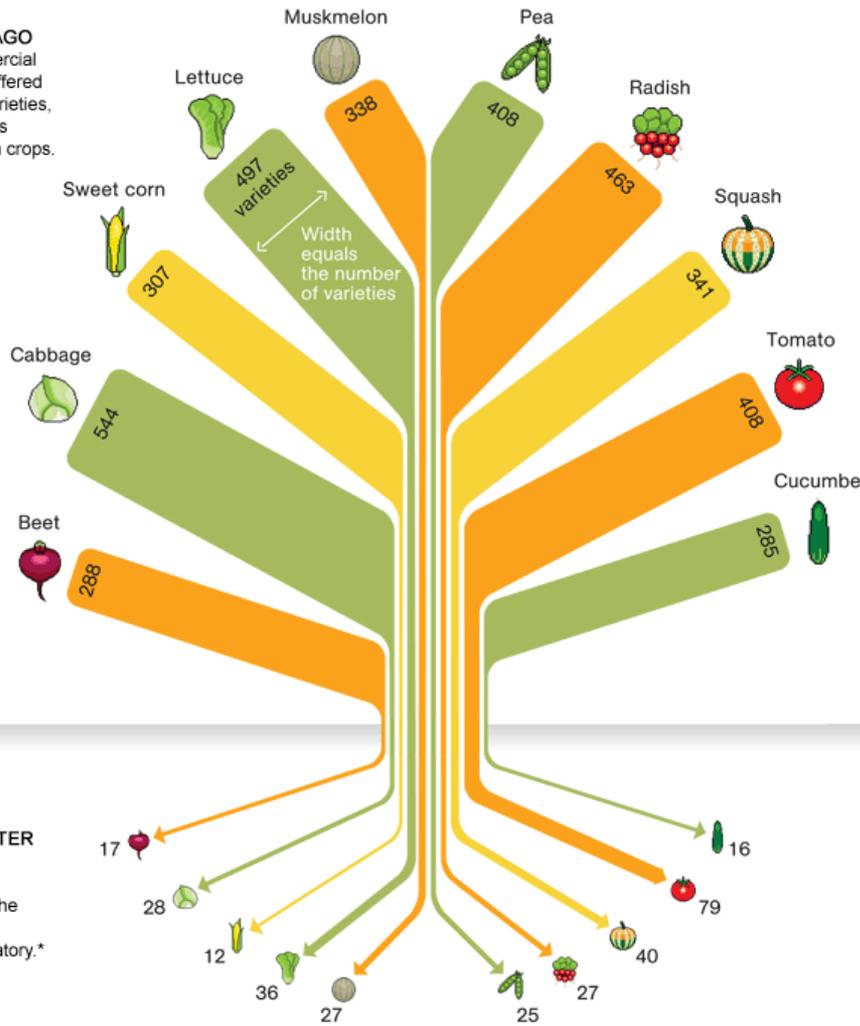


LANDSCAPE



We are losing our diversity!

A CENTURY AGO
In 1903 commercial seed houses offered hundreds of varieties, as shown in this sampling of ten crops.



80 YEARS LATER
By 1983 few of those varieties were found in the National Seed Storage Laboratory.*

N° TOTAL VARIETIES
1903: 3879
1983: 307

-92.1%

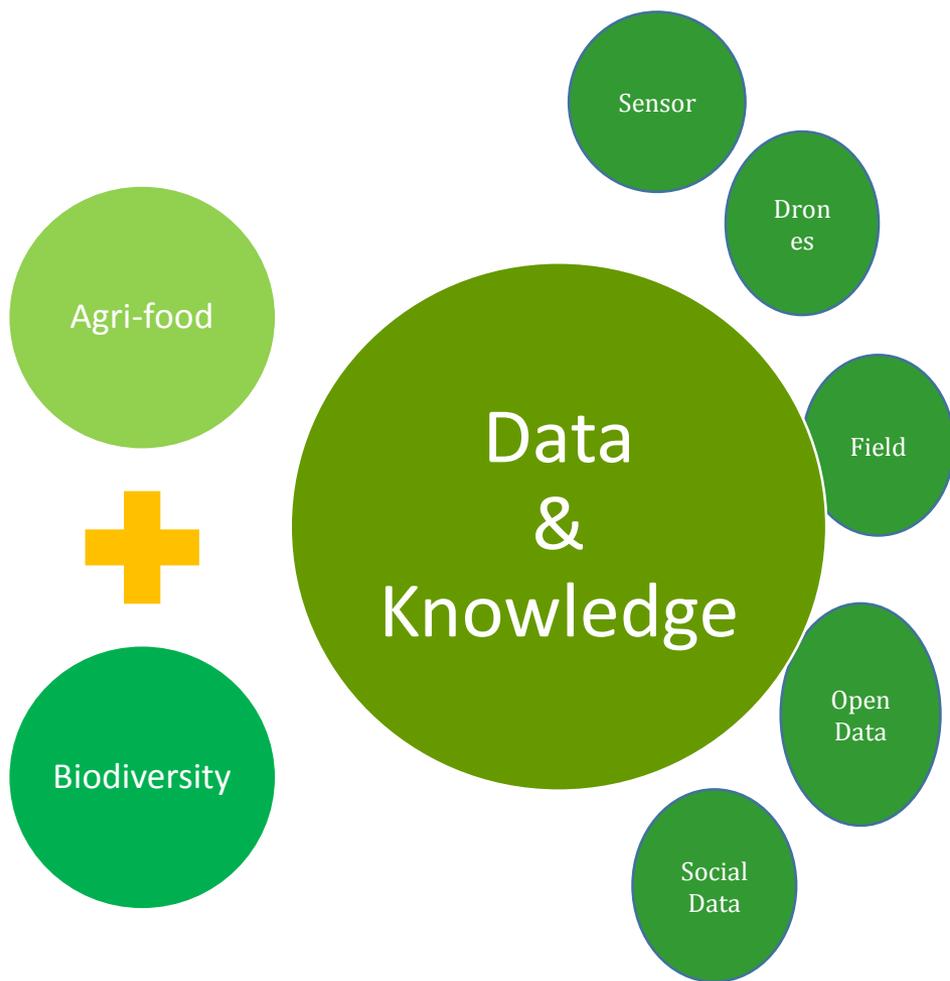
* CHANGED ITS NAME IN 2001 TO THE NATIONAL CENTER FOR GENETIC RESOURCES PRESERVATION

JOHN TOMANIO, NGM STAFF. FOOD ICONS: QUICKHONEY
SOURCE: RURAL ADVANCEMENT FOUNDATION INTERNATIONAL



What?

The solutions



Develop a number of **community-driven** data powered ICT solutions

Run **pilots** with communities

Co-innovation with stakeholders

3 scenarios

Seed – Field – Food

7 pilots



Where?

The pilots



- ★ Compost in precision agriculture (NL)
- ★ Storytelling on organic food (NL)
- ★ Stevia product data (GR)
- ★ Seed data management (IT)
- ★ Meal prediction tool (CZ)
- ★ Public food procurement (IT)
- ★ Soil health test (IT, GR)

- ★ **Web app**
- ★ **Smartphone app**
- ★ **Web + smartphone app**



Who?

The communities



Organic and conventional farmers

Cooperatives & food processors

Agronomists & breeders

Municipalities & civil society

Restaurants & customers

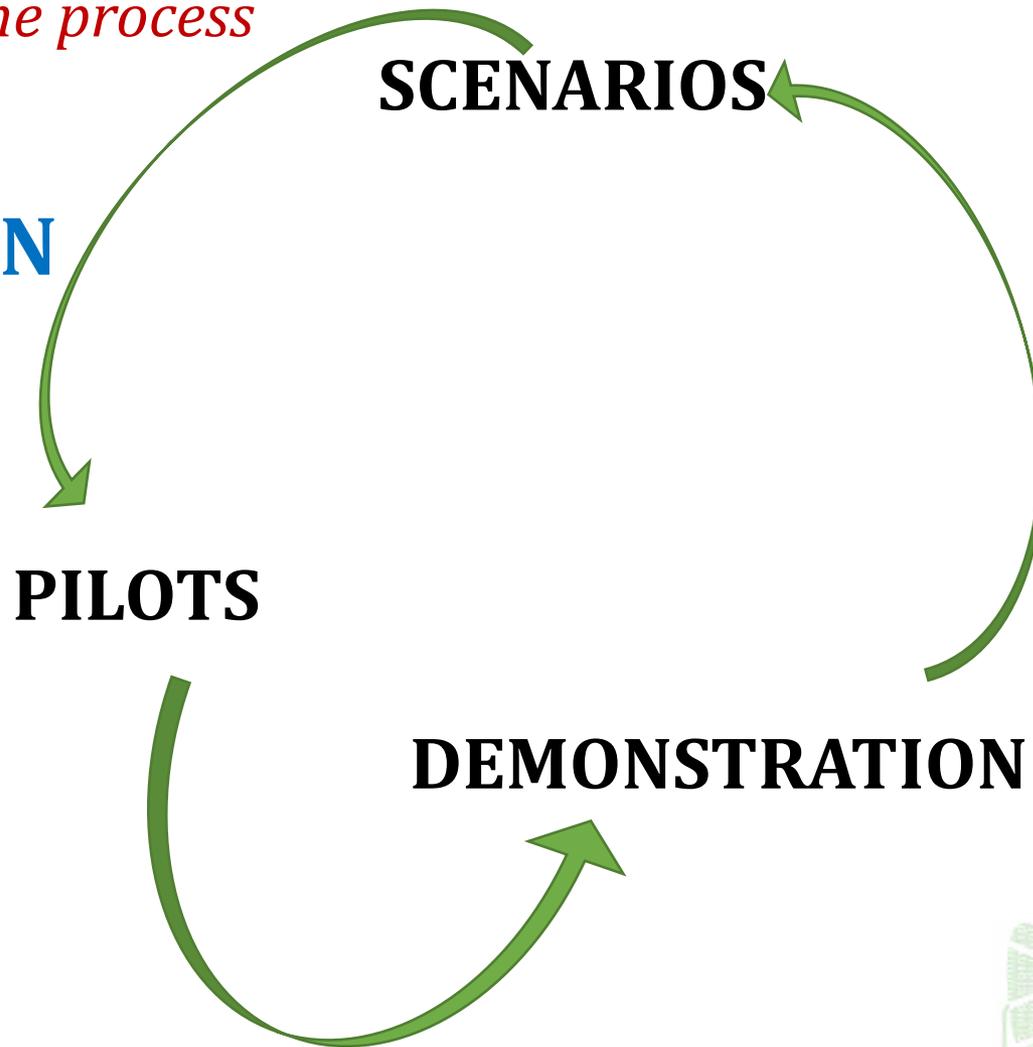
Scientists and ICT developers



How?

The process

THE CO-INNOVATION LOOP



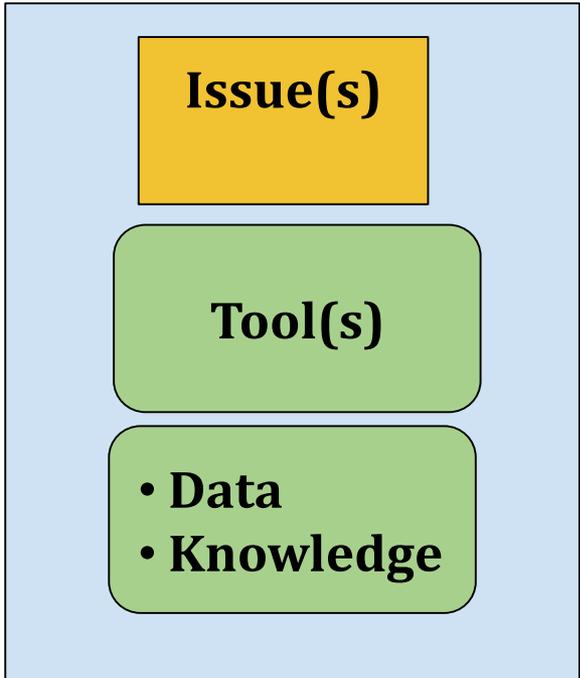
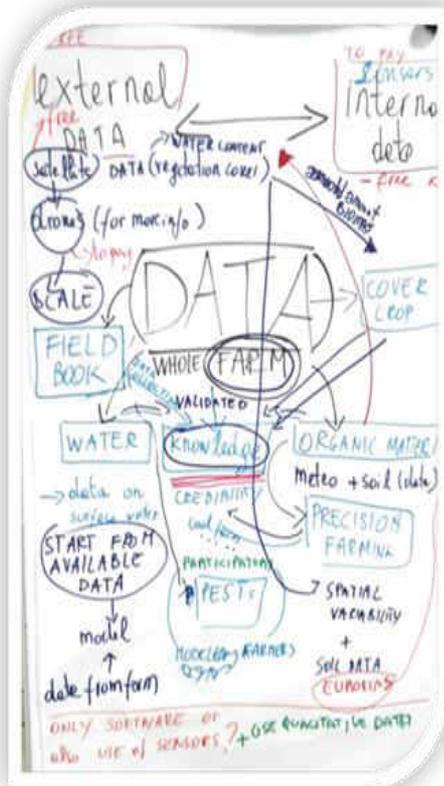
How?

The process

RICH PICTURE

EMERGING ISSUES

PRIORITIES



Want to know more?

The screenshot shows a web browser displaying the CAPSELLA website. The browser's address bar shows 'www.capsella.eu'. The website has a green header with navigation links: Home, Activities, Communities, Events, Dissemination, and About. The main content area features the CAPSELLA logo and tagline: 'CAPSELLA is your Innovation lab for agrobiodiversity'. A prominent banner for an event reads: 'SAVE THE DATE Harvesting Innovation: Open & Digital Innovation for Sustainable Agriculture and Food Systems. Acquario Civico (Milano) Tuesday, 8th May 2018'. Below this is a large image of various fresh produce in wooden crates. A green bar below the image contains the text: 'HIGHLIGHTS now available for free on Google Play and farmknowledge.org EU Food & Farming Forum in Brussels on May 29th - 30th'. The page is divided into two columns: 'CAPSELLA Project' and 'CAPSELLA Pilot Activities'. The 'Project' section includes a video thumbnail titled 'WHY AGRORIODIVERSITY' and text describing the development of ICT solutions. The 'Pilot Activities' section describes the prototyping of open data based products. The bottom of the screenshot shows a Windows taskbar with various application icons and a system tray with the date '03/05/2018' and time '15:20'.

Harvesting Innovation: Bringing Digital Innovation to Sustainable Agriculture and Food Systems
Milano, Acquario Civico, 8 May 2018

