

Agriculture & Technology

Levering AgTech for Collective Impact



11th Hour Project
The Schmidt Family Foundation



The
Outer
Haven

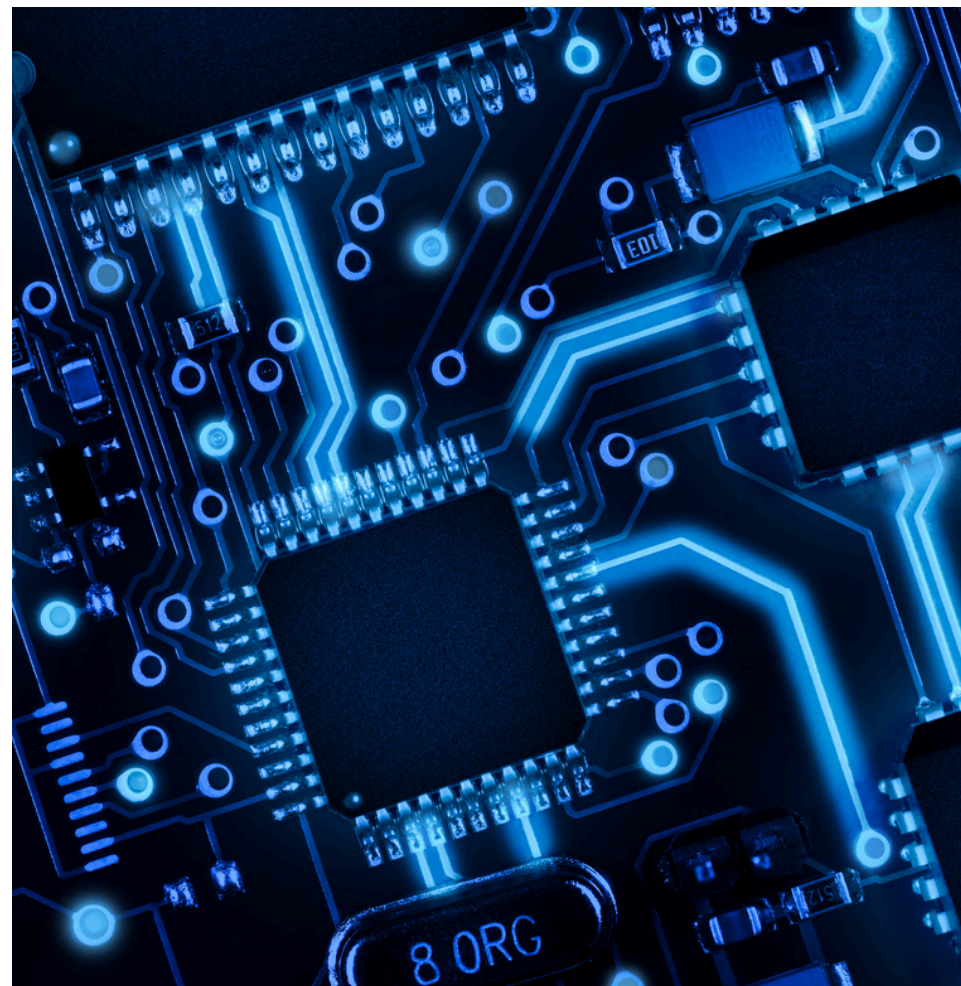


GARDOPIA
GARDENS

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Overview



Definition of **Agriculture**

- Science of growing crops or raising animals.
- Someone who works as a farmer or gardener
- The Latin root of agriculture is
 - agri, or "field,"
 - plus cultura, "cultivation."



Overview



Definition of Technology

- Application of **conceptual knowledge** to achieve *practical goals*.
- Can also mean the products resulting from such efforts
 - **Tangible tools** such as utensils or machines
 - **Intangible ones** such as software.





Definition of **AgTech**

- Agricultural technology, also known as **agritech**, is the use of technology to **improve the efficiency, yield, and profitability of agriculture, horticulture, and aquaculture.**
 - products, services, or applications that improve input and output processes.



Historical AgTech

Plow

Agriculture and the plow originated 10–13 millennia ago in the Fertile Crescent of the Near East, mostly along the Tigris, Euphrates, Nile, Indus and Yangtze River valleys, and were introduced into Greece and southeastern Europe 8000 years ago.

Irrigation

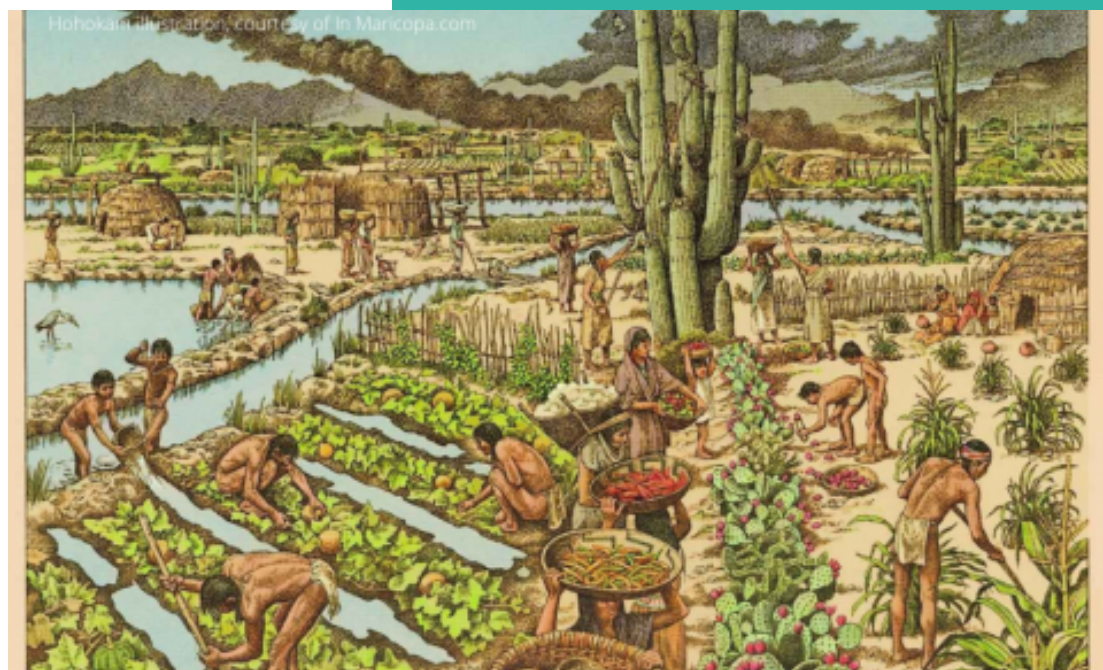
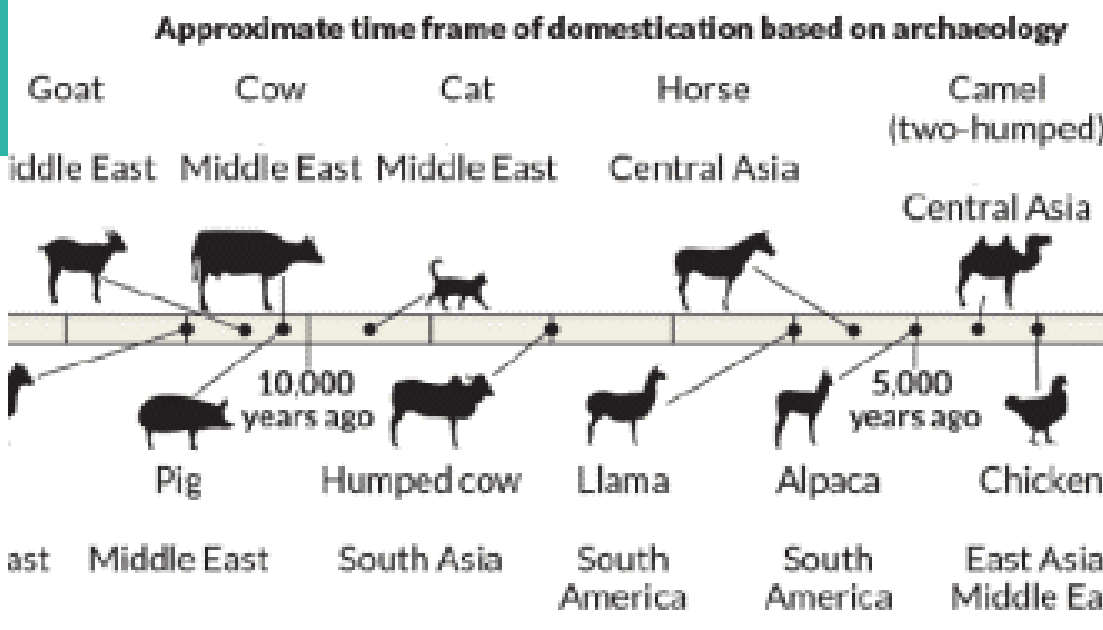
The earliest known systems of irrigation originated in Egypt and Mesopotamia in 6,000 B.C. Fighting against the flooding of the Nile several months each year, ancient civilizations pioneered a technique to divert flood waters to nearby crop fields.

Domesticated Animals

Most of the domestic animals familiar to us today were domesticated not long after people began farming and living in permanent settlements, between 8000 and 2500 BC; One of the first animals was sheep in the Middle East.

Domesticated Crops

People first domesticated plants about 10,000 years ago, between the Tigris and Euphrates rivers in Mesopotamia (which includes the modern countries of Iran, Iraq, Turkey, and Syria).



[Humanities](#) › [History & Culture](#) › [Inventions](#) › [Invention Timelines](#)

American Farm Machinery and Technology Changes from 1776–1990

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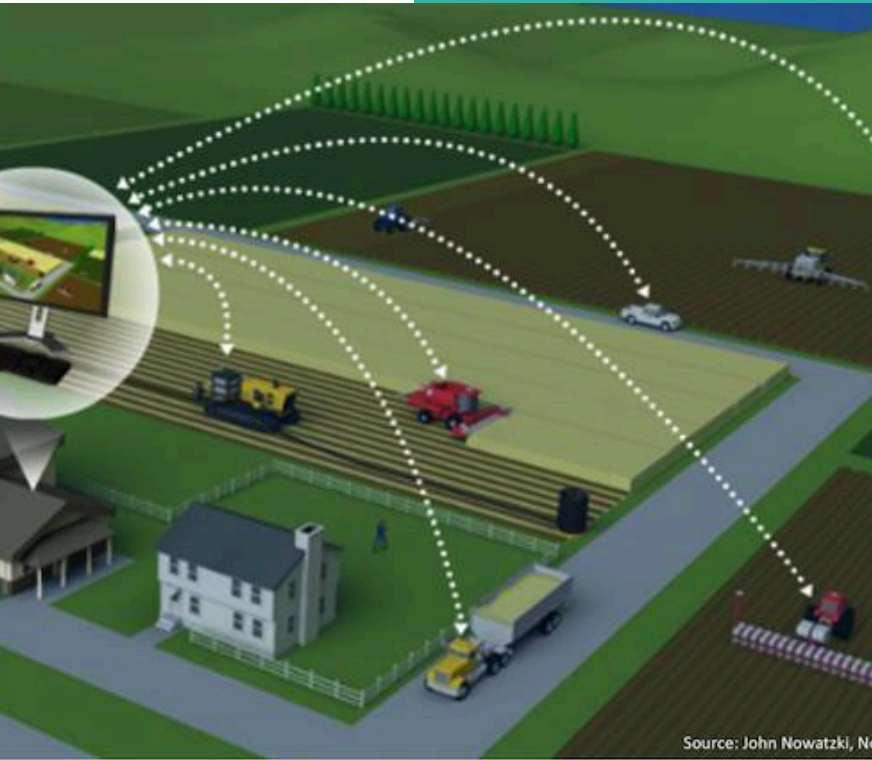
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Modern AgTech



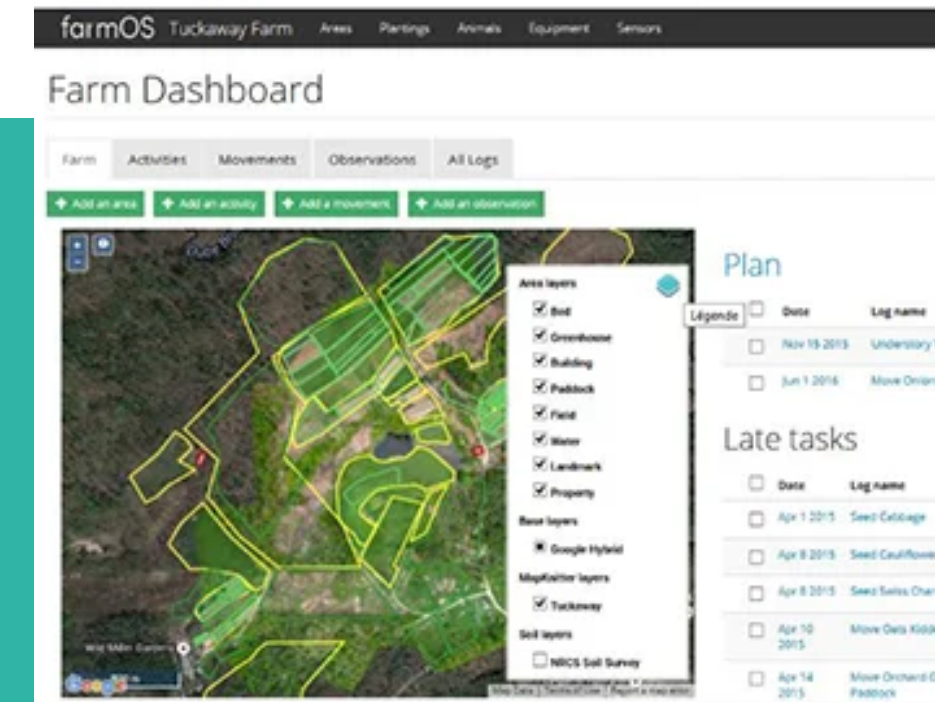
Precision Agriculture



Robotics



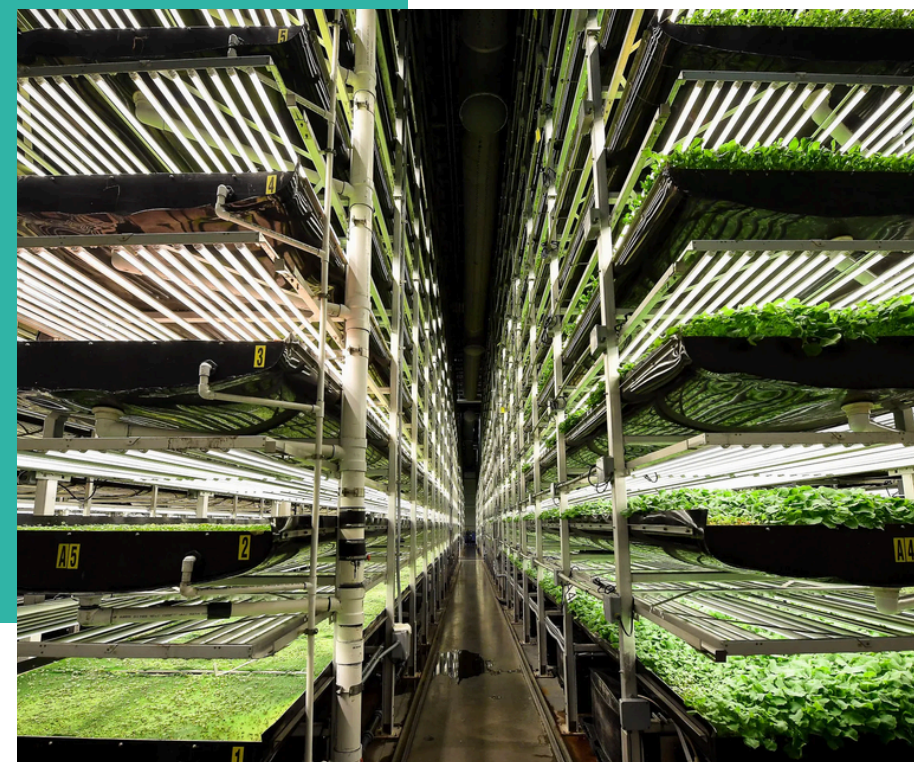
Drones



Software



Irrigation



Vertical Farming



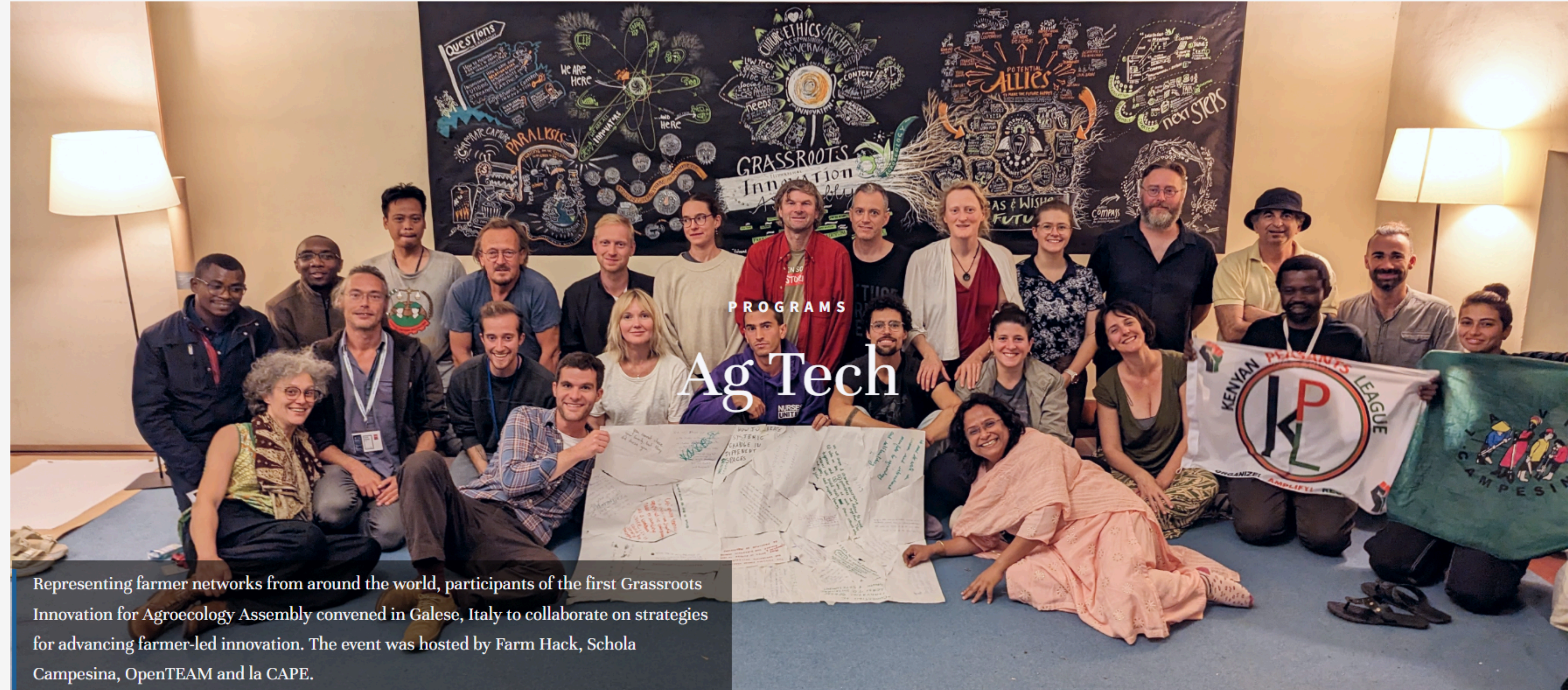
Aquaculture



Insect Breeding

Some Examples of Gardopia AgTech





PROGRAMS

Ag Tech

Representing farmer networks from around the world, participants of the first Grassroots Innovation for Agroecology Assembly convened in Galese, Italy to collaborate on strategies for advancing farmer-led innovation. The event was hosted by Farm Hack, Schola Campesina, OpenTEAM and la CAPE.

Technologies that *shape* and *control* the environment

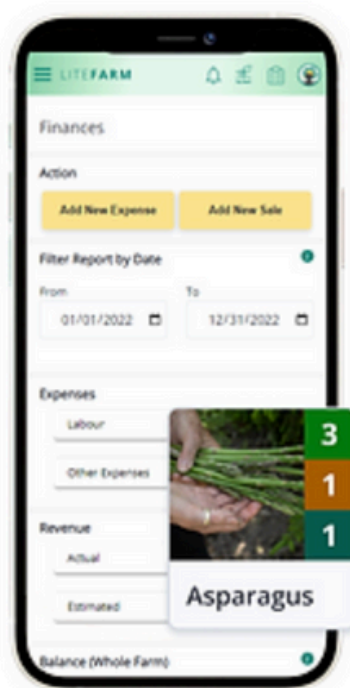


...and lead to **consolidation, centralization** and **precarity**.

Technologies that *reflect, adapt, and enhance* their environment.



...and support **decentralization**, the **commons**, and **resilience**.



Farm management and crop planning



- Map
- Tasks
- Crops
- Finances
- Insights
- Documents
- Farm settings
- People
- Certifications



Grow-A-Thon Harvest Survey

Description content for the survey

Submitter Name

Harvest Site

Harvest Date

Pounds Harvested (produce)

Pounds Harvested (eggs)

Pounds Harvested (meat)

Type of products harvested

I.e. Broccoli, Peppers, Tomatoes, Chicken, Fish, Mushrooms, etc.

Harvest Photo

Drop image here or select image



Collective Impact Model for Community Change

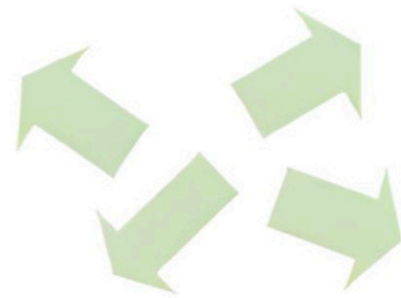
by Michelle Toukan | May 4, 2021 | News, Uncategorized | 0 comments

Buffalo County Collective Impact Model, Definitions and Questions
Community Well-Being Reflection Tool for Collaboratives

Powered by
Buffalo County
COMMUNITY PARTNERS

Moving from Isolated Impact to Collective Impact

Isolated Impact



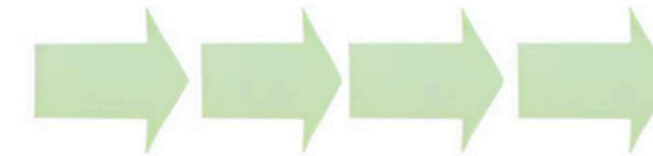
- Great initiatives, projects and pilots that **do not coordinate** with one another
- **Duplication** of efforts and inability to compare results and track big picture progress
- Sense of **competition** and turf battles

Collaboration/ Partnership



- Agreement and excitement around a **common "topic"**
- Too often, parties involved only include the **"usual suspects"**
- Meetings and working groups typically **lack real alignment** or shared measures / accountability

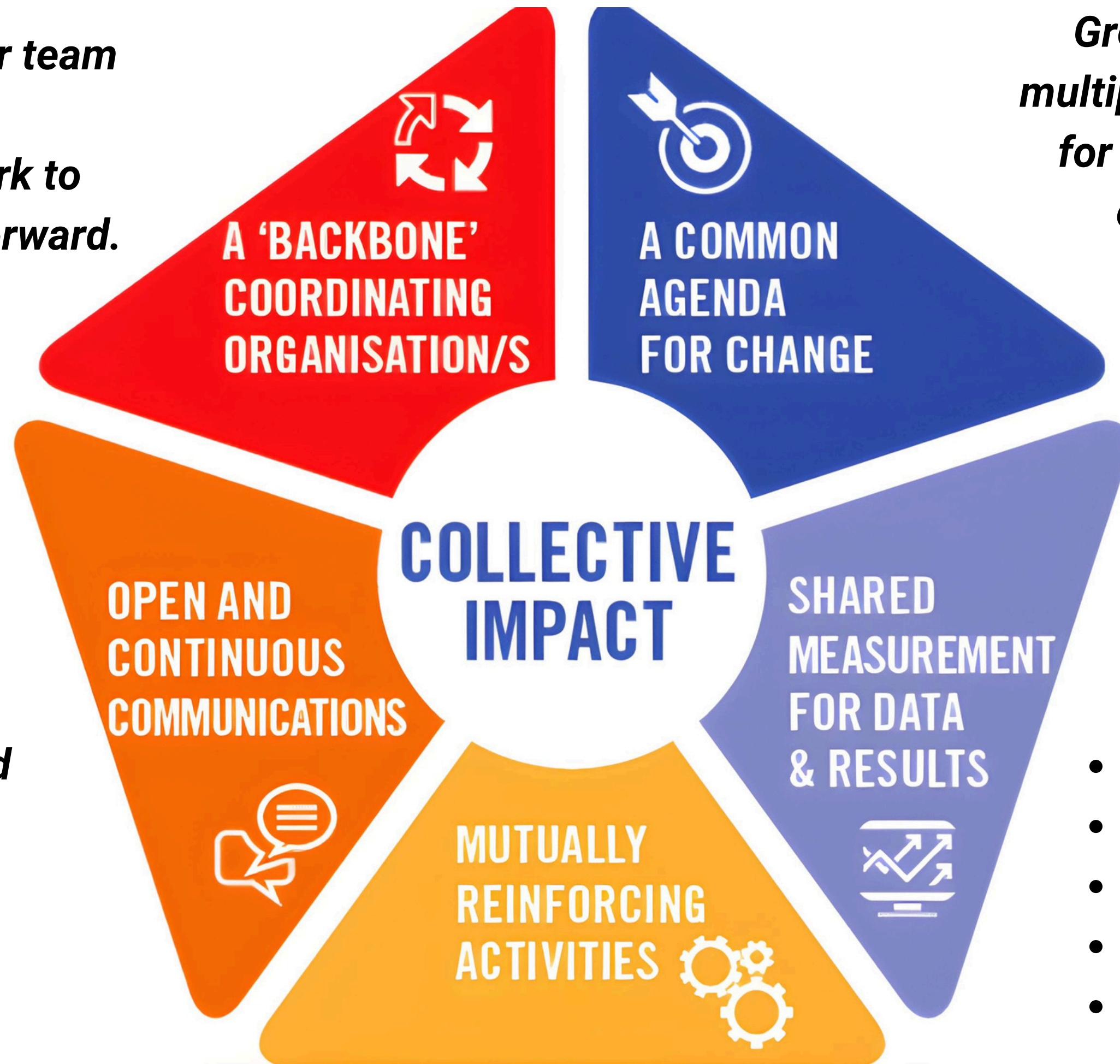
Collective Impact



- All relevant actors work toward the **same goal** and measure the **same things**
- Cross-sector **alignment**, includes **"unusual suspects"**
- Organizations actively **coordinate** their action and **share** lessons learned

Big Green - Operator team assisting with administrative work to move the mission forward.

Growing food has multiple direct benefits for local and global communities



- **Slack / Discord**
- **Email**
- **Social Media**
- **Meetings**
- **Etc.**

- **Food Production**
- **Individuals Impacted**
- **Meals Provided**
- **Greenspace Preserved**
- **Jobs Created**

If you want to go fast, go alone. If you want to go far, go together.

Thank You



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