Welcome

CultivAid
Knowledge based Development

https://www.cultivaid.org/

What Is The Most Valuable Resource We Have?

Hint:

We spend it every single day, without ever getting a refund?

It defines the shape of our lives more than anything else, yet can’t be touched?

TIME

If you had one more hour each day, what would you use it for?

Are we *spending* our time, *wasting* it, or *investing* it?

TIME

הַיּוֹם קָצֵר, וְהַמְּלָאכָה מְרֻבָּה, וְהַפּוֹעֲלִים עֲצֵלִים, וְהַשָּׂכָר הַרְבֵּה, וּבַעַל הַבַּיִת דּוֹחֵק.

“The day is short, the task is great, the laborers are idle, the reward is much, and the Master is pressing”

Rabbi Tarfon

The day is short, the task is great, the laborers are idle, the reward is much, and the Master is pressing

- **The Day is short** – we have a limited time on this planet, every day matters and each moment should be used meaningfully
- **The Task is great** – there is a lot to do and it is beyond us as individuals
- **The Laborers are idle** – most people are asleep, few people are concerned about the challenges Infront of us.
- **The Reward is great** – You many not see the full impact today, but the future depends on it.
- **And the Master is pressing** – Our actions are required, we are being called to act, whether by God or by future generations.

Setting Our Intention: Why We Are Here?

To Share Knowledge and Experience

To Learn from each other

To Develop Partnerships

Desired Outcomes of the Conference

- Improving our understanding of what works and what is required
- Network Development for Strengthening Cross border Collaborations
- Publishing a joint paper that outlines recommendations
- Development of joint programs and joint grant applications
- Creating a better future!

What does the future look like?

The State of Our Planet

2024 was the hottest year ever recorded, with global average temperatures rising 1.6°C above pre-industrial levels.

The Paris Agreement's 1.5°C target is no longer a threshold to avoid.

CO2 levels are > 430 ppm, above the 400 ppm threshold

Glaciers are vanishing, sea levels rising, and wildfires burn across continents.

Humanity is not coping with the challenge at hand!

The State of Our Planet

As of 2024, 2.6 billion people experience high or extreme water stress and rising

2 billion people suffer from water related food insecurity

Flooding, droughts, heatwaves, wildfires are spreading and raving ecosystems.

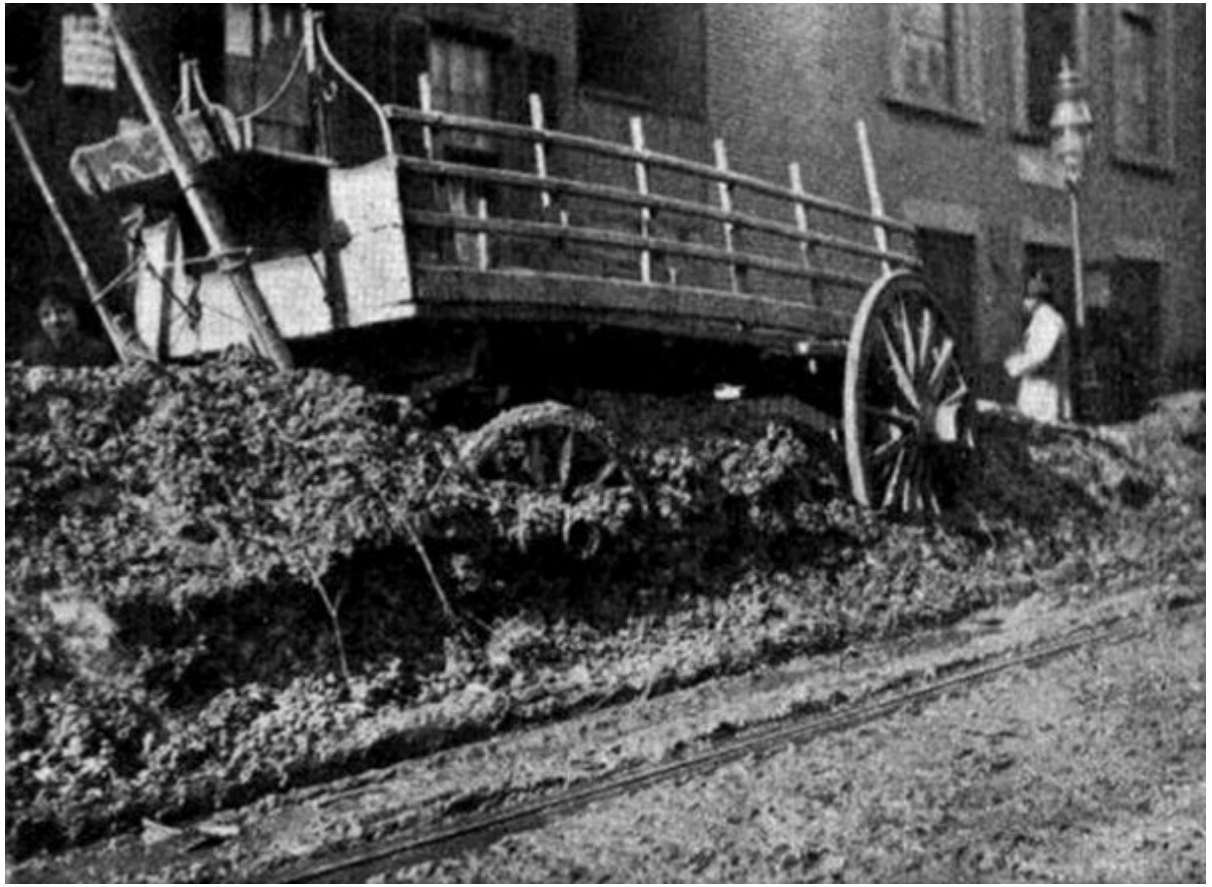
Rising sea levels, melting ice caps, melting mountain glaciers, overuse of ground water

Is there room for optimism for our Future ?

The Horse Manure Crisis in NY, 1890's

- In the late 1800s, things were bad. populations exploded and cities were growing fast.
- All Transportation was based on horses
- Horses produce between 8 and 16 kg of manure per day,
- In New York, there was 100,000 horses making over 1 million Kg of manure daily.
- In 1894 The Times in London predicted that in 50 years, every street would be buried in 3 meters of manure.

So what happened?



The Horse Manure Crisis in NY, 1890's

- By 1912, the number of horses on city streets worldwide fell to almost zero.
- Cars, buses, and transit replaced the horses and ended the horse manure crisis.
- Oil and gas industry saves the world from mountains of manure

The optimism must come with personal responsibility, social conscience, and the urgency of action, in ourselves and to spread it to people around us.

Food – Energy –Water – What is it?

The FEW Nexus is a system-based approach to understanding these interdependent systems (session 1)

Agriculture relies on water and energy; it is the largest user of freshwater globally ~70%. Session 2 - Irrigation overview in different countries

One constrains the others under stress, drought reduces hydroelectric capacity and irrigation potential. Session 3 will discuss Energy

We will further dive over the next 3 days into a range of topics in the FEW nexus

Understanding the FEW Nexus

- **Water is life.** It is also the essence of civilization. Mesopotamia, the Nile, Roman empire.
- **Water is at the center of our world**, Moden civilization works to control the hydrosphere for domestic, industrial and agricultural use and this requires energy.
- **Modern water projects** -3 gorge dam, the renaissance dam, desalination
- **Our challenges** in East Africa can be directly tied to water and its management.

Understanding the FEW Nexus

- **Economic Growth is key**, Agriculture is the backbone of many African economies, For many countries >50% of GDP and over 60% of the workforce.
- Agriculture is still mostly rain feed and subsistence based
- **A need for Finance**: Infrastructure requires finance, solutions require finance, addressing issues starts with developing reliance and economic development in order to solve the challenges from within.
- **Agricultural Led Economic Growth**

We Drive Agricultural-led Economic Growth, Resilience. Sustainability. IMPACT.

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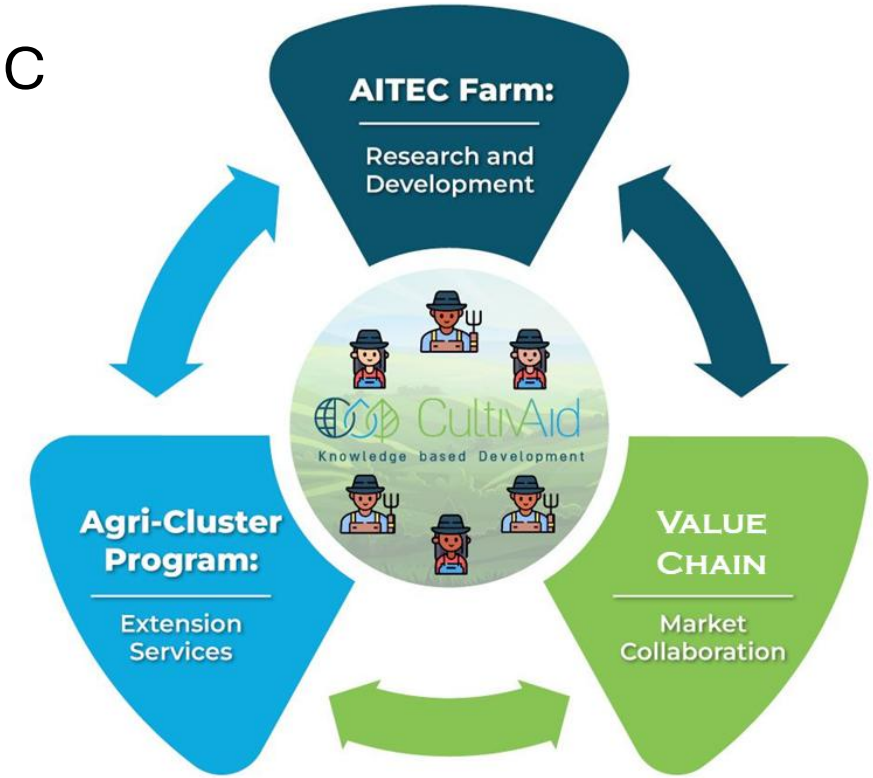
Our work is rooted in the Israeli agricultural experience, which integrates:

- **Research and Development** for innovation and adaptation
- **Farmer Production** for improved productivity and resilience
- **Value Chains** to strengthen market access and sustainability

The synergy between these three components fosters agricultural-led economic growth and long-term sector transformation.

The Agricultural Helix

- **Research and Development.**
  - Agricultural Innovation and Technology Center – AITEC
  - Developing knowledge e.g. growing protocols
  - Demonstrations
  - Training programs
- **Farmer production and Extension programs**
  - Agri-Cluster program, farmer aggregation
  - Farmer training and extension.
- **Value Chain development**
  - Market stability and Demand driven agriculture
  - Focus on Input supply and access to buyers
  - Connection with processors and purchasers,



The Role of Research and Development

- **The AITEC is a living Laboratory** that integrates farmers, agronomists, and researchers in continuous cycles of experimentation
  - Kenya: cover crops and fruit trees,
  - Dodoma: Grape production
- **Data Driven**, developing growing protocols and agronomy for local context.
- **Demonstration of potential**, support decision making, catalyze agricultural transformation.

What most people think if when they imagine African Agriculture

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WHAT WE SEE!

Skilled Young Professionals!

Agronomist Internship and attachment Programs

A New Generation Of Experts!

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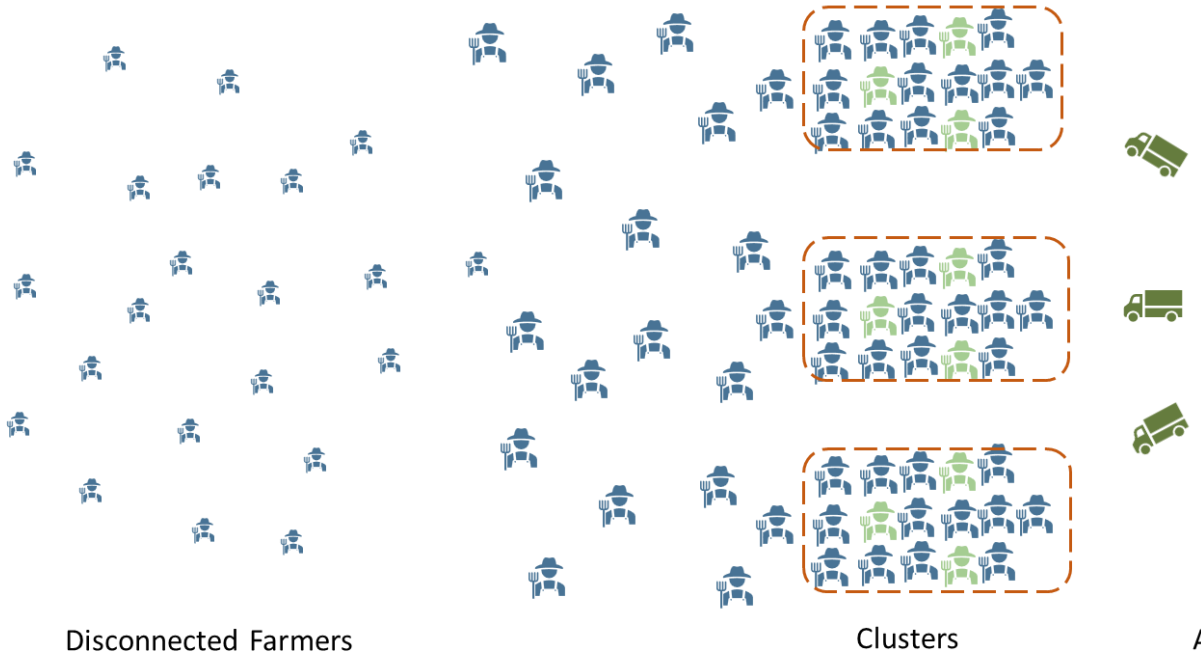
CultivAid's Agri-Cluster Model

farmers must organize to be able to ensure development

Economies of scale



1. Access to inputs, knowledge and technologies
2. Access to buyers and value chains
3. Aggregation, economies of scale
4. Market knowledge and Sector organization
5. Market Stability and trust
6. *Access to finance

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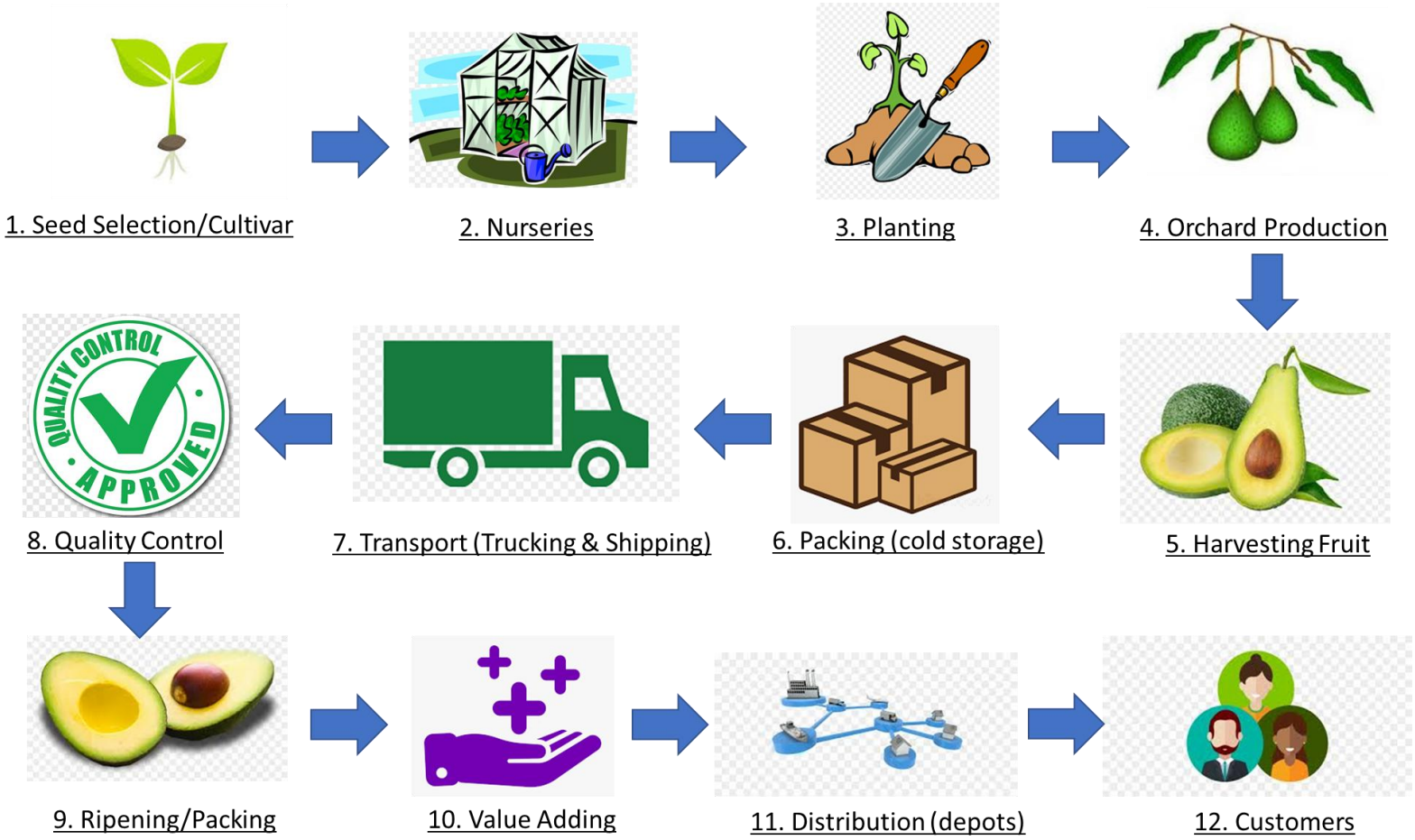
Cities are the Engines of Economic Growth

The market relationship between urban and rural create jobs and contributing to the transformation of rural agriculture, creating linkages between rural producers and urban consumers, markets, and services.

Agriculture, Value Chains: more than just production



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Job Creation in the Value Chain

- **Processing and Manufacturing**:

  1,000 tons of produce = potential 20 jobs.

- **Transport and Logistics:**

  farm to market, 5 jobs / 100 tons of goods transported.

- **Retail and Distribution:**

  10% increase in food supply = 3% increase in employment

- **Support Services**:

  Higher farmer productivity increases demand for advisory services, input suppliers, finance, and technology → demand for skilled jobs.

For every job in agriculture, potential for 2–3 additional jobs in processing, logistics, and related industries.

The Agricultural Helix – where do you fit?