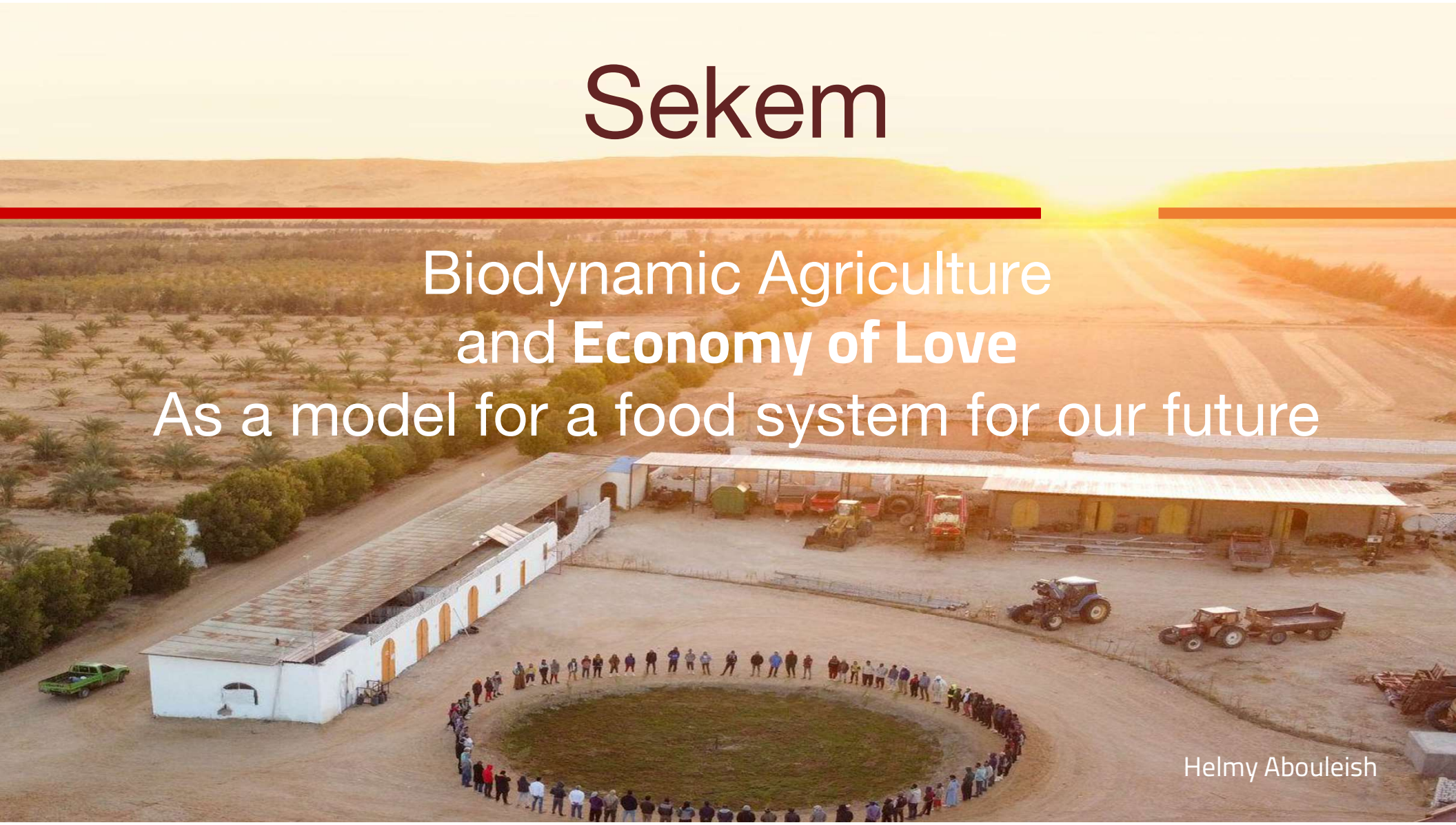
Sekem

Biodynamic Agriculture and **Economy of Love** As a model for a food system for our future



Helmy Abouleish

Egypt - Challenges

- Population growth
- Poverty
- Water
- Biodiversity
- Climate
- Unemployment
- Food security
- Education

1977 - 2017 The miracle in the desert

SEKEM
40 Years of Sustainable Development

Agriculture as Solution

Potential of Conversion of Global Agricultural System

10.7 - 12 Gigatons of CO_2

Conventional Agriculture & Land Use

18 Gigatons of CO_2

Organic, Biodynamic Agriculture

Sources:

- FAO. 2021. Emissions from agriculture and forest land. Global, regional and country trends 1990–2019. FAOSTAT Analytical Brief Series No 25. Rome.
- IPCC, 2019: Summary for Policymakers. In: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. https://doi.org/10.1017/9781009157988.001
- FAO. 2021. Land use statistics and indicators statistics. Global, regional and country trends 1990– 2019. FAOSTAT Analytical Brief Series No 28. Rome.
- Kilgore, G. (2023, January 23). How much CO2 does a tree absorb? 29 trees & plants ranked by most CO2.
- Scialabba, N. E., & Müller-Lindenlauf, M. (2010). Organic Agriculture and Climate Change. Renewable Agriculture and Food Systems, 25(2), 158-169. doi:10.1017/s1742170510000116

Factoring agrifood systems costs and benefits into decisions

12.7 trillion USD of hidden costs

Food and Agriculture Organization of the United Nations

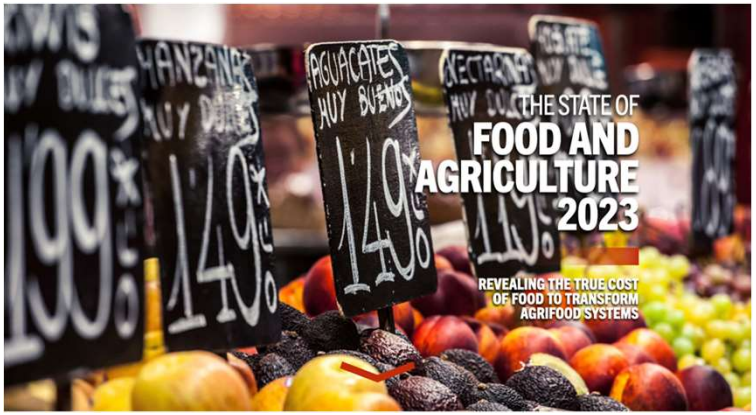
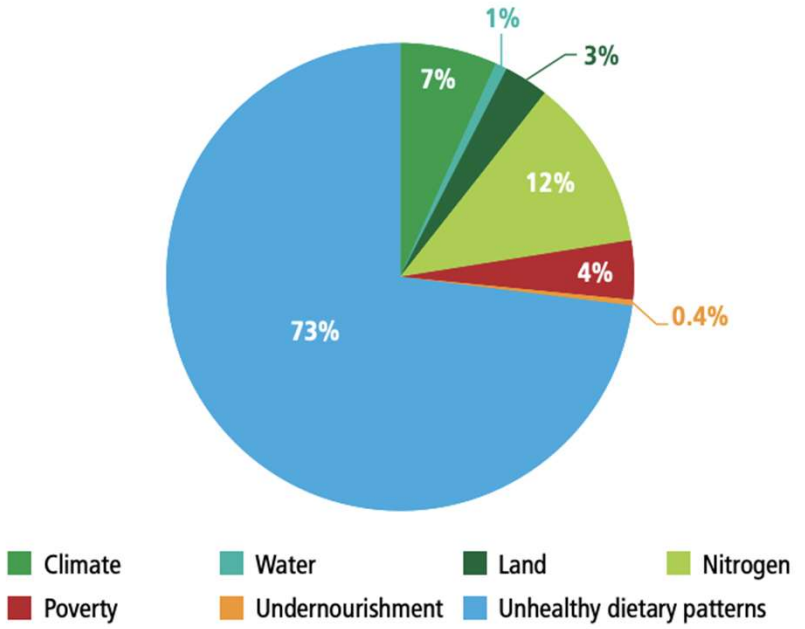


FIGURE 1. Distribution of 12.7 trillion dollars of hidden costs of agrifood systems by sub-category



Note: See Annex 2 of the source for country-level results.

Source: Authors' elaboration based on FAO. 2023. *The State of Food and Agriculture 2023. Revealing the true cost of food to transform agrifood systems.* Rome.

5 Main Pillars of Economy of Love

Certification

Providing a holistic certification standard for sustainable and ethical value chains.

impacTrace

Guarantee transparency to stakeholders, especially end-consumers, by showing them how their products are made, who made them, and what impact they have on the environment and people.

Carbon Credits

Aiming to reduce CO2 farm emissions. Rewarding farmers for their positive environmental services sequestering and avoiding CO2

Fund

Investing in unfolding potential and the development of farmers, communities and nature's regenerative capacity.

Education

Raising awareness in the community on sustainable living and working, and fostering their understanding of a holistic economy through interactive and comprehensive educational programs.

Economy of Love answers these 4 questions to the consumer:

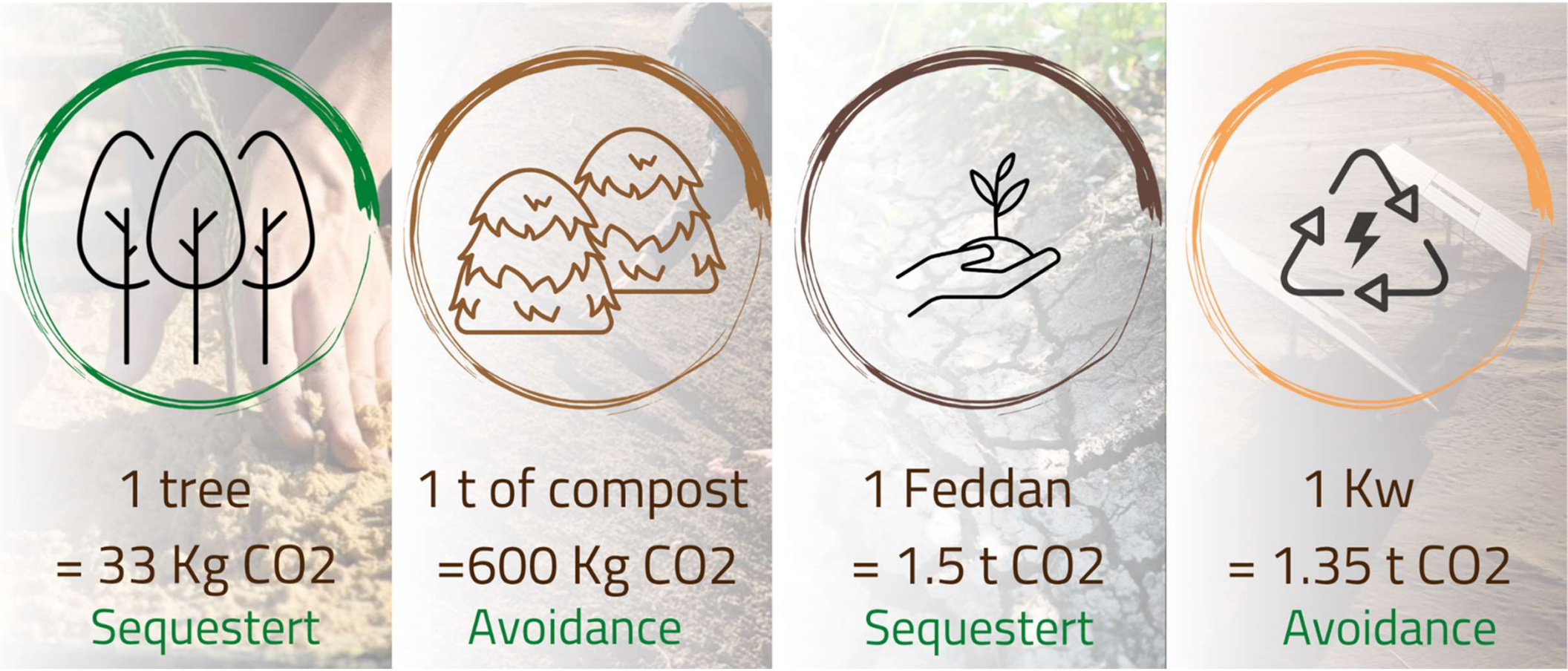
What is my impact on the environment ?

What impact do I have on potential unfolding of people?

What is my impact on society?

What is the True Cost of my product?

The Economy of Love Integrates Different Sources to Generate Carbon Credits



Agriculture as Solution

Potential of Conversion of Egyptian Agricultural System

= 22.7 million tons of CO_2

Conventional Agriculture & Land Use

≈ 47.5 million tons of CO_2

Organic, Biodynamic Agriculture

Scaling Economy of Love

Phase 1

2018-2021

Prototype
SEKEM Wahat Farm

- 830 acre
- 12,000 CC
  - 190k trees
  - 5.8k t compost
  - 1.3MW Renewable

Phase 2

2021-2023

Upscaling to 2100 Farmers

- 14,000 acre
- 84,000 CC
  - Avg. 3t CO_2 CDR/acre through soil carbon & afforestation
  - Avg 3t CO_2 avoidance/acre through compost production

Phase 3

2023-2025

Upscaling to 40,000 Farmers

- 250,000 acre
- 1.5 mio CC
  - Avg. 3t CO_2 CDR/acre through soil carbon & afforestation
  - Avg 3t CO_2avoidance/acre through compost production

Phase 4

2025-2028

Upscaling to 250,000 Farmers

- 1.6 mio acre
- 9.6 mio CC
  - Avg. 3t CO_2 CDR/acre through soil carbon & afforestation
  - Avg 3t CO_2avoidance/acre through compost production

Joint Call for Action

1. Joint approval of minimum requirements for carbon credit schemes. Schemes meeting the proposed requirements herein are accepted and can sell and trade their validated and verified agricultural carbon credits on the international VCM, ensuring global recognition.

2. Funding farm transitions, ensuring their shift towards climate-friendly agriculture by utilizing future earnings from agriculture carbon credits for initiatives such as renewable energy installation and capacity building.

3. Facilitating smallholder farmers' entry to the global VCM by providing knowledge, funding, and assistance in transitioning farms to apply climate friendly methods (e.g. Economy of Love scheme).

Egypt Pioneering CLimate Action

Voluntary Carbon Law

Prime Ministerial Decree No. 4664 of 2022 ("**Decree**") published on 25 December 2022, incorporating new provisions to the executive regulations of the Capital Markets Law No. 95 of 1992.


"It always seems impossible until it's done."
Nelson Mandela