True Price of Organic Meat in Egypt

Final Activities Report

Submitted to: Netherlands Food Partnership

Submitted by: Rdna Store

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Submission Date: 24 April 2025 Contact: Mazen Helmy, CEO

Executive Summary

This report presents the outcomes of the "True Price of Organic Meat in Egypt" project, initiated by Rdna Store in collaboration with True Price and key stakeholders. The project aimed to assess the hidden social and environmental costs associated with beef production in Egypt and raise awareness of sustainable consumption.

Despite challenges related to data scarcity and limited local benchmarks, the study successfully delivered Egypt's first exploratory analysis comparing organic and conventional beef production through a True Price lens. Key activities included a comprehensive desktop study, a targeted digital awareness campaign, and a stakeholder engagement event.

The project highlighted critical gaps in data and market awareness but also demonstrated strong stakeholder interest and government alignment with sustainability goals under Egypt Vision 2030. Building on this momentum, Rdna is launching a pilot sustainable livestock farm to translate awareness into practice.

Key Outcomes:

- Completion of Egypt's first True Price study on beef.
- Digital campaign reaching over 10,000 organic views.
- Successful stakeholder event fostering dialogue on sustainable practices.
- Initiation of a pilot farm to model sustainable livestock systems.

The report concludes with recommendations to expand awareness efforts, foster collaborations, and promote practical initiatives that drive systemic change in Egypt's agricultural sector.

Introduction

Since its establishment in 2019, Rdna Store has positioned itself as a leading specialty grocery retailer in Egypt, dedicated to offering sustainable and clean products. In pursuit of this mission, Rdna has continuously redefined its supply chain and sourcing practices, fostering close partnerships with farms and suppliers to promote transparency and support the transition toward resilient, sustainable agriculture.

As the only retailer in Egypt providing certified organic meat—sourced from its partner, Sekem Farm, located 70 km north of Cairo—Rdna has recognized the strategic importance of the meat category within its offerings. With meat representing one of Rdna's highest-selling product lines and a key driver of future growth, understanding the underlying production systems for both organic and conventional beef became imperative. This understanding is vital not only for optimizing Rdna's value chain but also for engaging consumers through education on the broader impacts of different production methods.

The primary objective of this study was to conduct Egypt's first comparative assessment of the **True Cost** of producing 1 kilogram of beef via organic versus conventional practices, focusing exclusively on domestically raised cattle. However, during the initial data collection phase, Rdna and its research partner, True Price, encountered several constraints that necessitated adjustments to the study's scope. These challenges included:

- **Limited availability of local data** and small sample sizes, hindering direct and statistically robust comparisons.
- **Absence of country-specific research** on the environmental externalities associated with beef production in Egypt.
- **Scarcity of data on organic farming practices**, with most available insights derived from Sekem Farm, primarily emphasizing animal welfare rather than comprehensive environmental impacts.

Despite these limitations, the study offers critical exploratory insights into the sustainability and economic viability of organic beef production in Egypt. It serves as a foundational step toward fostering informed dialogue, guiding future research, and supporting the evolution of sustainable practices within the sector.

Objectives

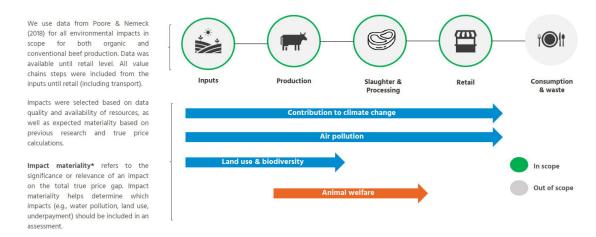
Primary Objectives

- **Introduce the True Cost concept**: Raise awareness among key stakeholders across the food value chain about the concept of the true cost of agricultural products, highlighting the hidden social and environmental impacts embedded in food production.
- **Enhance consumer understanding**: Simplify and communicate the externalities associated with food production—such as environmental degradation, resource depletion, and social costs—in a clear, accessible manner, avoiding complex scientific jargon to ensure broad public engagement.

Secondary Objective

• **Establish a roadmap for action**: Collaborate with local and international stakeholders to develop a practical follow-up action plan aimed at promoting sustainable practices and driving systemic change within Egypt's agricultural and livestock sectors.

A simplified beef value chain of beef produced in Egypt, both organic and conventional.



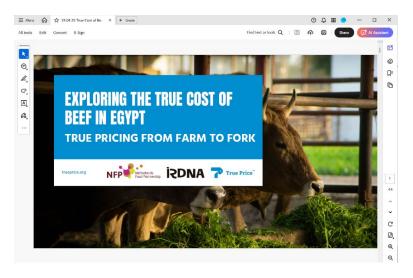
Activities and Findings

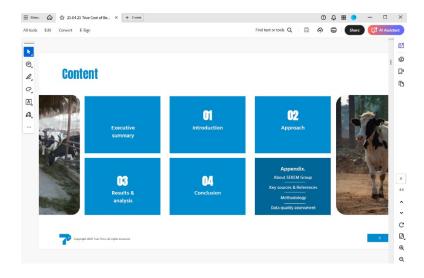
1. Assessment of the True Price of Meat Production in Egypt

The first phase centered on conducting an exploratory analysis of the True Price of beef production, leveraging secondary data and comprehensive desktop research. Led by the True Price team, with critical local support from Rdna Store, this effort involved sourcing relevant Egyptian studies and facilitating the translation of Arabic data to ensure contextual accuracy.

Despite data limitations, the research was completed on schedule between September and December 2024. Following multiple review cycles, the final report (English version) was finalized, marking Egypt's first attempt to quantify hidden social and environmental costs in beef production.

Access to the final report is available [here].



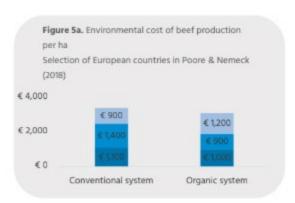


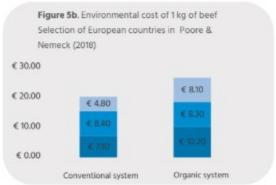
CONCLUSION | KEY INSIGHTS

This baseline assessment reveals the significant environmental costs of beef production and underscores the need to close the data gap to determine the true cost of (organic) meat in Egypt.

- This project highlights the significant environmental and animal welfare costs associated with beef production, revealing the hidden environmental costs—land use, biodiversity loss, climate change, and air pollution—that are often ignored. Using global data, we found that the true price gap of beef is much higher than its market price, with a middle range (where the middle 50% of the datapoints falls 1st to 3rd quartile) between €17 (E£560) and €50 (E£1,600). We were not able to estimate the environmental costs of Egyptian beef due lack of readily available secondary data. Within the global middle range of environmental costs, minimal grazing farms are on the high end.
- Generally, organic farms do not use pesticides and non-organic fertilisers and have a lower impact on biodiversity compared to conventional farming systems. However, because of bigger land use (m2 per cow), and less productive farms and cropland, there is a clear trade off for organic production. There is little data on the difference between organic and conventional beef production outside of Europe. Organic beef's environmental cost per hectare is lower than conventional systems but higher when comparing per kg beef. Further research on biodiversity impacts is needed to understand the trade-offs between organic and conventional beef production more comprehensively, especially considering the local Egyptian context.
- At the SEKEM farm improved manure management practices are used, and all energy used on farm is renewable. Additionally, the impact on biodiversity is limited because of biodynamic and holistic farming. Furthermore, land that was reclaimed from the desert for beef production is expected to have a much lower land use and biodiversity impact. An exploration of this impact reduces the overall environmental costs of beef significantly (down by approximately 50%). However, a careful assessment of the overall environmental impact should be made including among other impacts increased pressure on water scarcity for irrigation demands and helothened air pollution because of compost use.
- Animal welfare costs vary depending on practices such as days spent on open fields, slaughter age and length of the slaughter process. Animal welfare loss was valued at close to 0 when using data from the SEKEM farm. Access to open fields increases the life quality of the cattle and decreases the animal welfare impact. Regulations and organic certification can help ensure better living conditions for animals. While hala! slaughter is the predominant method in Egypt according to Islamic law, a comprehensive assessment of its animal welfare implications was not included within the scope of this assessment.







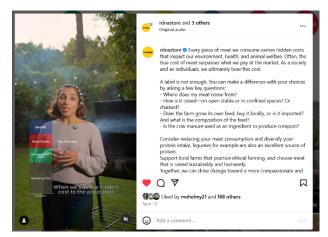
Note: The x-axis in Figures 3a and 3b represents different units. The scales of these figures are not directly comparable, and visual differences should be interpreted within the context of their respective units.

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2. Digital Awareness Campaign

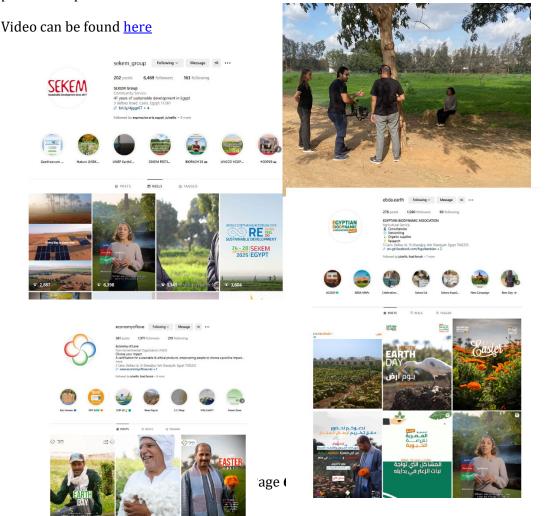
A key objective of the project was to translate complex research findings into accessible content for public engagement. To achieve this, a concise and engaging digital video was developed to introduce the concept of the True Cost and provide a high-level overview of the beef life cycle in Egypt.

Launched in April 2025—timed to follow the completion and reframing of the final



report—the campaign featured a short reel in Arabic with English subtitles. The video was initially published on Rdna's Instagram account and subsequently cross-promoted by Sekem Group, the Egyptian Biodynamic Association, and Economy of Love platforms.

The campaign achieved strong organic reach, garnering over **10,000 views** across all channels, successfully sparking conversations around sustainable consumption and production practices.



3. Pre-Publication Stakeholder Event

Recognizing the importance of stakeholder collaboration, Rdna organized a pre-publication event, despite it not being part of the initial project plan. This gathering convened **30 key participants** representing various segments of the meat production value chain, including producers, policymakers, industry experts, and sustainability advocates.

The event facilitated meaningful dialogue on bridging the True Price Gap, exploring collaborative opportunities, and identifying actionable pathways to promote sustainable meat production in Egypt. It was widely regarded as a pivotal first step toward fostering long-term partnerships and systemic change within the sector.

A summary video of the event is available [here].



Challenges and Mitigation Strategies

Throughout the course of the project, several challenges emerged, primarily concerning data limitations, contextual framing, and the interpretation of comparative findings. Addressing these obstacles was critical to ensuring the credibility, relevance, and impact of the study. Below are the key challenges encountered and the mitigation strategies implemented:

1. Limited Availability of Reliable Local Data

A significant challenge was the scarcity of dependable local data on conventional beef production, compounded by the limited number of certified organic farms in Egypt. These constraints rendered direct, statistically valid comparisons between organic and conventional systems unfeasible due to insufficient sample sizes.

Mitigation Strategy:

In collaboration with True Price, the research approach was adjusted to adopt an exploratory framework rather than pursue direct statistical comparisons. By referencing global average ranges from countries with similar cattle-raising conditions—such as restricted grazing systems—we established a preliminary benchmark. While not fully representative of Egypt-specific dynamics, this method provided a foundational reference point to address existing data gaps and guide future, more localized research initiatives.

2. Research Framing and Alignment with Local Context

Midway through the project, it became evident that the initial framing of the report was heavily data-centric, lacking sufficient consideration of Egypt's unique market context. Given that the True Price concept is still nascent in Egypt, with minimal public awareness and limited prior research, the original framing risked disengaging local stakeholders.

Mitigation Strategy:

To enhance relevance and accessibility, the project team worked closely with True Price to recalibrate the report's narrative. Without altering core research outcomes, the revised framing prioritized introducing the True Price concept and contextualizing findings within Egypt's socio-economic and environmental landscape. This approach shifted the focus from isolated cost figures (€17 vs. €49 per kg) to broader discussions on sustainability challenges and opportunities in beef production.

3. Risk of Misinterpretation of Comparative Findings

An early draft of the report included graphical representations that, without proper context, could be misconstrued to suggest that conventional beef production was less harmful than organic methods. While certain scientific parameters might support this under specific conditions, presenting such data without adequate explanation could lead to incorrect conclusions, potentially undermining sustainability efforts.

Mitigation Strategy:

To safeguard against misinterpretation, the team engaged with both True Price and Sekem to reframe how comparative data was presented. The final version ensured that findings were clearly contextualized, emphasizing the complexity and trade-offs inherent in different production systems. This reframing underscored the importance of long-term sustainability goals while transparently acknowledging data limitations.

By proactively addressing these challenges, the project strengthened the clarity, credibility, and impact of its findings. These mitigation efforts ensured that the study serves as a constructive contribution to ongoing discussions around sustainable meat production in Egypt.

Conclusion and Recommendations

In light of ongoing domestic and geopolitical challenges, both regionally and globally, this moment presents a strategic opportunity to advance beyond awareness-raising and initiate tangible actions aimed at promoting sustainable agricultural practices—starting with beef production in Egypt and extending to other sectors.

Several key factors reinforce this opportunity:

a. Strong Government Commitment to Sustainability

Egypt's Vision 2030 underscores a national commitment to addressing climate change through the development of an integrated and sustainable ecosystem. The vision emphasizes resilience, transparency, governance reform, and the empowerment of local administrations—all within a framework designed to safeguard national stability and enhance Egypt's regional and international leadership. This policy alignment provides a supportive environment for scaling sustainability initiatives across the agricultural value chain.

"Egypt's Vision 2030 gives importance to confronting the effects of climate change through the presence of an integrated and sustainable ecosystem that enhances resilience and the ability to confront natural risks..."

b. Engaged and Diverse Stakeholder Network

The project has successfully engaged a broad spectrum of stakeholders representing critical segments of the food value chain. This diverse network—spanning producers,

policymakers, industry actors, and sustainability advocates—offers a solid foundation for fostering collaboration and driving the adoption of sustainable practices across the sector.

c. Transitioning from Awareness to Action: The Rdna Sustainable Farming Initiative To translate concepts into practice, Rdna is launching a spin-off venture focused on sustainable livestock farming. This initiative is based on a reclaimed **eight-hectare farm** on the outskirts of Cairo, dedicated to feed cultivation, cattle grazing, and poultry raising. The pilot project aims to serve as a living model of sustainable agriculture, demonstrating practical applications of the principles highlighted in this study.

In line with our commitment to transparency and collective learning, Rdna is meticulously documenting the project's progress, challenges, and decision-making processes. This open knowledge-sharing approach is intended to benefit stakeholders and partners interested in replicating or building upon these experiences.

Next Steps:

Building on the momentum generated by this project, Rdna and its partners are committed to advancing sustainable agriculture and True Cost Accounting (TCA) practices through the following actions:

• Finalizing a Multi-Stakeholder Concept Note:

We are currently developing a comprehensive concept note for follow-up activities, led locally by Rdna in collaboration with Sekem, True Price, and New Silk Road. This initiative aims to:

- Expand awareness campaigns on True Cost principles.
- Build local capacities in True Cost Accounting through training and knowledge transfer.
- Establish a sustainable and independent mechanism to advance local studies and remediation efforts.
- Facilitate multi-stakeholder engagement to systematically uncover True
 Price gaps and implement strategies to reduce them.

• Enhancing Public Awareness:

Continue targeted communication campaigns to deepen consumer and stakeholder understanding of hidden costs in agriculture and promote informed decision-making.

• Strengthening Collaborative Platforms:

Organize regular stakeholder dialogues, workshops, and capacity-building sessions to foster ongoing cooperation across the value chain.

Operationalizing the Pilot Farm:

Monitor, evaluate, and refine practices within the sustainable farming initiative to generate actionable insights and scalable models for sustainable livestock production.

• Advocating for Policy Alignment:

Engage with governmental bodies to align initiatives with Egypt Vision 2030, ensuring policy support for expanding sustainable agricultural practices and True Cost methodologies.

Through these next steps, Rdna and its partners aim to transform the initial groundwork of this project into a long-term, sustainable movement—bridging the gap between awareness and actionable change within Egypt's agricultural landscape.



Annexes

- 2. Physical Event Summary: https://drive.google.com/file/d/1GNQxuFXAoypYFOPmh5kbZHZKg9o21Oqe/view?usp=sharing
- 3. Final Study Report: <u>https://drive.google.com/file/d/1rErpMcDpAvfa3e60EBWHD7PlufMtZUdZ/view?usp=drive_link</u>
- **4.** Location of the new pilot farm: