



DO SME FOOD PROCESSORS IN CENTRAL ASIA WITH CERTIFICATION PERFORM BETTER THAN THOSE WITHOUT CERTIFICATION?

CASE STUDY

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INTRODUCTION

Dried fruits and nuts are vital for nutrition and incomes in rural Central Asia (CA):

Collected from **wild forests** and cultivated in intensive **orchards**;

Rarely in sustainable **Agroforestry Systems (AFS)**;

The expansion of AFS is slow and hindered due to:

- Limited knowledge,
- Undeveloped processing,
- Absence of **Environmental and Social Standards (ESS)**

ENVIRONMENTAL AND SOCIAL STANDARDS (ESS)

ESS are guidelines for sustainable and ethical food production and processing practices

		
Environmental sustainability and resource efficiency	Equitable societies and respect for human rights	Accountable and transparent operations
Sustainable harvesting/collection	Safe and fair working conditions	Traceability
Soil and water conservation	Employee benefits	Quality control systems
Forest, eco-system management	Uphold social responsibility throughout the food supply chain	Inspections
Examples		
Organic, FSC, Fairwild	FSC, Fairtrade, Fairwild	Organic, HACCP, ISO 22000, FSSC 22000

PROBLEM STATEMENT



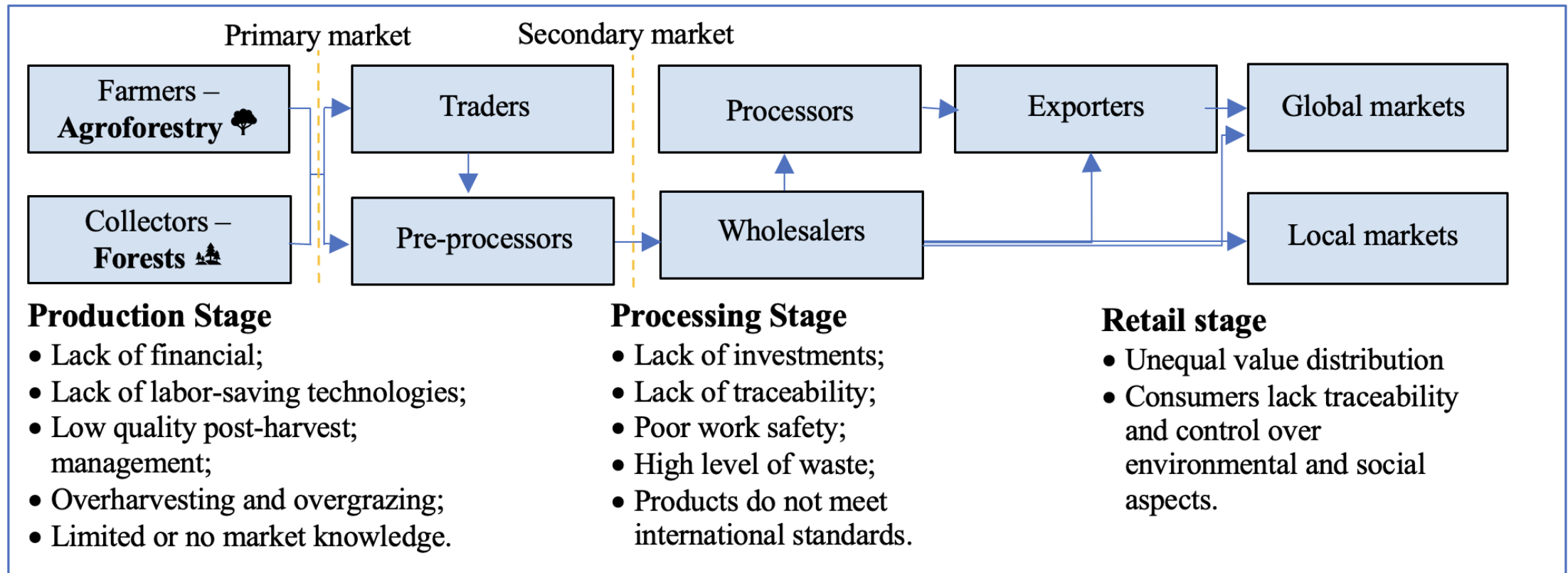
Food processing SMEs in CA often do not fully exploit and benefit from ESS

- Growing demand for sustainable and ethical food
- Rising living standards of populations across the world

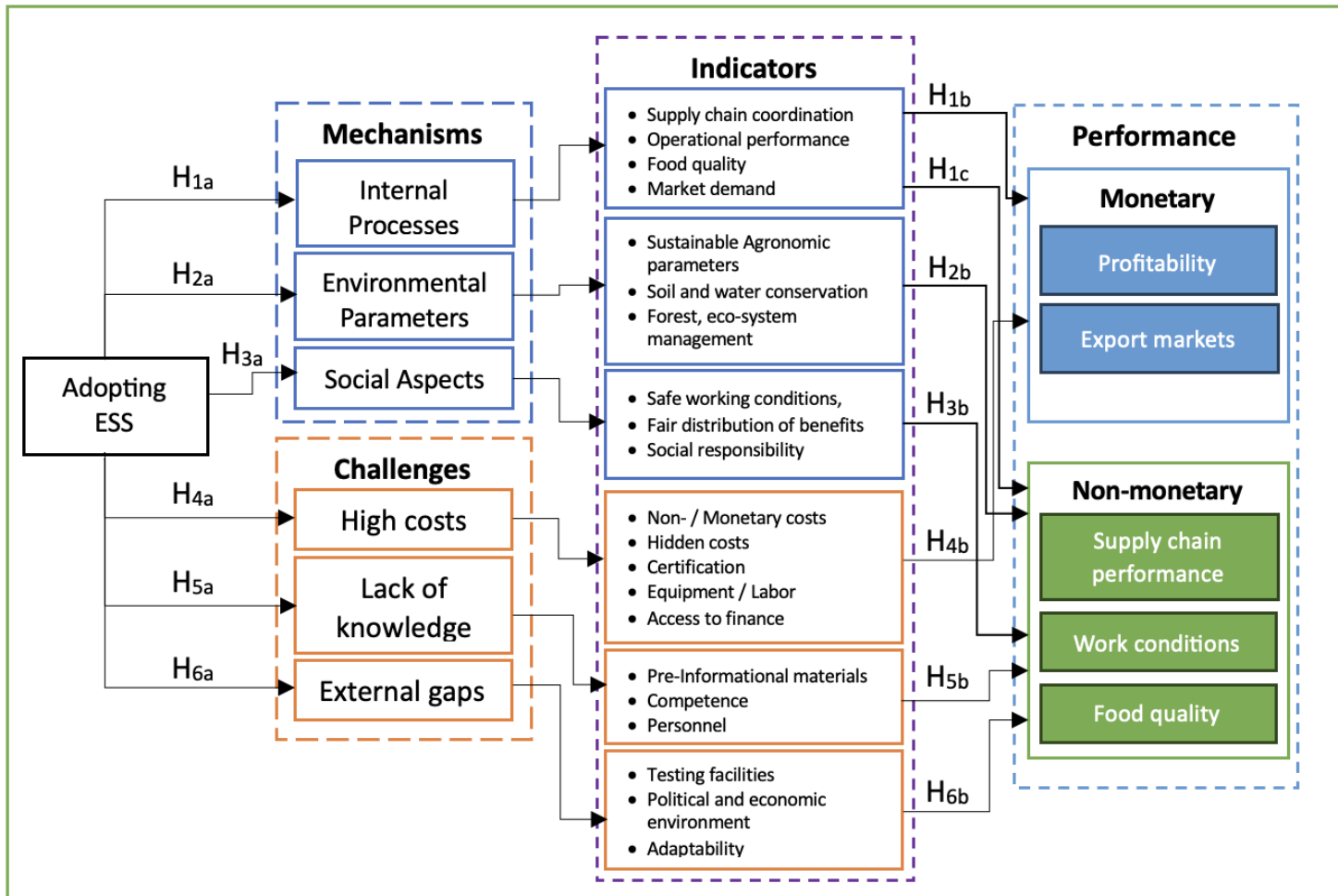


High costs of adopting ESS create uncertainties among food processing SMEs.

VALUE CHAINS OF DRIED FRUITS AND NUTS IN CA



RESEARCH FRAMEWORK AND HYPOTHESIS DEVELOPMENT



H1a: Adoption of ESS enhances internal processes of food processing SMEs, which **H1b:** improves their monetary performance / **H1c:** improves their non-monetary performance of food processing SMEs.

H2a: Adoption of ESS improves environmental parameters of food processing SMEs, which **H2b:** enhances the non-monetary performance of food processing SMEs.

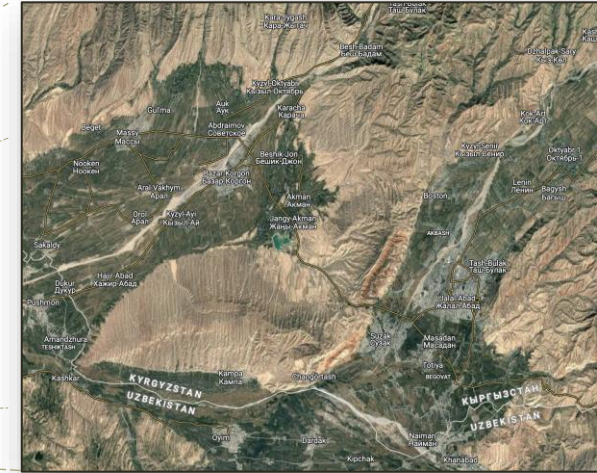
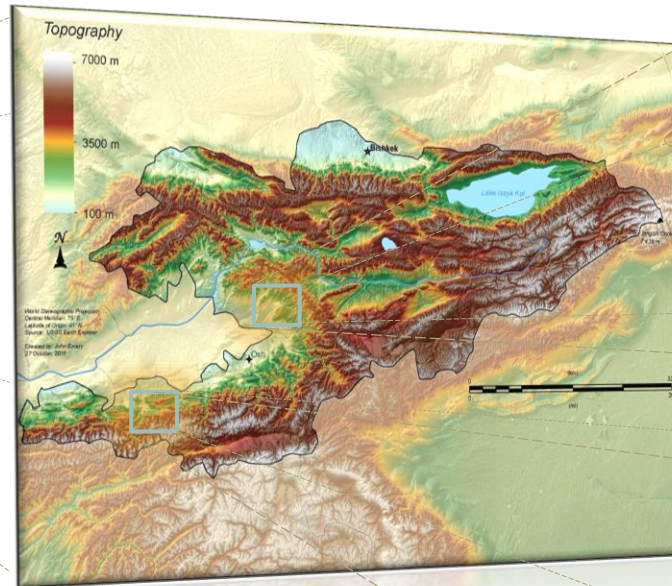
H3a: Adoption of ESS enhances social aspects within food processing SMEs, which **H3b:** enhances the non-monetary performance of food processing SMEs.

H4a: The adoption of ESS by food processing SMEs is hindered by the high costs, which **H4b:** negatively affects the monetary performance

H5a: A lack of knowledge impedes the adoption of ESS within food processing SMEs, which **H5b:** negatively impacts their non-monetary performance.

H6a: External gaps hinder the adoption of ESS by food processing SMEs, which **H6b:** negatively affects their non-monetary performance.

METHODOLOGY, REGION OF STUDY



Jalal-Abad oblast, Kyrgyzstan



Batken oblast, Kyrgyzstan

Multiple (comparative) case study approach

Case study protocol

Food processing SMEs: 7

DESCRIPTION OF FOOD PROCESSING SMES

Food processing SME	Region	Product	Employees	Turnover (€)	Quality assurance
A	Jalal-Abad	Wild walnuts, capers, pistachios, apples and rose hips	2-15	38 000	Organic standard (EU834/07, 889 08) (ended 2023)
B	Jalal-Abad	Wild walnuts, apples	3-35	655 000	Not certified
C	Jalal-Abad	Wild walnuts, pistachios, capers, sunflower seeds		754 000	Not certified
D	Jalal-Abad	Walnuts, capers, pistachios, dried apples, plums, tomatoes, fodder, etc.	2-35	641 000	Organic, HAACP
E	Jalal-Abad	Walnuts, pistachios, dried apples	15-20	892 000	Organic
F	Batken	Dried apricots, apricot oil	2-15	450 000	Organic standard (EU834/07, 889 08) (ended 2023)
G	Batken	Dried apricots, walnuts	2-12	200 000	Not certified

CHALLENGES IN ADOPTING ESS

- The adoption of ESS is mainly funded by international organizations



- For one year

- Food processing SMEs lack business acumen:



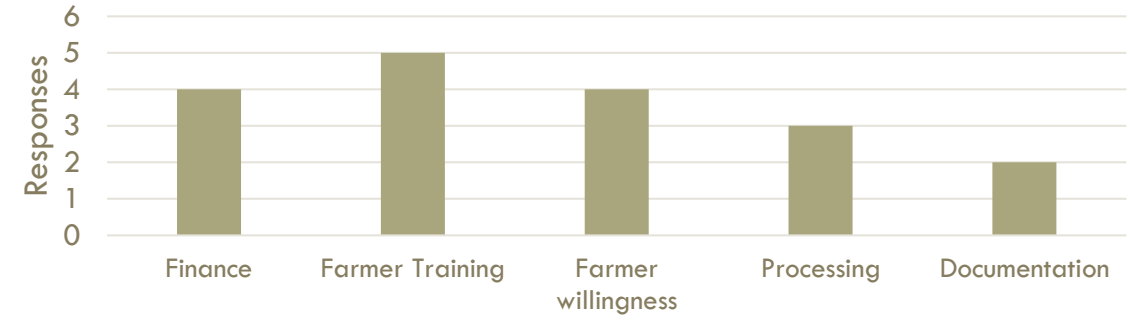
- Finance
- Marketing
- Documentation
- Communication, etc.

- Absence of

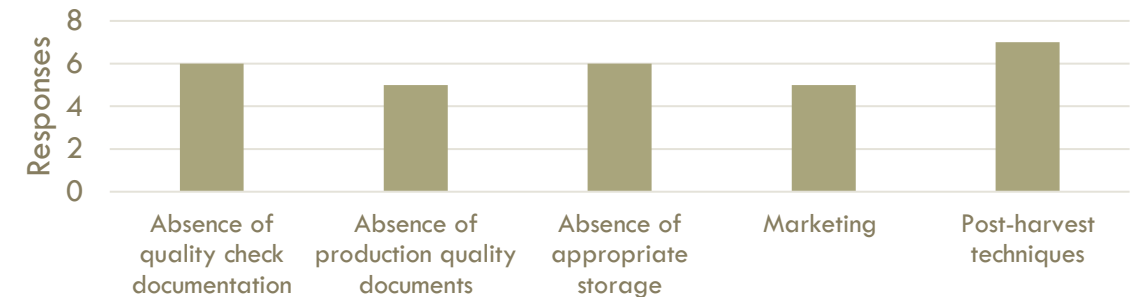


- Work safety documents
- Information materials
- Work contracts

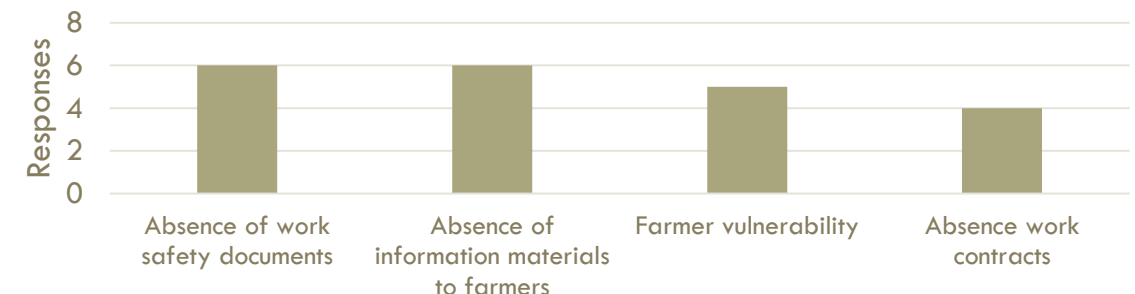
Challenges in Adopting ESS



Effect of ESS on Internal Processes



Effect of ESS on Environmental and Social Processes



POSITIVE EFFECTS OF ESS

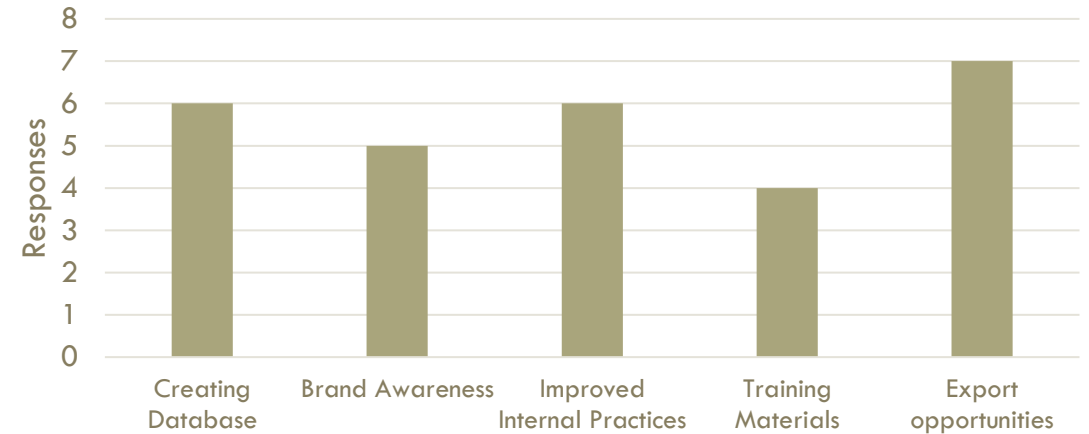
Positive effect:

- Information Systematization;
- Brand awareness;
- Internal practices are improved;
- Training materials are developed;
- NGO support;
- Export opportunities.

Challenges:

- Short-term funding;
- Farmers unreliability;
- Language barriers;
- Phytosanitary reports;
- Quality of produce.

Positive Effect of ESS on Internal Processes

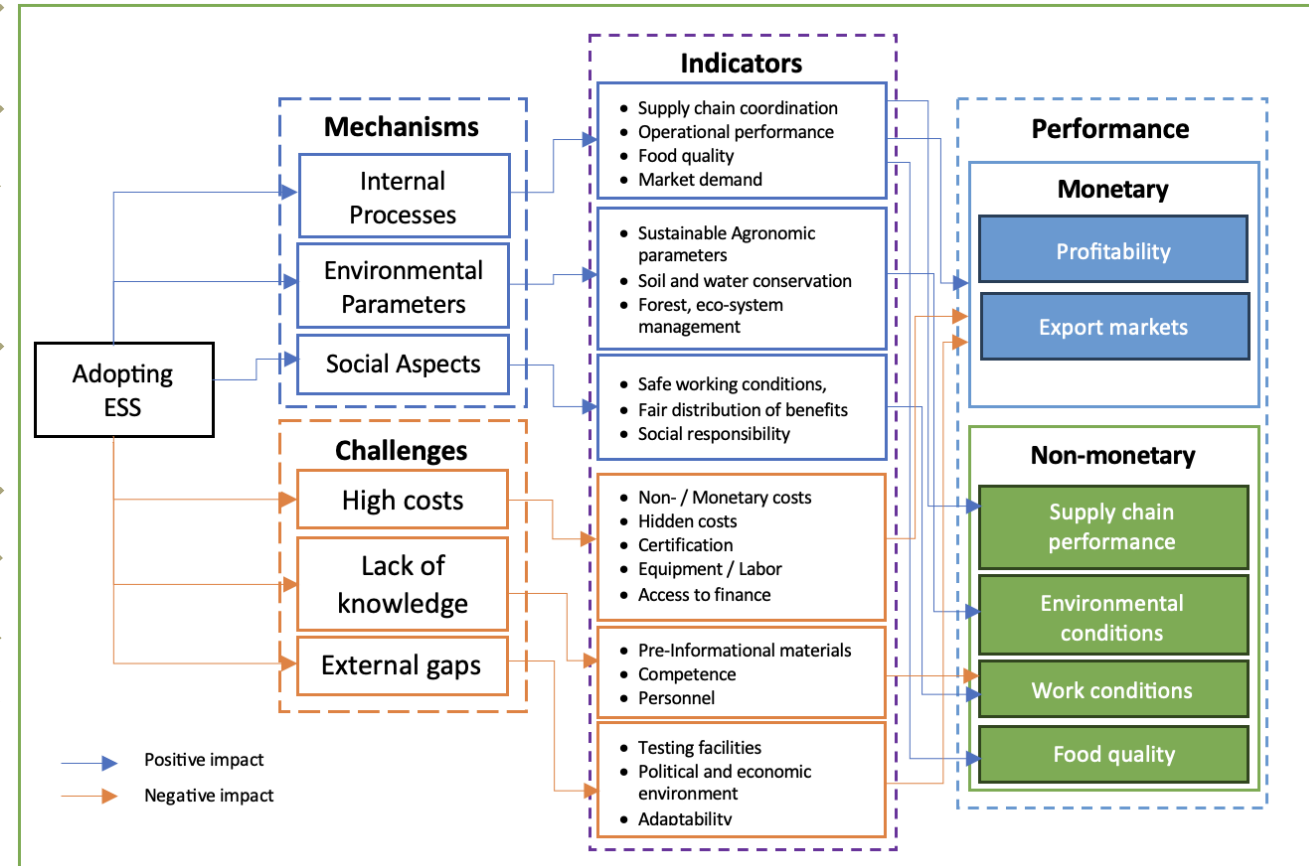


Export countries



CONCLUSION

- **H1a:** Adoption of ESS enhances internal processes of food processing SMEs, which ✓
 - **H1b:** improves their monetary performance / ✗
 - **H1c:** improves the non-monetary performance of food processing SMEs. ✓
- **H2a:** Adoption of ESS improves environmental parameters of food processing SMEs, which ✓
 - **H2b:** enhances the non-monetary performance of food processing SMEs. ✗
- **H3a:** Adoption of ESS enhances social aspects within food processing SMEs, which ✓
 - **H3b:** enhances the non-monetary performance of food processing SMEs. ✗
- **H4a:** The adoption of ESS by food processing SMEs is hindered by the high costs, which ✓
 - **H4b:** negatively affects the monetary performance ✓
- **H5a:** A lack of knowledge impedes the adoption of ESS within food processing SMEs, which ✓
 - **H5b:** negatively impacts their non-monetary performance. ✓
- **H6a:** External gaps hinder the adoption of ESS by food processing SMEs, which ✓
 - **H6b:** negatively affects their non-monetary performance. ✓



CONCLUSION AND RECOMMENDATIONS

International organizations:

- While financing adoptions of ESS, should perform detailed **feasibility studies** to ensure compatibility with existing operations and market conditions of SMEs.
 - **Market Research:** Understand market demand for certified products to ensure the adoption of ESS aligns with consumer expectations and market trends.
 - **Cost-Benefit Analysis:** Analyze the financial implications, including potential ROI from investing in ESS, and operational adjustments needed to comply with these standards.
- **Education and Training:** Invest in continuous education and training for farmers, owners of processing SMEs, and staff to improve their understanding and implementation of ESS.
- **Policy advocacy:** Collaborate with local governments to develop and refine laws and regulations that support organic farming, ensuring they align with international standards.
- **Capacity building:** Offer training programs for government officials and local stakeholders to enhance their understanding and ability to implement effective organic agriculture policies.
- **Enhance Market Positioning:** Support SMEs in utilizing ESS for better market differentiation, meeting the increasing consumer demand for sustainably produced products.

Food processing SMEs:

- **Planning:** Shift the focus from short-term gains to establishing sustainable, long-term business strategies that incorporate ESS.
- **Leverage financial support:** by utilizing initial financial aid from international organizations to build a strong foundation for ESS adoption, ensuring sustainable practices that align with business goals.

THANK YOU!

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