

FOOD INTEGRITY CLIMATE ASSESSMENT IN BELGIAN AND SAUDI ARABIAN FOOD BUSINESSES

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- The fight to prevent food fraud requires an approach that goes beyond the common food safety-based strategies and falls into the sphere of food integrity.
- While food safety hazards occurs unintentionally, food fraud threats are intentionally perpetrated for economic gain.
- Food integrity considers not only technical and managerial factors but also the human dimension involved in potential food fraud occurrences.
- The study of organizational climate recognize the human dimension in food companies and in food integrity, which we call food integrity climate.

OUR DEFINITIONS

- **Food integrity** is a multidimensional concept concerning the integrity of product, process, people and data, referring to the controlled status of a food product to be intact, safe, of quality and authentic in its claims, as well as sourced, processed and distributed ethically throughout a food supply chain.
- **Food integrity climate** refers to the employees' shared perception of leadership, communication, commitment, risk awareness and resources regarding food integrity within the company's working environment in terms of product, process, people and data integrity.

RESEARCH OBJECTIVE

The aim of this study was to assess food integrity climate across countries considering various organizational characteristics of food businesses, by analyzing how the food integrity climate is perceived by quality managers of different food companies and whether organizational characteristics of the participating companies affect the quality managers' estimation of their companies' food integrity climate.

MATERIALS AND METHODS

The food integrity climate (FIC) self-assessment tool was applied on 43 food companies operative in Belgium and Saudi Arabia (Table 1). The FIC tool was applied alongside with a set of introductory questions to classify the participating companies based on specific organizational characteristics (i.e. sector, product composition, supply chain step, presence of (inter)national branches, company size and certification status).

PRODUCT	PROCESS	PEOPLE	DATA
Clear objectives	Clear expectations	Striving to improve	Striving to improve
Clear communication	Clear communication	Open communication	Open communication
Giving importance	Act constructively	Rewarding	Giving good example
Risk awareness	Risk awareness	Alertness to hazards	Alertness to hazards
Resources available	Resources available	Investments made	Investments made

TABLE 1: Food integrity climate (FIC) self-assessment tool indicators

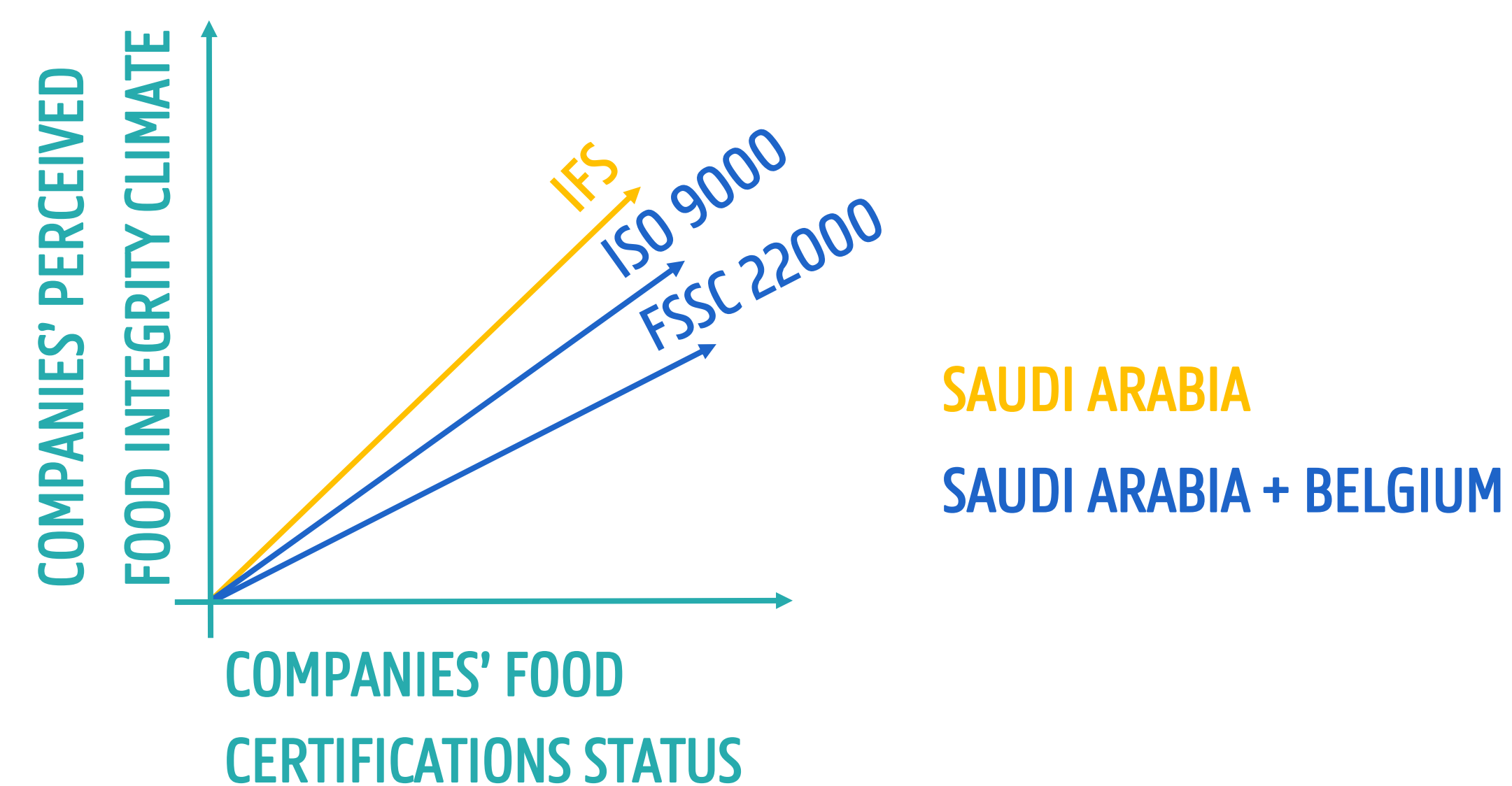


FIGURE 1: Positive relation between food integrity climate and certifications status

RESULTS AND DISCUSSION

The food integrity climate in the participating 15 Saudi Arabian and 28 Belgian food companies was estimated overall as medium-high. Scores were ranging substantially across the different types of organizations, but only slightly between the two countries. The companies' certification status was found statistically significantly related to the perceived food integrity climate. Quality managers in food companies certified for multiple standards perceived a higher food integrity climate than their counterparts in organizations certified for no or only a single certificate, in particular for ISO 9000 as well as FSSC 22000 in both countries and IFS only in the Saudi Arabian sample (Figure 1).

CONCLUSIONS

All types of food companies could improve their food integrity climate by having updated certifications and standards as part of their food safety management systems. To improving performances companies should evolve from a traditional food safety management system towards a more comprehensive food integrity management system.

REFERENCES

Alrobaish, W.S., Jacxsens, L., & Vlerick, P. (2022). Quantitative study of food integrity climate in Belgian and Saudi Arabian food businesses in view of their organizational characteristics. *IJFS*. <https://doi.org/10.1111/ijfs.15749>.

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