

Food Security in the Hotel Sector of the Riviera Maya: An Analysis Based on Food Management Practices

Seguridad alimentaria en el sector hotelero de la Riviera Maya: un análisis desde las prácticas de gestión alimentaria

Josue Emmanuel León-González¹ , Elva Esther Vargas-Martínez¹ ,
Alejandro Delgado-Cruz¹ , Ana Gabriela Cabrera-Rebollo¹ 

Siembra 13 (2) (2026): e9650
DOI: [10.29166/siembra.v13i2.9650](https://doi.org/10.29166/siembra.v13i2.9650)

Received: 02/02/2026
Revised: 25/03/2026 / 26/05/2026
Accepted: 15/06/2026



¹ Universidad Autónoma del Estado de México.
Facultad de Turismo y Gastronomía. Calle Cerro
de Coatepec s/n. C.P. 50110. Toluca de Lerdo,
Estado de México, México.

Correspondence: jem-lego@outlook.com

Abstract

The aim of this study is to analyze how food security is configured within the hotel sector of the Riviera Maya, based on the dimensions of food availability, access, utilization, and stability, from the perspective of the stakeholders involved in its management. The research adopted a qualitative approach, using semi-structured interviews conducted with stakeholders involved in food management in hotel establishments and across the destination's food supply chain. The data were analyzed through content analysis, organizing participants' narratives according to the dimensions of food security. The findings reveal that hotel operations rely heavily on external supply chains, ensuring continuity of food provision but limiting integration with local agricultural production. The study identifies asymmetries in food access between the hotel sector and the local resident population, associated with the rising cost of living and differences in bargaining power. In addition, high standards of food handling and safety were observed alongside practices that contribute to overproduction and food waste. Overall, the findings depict a functional food security system within the hotel sector, embedded in a territorial context characterized by persistent dependencies and inequalities. From a practical perspective, the results highlight that, beyond ensuring an adequate food supply for tourism operations, the hotel industry has the capacity to influence the configuration of local food flows through procurement decisions, supplier diversification, food waste reduction, and the strengthening of relationships with regional producers.

Keywords: food security, food supply chains, hospitality sector, Riviera Maya, tourism destinations

Resumen

El objetivo de este estudio es analizar cómo se configura la seguridad alimentaria en el sector hotelero de la Riviera Maya, a partir de la disponibilidad, acceso, utilización y estabilidad de los alimentos, desde la perspectiva de los actores involucrados en su gestión. La investigación se desarrolló bajo un enfoque cualitativo, mediante entrevistas semiestructuradas aplicadas a actores vinculados con la gestión alimentaria en establecimientos hoteleros y en la cadena de suministro del destino. La información se examinó mediante análisis de contenido, organizando los discursos según las dimensiones de la seguridad alimentaria. Los resultados muestran que la operación hotelera se sostiene sobre una fuerte dependencia de cadenas de suministro externas, lo que garantiza la continuidad del abasto, pero limita la articulación con la producción local. Se

SIEMBRA
<https://revistadigital.uce.edu.ec/index.php/SIEMBRA>
ISSN-e: 2477-8850
Frequency: half-yearly
vol. 13, issue 2, 2026
siembra.fag@uce.edu.ec



© The authors 2026

This work is licensed under a
Creative Commons Attribution-
Non-Commercial 4.0 Inter-
national License

identifican asimetrías en el acceso a los alimentos entre el sector hotelero y la población residente, asociadas al encarecimiento del costo de vida y a diferencias en capacidad de negociación. Asimismo, se observan altos estándares de manejo e inocuidad, junto con prácticas que favorecen la sobreproducción y el desperdicio. En conjunto, los hallazgos describen una seguridad alimentaria funcional en el ámbito hotelero, inserta en un entorno territorial caracterizado por dependencias y desigualdades persistentes. Desde una perspectiva práctica, los resultados subrayan que más allá de garantizar el suministro para la operación turística, la hotelería posee capacidad de incidir en la configuración de los flujos alimentarios locales mediante decisiones de compra, diversificación de proveedores, reducción de desperdicio y fortalecimiento de vínculos con productores regionales.

Palabras clave: abastecimiento de alimentos, destinos turísticos, Riviera Maya, sector hotelero, seguridad alimentaria

1. Introduction

Food security [FS] has been the subject of analysis by the international academic community within the framework of efforts to ensure adequate and sufficient food for the world's population. It represents a complex challenge that requires recognizing how the dynamics of food production, distribution, and consumption are pressured and transformed by different sectors, including tourism and, particularly, the hotel industry, where food demand is intense and continuous (Omar et al., 2024). In high-tourism regions such as the Riviera Maya, the pressure exerted by hotel operations creates a tension between the needs of the tourism sector and the living conditions of the resident population.

According to the Food and Agriculture Organization of the United Nations (Organización de las Naciones Unidas para la Alimentación y la Agricultura [FAO] et al., 2025), in 2024, approximately 673 million people suffered from hunger, equivalent to 8.2% of the world's population. In the same year, 2.3 billion people experienced moderate or severe food insecurity, in a context of gradual decline since 2021. In Latin America and the Caribbean, undernourishment decreased to 5.1%, and moderate or severe food insecurity affected 25.2% of the population, confirming a regional trend of improvement. However, the global cost of a healthy diet increased to 4.46 PPP dollars per person per day, which continues to restrict access to adequate food, especially for the most vulnerable groups.

In Mexico, food availability is sufficient in aggregate terms, but this does not guarantee adequate conditions for food access due to unequal income distribution, price volatility, and the rising cost of the basic food basket (Granados Sánchez et al., 2025). In addition, 18.2% of the population experiences deprivation in access to nutritious and quality food, a condition that reflects economic and material constraints in acquiring sufficient and adequate food (Consejo Nacional de Evaluación de la Política de Desarrollo Social [CONEVAL], 2022). This condition coexists with the

double burden of malnutrition, reflecting a food environment that combines excess caloric intake with nutritional deficiencies (Carrasco-Quintero et al., 2023).

Meanwhile, Quintana Roo is the Mexican state that receives the largest influx of international tourists (DATATUR, 2025) and records the highest revenues from tourism activity (Secretaría de Turismo de Quintana Roo, 2024). This dynamic contrasts with the vulnerability conditions faced by part of its population. According to estimates, 14% of the state's population experiences deprivation in access to nutritious and quality food (CONEVAL, 2022). In this scenario of contrasts, the food procurement and management practices of the hotel sector are embedded in a context marked by inequalities. In this study, the problem of FS is not addressed in terms of the overall availability of food, but rather in its configuration within the hotel sector of the Riviera Maya. In particular, the analytical focus is on how food management practices structure the dimensions of availability, access, utilization, and stability in a context characterized by high tourism demand.

In this context, the hotel industry has a high capacity to guarantee the food supply required for its operations, supported by external supply chains and complex logistical schemes. However, this configuration coexists with weak integration with local production and with asymmetries in food access between the tourism sector and the resident population. This tension defines the research problem by showing that FS in the hotel sector is sustained as a functional condition at the organizational level, while being embedded in a territorial environment characterized by dependencies and inequalities.

The literature addressing FS in tourism contexts has advanced in a fragmented manner and, to a large extent, through the analysis of macroeconomic indicators at the national or regional level, such as agricultural production (Akther et al., 2024), food imports (Baidoo et al., 2024), or the contribution of tourism to gross domestic product (Agostinho et al., 2024). In this regard, it has been suggested that tourism expansion may indirectly contribute to certain FS objectives by stimula-

ting agricultural production and reducing dependence on food imports, although these positive effects are not necessarily reflected in the territories where tourism is concentrated, but rather in adjacent areas (Kocak, 2026). Furthermore, these approaches prioritize aggregated scales of analysis and provide limited documentation on how these dynamics are translated into concrete practices within hotel operations, as well as their implications for tourism destinations.

The capacity of tourism to strengthen FS beyond its macroeconomic contributions has been questioned. Research conducted in environments highly dependent on this activity shows that the coexistence of visitor-oriented economies and local populations facing food constraints is a common characteristic, associated with external dependence, economic leakage, and the reconfiguration of local food supply systems (Burke, 2021; Tchouamou Njoya & Nikitas, 2020). However, there is still a limited understanding of how business decisions shape the conditions of food availability, access, utilization, and stability.

At the sectoral level, the hotel industry has been identified as a strategic actor in shaping food environments in tourism destinations by concentrating on daily decisions related to the procurement, storage, preparation, and service of food. Evidence shows that the hotel food system is characterized by high sensitivity to demand variability, limited storage capacity, and a strong dependence on frequent supply schemes, limiting its ability to respond to external disruptions (Sentia et al., 2022). These conditions are reinforced by operational practices aimed at ensuring abundance and diversity in the food offer, typical of mass tourism models, which increase pressure on food flows and resource use (Amicarelli et al., 2022; León-González & Vargas-Martínez, 2024). Nevertheless, these analyses are approached from an operational efficiency perspective, without examining how internal decisions shape the dimensions of FS in specific tourism contexts and sectors.

Food waste constitutes another line of research in which its impact on the availability, access, and stability of the food supply is recognized (De Visser-Amundson, 2022; Kalogiannidis et al., 2025). Although progress has been documented in reducing food waste through organizational interventions and collaborative approaches, as well as the relevance of integrating the hotel sector into broader sustainability strategies, there remains a gap regarding the relationship between these practices and FS in the tourism industry.

Complementarily, recent studies have explored strategies aimed at strengthening the resilience and sustainability of food management in the hotel and restaurant sectors, including circular economy practi-

ces, purchasing from local producers, seasonal menus, and surplus food redistribution mechanisms (Chang et al., 2025; Misik & Nagy, 2025; Okupe, 2023). Likewise, it has been pointed out that the adoption of food preservation, storage, and utilization practices can reduce dependence on highly perishable or imported inputs, although their adoption faces constraints related to infrastructure, costs, and the availability of trained personnel (Sundqvist & Marshall, 2025). Despite these advances, the way in which these strategies influence the configuration of FS from a sectoral perspective, particularly in terms of their interaction with local food supply systems and the conditions of food access for the resident population, remains insufficiently addressed.

It has been noted that global food crises, rising food and energy prices, and disruptions in supply chains represent growing threats to the operational continuity of the tourism and hospitality sector (Okumus, 2025). This approach has made it possible to recognize the vulnerability of tourism to external shocks; however, the analysis of how these macro-level dynamics are translated into concrete hotel management actions and their implications for FS remains limited.

Therefore, the existing literature highlights the need to analyze FS from a sectoral and organizational perspective by integrating food procurement, management, and utilization practices in the hotel industry with the conditions of the local food environment. In this regard, this study contributes to addressing this gap by examining how the dimensions of food availability, access, utilization, and stability are configured in the hotel sector of the Riviera Maya from the perspective of the actors involved in their management.

In this study, FS is understood as a multidimensional concept that integrates the dimensions of availability, access, utilization, and stability, which are widely recognized in the specialized literature (FAO, 1996; FAO et al., 2025; Maxwell, 1996). Although this approach has been developed primarily from population-level and public policy perspectives, its application to sectoral contexts makes it possible to analyze how these dimensions are shaped through specific organizational decisions and practices, particularly in activities with intensive food use such as the hotel industry. In high-intensity tourism destinations such as the Riviera Maya, hotel operations concentrate key decisions regarding food procurement, management, and utilization, with implications for the territory's food environment (León-González & Vargas-Martínez, 2024). Accordingly, the objective of this article is to analyze how FS is configured in the hotel sector of the Riviera Maya based on the dimensions of food availability, access, utilization, and stability from the

perspective of the actors involved in its management.

The manuscript is organized into four sections. First, the methodology used for the fieldwork and data analysis is described. Subsequently, the results are presented, organized according to the dimensions of FS: availability, access, utilization, and stability. In the discussion section, the findings are contrasted with the specialized literature, incorporating a reflection on their practical implications for food operations in the hotel sector, and concluding with the conclusions. The main contributions of the study demonstrate how FS is configured in the daily operations of the hotel sector in the Riviera Maya through the practices, decisions, and organizational dynamics involved in food management within the destination.

2. Materials and Methods

2.1. Study Area

The Riviera Maya is a tourism region located along the eastern coastal strip of the state of Quintana Roo, Mexico, extending for approximately 140 kilometers along the Caribbean Sea coastline. The corridor includes destinations such as Puerto Morelos, Playa del Carmen, Akumal, Xel-Há, and Tulum, reaching the locality of Punta Allen in the south, and constitutes one of the country's main areas of concentration of international tourism (Castillo-Pavón & Méndez-Ramírez, 2017). Its territorial configuration is part of a tourism development process characterized by strong public and private intervention, as well as by the su-

bordination of territorial planning to the dynamics of the tourism sector (Calderón-Maya & Orozco-Hernández, 2009).

In 2001, the territorial planning of the then-called Cancún–Tulum corridor was formalized, delimiting the region between 20°07' and 21°04' north latitude and 86°46' and 87°38' west longitude (Diario Oficial de la Federación, 2001) (Figure 1). The region is characterized by the coexistence of highly fragile coastal ecosystems and intense tourism activity, a condition that has favored its international positioning and the development of activities associated with nature-based tourism, such as diving and snorkeling (Asociación de Hoteles Riviera Maya [AHRM], 2025).

2.2. Research Design

The study was conducted under a qualitative approach with a descriptive scope and a phenomenological design, aimed at showing the configuration of FS as it is expressed in the daily operation of the hotel sector in the Riviera Maya. From this perspective, the research is based on the exploration of the experiences, perceptions, and decision-making criteria of the actors involved in food management, with the purpose of understanding the phenomenon through the meanings that emerge in practice (Creswell & Poth, 2018; Sánchez, 2019).

In line with the principles of applied phenomenological research, the analysis addresses both the lived experiences of the actors and the meanings they construct within specific organizational contexts. From this perspective, the study is framed within an inter-

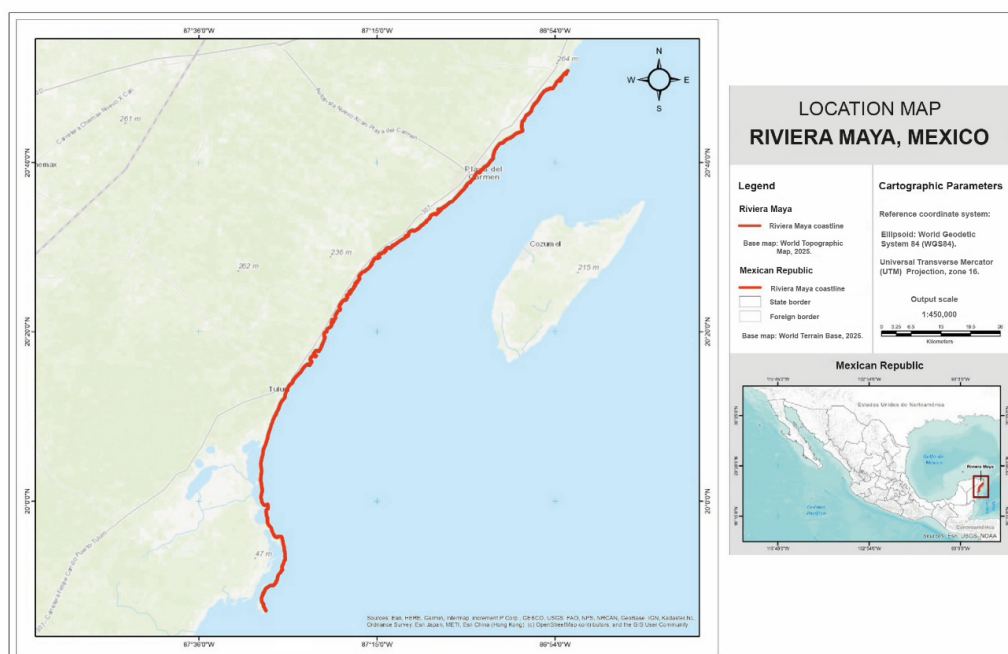


Figure 1. Location map of the Riviera Maya, Mexico.

pretive phenomenological approach, in which the description of the phenomenon serves as a starting point for its understanding (Creswell & Poth, 2018). Thus, the design allows access to the rationalities, practices, and contradictions that shape FS in the hotel sector, as well as the patterns that structure these dynamics in the studied context (Sánchez, 2019).

2.3. Data Collection

Data collection was carried out through semi-structured interviews, selected for their ability to combine narrative flexibility and thematic rigor, allowing for an in-depth exploration of the logics, criteria, and meanings that guide decision-making in food management through an open dialogue with participants (González-Vega et al., 2022; Maher & Bedwei-Majdoub, 2024). The instrument used was an interview guide, conceived as an orienting structure that ensured process consistency without restricting informants' ability to express their professional experiences in their own terms (Ibarra-Sáiz et al., 2023). The interviews were conducted during May and June 2025. Each interview lasted approximately one hour.

The design of the interview guide was based on a conceptual categorization matrix (Table 1), developed from the classical dimensions of FS recognized in the specialized literature. The categories of availability, access, utilization, and stability were used as analytical axes to guide the formulation of questions aimed at exploring how these dimensions are expressed in the daily operations of the hotel sector, serving as interpretive references for the phenomenon under study. Thus, the matrix functioned as a conceptual framework to ensure the coherence of the instrument, without constituting a rigid analytical scheme, but rather a guide for exploring the phenomenon from the experience of the actors involved.

2.4. Key actors

The key actors in the study consisted of eight stakeholders involved in decision-making related to food procurement, management, and utilization in the Riviera Maya. Access to informants was achieved through professional contact networks, given the restrictions of the hotel sector regarding participation in external research, a condition widely documented in qualitative studies in business contexts (Buchanan et al., 1988; Okumus et al., 2007; Solarino & Aguinis, 2021). To mitigate potential convenience sampling biases, efforts were made to include diverse profiles within the food management chain, incorporating actors with differentiated roles and positions, which

allowed for the comparison of perspectives and reduced the homogeneity of the narratives.

The group of informants consisted of five food and beverage managers from all-inclusive hotels, two suppliers of food inputs for hotel establishments, and one academic informant with expertise in tourism and food systems. This diversity of profiles responded to an analytical and informational representativeness criterion, grounded in the proximity, experience, and direct involvement of the informants in food procurement and consumption processes that influence the configuration of FS in the hotel sector. In particular, food and beverage managers were considered strategic actors due to their direct involvement in decision-making processes related to procurement, storage, supplier selection, menu design, and food operations within the establishments. The inclusion of suppliers and an academic specialist complemented this organizational perspective with insights from the supply chain and contextual analysis of the phenomenon, thereby enhancing the triangulation of perspectives. Likewise, the analysis was oriented toward the identification of recurrent patterns and thematic convergences rather than the validation of individual viewpoints, following the principle of analytical saturation.

To safeguard participants' anonymity and confidentiality, no identifiable personal data were collected. The characterization of the subjects (Table 2) was carried out based on their functional role, professional trajectory, and level of involvement in food management processes. From a phenomenological approach, this selection made it possible to explore shared meanings and recurring tensions associated with FS.

2.5. Data Analysis

The interviews were fully transcribed and analyzed using the content analysis technique, with the support of ATLAS.ti (2025), which enabled the organization, coding, and systematization of the collected information (Nowell et al., 2017; Krippendorff, 2019). The process involved identifying and coding relevant excerpts, which were grouped into categories and subcategories previously defined based on the FS conceptual matrix. To ensure consistency and rigor in coding, operational inclusion criteria were established for each subcategory, guiding code assignment during the analysis (Table 3). Subsequently, analytical decisions were subjected to a process of collective review and discussion to assess the appropriateness of fragment assignment to the different subcategories, question preliminary interpretations, and verify the coherence between empirical data and the categorical

framework. Finally, the coded segments were interpreted through a cross-sectional analysis, considering patterns, recurrences, and contradictions in the participants’ narratives, with the aim of constructing an analytical description of how FS is configured in the operation of the hotel sector in the Riviera Maya.

Analytical quality was ensured through categorical saturation (Saunders et al., 2018). During the content analysis, a progressive recurrence of participants’ narratives and meanings associated with the analytical categories was identified, with no emergence of new substantive elements, which indicated interpretive sufficiency for the construction of the results. Additionally, the categorical framework and findings were subjected to expert review, which contributed to refining the interpretation and strengthening the conceptual coherence of the analysis.

3. Results

3.1. Food availability

The availability category describes the food supply structure that sustains the functioning of the hotel sector in the Riviera Maya. The thematic network (Figure 2) reveals a marked external dependence, supported by national and international supply chains that compensate for the limited local production capacity. Overall, these elements indicate a food availability model that is stable but vulnerable.

The Riviera Maya region exhibits limited agri-food autonomy. The testimonies highlight the absence

of a solid industrial and agricultural base capable of sustaining local food production. From the FS perspective, availability refers to the physical presence of food, alluding to a territory’s capacity to sustain its supply in a relatively autonomous manner (FAO et al., 2025). In this sense, Quintana Roo is highly dependent on external suppliers, as natural conditions and infrastructure constraints limit agricultural and livestock production. Most of the inputs used by the hotel sector come from central Mexico, reflecting weak self-supply capacity. Local food and raw material production is limited and does not meet the demand generated by tourism activity, which directly affects local FS, placing the destination in a structurally dependent position on other producing regions.

In line with this, food supply sources are located primarily outside the region, reinforcing a logic of functional disconnection between tourism and local production, which has direct implications for surrounding communities. The interviewees indicate that a significant proportion of the inputs used by hotels are acquired through complex supply chains and multiple intermediaries. The distance between production centers and the destination requires maintaining continuous and coordinated supply channels with other regions, which are under constant pressure. According to the informants, this dependence is driven by the magnitude of tourism demand and the limited local production capacity.

In addition to the national supply structure, the incorporation of products from abroad is also evident. Hotels complement their supply through the importation of certain goods such as premium cuts of meat,

Table 1. Food security categorization matrix.

Category	Subcategory	Description	Authors
Food security	Availability	Sufficient existence of food through production, local supply, reserves, or imports.	Borlaug (2000); FAO (1996); Jachertz and Nützenadel (2011); Maxwell (1996).
	Access	Possibility of obtaining food based on prices, purchasing power, and logistics.	Drèze and Sen (1989); Ravallion (1992); Sen (1981).
	Utilization	Nutritional quality, food safety, infrastructure, and adequate utilization of food.	Campbell (1991); Reutlinger (1985); Schejtman (1988).
	Stability	Capacity to maintain the three previous dimensions in the face of crises or structural changes.	Barrett (2010); Berry et al. (2015).

Table 2. Characterization of key informants.

Interview	Functional role	Type of actor	Experience in food management	Level of involvement
E1, E8	Food supplier	Hotel supply chain actor	Medium–high	Strategic
E2	Academic	Expert in tourism and food systems	High	Analytical-contextual
E3, E4, E5, E6, E7	Food and Beverage Manager	All-inclusive hotel	High	Strategic-operational

Table 3. Operational definitions of food security codes in the hotel sector.

Subcategory	Code	Operational definition (inclusion criterion)
		It is coded when it is mentioned...
Availability	Agri-food autonomy	The capacity or incapacity of the territory to produce the food it consumes.
	External dependence	The importation or purchase of food inputs or food from outside the region.
	Importation	About products or inputs originating from abroad, emphasizing their international origin or logistical cost.
	Local production	The existence, type, or scale of local agri-food production, including agricultural, livestock, or fishery products.
	Seasonality	Seasonal variability in product availability.
Access	Financial access	The economic capacity of hotels and households to purchase food or inputs, as well as limitations derived from wages or credit.
	Inequality	The contrast in food availability or quality between different groups (tourists, locals, and workers), highlighting social gaps.
	Infrastructure	The existence or absence of markets, transport, roads, or distribution networks that facilitate access to food.
	Supplier offer	The diversity, sufficiency, or scarcity of suppliers in the region, as well as their operating conditions.
	Local prices	Variation in food prices due to tourism, climatic, or logistical factors.
Utilization	Infrastructure and equipment	Physical or technological infrastructure that ensures food safety, preservation, and proper food preparation.
	Food safety	Food safety and risk control in food handling.
	Staff training	Training in hygienic handling and food preparation.
	Certifications	Distinctive labels or standards applied to food management in the region.
	Food utilization / food utilization efficiency	Strategies to avoid waste or reuse food within the production process.
	Healthy menu	The availability of nutritious, vegetarian, or low-fat options.
	Dietary adjustments	Menu modifications due to cultural, sanitary, or market reasons.
Stability	Operational capacity	Infrastructure or resources that enable the sustained distribution and storage of food over time.
	Supply planning	The anticipation or scheduling of supply to ensure continuous operation.
	Supply dependency	Risks arising from disruptions in the supply chain or from suppliers.
	Disruptive events	Climate, health, or economic crises that affect the flow or availability of food.
	Seasonal variability	Changes in product volumes, prices, or supply throughout the year.
	Asymmetry	Discrepancy in food stability among different actors.

seafood, and selected processed inputs. This strategy displaces regional productive potential and reinforces dependency. Although imports serve an operational function by diversifying the offer and ensuring the continuity of tourism services, they also consolidate a model of availability that is disconnected from local agroecological conditions. This component is part of global supply chains that operate through local intermediaries and regional distributors responsible for introducing goods into the tourism sector of the Riviera Maya.

Despite this context, local production maintains a limited presence in specific small-scale sectors. Pro-

ducts originating from the peninsula, such as poultry, citrus fruits, and habanero chili, are mentioned; however, their volume is insufficient to meet the demand generated by tourism activity and the local population. The testimonies consistently indicate that the participation of regional producers within the hotel supply system is limited, reflecting weak articulation between the local productive base and the sector's supply chains.

In terms of seasonality, establishments maintain a permanent base menu to ensure year-round supply through agreements with providers. To this stable offer, seasonal dishes and beverages are added that

incorporate local inputs when available. Only in specialized kitchens is a more pronounced management of seasonality observed through the use of regional ingredients; in seafood products, compliance with fishing bans is reported, while in agricultural inputs the supply tends to remain constant. This organization sustains the flow of food and reduces the incidence of seasonal fluctuations.

3.2. Food access

Food costs, suppliers, and inequalities between the hotel sector and the local population shape the economic and logistical conditions that determine the possibility of obtaining food within the tourism system of the Riviera Maya (Figure 3).

Financial access to food in the hotel sector of the Riviera Maya is governed by commercial relationships based on extended credit terms and direct negotiation with large suppliers. Agreements typically establish payment periods of up to two months, allowing the flow of inputs to be maintained without immediate disbursements. This dynamic benefits establishments with higher purchasing volumes but may limit the liquidity of smaller distributors, who face payment delays and reduced reinvestment capacity.

At the same time, informants describe an economic environment characterized by a general increase in the cost of goods and services, which affects the cost of living for the resident population. Rising prices for food, housing, and transportation contrast with slow wage growth, generating economic difficulties that affect food access outside the hotel circuit.

In turn, food access conditions vary across social sectors and territories. In consolidated urban and tourism areas, there is a wide range of establishments and supermarkets, while in rural or indigenous communities, food self-management practices prevail with weaker integration into formal supply chains. This differentiation results in economic and consumption inequalities, reinforced by the concentration of purchasing power within the tourism sector.

The testimonies indicate that high-end hotels and restaurants tend to secure the best-quality products through exclusive agreements with suppliers, leaving the local population with more expensive or lower-quality options. These dynamics present a dual scenario in which an abundance of supply for tourists coexists with economic constraints for residents.

Regarding the logistical infrastructure for food access, products are mainly transported by land from central Mexico, while imports are routed through maritime ports such as Progreso and Puerto Morelos. Informants report that distance and transportation costs increase final prices for both the hotel sector and local consumers. In this regard, peripheral and rural areas face greater connectivity limitations, and poor transport conditions restrict regular access to fresh products.

The growth of the tourism destination has encouraged the establishment of supplier companies that directly supply hotels and restaurants. The presence of large national and international distributors has expanded product variety and improved responsiveness to demand. However, this expansion has consolidated the dominant position of a few suppliers that concen-

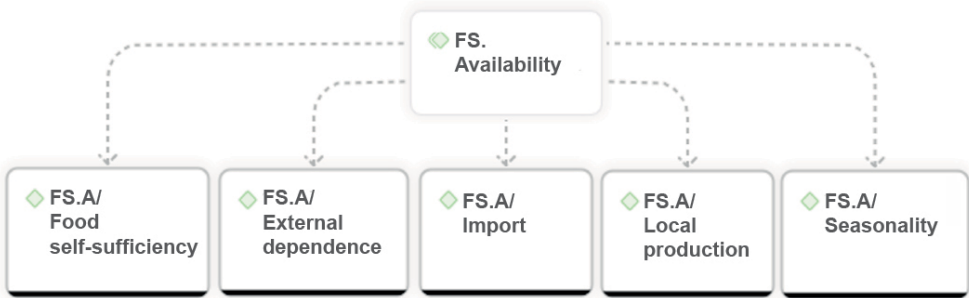


Figure 2. Network of related themes in food availability.

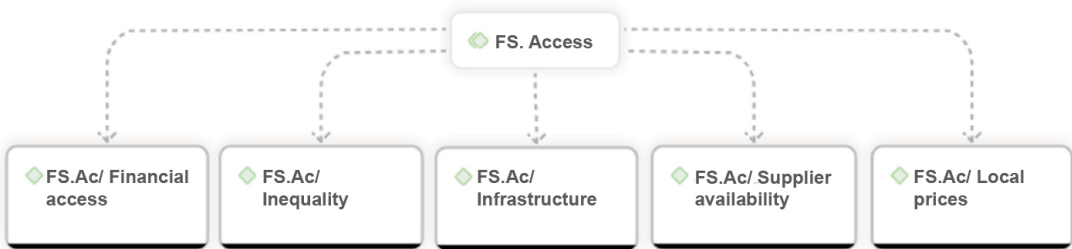


Figure 3. Physical, economic and social access to food.

trate distribution, establishing more favorable commercial relationships with large-scale establishments.

Local markets and small producers have a limited role within this network. Although some hotels purchase from regional markets or wholesale stores, the operational convenience of supermarkets and the logistical support of large companies tend to displace local alternatives. Consequently, food access remains conditioned by the market structure and the bargaining power of each actor.

In general terms, food prices in the Riviera Maya are higher than in other regions of the country. Interviewees attribute this difference to transportation costs, commercial intermediation, and dependence on external products. Although the hotel sector maintains fixed prices agreed upon with suppliers, fluctuations arising from weather events or logistical disruptions can generate temporary increases.

At the household level, the local population faces a high cost of living, reflected in the price of meals and the basic food basket. While the food supply is extensive, purchasing power limits regular access to fresh or higher-quality products. This situation is exacerbated when hotels pay higher prices for the same inputs, which increases costs for local businesses and households.

3.3. Food utilization

Food utilization in hotels in the Riviera Maya is shaped by a set of practices aimed at ensuring the safe handling, preparation, and utilization of food within service operations (Figure 4).

The reported practices reveal a high level of internal organization and a work structure that involves physical infrastructure, staff training, external certification, and menu adaptation to visitor needs.

Hotels have specialized infrastructure designed to maintain food quality in high-demand environments. They include differentiated areas for receiving, storage, and preparation, with refrigeration and freezing chambers, cold and hot kitchens, pastry sections, and pre-production spaces. Each section is equipped with specific temperature and ventilation controls, ensuring optimal preservation conditions.

Transport and product delivery are carried out in refrigerated vehicles that preserve the cold chain from supplier to service point. Although the size and type of equipment vary depending on hotel category, in all cases they represent a key element for maintaining food safety and product quality. In this regard, interviewees note that food safety constitutes a permanent control axis within hotel operations. Each establishment has a hygiene department responsible for super-

vising processes, recording temperatures, and coordinating internal and external audits. In addition, food handlers must present updated medical certificates, while audits ensure process traceability and reduce contamination risks.

Compliance with regulations is further reinforced through certifications and external audits. Hotels apply recognized labels such as Distintivo H, Cristal, or Preverisk, which certify both food safety and responsible food management. However, some informants point out the need to strengthen public oversight, as certain establishments lack updated inspections or permits.

Staff training is also identified as an essential component of food utilization. Hotels regularly offer courses on hygienic food handling, temperature control, and waste management. Training is structured by levels, with basic programs for assistants and advanced modules for chefs or kitchen managers. In some cases, those who fail assessments must repeat training, reflecting a continuous commitment to professionalization. However, nutritional training is not usually included in training programs, although senior staff tend to update their knowledge independently, especially in establishments seeking to improve their gastronomic positioning.

Food surplus management is another relevant issue in the region's hotels. The main source of waste is buffets, where portion overestimation generates surpluses. Establishments implement controls to reduce waste volume, allocating part of the surplus to internal staff consumption or disposal under food safety regulations. In some cases, organic waste is used by local livestock producers as animal feed.

On the other hand, the availability of healthy menus is increasingly visible in high-category hotels or in establishments with a strong focus on wellness and self-care. These menus include vegetarian, vegan, or allergen-free options, as well as freshly prepared natural beverages. Their implementation depends on the type of guest and the positioning of the establishment, functioning more as an added value than as a generalized practice.

In this regard, hotels show a high capacity for adaptation to visitors' dietary needs. Menus include modifiable alternatives that allow them to address allergies, intolerances, or specific preferences. This flexibility seeks to ensure guest satisfaction and reduce health risks. However, adaptations oriented towards international tastes involve a process of standardization that may dilute the authenticity of local cuisine. In some cases, characteristic seasonings, such as spiciness, are reduced, or traditional recipes are adjusted to make them more acceptable to foreign palates. Culinary

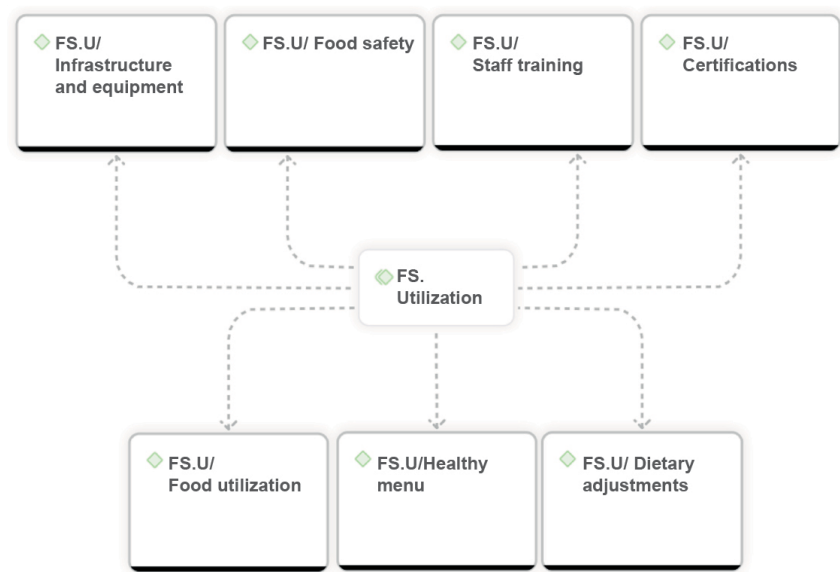


Figure 4. Food utilization.

reinterpretations that integrate regional ingredients within international formats are also reported.

3.4. Stability

Food stability in the hotel sector of the Riviera Maya is sustained through a combination of operational capacity, anticipatory planning, and supply networks that ensure a continuous flow of inputs throughout the year (Figure 5). However, this stability depends largely on external factors, which exposes the system to logistical, climatic, and economic vulnerabilities that could compromise its functioning in the face of unforeseen events.

Hotels in the region operate with robust infrastructure and high logistical capacity to process large volumes of food. The scale of operations requires specialized equipment and continuous investment in maintenance, refrigeration, and storage. The level of equipment and organization varies according to the size and category of the establishment, but in all cases, investment in infrastructure is recognized as a fundamental requirement for maintaining food flow and quality. Some hotel chains have central commissaries that supply several hotels within the group, optimizing resources and ensuring uniformity in production and supply standards.

Interviewees highlight that another key factor in maintaining supply is planning. Some hotels establish agreements with their suppliers, securing food provision throughout the year. Demand is estimated based on occupancy levels and average guest consumption, allowing them to adjust purchase orders and avoid overcosts or shortages.

This planning system is supported by supplier di-

versification and the use of central warehouses that process and distribute food to different establishments. In some cases, reserves such as frozen juices or processed foods are implemented to cope with peak tourism seasons or supply contingencies. Forecasting and statistical demand control are key to maintaining service continuity.

Despite operational strength, food stability in hotels depends almost entirely on external supply chains. Most inputs come from other regions of the country due to limited local productive capacity and the absence of a consolidated agri-food industry in Quintana Roo. Therefore, the supply structure is complex, involving multiple intermediaries between producer and final consumer. Although hotels typically have more than one supplier option, fresh or perishable products may face logistical constraints due to climate conditions or distance. This situation places the destination in a structurally vulnerable position in the face of disruptions in transport routes or fluctuations in the national market.

On the other hand, meteorological phenomena constitute one of the main threats to food stability in the Riviera Maya. Hurricanes, storms, and power outages temporarily interrupt transportation and supply chains, while also affecting the price and quality of agricultural products. During these events, hotels resort to internal reserves or contingency menus to maintain operations.

Likewise, interviewees emphasize that global episodes such as the COVID-19 pandemic exposed the fragility of the system, as it led to the temporary closure of local suppliers and a reduction in the availability of fresh products. Although subsequent recovery has been significant, this recent precedent demonstra-

ted that the tourism supply model, being highly centralized and dependent on imports, remains sensitive to external crises.

Hotels also face predictable fluctuations associated with the seasonality of agricultural products. Certain inputs, such as fruits and vegetables, vary according to climatic conditions and market supply, requiring menu adjustments and ingredient substitutions. To avoid disruptions, establishments maintain a stable base offer throughout the year and complement it with seasonal products in beverages and specific dishes. This strategy allows for continuity in service while introducing limited gastronomic flexibility. Advance purchasing mechanisms and long-term supplier relationships reduce the impact of seasonal variations on overall supply.

Finally, although hotels maintain forecasting systems that ensure supply even during critical periods, this condition contrasts with the food vulnerability of large segments of the local population. While tourism chains have sufficient infrastructure and reserves to cope with contingencies, low-income households rely on unstable incomes and lack the means to plan consumption or store food. This asymmetry reflects differentiated stability, which is high within the hotel system—sustained by planning and investment—and fragile in the domestic sphere, shaped by purchasing power and structural inequalities.

4. Discussion

The results obtained make it possible to characterize how FS operates in the hotel sector of the Riviera Maya from a sectoral and organizational scale, a topic that has been scarcely addressed in the existing literature. Unlike previous studies that have examined the relationship between tourism and FS through macro-economic indicators such as agricultural production, food imports, or tourism-related GDP growth (Agostinho et al., 2024; Akther et al., 2024; Baidoo et al., 2024), this analysis shows that in highly tourism-dependent destinations, food supply for the hotel industry is sustained by stable provisioning structures, yet

remains dependent on external supply chains. This dependence supports the argument made by Kocak (2026), who states that the economic benefits associated with tourism do not automatically translate into greater food autonomy or structural improvements in the territories where tourism activity is concentrated.

The findings regarding the availability dimension reveal a limited capacity for regional self-supply and weak articulation between local production and hotel supply chains, which is consistent with studies conducted in other tourism contexts (Burke, 2021; Tchouamou Njoya & Nikitas, 2020). However, this situation is perceived as a normalized condition of the regional tourism model, sustained by complex logistical agreements and consolidated intermediary networks. This result reinforces the ongoing debate suggesting that the stability of hotel supply can coexist with vulnerability in the regional food environment (Tchouamou Njoya & Nikitas, 2020).

In the access dimension, the results corroborate an asymmetrical distribution of food circuits between the tourism sector and the local population. The hotel industry ensures access to food through advantageous financial schemes, economies of scale, and preferential agreements with large suppliers, while the resident population faces high prices and persistent economic constraints that condition and limit their access to food. This duality reinforces what has been documented in the literature regarding the reproduction of food inequalities in tourism destinations highly dependent on external consumption (Burke, 2021), and helps nuance the idea that tourism expansion contributes homogeneously to territorial FS. The results show that food access is not determined solely by physical availability, but also by the position that different actors occupy within the economic structure of the destination.

Regarding the utilization dimension, the findings are consistent with previous studies highlighting the high level of standardization, sanitary control, and professionalization of food services in the hotel industry (Sentia et al., 2022). However, this study provides empirical evidence of how these practices, primarily aimed at ensuring food safety and guest sa-

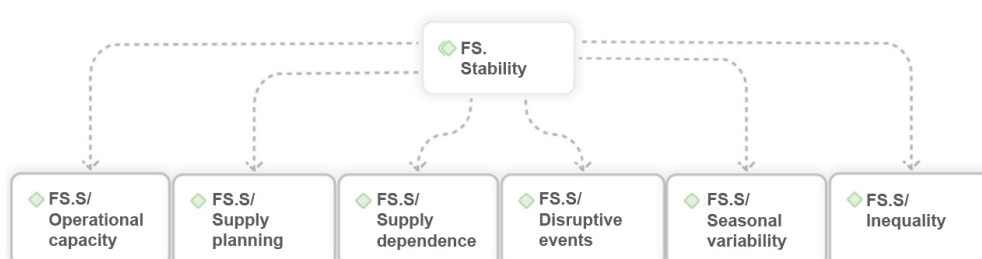


Figure 5. Food stability.

tisfaction, also generate dynamics of overproduction and food waste, particularly in buffet and all-inclusive systems, which have been identified as inefficiencies in food supply management (Amicarelli et al., 2022; Kalogiannidis et al., 2025). In this regard, the results indicate that food waste reduction strategies are implemented only partially and with a predominantly operational focus, rather than being fully integrated into a territorial FS framework, as suggested by De Visser-Amundson (2022).

With respect to the stability dimension, the study reveals that the hotel sector's ability to maintain a continuous food supply is based on a combination of advance planning, robust infrastructure, and supplier diversification, which is consistent with the operational resilience reported by Sentia et al. (2022). The findings also show that this stability is highly dependent on external factors, including climatic conditions, national logistics networks, and global market dynamics, reinforcing the warnings of Okumus (2025) regarding the vulnerability of the tourism sector to food, energy, and public health crises.

Complementarily, the findings indicate that FS in the hotel sector is closely intertwined with the food conditions of the local community, configuring a system characterized by asymmetrical interdependencies (Burke, 2021; Tchouamou Njoya & Nikitas, 2020). The stability of food supply and the access secured by the hotel industry do not operate in isolation; rather, they are sustained by economic, logistical, and market structures that influence food availability and access beyond the tourism circuit. In this sense, hotel operations contribute to consolidating a dual food environment in which the abundance and continuity of food supply for visitors coexist with constraints affecting large segments of the resident population, particularly in terms of prices, quality, and regularity of food consumption. Under this logic, the dimensions of FS are reconfigured according to the position occupied by different actors within the destination's food system (Kocak, 2026).

In this context, the hotel sector, in addition to being an intensive consumer of food, also plays a role in shaping food supply and access circuits within the destination. Decisions related to procurement, supplier negotiation, and supply management contribute to structuring the relationships among the different actors in the food system, favoring certain provisioning schemes while conditioning the participation of local producers. From this perspective, understanding FS in tourism-dependent enclaves requires considering the interdependencies and asymmetries that emerge between tourism operations and the food conditions of the surrounding territory.

From a practical perspective, the findings underscore the need to rethink the role of the hotel sector as a key actor within the food systems of tourism destinations. Beyond ensuring food supply for tourism operations, the hotel industry has the capacity to influence the configuration of local food flows through procurement decisions, supplier diversification, food waste reduction, and the strengthening of linkages with regional producers.

Integrating FS as an explicit criterion in food management would not only help reduce operational vulnerabilities to external disruptions, but also contribute to greater coherence between tourism activities and the food conditions of the surrounding territory. In this regard, the findings suggest that advancing toward food management models that are more closely integrated with the local context represents a relevant pathway for strengthening destination sustainability and reducing the asymmetries that currently characterize the relationship between tourism and FS.

5. Conclusions

The analysis of FS in the hotel sector of the Riviera Maya reveals a functionally stable food supply structure that is sustained by a strong dependence on external supply chains. Limited local productive capacity and weak integration with regional producers shape a model of food availability that supports tourism operations, while simultaneously exposing the destination to logistical vulnerabilities and external shocks.

In terms of access, the findings reveal a marked differentiation between the hotel sector and the local population. While tourism establishments benefit from economic and logistical advantages that ensure a reliable food supply, residents face greater constraints resulting from the high cost of living and rising food prices, highlighting persistent territorial asymmetries. Regarding utilization, the hotel industry demonstrates high standards of food safety, infrastructure, and staff training, supported by certifications and external audits. Nevertheless, these practices coexist with dynamics of overproduction and food waste, particularly in buffet and all-inclusive services, indicating inefficiencies in food utilization.

The stability of the hotel food supply is sustained through advance planning, supplier diversification, and investment in infrastructure, enabling operations to continue even during critical events. However, this stability contrasts with the food vulnerability experienced by large segments of the local population, highlighting a differentiated pattern of stability between the hotel system and the surrounding territorial context.

Overall, the findings provide empirical evidence on the configuration of FS within the hotel sector of the Riviera Maya, demonstrating that the sector constitutes a key node in shaping the destination's food flows. While the hotel industry exhibits high operational capacity, it remains embedded within a regional context characterized by structural dependencies and persistent inequalities.

The findings also open several avenues for future research that could deepen and broaden the analysis of FS in the hotel sector and tourism destinations. In particular, comparative studies across destinations with different levels of tourism specialization would help determine whether the dynamics observed in the Riviera Maya are replicated in other contexts. Likewise, research incorporating the perspectives of local producers, tourism sector workers, and resident households would contribute to a more comprehensive understanding of the territorial effects of tourism-related food consumption. Furthermore, the application of mixed-methods or longitudinal approaches would enable the examination of how these dynamics evolve over time and the assessment of the impacts of strategies aimed at reducing food waste, strengthening short supply chains, and promoting the adoption of

circular economy practices within the hotel industry. Regarding its limitations, this study is based on a qualitative interpretive approach; therefore, the findings should be interpreted with caution when considering their transferability to other contexts. The interviews were conducted according to access and analytical saturation criteria using a purposive sample of key informants. Although this sampling strategy is appropriate for the hotel sector, it provides a limited scope for capturing the full heterogeneity of the Riviera Maya as a tourism destination. While the selection of participants provided access to strategic actors directly involved in hotel food management and key processes within the food supply chain, the findings reflect the experiences and perceptions of a specific group of informants and are therefore not intended to be generalizable to the entire tourism sector of the Riviera Maya. In this sense, participants' accounts may be influenced by biases associated with the positions they occupy within the destination's food system. Future research could expand both the number and diversity of informants to incorporate additional perspectives from other actors within the destination's food environment.

Funding

This research was supported by a National Scholarship from the Secretaría de Ciencias, Humanidades, Tecnología e Innovación (SECIHTI) through the Doctoral Program in Environmental Sciences (Program Code: 2023-000002-01NACF) at the Autonomous University of the State of Mexico, awarded for a three-year period.

Contributor roles

- Josue Emmanuel León-González: conceptualization, methodology, investigation, data curation, formal analysis, project administration, visualization, writing – original draft, writing – review & editing.
- Elva Esther Vargas-Martínez: conceptualization, methodology, supervision, validation, writing – review & editing.
- Alejandro Delgado-Cruz: data curation, formal analysis, validation, visualization, writing – original draft.
- Ana Gabriela Cabrera-Rebollo: investigation, data curation, writing – original draft.

Data availability

The data that has been used is confidential.

Use of Artificial Intelligence

The authors declare that during the preparation of this ma-

nuscript the authors used CHAT GPT in order to improve the style, grammar and syntax of the final draft, at a 5%. After using this tool, the authors reviewed and edited the content as needed, to avoid bias, errors, or fabrication of references, and take full responsibility for the content of the published article.

Ethical Implications

The authors declare that the study was conducted in accordance with the widely accepted ethical principles of social research. These principles ensure informed consent, voluntary participation, confidentiality and anonymity for the participants. Participants were informed of the study's objectives, how the information would be used for academic purposes, and their right to withdraw at any time without facing any consequences. The procedure followed was consistent with the ethical principles and guidelines on respect, transparency, and accountability promoted by the Autonomous University of the State of Mexico for scientific research.

Conflict of Interest

The authors declare that they have no affiliation with any organization with a direct or indirect financial interest that could have appeared to influence the work reported.

References

Agostinho, M. N., Dias, A., & Pereira, L. (2024). Tourism

- direct GDP: configuration of antecedents and tourism future performance in high-income countries'. *Journal of Tourism Futures, ahead of print*, 1-19. <https://doi.org/10.1108/JTF-12-2023-0265>
- Akther, T., Selim, I.M.M., Hossain, S.M., & Kibria, G.M. (2024). Synergistic role of agriculture production, fertilizer use, tourism, and renewable energy on CO₂ emissions in South Asia: A static and dynamic analysis. *Energy Nexus*, 14, 1-13. <https://doi.org/10.1016/j.nexus.2024.100287>
- Amicarelli, V., Aluculesei, A.-C., Lagioia, G., Pamfilie, R., & Bux, C. (2022). How to manage and minimize food waste in the hotel industry: an exploratory research. *International Journal of Culture, Tourism and Hospitality Research*, 16(1), 152-167. <https://doi.org/10.1108/IJC-THR-01-2021-0019>
- Asociación de Hoteles Riviera Maya [AHRM] (2025). Inicio: acerca de nosotros. <https://rivieramaya.org.mx>
- ATLAS.ti (2025). *ATLAS.ti MAC (versión 25.0.1)*. Software de análisis de datos cualitativos.
- Baidoo, F., Pan, L., Fiador, V. O. L., & Agbloyor, E. K. (2024). Importing to feed international tourists: Growth implications for islands across the globe. *Tourism Economics*, 30(7), 1651-1679. <https://doi.org/10.1177/13548166231224012>
- Barrett, C. B. (2010). Measuring food insecurity. *Science*, 327(5967), 825-828. <https://doi.org/10.1126/science.1182768>
- Berry, E. M., Dernini, S., Burlingame, B., Meybeck, A., & Conforti, P. (2015). Food security and sustainability: can one exist without the other? *Public Health Nutrition*, 18(13), 2293-2302. <https://doi.org/10.1017/s136898001500021x>
- Borlaug, N. E. (2000). *The Green Revolution revisited and the road ahead*. Special 30th Anniversary Lecture, The Norwegian Nobel Institute, Oslo, Norway.
- Buchanan, D., Boddy, D., & McCalman, J. (1988). Getting in, getting on, getting out, and getting back. En A. Bryman (Ed.), *Doing Research in Organizations (RLE: Organizations)* (pp. 53-67). Routledge. <https://doi.org/10.4324/9780203385449>
- Burke, A. (2021). The crossroads of ecotourism dependency, food security and a global pandemic in Galápagos, Ecuador. *Sustainability*, 13(23), 13094. <https://doi.org/10.3390/su132313094>
- Calderón-Maya, J. R., & Orozco-Hernández, M. E. (2009). Planeación y modelo urbano: El caso de Cancún, Quintana Roo. *Quivera*, 11(2), 18-34. <https://quivera.uaemex.mx/article/view/10258>
- Campbell, C. C. (1991). Food insecurity: A nutritional outcome or a predictor variable? *The Journal of Nutrition*, 121(3), 408-415. <https://doi.org/10.1093/jn/121.3.408>
- Carrasco-Quintero, M. del R., Ramírez Sánchez, E., Álvarez Izazaga, M., Chávez Villasana, A., Roldán Amaro, J. A., & Cortés Pérez, T. (2023). Diferencias por nivel socioeconómico y escolar en la adquisición de alimentos de la población mexicana. *Nutrición Hospitalaria*, 40(3), 591-596. <http://dx.doi.org/10.20960/nh.04396>
- Castillo-Pavón, O., & Méndez-Ramírez, J. J. (2017). Los desarrollos turísticos y sus efectos medioambientales en la Riviera Maya, 1980-2015. *Quivera*, 19(2), 101-118. <https://www.redalyc.org/articulo.oa?id=40153982006>
- Chang, K. A., Norazlin, A. A., Lim, J. P. S., & Mohd, M. Z. (2025). Adopting circular food practices in Malaysian hotels: The influence of isomorphic pressures and environmental beliefs. *International Journal of Hospitality Management*, 127, 1-10. <https://doi.org/10.1016/j.ijhm.2025.104113>
- Consejo Nacional de Evaluación de la Política de Desarrollo Social [CONEVAL]. (2022). *Informe de la pobreza multidimensional en México, 2022*. Consejo Nacional de Evaluación de la Política de Desarrollo Social.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry research design: choosing among five approaches*. SAGE.
- DATATUR (2025). Resultados de la Actividad Turística (RAT). Secretaría de Turismo, Gobierno de México. <https://datatur.sectur.gob.mx/SitePages/versionesRAT.aspx>
- De Visser-Amundson, A. (2022). A multi-stakeholder partnership to fight food waste in the hospitality industry: A contribution to the United Nations Sustainable Development Goals 12 and 17. *Journal of Sustainable Tourism*, 30(10), 2448-2475. <https://doi.org/10.1080/09669582.2020.1849232>
- Diario Oficial de la Federación (2001). *Programa de Ordenamiento Ecológico Territorial de la Región denominada Corredor Cancún-Tulum*. Chetumal, Quintana Roo. Gobierno de Quintana Roo.
- Drèze, J., & Sen, A. (1989). *Hunger and Public Action*. Oxford University Press.
- González-Vega, A.M.C., Molina, R., López, A., & López, G. L. (2022). La entrevista cualitativa como técnica de investigación en el estudio de las organizaciones: avances y desafíos. *New Trends in Qualitative Research*, 14, e571, 1-12. <https://doi.org/10.36367/ntqr.14.2022.e571>
- Granados Sánchez, M. del R., Galán Figueroa, J., & Gómez Oliver, L. (2025). La volatilidad en el precio de los alimentos de la canasta básica en seis entidades de México (2018-2022). *Cuadernos de Economía*, 44(95), 737-788. <https://doi.org/10.15446/cuad.econ.v44n95.110471>
- Ibarra-Sáiz, M. S., González-Elorza, A., & Rodríguez Gómez, G. (2023). Aportaciones metodológicas para el uso de la entrevista semiestructurada en la investigación educativa a partir de un estudio de caso múltiple. *Revista de Investigación Educativa*, 41(2), 501-522. <https://doi.org/10.6018/rie.546401>
- Jachertz, R., & Nützenadel, A. (2011). Coping with hunger? Visions of a global food system, 1930-1960. *Journal of Global History*, 6, 99-119. <https://doi.org/10.1017/S1740022811000064>
- Kalogiannidis, S., Kalfas, D., Papatheanasiou, F., & Chatzitheodoridis, F. (2025). Analysis of food waste generation and its implications for food security and ecosystem sustainability in Europe. *Sustainable Futures*, 10, 101186. <https://doi.org/10.1016/j.sfr.2025.101186>
- Kocak, E. (2026). Does tourism contribute to food security goals? *Current issues in tourism*, 29(7), 1254-1260. <https://doi.org/10.1080/13683500.2025.2486548>
- Krippendorff, K. (2019). *Content analysis: An introduction to its methodology*. SAGE Publications. <https://doi.org/10.4135/9781071878781>
- León-González, J. E., & Vargas-Martínez, E. E. (2024). *Food Security and Tourism* (pp. 181-200). <https://doi.org/10.4018/979-8-3693-1814-0.ch011>
- Maher, C., & Bedwei-Majdou, C. (2024). *Semi-structured Qualitative Interview Guide* (pp. 195-220). <https://doi.org/10.4018/979-8-3693-3069-2.ch007>
- Maxwell, S. (1996). Food security: A post-modern perspective. *Food Policy*, 21(2), 155-170. [https://doi.org/10.1016/0306-9192\(95\)00074-7](https://doi.org/10.1016/0306-9192(95)00074-7)
- Misik, T., & Nagy, Z. (2025). Sustainability and innovation in hospitality management: Green practices in Northeast-

- tern Hungary. *Sustainability*, 17(13), 6185. <https://doi.org/10.3390/su17136185>
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1-13. <https://doi.org/10.1177/1609406917733847>
- Okumus, B. (2025). Potential threat to the future of hospitality and tourism: Food insecurity and famine. *Journal of Culinary Science & Technology*, 23(4), 836-856. <https://doi.org/10.1080/15428052.2024.2354204>
- Okumus, F., Altinay, L., & Roper, A. (2007). Gaining access for research: Reflections from experience. *Annals of Tourism Research*, 34(1), 7-26. <https://doi.org/10.1016/j.annals.2006.07.006>
- Okupe, A. (2023). *Applying Circular Economy Thinking to Food Systems in the Hospitality Industry in Nigeria* (pp. 359-380). https://doi.org/10.1007/978-981-99-3083-8_12
- Omar, I. A., Hasan, H. R., Jayaraman, R., Salah, K., & Omar, M. (2024). Using blockchain technology to achieve sustainability in the hospitality industry by reducing food waste. *Computers & Industrial Engineering*, 197, 110586. <https://doi.org/10.1016/j.cie.2024.110586>
- Organización de las Naciones Unidas para la Alimentación y la Agricultura [FAO]. (1996). *Informe de la cumbre mundial sobre la alimentación*. FAO. <https://www.fao.org/4/w3548s/w3548s00.htm>
- Organización de las Naciones Unidas para la Alimentación y la Agricultura [FAO], Fondo Internacional de Desarrollo Agrícola [FIDA], Organización Mundial de la Salud [OMS], Programa Mundial de Alimentos [PMA] & Fondo de las Naciones Unidas para la Infancia [UNICEF]. (2025). El estado de la seguridad alimentaria y la nutrición en el mundo 2025: Hacer frente a la inflación alta de los precios de los alimentos en aras de la seguridad alimentaria y la nutrición. FAO. <https://doi.org/10.4060/cd6008es>
- Ravallion, M. (1992). On *Hunger and Public Action*: A review article on the book by Jean Drèze and Amartya Sen. *The World Bank Research Observer*, 7(1), 1-16. <https://doi.org/10.1093/wbro/7.1.1>
- Reutlinger, S. (1985). Food security and poverty in LDCs. *Finance & Development*, 22(4), 7-11. <https://www.elibrary.imf.org/downloadpdf/journals/022/0022/004/article-A002-en.pdf>
- Sánchez, F. (2019). Fundamentos Epistémicos de la Investigación Cualitativa y Cuantitativa: Consensos y Disensos. *Revista Digital de Investigación en Docencia Universitaria*, 13(1), 101-122. <https://doi.org/10.19083/ridu.2019.644>
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & Quantity*, 52, 1893-1907. <https://doi.org/10.1007/s11135-017-0574-8>
- Schejtman, A. (1988). Food security: trends and impact of the crisis. *CEPAL Review*, (36), 141-167. https://repositorio.cepal.org/bitstream/handle/11362/10266/36141160I_en.pdf?sequence=1
- Secretaría de Turismo de Quintana Roo (2024). *Presenta SEDETUR resultados ante el Congreso del Estado: Quintana Roo continúa siendo líder nacional en materia turística*. Secretaría de Turismo de Quintana Roo. <https://sedetur.qroo.gob.mx/presenta-sedetur-resultados-ante-el-congreso-del-estado-quintana-roo-continua-siendo-lider-nacional-en-materia-turistica/>
- Sen, A. K. (1981). *Poverty and Famines: An Essay on Entitlement and Deprivation*. Clarendon Press.
- Sentia, P. D., Andriansyah, Syahputra, R. A., Akbar, C., & Rustandi Putri, W. A. (2022). System dynamic modeling: A case study of a hotel food supply chain. *Jurnal RESTI (Rekayasa Sistem Dan Teknologi Informasi)*, 6(4), 521-527. <https://doi.org/10.29207/resti.v6i4.4077>
- Solarino, A. M., & Aguinis, H. (2021). Challenges and best-practice recommendations for designing and conducting interviews with elite informants. *Journal of Management Studies*, 58(3), 649-672. <https://doi.org/10.1111/joms.12620>
- Sundqvist, J., & Marshall, M. (2025). New nordic cuisine in practice: storage and preservation practices as a means for a resilient restaurant sector. *International Journal of Gastronomy and Food Science*, 40, 101193. <https://doi.org/10.1016/j.ijgfs.2025.101193>
- Tchouamou Njoya, E., & Nikitas, A. (2020). Assessing agriculture-tourism linkages in Senegal: A structure path analysis. *GeoJournal*, 85(5), 1469-1486. <https://doi.org/10.1007/s10708-019-10033-1>