

5. From Heritage to Sustainability: Exploring Traditional Emirati Food Practices as a Framework for Sustainable Food Education

Denise Buttigieg Fiteni

Emirates College for Advanced Education (ECAE)

Abu Dhabi, United Arab Emirates

denise.fiteni@ecae.ac.ae

Abstract

[EN] Traditional food practices constitute an important form of cultural heritage through which communities preserve identity, transmit knowledge, and maintain connections between people, place, and the environment. These practices contain principles of resource conservation, responsible consumption, communal responsibility, and intergenerational learning that are relevant to contemporary sustainability challenges. The current study explores how traditional Emirati food practices can provide a framework for sustainable food education among younger generations in the UAE. Theoretically, the study views heritage as a living repository of collective memories, identities, values, relationships, and knowledge reproduced through everyday practices enabling UAE citizens to communicate meanings related to identity, belonging, memory, relationships, values, and social practices. Education for Sustainable Development (ESD) provides the overarching framework for linking these cultural practices to sustainability. Despite widespread recognition of traditional food practices in preserving cultural identity, limited research has examined how they can be conceptualised as a framework for sustainable food education. This is the primary focus of the current study, with specific attention to perception on the significance of traditional Emirati food heritage in contemporary UAE society, how such knowledge gets transmitted across generations, and how traditional food practices shape sustainable food education and behaviour among younger generations. The study adopted a qualitative case study approach. This is considered the best approach for this study, given that its purpose was not to give a statistical

representation of the UAE population but to outline an in-depth exploration of meanings, experiences, and perceptions concerning traditional Emirati food practices and how they contribute to sustainability education. Semi-structured interviews were undertaken with three distinct groups of six individuals each, including Emirati parents, Food and Nutrition teachers, and professional chefs specialising in Emirati cuisine. The results demonstrate that traditional Emirati food practices are more than a culinary tradition. In the contemporary UAE, these practices function as repositories of cultural heritage and educational resources. They provide culturally authentic, experiential learning opportunities that enable learners to develop sustainability competencies in meaningful local contexts. The findings demonstrated that traditional food practices are transmitted through an interconnected ecosystem comprising the home, school, and community, with the domestic environment serving as the primary foundation. Integrating traditional Emirati culinary heritage into Food and Nutrition curricula enhances student food literacy while safeguarding the nation's intangible cultural heritage. Practically, the study demonstrates that schools can use traditional recipes, ingredients, food preparation techniques, and food-related cultural practices to develop food literacy, responsible consumption, environmental awareness, and appreciation of cultural heritage. The study also highlights the significance of collaboration among stakeholders, including teachers, parents, professional chefs, and community organisations, in creating meaningful intergenerational learning opportunities that not only enhance an individual learner's identity with their culture but also help them become responsible citizens who are interested in creating optimal value for both current and future generations. The study also highlights the need for policymakers to encourage heritage-based sustainability education through teacher professional development, curriculum resources, school–community partnerships, among other programmes that support traditional food knowledge.

Keywords: *traditional food Practices, culinary education, heritage learning, food literacy, sustainability*

1. Introduction

1.1. Background

Many researchers and organisations have become increasingly drawn to the impact of human behavior on planet Earth. The United Nations, as a governing body, has established the Sustainable Development Goals (SDGs) to meet the world population's food needs in a responsible, non-polluting manner. Specifically, SDG 2 focuses on zero hunger. At the same time, SDGs 1 (no poverty), 3 (good health and well-being), 12 (responsible consumption and production), and 13 (climate action) all serve as supporting goals across the food system (HUSSAIN et al. 2025). Sustainability has become a key priority within both global and national agendas. Educational institutions are increasingly expected to support the development of knowledge, values, and behaviors that contribute to sustainable futures (MENG et al. 2025). Food practices provide a particularly valuable context for sustainability learning because they connect environmental, social, cultural, and economic dimensions of sustainable development (HU et al. 2024; GILSENAN et al. 2025). Amid this sharp focus on sustainability in the food system, human dietary choices and consequent consumption patterns can be vital in linking environmental sustainability and human health.

Food is also emerging to be more than a source of nutrition, as traditionally conceived in the field of culinary science. In recent times, it has been established as a reflection of several relationships, including cultural, social, and environmental relationships (LE et al. 2020). In this context, the role of traditional recipes in creating and maintaining these relationships is widely recognised among researchers across diverse societies (TOLEDO 2022). Thus, cultural heritage is being fronted as a powerful catalyst for sustainable regional development, acting as the essence that defines and shapes regions. Without culture, regions would lack distinct identities that make them unique (FERNQVIST et al. 2024; PAGANO 2023). Food is one of the best avenues for passing down cultural heritage to both current and future generations in a fluid manner.

Food has become more than just a means of sustenance but rather a way

of expressing oneself, connecting with others, and passing on rich cultural heritage. It is considered part of intangible cultural heritage, a way of life passed down from generation to generation (ALAM & GABRIEL-NEUMANN 2024; JIEMURATOVA 2025; SONNINO & MILBOURNE 2022). The food itself, along with the associated preparation techniques and social customs, serves as a reminder of the past and connects to historic and cultural roots. For example, Italians have a rich culinary history dating back to ancient times, with important traditional dishes such as pasta and pizza, which make food not just sustenance but also a reflection of family and traditions (JAYASINGHE et al. 2025). A similar case can be observed in Japan. Japanese cuisine is known for its simplicity and elegance. The preparation and presentation of traditional Japanese dishes like sushi, tempura, and ramen are considered an art form (BAUMERT & FUKUDA 2021). Japanese food culture emphasises the aesthetics and symbolism of food and honours a culturally rooted respect for nature and tradition (VARZAKAS & ANTONIADOU 2024).

Emirati cuisine is a deeply rooted culinary tradition shaped by desert survival, coastal fishing, and oasis agriculture. It defines and perpetuates centuries of trade across the Arabian Gulf, the history of pearl diving, and Bedouin resilience (JOHNSON 2024). At the core of Emirati cuisine is Bezar, a signature spice blend made from cumin, coriander, turmeric, cinnamon, fennel seeds, and dried chilies (SAVVAIDIS et al. 2022). The final product is an aromatic mix that defines the flavour profile of many rice and meat dishes in the UAE. Supporting spices such as saffron and cardamom are used to enhance fragrance. At the same time, loomi (dried lime) is also used to add a subtle tang that distinguishes Emirati cuisine from other Middle Eastern foods. Some of the most prominent ingredients include rice, meat, fish, dates, dairy, and spices (SAVVAIDIS et al. 2022). Rice is a common ingredient in many Emirati dishes, such as Machboos and Biryani, which are cooked with spices and meats to create hearty, satisfying meals (MARTÍN 2024). Meat, specifically lamb and camel, is commonly used in traditional dishes and is cooked in various ways, such as roasting or slow-cooking with spices. Among the iconic main dishes is Machboos, a fragrant rice cooked in a spiced broth with chicken, lamb, or seafood, infused with loomi for depth and tang (ELDEAN 2020). Harees is also a common Emirati cuisine, especially during Ramadan celebrations. It is a slow-cooked blend of wheat and meat, blended into a comforting, porridge-like consistency. Harees is generously distributed

to mosques and communities during Ramadan to highlight the spirit of giving. Traditional Emirati food practices represent a rich body of cultural knowledge that has evolved through centuries of adaptation. These practices go beyond recipes and vernacular culinary techniques to the knowledge, values, rituals, and social customs associated with the processes of sourcing, preparation, sharing, and consumption of food (BAYCAR 2023; MARTÍN 2021). Food preparation often involves collective participation among family members, with knowledge transmitted informally through observation, practice, and storytelling, particularly from older to younger family members (HAROUN et al. 2025). Among the social and cultural values embodied in traditional Emirati food practices are, but are not limited to, hospitality, generosity, reciprocity, and community cohesion (MARTÍN 2024). These highlight the intimacy of relationships between people and their natural environment, as well as the responsible use of scarce resources.

Arabian cuisine also embodies a range of sustainability principles that were in place long before sustainability became part of the global policy agenda. Notably, the environmental conditions within the Arabian Peninsula played a considerable role in shaping these sustainability principles (ROUF & TANVEER 2026). The harsh weather conditions, coupled with scarcity in water supply, demand efficiency, resilience, and careful resource management by eliminating unnecessary waste (AMMAR et al. 2023). Local sourcing and seasonal consumption form two defining features of Emirati food practices (SAVVAIDIS et al. 2022). Camels and goats were important sources of meat, while coastal communities relied predominantly on fish and oasis communities cultivated vegetables, reflecting how local food practices were historically adapted to the ecological conditions and resources available in different parts of the UAE (ALHADDAD & GALAL-AHMED 2024). Consequently, traditional Emirati food practices offer a holistic model of sustainability that interconnects ecological stewardship, cultural heritage, and social well-being. Food heritage offers authentic opportunities for learners to understand the interconnections among culture, environment, economy, and society. Traditional food practices form an experiential form of knowledge that also allows learners to appreciate the cultural values and environmental principles embedded within them (VARZAKAS & ANTONIADOU 2024). Equally important is the intergenerational transmission of knowledge, in which grandparents teach culinary techniques and cultural values to younger

generations through observation, participation, and storytelling (ALHUZAIL et al. 2026). The experiential learning further strengthened a sense of belonging and cultivated respect for heritage. Further, the incorporation of Emirati food heritage into formal educational settings not only promotes food literacy but also supports environmental awareness.

1.2. Research Problem

Research on sustainable food education has predominantly focused on nutrition, environmental awareness, food literacy, and sustainable consumption. Contemporary pedagogical approaches and global sustainability frameworks provide the overarching conceptual and guiding foundations. At the same time, studies examining traditional Emirati food practices have primarily explored their cultural significance, historical development, culinary traditions, and contribution to national identity and heritage preservation (CONTU 2025; KHANSAHEB 2021; SAVVAIDIS et al. 2022). However, traditional food practices as educational resources capable of advancing sustainability learning have received limited attention. This disconnect is particularly evident in the United Arab Emirates (UAE), where national policies increasingly emphasise sustainability, cultural preservation, and educational innovation. The current paper addresses this conceptual gap by repositioning traditional Emirati food practices from being viewed through a singular lens as elements of cultural heritage to being recognised as a dynamic framework for sustainable food education. Specifically, this study is guided by three research questions:

- (1) How do Emirati parents, Food and Nutrition teachers, and professional chefs perceive the significance of traditional Emirati food heritage in contemporary UAE society?
- (2) How is traditional Emirati food knowledge transmitted across generations through homes, schools, and communities?
- (3) How can traditional Emirati food practices contribute to sustainability education and the promotion of sustainable food behaviours among younger generations in the UAE?

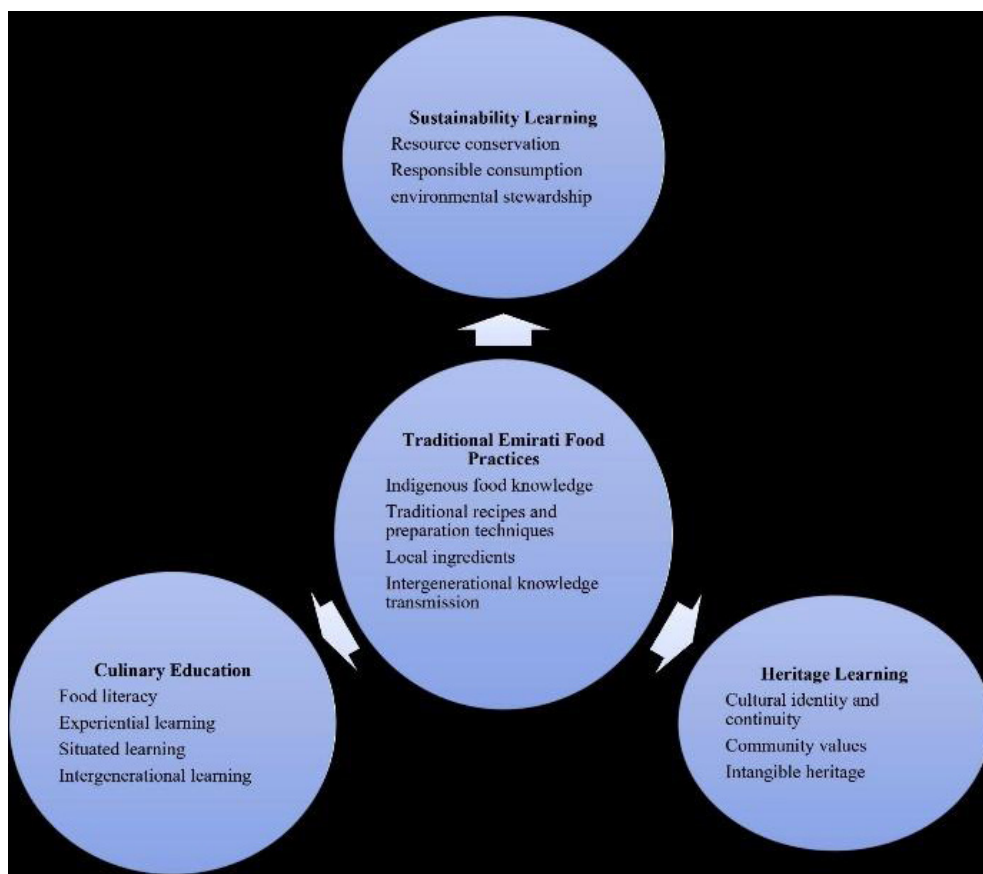
2. Theoretical Background

The current study is interested in understanding Arabian Cuisine beyond recipes and ingredients to conceptualising traditional Emirati food practices as living cultural heritage. Heritage theory as conceived by Laurajane Smith (SMITH 2006) perceive that the collective memories, cultural identities, values, social relationships, and knowledge accumulated across generations contribute in defining the what, where, when, and why particular food practices have survived in UAE. As such, heritage in this sense is understood to be continuously reproduced through everyday practices (MINAMI 2025). Through these practices individuals UAE citizens communicate meanings about identity, belonging, memory, relationships, values, and social practices. Within this communication framework, particular foods, ingredients, preparation methods, and occasions can acquire meanings that extend beyond their material characteristics (HUMTSOE & MARAK 2022). Traditional Emirati food practices are therefore interpreted not simply as objects of preservation but as meaningful cultural texts through which individuals negotiate and reproduce cultural identity through their daily food practices (BÁTI 2024).

The study has adopted Education for Sustainable Development (ESD) as its primary theoretical lens. ESD positions education as a transformative process that equips individuals and communities with the knowledge, skills, values, and behaviours necessary to promote sustainable development (GOLLER & MARKERT 2024). In this, it adopts a holistic perspective that integrates ecological integrity, social equity, cultural diversity, and economic well-being into educational practice. ESD theory holds that sustainability learning should be contextualised within an individual learner's lived experiences and cultural environments, and should not rely on abstract concepts. Sustainable solutions are therefore most effective when grounded in the cultural traditions and social realities of an individual learner's community (LOHMANN & GOLLER 2023). ESD also encourages experiential and participatory pedagogies that enable learners to understand sustainability through authentic engagement with everyday practices.

Traditional food practices are important educational resources in the current study, as they are practical expressions of sustainability that have evolved over generations of interaction with the local environment. Efficient resource

management, seasonal consumption, local food production, and communal cooperation are among the sustainable strategies associated with Emirati food practices to date. As highlighted in f.1, the current study, therefore, moves beyond viewing culinary heritage solely as an aspect of cultural preservation and instead recognises it as a dynamic pedagogical resource for developing sustainability competencies through culturally meaningful learning experiences. Through the processes involved in traditional food preparation, intergenerational knowledge transmission, communal dining practices, and the use of locally available resources, Emirati food practices offer authentic opportunities for learners to develop a deeper understanding of sustainable food systems while simultaneously strengthening their appreciation of national identity and intangible cultural heritage (RIESS et al. 2022).



F.1 – Conceptual Framework

3. Method

3.1. Research Design

This study adopted a qualitative case study design to explore perceptions of the significance of traditional Emirati food heritage in contemporary UAE society, intergenerational transmission of food-related knowledge, and the role of traditional food practices in shaping sustainable food education and behaviour among younger generations. Based on the interpretivist research paradigm, the study sought to understand participants' subjective meanings and experiences, which were considered more important than measuring predefined variables and establishing statistical relationships. The study sought to make sense of traditional Emirati food practices in the contemporary UAE and to understand how they relate to sustainability, heritage learning, and culinary education. A qualitative case study design offered an opportunity to capture and examine how meanings are constructed within the UAE's social and cultural contexts. The ESD theory was quite pivotal in interpreting participants' accounts and provided a framework for examining how traditional food practices may contribute to sustainable food education.

3.2. Sampling

The study was undertaken in Al Ain, Abu Dhabi. Purposive sampling was employed to select information-rich participants with direct knowledge and experience relevant to the study objectives. The study sought the opinions and experiences of three groups of individuals who were deemed to be in daily contact with traditional food practices. The three groups of participants include Emirati parents, Food and Nutrition teachers, and professional chefs specialising in Emirati cuisine. Professional chefs provided perspectives on culinary knowledge and authenticity, while Food and Nutrition teachers provided insights into how best traditional food practices can be integrated into formal educational settings. On the same note, Emirati parents provide valuable accounts on how these practices are being transmitted within the

lived experiences of the family unit. The inclusion of multiple groups enabled the study to compare perspectives across professional, educational, and family contexts.

The study, undertaken in May 2026, engaged 18 respondents in total, including six Emirati parents, six Food and Nutrition Teachers and six professional chefs. The purposive sampling technique was used to identify participants who could provide information relevant to the research objectives. Individuals selected were expected to have knowledge and experience and to have meaningful perspectives on the relationship among culinary heritage, sustainability, and education. Six participants per stakeholder group was considered appropriate because it provided balanced representation across the three groups and were sufficient in identifying recurring patterns, shared understandings, and differences within and between participant categories (LINDQVIST 2025). The study did not consider a larger sample group given that its purpose was not to give a statistical representation of the UAE population but to outline an in-depth exploration of meanings, experiences, and perceptions concerning traditional Emirati food practices and how they contribute to sustainability education (HALLORAN 2025). At the same time, a substantially smaller sample could have limited the diversity of perspectives and reduced the ability to meaningfully compare the three stakeholder groups. The participants were contacted via email detailing the goals and objectives of the study together with their expected role in realising these goals and objectives. They were given a two weeks period to respond in which only one professional chef failed to respond. All the responses indicated excitement and readiness to participate in the study.

3.3. Data Collection and Analysis

Data were collected through semi-structured interviews with interviews being conducted at respondents' preferred locations, which technically involved workplaces, schools, and homes, among other agreed venues. The central areas of inquiry in the study were used to develop the interview guide; these included the cultural significance of traditional Emirati food practices, the transmission of food knowledge across generations, and the sustainability principles embedded in these practices. The flexibility of semi-structured

interviews as a data collection tool allowed participants to describe their experiences freely in their own words. The researcher was also able to ask follow-up questions where participants introduced significant and unexpected issues. Each interview session lasted approximately 30 minutes. All interviews were audio-recorded for transcription purposes and subsequent analysis. Participant confidentiality was maintained by removing personally identifying information from transcripts and reporting findings using participant codes or pseudonyms rather than names. To further advance confidentiality and ease of reference, participants were assigned codes based on their participant group: P for parents, T for Food and Nutrition teachers, and PC for professional chefs, with numerical identifiers used to distinguish participants within each group (e.g., P1, T1, and PC1).

The credibility and trustworthiness of the findings were strengthened through the use of a consistent semi-structured interview guide, systematic coding and thematic analysis, careful checking of transcripts against interview recordings, and comparison of perspectives across the three participant groups. Thematic analysis was used to organise and interpret recurring patterns of meaning across the dataset. The process involved familiarisation with the interview material before identifying initial codes and developing candidate themes. A review and refinement of the themes then followed. The significance and meaning attached to the issues that the respondents presented were given close attention, as was the frequency of discussion. Specifically, issues relating to cultural identity, heritage preservation, symbolic meanings attached to food, intergenerational knowledge transmission, resource use, sustainability values, and educational practices and meanings attached to every practice were given close attention. The analysis also compared patterns across different groups of participants, including professional chefs, Food and Nutrition teachers, and parents, to identify areas of convergence and difference between the stakeholder groups. The study sought and received ethical approval from the University of West London in the UAE, School of Human and Social Sciences Ethics Panel. Participation in the study was fully voluntary, with participants giving informed consent before participation.

4. Results

4.1. Traditional Emirati Food Practices as Cultural Heritage

Across the three participant groups, traditional Emirati food practices were unanimously recognised as integral to the nation's cultural heritage. The emerging understanding across these groups is that traditional cuisine is a living expression of Emirati culture and reflects how the community has adapted to its environment over the years. As a result, these practices were viewed as vehicles for preserving cultural continuity in the face of the rapid social, environmental, and technological transformation we are currently witnessing.

One parent noted that «vernacular recipes mostly serve as cultural artefacts not only of the methods of preparation but also of the historical identities of the people involved» (P3).

Moreover, a professional chef remarked that:

«Unlike standardised recipes found in cookbooks and culinary schools, vernacular recipes emerge from everyday practice and are shaped by local environments, available ingredients, inherited techniques, and shared cultural values» (PC4).

Professional chefs in the UAE often associate traditional Emirati cuisine with authenticity and cultural identity. Four out of six of them highlighted that traditional dishes embody the history of how the Arabian Peninsula community has successfully adapted to the prevailing environmental conditions over the ages. Notably, the use of ingredients and food preparations was primarily used as a perfect example of the histories represented by the traditional cuisines. One professional chef highlighted that:

«The desert like conditions witnessed in most of the Arabian Peninsula explains why specific ingredients such as dates, camel milk, and locally caught fish [...] dates as an ingredient was an adaption around oasis while camel milk is predominantly as a result of the aridity in the Arabian Peninsula [...] fish further reflect the marine culture along the shorelines» (PC2).

PC3 also added that «slow cooking and the use of minimal water in the preparation of common traditional dishes like Harees and Thareed reflect the necessary adaptation to the aridity being witnessed in this area» (PC3).

The chefs were also unanimously consistent that preparing traditional dishes requires more than technical expertise. A comprehensive understanding of the cultural meanings associated with specific foods, celebrations, and family traditions was also essential to preparing these traditional dishes. PC4 notes that:

«dishes like Harees, Thareed, Samboosa, and Luqaimat are closely associated with Ramadan celebrations. Their nutritional value has been engraved into Ramadan's religious practices and their annual preparation creates a rhythm of cultural remembrance that links present generations to their ancestors» (PC4).

Teachers also expressed similar sentiments regarding the cultural heritage embedded in traditional cuisines and added that these dishes serve as significant educational and cultural resources for the current and future generations. Notably, they placed much emphasis on their role in fostering cultural awareness among younger generations. The emergence of globalisation and changing dietary preferences has considerably disrupted young people's familiarity with traditional Emirati dishes and their cultural significance.

T2 noted that:

«the emergence of globalisation and technological advancements in the contemporary world has altered how recipes circulate [...] Students nowadays consult online videos and social media platforms when they prepare their meals» (T2).

T5 held a slight reservation about the use of social media, stating that:

«young individuals in the Gulf region still seek validation from parents and grandparents regarding the flavour and texture of the dishes they are preparing, despite their use of online videos and social media platforms» (T5).

Teachers also argued that schools have an important responsibility to introduce learners to their culinary heritage by enabling the students to appreciate the specific historical, cultural, and environmental contexts in which traditional food practices evolved. Integrating traditional food practices into classroom learning creates meaningful opportunities for students to connect theoretical knowledge with lived cultural experiences.

T3 explained that «to me, traditional ingredients and cooking methods, when taught in class, strengthen an individual learner's engagement while simultaneously reinforcing their respect for local heritage» (T3).

Confirming that when students understand the stories, customs, and environmental conditions associated with traditional foods, they develop a greater appreciation of both their cultural identity and the tacit knowledge embedded in these identities.

Parents also held complementary perspectives, viewing the home as the first learning center and the primary environment for transmitting culinary heritage. All six parents described traditional food preparation as a family-centered activity through which children acquire practical cooking skills, appreciate cultural values, social responsibilities, and family traditions.

P1 highlighted that:

«my children especially my two girls like spending time with their grandmothers as they prepare meals [...] I also like it that way because it makes my mother useful in the family by helping them learn their culture and family traditions» (P1).

P6 adds that:

«cooking together during religious celebrations, family gatherings, and everyday meals creates opportunities for older family members to share stories, explain the significance of traditional dishes, and demonstrate cultural practices that might otherwise be lost» (P6).

Parents also noted that traditional food practices encourage children to value their heritage in ways that extend beyond formal education. Communal values, including respect for elders, generosity, and hospitality, are always on display in traditional Emirati cuisine practices. These values are often communicated implicitly through shared experiences rather than explicit instruction. P5 pointed out that «I always try so much for my children to understand that every step in food preparation and dining practices represent either hospitality, generosity or respect for elders» (P5).

4.2. Sustainability Principles Embedded in Traditional Food Practices

The traditional food practices in the Arabian Peninsula embody principles that closely align with our contemporary understanding of sustainability. The descriptions offered by participants across the three groups in food production, preparation, preservation, and consumption reflected longstanding practices that promoted environmental stewardship and the use of scarce resources. The three groups generally agree that these practices were developed out of necessity in response to the environmental conditions witnessed in the Arabian Peninsula. Essentially, they were driven by scarcity in water and agricultural land.

There exists a close relationship between traditional Emirati cuisine and the natural environment. PC6 points out that:

«historical food practices in the Gulf region were shaped by the availability of local resources, resulting in a cuisine that relied heavily on seasonal ingredients, locally sourced produce, and ingredients capable of thriving under arid climatic conditions» (PC6).

PC1 added that «communities learned to maximise the nutritional value of locally available foods while adapting recipes according to seasonal availability rather than relying on imported ingredients» (PC1).

Professional chefs were also unanimous in agreeing that efficient resource utilisation through the minimisation of food waste is another sustainability principle closely observed in traditional Emirati cuisine. The view, together with their explanation, was all angled towards the previous generations' understanding of the value of every ingredient, because food availability could never be taken for granted.

PC3 highlights that «across the UAE, leftover food is always repurposed into subsequent meals and animal products were utilised comprehensively [...] these are practices inherited across generations» (PC3).

PC4 also pointed out that «preservation techniques such as drying, salting, and fermentation were employed to extend the shelf life of food» (PC4).

Food and Nutrition teachers corroborated these perspectives by identifying sustainability as an intrinsic characteristic of traditional Emirati food practices. Their responses indicated that many traditional recipes provide practical examples of sustainable food systems through responsible consumption, seasonal eating, and efficient resource management. Introducing traditional Emirati culinary practices in educational settings helps students recognise that sustainability is not just a modern scientific concept but has long been embedded in local cultural traditions.

T2 asserted that:

«sustainability has been in existence for centuries. In the modern world, we only refine the terms, but before us, the generations were much more action-oriented in terms of using the available resources in a manner that not only benefited them but also benefited the future generations» (T2).

T6 adds that «students understand sustainability better from their daily interactions, and there is no better way to reinforce that than in their formal learning spaces» (T6).

The responses from teachers further highlighted the interconnectedness of environmental and social sustainability. Traditional culinary practices were found to strengthen family relationships and encourage collective

responsibility through communal food preparation and shared meals.

T1 remarked that «I am happy that most curriculums around the world have begun acknowledging the sustainability aspect embedded in different culinary practices» (T1).

T5 also added that «sustainability education should move beyond environmental conservation alone to acknowledge the importance of preserving cultural knowledge and strengthening social cohesion» (T5). Parents also reinforced these perspectives by highlighting that sustainability has become a way of life, as evidenced by everyday family practices. Specifically, household routines such as avoiding waste, respecting food, and using resources were notable in the responses, and four participants acknowledged having inherited them from older generations. These practices have become more than economic necessities and have been ingrained in the moral fabric of the population of the Arabian Peninsula as a reflection of gratitude for the scarce resources available.

Parents were also critical of the need to show children where food originates and the effort involved in producing it. This taught children the value of respecting food and discouraging wasteful behaviors.

P3 noted that «I believe involving my children in shopping, preparing the food, and engaging them in family cooking activities encouraged them to have greater respect for food» (P3).

These learning experiences are important in contemporary society, where convenience foods and highly processed products have distanced young people from traditional food systems and the environmental knowledge embedded in them. Other modern lifestyle factors, such as urbanisation, globalised food markets, and changing family structures, were also identified by parents as significantly contributing to the decline in knowledge of traditional cooking methods and the reduced appreciation for local ingredients among the younger generation.

4.3. Educational Value of Traditional Food Practices

Traditional Emirati food practices were unanimously acknowledged by respondents from all quarters as valuable educational resources capable of promoting knowledge acquisition and skill development. This means that

the practices can also serve as important pedagogical tools to help learners acquire competencies in cultural values, environmental knowledge, and social responsibility. However, the individual groups of participants approached this educational role from different perspectives.

Specifically, professional chefs view the educational value of traditional Emirati cuisine through the lens of the practical knowledge embedded in its practices. PC5 explained that «mastering traditional Emirati cuisine requires learners to understand ingredients, preparation techniques, food preservation methods, seasonal availability, and appropriate resource use» (PC5).

Through observation and participation, the younger generation can acquire the necessary sustainability competencies to apply in other areas of life, including the job market, thereby helping them become responsible citizens in the UAE. PC1 remarked that «the experiential learning gained through observation and participation nurtures patience, discipline and precision, which all extend beyond the kitchen and contribute to personal development» (PC1).

The professional chefs also critically highlighted traditional kitchens as important sites of intergenerational learning. By working alongside parents and grandparents, the younger generations get the opportunity to observe cooking techniques and ask questions. The apprenticeship model in such a learning environment is highly effective because knowledge is transmitted within authentic cultural contexts.

The responses from teachers also suggested that incorporating traditional Emirati food practices into Food and Nutrition education enhances student engagement, as learners are more likely to relate to familiar foods and family experiences. T6 observed that «my students often become more motivated when lessons involve preparing traditional dishes» (T6).

T3 also remarked that «my students become livelier when we are investigating the origins of local ingredients and discussing family food traditions» (T3).

In such instances, the learning environment promotes critical thinking. The skills that students gain from traditional Emirati cuisine, as an educational resource, closely match those previously identified by the professional chefs. Some of these include, but are not limited to, teamwork (T1), communication, problem-solving (T4), planning, creativity, and responsible decision-making (T5). Additionally, the teachers were more specific about the competencies individual learners derive from the inclusion of traditional Emirati food

practices in the curriculum. These competencies include hygiene, time management, and safe food handling.

T2 explained that «I think it significantly contribute to holistic development of learners by integrating cognitive, practical, social, and ethical dimensions of learning» (T2).

The parents corroborated all these by virtue of the fact that the home is the first and most influential learning environment. Five of the six parents quickly recognised that cooking together provides opportunities for children to acquire practical culinary skills while learning family traditions. Food preparation came out as a natural context for conversation, storytelling, and shared experiences through which children develop an appreciation of their cultural heritage.

P3 pointed out that «my children gradually developed confidence and independence as a result of our interaction within the kitchen space» (P3).

P4 added that «food preparation also provides a platform for strengthening intergenerational relationships especially when involving traditional dishes» (P4).

Parents and grandparents always use these opportunities to transfer complex tacit knowledge that, in most cases, may extend beyond recipes to include family histories and religious traditions.

P6 remarked that:

«interacting with parents and grandparents in the kitchen is important in modern society, where busy lifestyles and changing family routines may reduce opportunities for informal cultural learning» (P6).

The shared experiences reinforce an individual child's sense of identity while cultivating respect for elders and appreciation of cultural continuity. It also helps them adapt to new technological and culinary trends in innovative ways without abandoning traditional Emirati cuisine.

5. Discussion

The findings indicate that traditional Emirati food heritage is a living cultural resource that continues to play a significant role in contemporary UAE society. These traditional dishes act as immense educational resources. Independently, dishes like Machboos, Harees, Thareed, and Balaleet, among others, are repositories of cultural identity, social values, and environmental knowledge that shape intergenerational learning across past, present, and future generations in the UAE. The experiential learning involved in preparing these traditional dishes serves as a dynamic expression of Emirati identity despite the rapid urbanisation, globalisation, and changing dietary patterns witnessed in modern Emirati society. The findings corroborate what Pagano (2023) had earlier proposed, that food heritage extends beyond culinary traditions. It also encompasses cultural memory, collective identity, and community belonging. Understanding the educational resourcefulness embedded in traditional Emirati cuisines treats traditional food heritage as a valuable resource rather than merely as an object for propagating communal continuity. It acknowledges the significance of each ingredient and each step in the cooking process, as well as their role in sustainably navigating environmental challenges in the Arabian Peninsula.

Not to be forgotten is the sense of shared societal responsibility for the sustainable preservation of cultural heritage. Teachers emphasised the role of a formal learning environment in introducing younger generations to traditional food practices through well-structured educational experiences. On the other hand, parents highlighted the family as the primary learning environment in which culinary traditions and cultural values are transmitted. Jayasinghe et al. (2025) and Minhaji et al. (2024) also note that the interconnectedness of the home and formal learning environments helps students further understand that learning can occur in any environment. This is critical for enhancing an individual learner's creativity and innovation in navigating current challenges, such as changing family structures, without losing their sense of identity and belonging to the UAE. Traditional food heritage, as an educational resource, provides more than an avenue for cultural preservation; it also offers learners an opportunity to develop critical sustainability competencies. Values like respect for natural resources, cooperation, responsible consumption, and hospitality can be

learned from traditional Emirati cuisine. It is worth noting that the participants perceived sustainability as a lived experience embedded in everyday culinary traditions, rather than as an abstract concept confined to environmental policies and classroom instruction. Many traditional food practices embody principles of responsible resource use, waste minimisation, and respect for local resources (LÁZARO ORTIZ & JIMÉNEZ DE MADARIAGA 2022), although their sustainability may vary as contemporary food preparation increasingly incorporates imported ingredients, resource-intensive methods, and practices that generate food waste. ESD advocates educational approaches that enable learners to understand the interconnected relationships between environmental, social, cultural, and economic systems rather than viewing sustainability solely through an ecological lens. These are further corroborated by Alam & Gabriel-Neumann (2024), who add that cultural awareness, collaboration, ethical responsibility, and informed decision-making are among the competencies derived from traditional food practices. Traditional Emirati food practices, therefore, represent a situated pathway for cultivating sustainability competencies without disconnecting learners from their heritage.

Participants consistently rejected the notion that food knowledge is acquired solely through formal instruction. They stressed that it develops through continuous participation in everyday cultural practices. Most importantly, the home environment was identified as the first learning ground. These are consistent with the observations of Fernqvist et al. (2024) and Hu et al. (2026), who identified family cooking as an educational platform for preparing and sharing meals within the household. These activities are not only practical but also carry symbolic significance for the participants' culinary heritage. The practices foster family cohesion, encouraging healthy dietary behaviours, and promoting overall well-being for both current and future generations. Varzakas & Antoniadou (2024) also add that the experiences derived from observation, participation, and explanations offered form invaluable learning that shapes family relations through memory. Activities such as shopping for ingredients and cooking together require collective thinking, negotiation, and cooperation, all of which enhance participants' emotional proximity (BAYCAR 2023). Multiple sensory apparatuses are also involved in the process, including the eye through sight, the tongue through taste, and the nose through smell (FITENI & MIMIRINIS 2025; HU et al. 2024). Children

internalise the scents, tastes, and textures of family recipes, which help them develop an intuitive grasp of flavour balance and a deep respect for cultural heritage. The learning process involved in all of this prepares individuals to assume their role as knowledge carriers, responsible for passing on heritage. Grandmothers and parents, together with extended family members, serve as the primary custodians of culinary knowledge. They preserve recipes orally and through demonstration. Grandmothers draw on their decades of accumulated experience to explain why specific ingredients are used, recount family stories associated with particular dishes, and describe how recipes evolved during earlier periods of economic hardship and seasonal migration. Aunts, older siblings, cousins, and neighbours are also frequently involved in culinary education, particularly during weddings and Ramadan, when large quantities of food require cooperative preparation (FITENI 2025). The responsibility for preserving recipes, therefore, extends beyond individual households to wider kinship networks.

Schools also play an equally important role in strengthening and extending traditional food knowledge. The teachers were critical of educational institutions for creating spaces where traditional culinary practices can be systematically integrated into formal learning, allowing students to examine the relationships among food, health, culture, and environment. This finding is consistent with that of Fiteni & Mimirinis (2025), who held that food and nutrition teachers play a core role in advancing sustainability and food literacy by equipping younger generations with practical cooking skills, systems-thinking around food origins, and zero-waste habits. Professional chefs, on the other hand, described their role as custodians of culinary heritage, preserving authentic cooking techniques while introducing younger generations to traditional Emirati cuisine in restaurants and at cultural festivals. Collaboration is essential to ensuring that all three learning sites remain interconnected, relevant, and accessible to younger generations. The complementary educational experiences in all these learning sites reinforce one another. Families cultivate cultural identity and everyday practices; schools provide structured opportunities for reflection, critical inquiry, and interdisciplinary learning; while communities offer authentic cultural experiences that connect learners with wider social traditions.

5.1. Limitations and Future Research

Despite the informative findings, this study had its set of limitations that might negatively influence the viability of its conclusion. First, there is the fact that it relied on a relatively small sample of respondents, with only 18 participating. This renders the findings context-specific and not generalisable to the wider UAE population. Secondly, the self-reported accounts from the semi-structured interviews may have been influenced by participants' personal interpretations and desire to present socially desirable views regarding cultural heritage and sustainability. The study therefore recommends that future research should adopt mixed-methods or longitudinal research designs to examine how heritage-based food education influences learners' sustainability competencies and food behaviours over time. Besides, observational studies conducted in the three learning centres, including home, schools, and community, could provide deeper insights into how traditional food knowledge is transmitted and enacted in everyday practice. Future studies should also explore the existing tension between heritage narratives and living practices in the highly globalised contemporary gastroeconomy landscape.

6. Conclusions

The study has presented traditional Emirati food practices as more than culinary traditions. They function as a repository of cultural heritage and an educational resource. Across all participant groups, it is evident that these practices embody principles of sustainability through local sourcing, seasonal consumption, responsible resource management, minimising food waste, and communal dining. Traditional Emirati food practices, therefore, provide culturally authentic and experiential learning opportunities that enable learners to develop sustainability competencies within meaningful local contexts. The study has also highlighted that the transmission of traditional food practices is done through an interconnectedness of three learning environments, including the home, school, and communities, with the home as the primary and first

learning ground. Integrating traditional Emirati food practices into Food and Nutrition curricula strengthens learners' food literacy while preserving the nation's intangible cultural heritage.

The study suggests that culinary heritage can be integrated into sustainability education through experiential and intergenerational learning activities. Schools can promote this by implementing family-recipe projects that document traditional recipes and their associated cultural meanings, inviting professional chefs and community elders to demonstrate traditional preparation techniques, and organising intergenerational workshops that facilitate the exchange of food knowledge between learners and older generations. Traditional ingredient mapping could further help learners explore locally available foods, seasonal production, and sustainable sourcing practices. Investigations into household and school food waste could enable learners to connect traditional resource-conservation practices with contemporary sustainability challenges. Such approaches are critical in strengthening food literacy, promoting appreciation of Emirati culinary heritage, and providing practical opportunities for learners to develop sustainability competencies within culturally relevant contexts.

References

- ALAM, Anwar, GABRIEL-NEUMANN, Elena (2024), «Potential contribution of foodscaping to food security in the Gulf region: Case study of Al Ain city of UAE» in *Urban Agriculture & Regional Food Systems*, n. 9(1).
- ALHADDAD, Huda, GALAL-AHMED, Khaled (2024), «Informal household-practiced urban agriculture as a contributor to sustainability and resilience: The case of Emirati neighbourhoods» in *Smart and Sustainable Built Environment*, n. 15(3), pp. 1085-1114.
- ALHUZAIL, Nawal A., ZANOON, Ali, ALHUJJAJ, Mohammad (2026), «Indigenous knowledge among elderly bedouin women in the Negev: Memory, practice, and intergenerational transmission» in *Journal of Cross-Cultural Gerontology*, n. 41(2).
- AMMAR, K. A., KHEIR, A. M., ALI, B. M., SUNDARAKANI, B., MANIKAS, I. (2023), «Developing an analytical framework for estimating food security indicators in the United Arab Emirates: A review» in *Environment, Development and Sustainability*, n. 26(3), pp. 5689-5708.
- BÁTI, Anikó (2024), «Traditional food as cultural heritage in Hungary» in *Acta Ethnographica Hungarica*, n. 68(2), pp. 481-498.
- BAUMERT, Nicolas, FUKUDA, Ikuya (2021), «The raw and the cooked in Japanese cuisine: Triangulations around culture, nature and artifice» in *Anthropology of Food*, n. 16.
- BAYCAR, Hakan (2023), «Promoting multiculturalism and tolerance: Expanding the meaning of “unity through diversity” in the United Arab Emirates» in *Digest of Middle East Studies*, n. 32(1), pp. 40-59.
- CONTU, Davide (2025), «Food choices and religion: The case of the United Arab Emirates» in *The Sustainable Food Choice*, pp. 151-162.

- ELDEAN, Rania S. (2020), «Food tours in the context of multiculturalism of tourism destinations: The city of Dubai as an example» in *International Journal of Tourism and Hospitality Management*, n. 3(2), pp. 320-343.
- FERNQVIST, Fredrik, SPENDRUP, Sara, TELLSTRÖM, Richard (2024), «Understanding food choice: A systematic review of reviews» in *Heliyon*, n. 10(12).
- FITENI, Denise Buttigieg, MIMIRINIS, Mike (2025), «Developing a food and nutrition curriculum: An ethnographic study of secondary education teachers» in *American Journal of Health Education*, n. 57(1), pp. 1-12.
- GILSENAN, Sarah, LEONG, Dara, COTTER, Paul., BRENNAN, Lorraine, NILAWEERA, Kanishka (2025), «Digging deep for nutrients and metabolites derived from high dietary protein intake and their potential functions in metabolic health» in *Nutrition Research Reviews*, n. 38(2), pp. 586-598.
- GOLLER, Andrea, MARKERT, Julia (2024), «Teacher educators' subjective theories on education for sustainable development in higher education» in *Environmental Education Research*, n. 31(7), pp. 1335-1355.
- HALLORAN, Vivian (2025), «Food shaming and cultural heritage» in *Routledge Handbook of Food and Cultural Heritage*, pp. 415-428.
- HAROUN, Dima, EHSANALLAH, Ayesha, SMAIL, Linda (2025), «Motives of college students for choice of traditional food in the UAE» in *British Food Journal*, n. 127(6), pp. 2216-2232.
- HU, Tianyi, MAISTRO, Maria, HERSHCovich, Daniel (2024), «Bridging cultures in the kitchen: A framework and benchmark for cross-cultural recipe retrieval» in *Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing*, pp. 1068-1080.

- HU, Tianyi., MORALES-GARZÓN, Andrea, ZHENG, Jingyi, MAISTRO, Maria, HERSHCOVICH, Daniel (2026), «Culinary crossroads: A RAG framework for enhancing diversity in cross-cultural recipe adaptation» in *Proceedings of the 64th Annual Meeting of the Association for Computational Linguistics*, pp. 2408-2423.
- HUMTSOE, Chumchano, MARAK, Quadhan (2022), «Naga ethnic food history, traditional knowledge system and cultural meanings» in *The Cultural Heritage of Nagaland*, pp. 301-313.
- HUSSAIN, Malik, LI, Li, KALU, Arua, WU, Xiyang, NAUMOVSKI, Nenad (2025), «Sustainable food security and nutritional challenges» in *Sustainability*, n. 17(3), 874.
- JAYASINGHE, Sisitha, BYRNE, Nuala, HILLS, Andrew (2025), «Cultural influences on dietary choices» in *Progress in Cardiovascular Diseases*.
- JIEMURATOVA, Gulistan Koshkinbaevna (2025), «The cultural relevance of food: Shaping social interactions and defining collective identities» in *Mental Enlightenment Scientific-Methodological Journal*, n. 6(4), pp. 442-457.
- JOHNSON, Sophie (2024), «Domesticity as nation building in the United Arab Emirates» in *Urban Planning*, n. 9.
- KHANSAHEB, Ayisha (2021), «Exploring the nation: Gender, identity and cuisine in the UAE» in *Hawwa*, n. 19(1), pp. 76-101.
- LÁZARO ORTIZ, Saúl, JIMÉNEZ DE MADARIAGA, Celeste (2022), «The UNESCO convention for the safeguarding of the intangible cultural heritage: A critical analysis» in *International Journal of Cultural Policy*, n. 28(3), pp. 327-341.

- LE, Thai, DISEGNA, Marta, LLOYD, Tim (2020), «National food consumption patterns: Converging trends and the implications for health» in *EuroChoices*, n. 22(1), pp. 66-73.
- LINDQVIST, Yrsa (2025), «Food recipes as cultural heritage and historical source» in *Proceedings of the SIEF 24th International Ethnological Food Research Conference*, Budapest, pp. 253-263.
- LOHMANN, Julia, GOLLER, Antje (2023), «Physical education teacher educators' subjective theories about sustainability and education for sustainable development» in *International Journal of Sustainability in Higher Education*, n. 24(4), pp. 877-894.
- MARTÍN, Eloísa (2021), «Nation building and social change in the United Arab Emirates through the invention of Emirati cuisine» in *The Sociological Review*, n. 69(3), pp. 538-559.
- MARTÍN, Eloísa (2024), *From cultural heritage to culinary tourism: Ras al Khaimah as a prime destination for Emirati cuisine*, Ras Al Khaimah, Al Qasimi Foundation.
- MENG, Ze, SAVARY, Serge, WU, Fang, ZHANG, Zhao, QIU, Bingwen, CUI, Xuefeng (2026), «Revisiting global food security from a systems science perspective», *Social Science Research Network*, pp. 1-13.
- MINAMI, Naoto (2025), «Protecting and promoting traditional food culture in contemporary Japan: Registration of food culture as a cultural property with the agency for cultural affairs» in *Proceedings of the SIEF 24th International Ethnological Food Research Conference*, Budapest, pp. 207-216.
- MINHAJI, Minhaji, HOSAINI, Hisaini, PRASETIYO, Nova Tri, MAKTUMAH, Luluk, ALEHIRISH, Mustafa Hamed (2024), «Responsive Islamic education in exploring social values through the war Takjil phenomenon: Sociological perspective in Indonesia» in *Jurnal Indo-Islamika*, n. 14(1), pp. 51-61.

- PAGANO, Umberto (2023), «Sociological explorations of food: Interconnections, aesthetics, and rituals in culinary practices» in *Science & Philosophy*, n. 11(1), pp. 140-157.
- RIESS, Werner, MARTIN, Monika, MISCHO, Christoph, KOTTHOFF, Hans Georg, WALTNER, Eva Maria (2022), «How can education for sustainable development (ESD) be effectively implemented in teaching and learning? An analysis of educational science recommendations of methods and procedures to promote ESD goals» in *Sustainability*, n. 14(7), 3708.
- ROUF, Zaiema, TANVEER, Aasimah (2026), «Socio-economic dimensions of climate change in the Arabian Peninsula: Challenges and strategic responses» in *Climate Change in the Arabian Peninsula*, pp. 129-160.
- SAVVAIDIS, Ioannis, AL KATHEERI, Anfal, LIM, Swee-Hua Erin, LAI, Kok-Song, ABUSHELAIBI, Aisha (2022), «Traditional foods, food safety practices, and food culture in the Middle East» in *Food Safety in the Middle East*, pp. 1-31.
- SMITH, Laurajane (2006), *Uses of heritage*, London, Routledge.
- SONNINO, Roberta, MILBOURNE, Paul (2022), «Food system transformation: A progressive place-based approach» in *Local Environment*, n. 27(7), pp. 915-926.
- TOLEDO, Victor (2022), «Agroecology and spirituality: Reflections about an unrecognized link» in *Agroecology and Sustainable Food Systems*, n. 46(4), pp. 626-641.
- VARZAKAS, Theodoros, ANTONIADOU, Maria (2024), «A holistic approach for ethics and sustainability in the food chain: the gateway to oral and systemic health» in *Foods*, n. 13(8), 1224.

Webography and Online Sources

- FITENI, Denise Buttigieg (2025), «Investigation towards comprehensive teaching of food and nutrition in Abu Dhabi secondary schools: an ethnographic study», Doctoral dissertation, University of West London, <https://repository.uwl.ac.uk/id/eprint/13930/> (last accessed: 29/09/2026).