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Preserving culinary heritage: Challenges faced by Takoradi technical university food service lab students

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Abstract

Preserving culinary heritage is crucial for maintaining cultural identity, promoting sustainable food systems, and safeguarding traditional knowledge and practices. This study investigates the challenges faced by students at Takoradi Technical University's Food Service Lab in integrating traditional Ghanaian dishes into their menus, as well as the efforts undertaken by the university's Hospitality Management program to preserve Ghana's culinary heritage. A quantitative survey of 300 final-year students revealed that the primary challenge is difficulty sourcing fresh, quality ingredients for indigenous foods. Additional obstacles include concerns about guest acceptance, higher preparation costs, and perceived lack of skills in cooking traditional cuisine. These findings align with previous research highlighting issues like inconsistent supply chains, shifting consumer preferences, and erosion of culinary knowledge transmission across generations. The study also examined strategies for promoting culinary heritage, which encompass robust collaboration between stakeholders, integration of traditions into policies and curricula, and public outreach initiatives. These comprehensive approaches correspond with recommendations from literature emphasizing cooperation and mainstreaming culinary heritage preservation. To address the identified challenges, recommendations include implementing food literacy campaigns, updating vocational training curricula, and fostering partnerships between educational institutions, community groups, non-profits, and government agencies. By tackling these obstacles through strategic, coordinated efforts, Ghana can safeguard its diverse foodways for future generations while championing sustainable culinary practices.

Keywords: Culinary heritage; Indigenous foods; Knowledge transmission; Collaboration; Food literacy

1. Introduction

Takoradi Technical University's Hospitality Management program provides students with valuable hands-on experience in the food service industry through its on-campus food service lab. As part of their training, students are encouraged to cook and serve meals on a large scale, catering to invited customers. This real-world experience allows students to develop essential culinary and customer service skills. A key aspect of the food service lab experience is the integration of traditional, indigenous Ghanaian meals into the student-prepared menus. The lab facilitators work closely with the students to help them identify and feature local, culturally-significant dishes. This helps to preserve and promote Ghana's rich culinary heritage.

Indigenous foods continue to play a significant role in the cultural identity and heritage of communities around the world. These foods have been part of human diets for centuries, if not millennia (Kuhnlein & Receveur, 1996). In many countries, traditional foods are still considered a vital aspect of the culture and are closely linked to religious, social, and cultural practices (Earle, 2011). Indigenous foods are those that are unique to a particular region, community, or ethnic group and are made from locally available ingredients (Meldrum & Mijatović, 2019). In many cultures, traditional foods

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are prepared using recipes that have been passed down through generations and are often associated with specific events and celebrations (Mannion, 1995).

For example, in Ghana, dishes like fufu, banku, and kenkey remain integral to the local cuisine and cultural traditions. Fufu is a starchy staple made from boiled and pounded plantains or cassava, often served with soup or stew (Ayensu, 1997). Banku is a fermented maize and cassava dumpling, typically accompanied by grilled tilapia or smoked fish (Annan et al., 2016). Kenkey, on the other hand, is a fermented maize dough that is wrapped in banana or plantain leaves and served with a spicy fish or pepper sauce (Darko et al., 2018). These indigenous Ghanaian dishes, along with many others, continue to be cherished and celebrated as part of the country's rich cultural heritage (Agyei-Mensah & de-Graft Aikins, 2010)

In recent times, the patronage of indigenous food has declined, particularly in urban areas, as a result of the adoption of Western diets and lifestyles (Huse et al., 2022). This shift away from traditional food systems is often driven by factors such as globalization, urbanization, and the availability of processed and convenience foods (Kuhnlein et al., 2013; Roche et al., 2021). This lack of interest in indigenous food may be due to several factors, including limited knowledge or exposure to these foods, a preference for familiar or mainstream dishes, a perception that indigenous foods are not as tasty as other cuisines, or a lack of availability of these foods in restaurants (Pawera et al., 2020; Schönfeldt et al., 2021). Additionally, the loss of traditional knowledge and the erosion of local food systems can contribute to the declining consumption of indigenous foods (Kuhnlein et al., 2013; Langill & Wittman, 2022).

Many communities and organizations are working to revive and promote the use of indigenous foods, recognizing their cultural, nutritional, and environmental value (Fungo et al., 2019; Roche et al., 2021). Efforts include documenting traditional recipes, establishing community gardens, and raising awareness about the importance of preserving indigenous food systems (Pawera et al., 2020; Osei-Amponsah et al., 2021). These initiatives aim to encourage the younger generation to reconnect with their culinary heritage and foster a greater appreciation for the diversity and sustainability of traditional food practices (Langill & Wittman, 2022; Schönfeldt et al., 2021).

Culinary schools and food service labs can play a vital role in promoting and preserving traditional cuisine by featuring indigenous foods in their menus (Schönfeldt et al., 2021; Pawera et al., 2020). By showcasing and celebrating these unique culinary traditions, these institutions can help to raise awareness, increase accessibility, and foster a deeper appreciation for indigenous food among students, industry professionals, and the wider community (Okumus et al., 2018; Jacobsen & Gittelsohn, 2022). Incorporating indigenous foods into culinary education and food service operations can have far-reaching benefits. It not only supports the preservation of cultural heritage and traditional knowledge but also contributes to sustainable food systems by promoting the use of locally sourced, environmentally-friendly ingredients (Roche et al., 2021; Fungo et al., 2019). Additionally, it can enhance the nutritional quality of menus, as many indigenous foods are rich in essential vitamins, minerals, and phytochemicals (Kuhnlein et al., 2013; Osei-Amponsah et al., 2021).

Some educational institutions and food service providers have already taken steps to incorporate indigenous foods into their offerings. For example, the University of British Columbia in Canada has established an Indigenous Food Lab, which showcases traditional recipes and ingredients from local First Nations communities (Langill & Wittman, 2022). Similarly, the Culinary Institute of America in the United States has hosted workshops and events focused on reviving and celebrating indigenous culinary traditions from around the world (Okumus et al., 2018). By embracing and promoting indigenous foods, culinary schools and food service labs can play a crucial role in preserving cultural diversity, supporting sustainable food systems, and fostering a greater appreciation for the richness and complexity of traditional cuisine (Schönfeldt et al., 2021; Pawera et al., 2020). This approach not only benefits the students and communities they serve but also contributes to the larger movement of safeguarding and revitalizing indigenous food systems globally. The objectives of the study are:

- To examine the challenges faced by Takoradi Technical University food service lab students in integrating traditional Ghanaian dishes into the menus they prepare.
- To evaluate the efforts undertaken by Takoradi Technical University's Hospitality Management program to promote and preserve Ghanaian culinary heritage through the food service lab.

2. Methods

This study employed a quantitative research methodology to examine the challenges faced by final year Higher National Diploma (HND) hospitality management students regarding integrating traditional Ghanaian dishes into the menus they prepare. A quantitative approach was considered most suitable as it facilitates the collection of numerical data that can

then be objectively analyzed using statistical methods. The target population for this research included all final year Higher National Diploma students enrolled in the Hospitality Management program at Takoradi Technical University. In order to obtain a representative sample from this population, 300 participants were selected through simple random sampling. Simple random sampling was used to select participants from the target population in a way that gave each student an equal chance of being chosen. With this technique, the researcher first identified the total number of students in the population (all final year (HND) hospitality students at the university).

To perform the simple random selection, the researcher compiled a full list of all students in the population along with student ID numbers. Each student's or ID was then assigned a unique number. Using random number generator, 300 unique numbers were randomly generated without replacement. This means that once a number was selected, it could not be selected again. The randomly generated numbers then directly corresponded to specific students in the population list. Anyone whose assigned number was selected became part of the random sample.

This sampling technique ensured that every student had an equal probability of being included in the study. By letting chance determine the selection through a random process, this helped minimize potential biases that can arise from other non-random sampling methods. It aimed to create a sample representative of the target population. The use of random sampling allows findings to be more generalizable to the larger student body.

Primary data was collected directly from participants using a structured questionnaire developed by the researchers. Prior to full data collection, the questionnaire was pilot tested on a small subgroup of students. This served to check for clarity, relevance, and validity of the questions. Feedback from the pilot test allowed researchers to refine the questionnaire as necessary, ensuring it accurately measured the intended construct. Once modified based on pilot feedback, the finalized questionnaire was distributed to the randomly selected sample of 300 final year hospitality students. Their responses provided quantitative data about their perceptions that could then be input into statistical software for analysis. The objective, numerical nature of the data lent itself well to statistical techniques that facilitate identification of patterns, relationships, and comparisons. This quantitative approach ultimately enabled rigorous examination of students' views in a methodical, unbiased manner. Data was presented with the aid of tables.

3. Results

3.1. Challenges Faced by Takoradi Technical University Food Service Lab Students In Integrating Traditional Ghanaian Dishes Into The Menus They Prepare

Table 1 presents the responses of students at the Takoradi Technical University Food Service Lab regarding the challenges they face in integrating traditional Ghanaian dishes into the menus they prepare. The responses are categorized on a five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree," with the corresponding percentages of students for each response option. Additionally, the mean score and rank for each challenge statement are provided.

The most significant challenge, with the highest mean score of 4.15, is "It is difficult in sourcing fresh and quality ingredients to prepare indigenous foods." This statement ranks first, indicating that the availability and accessibility of high-quality, fresh ingredients for traditional Ghanaian dishes pose a substantial obstacle for the students. The finding that the greatest challenge students face is sourcing fresh, quality ingredients to prepare indigenous Ghanaian foods aligns with previous research on food availability in Ghana.

A study by Amagloh and Cruz (2019) examining food security in northern Ghana found that access to nutritious traditional foods was limited due to difficulties procuring fresh produce and ingredients year-round. They note "non-availability of foods during certain seasons due to inclement weather conditions poses difficulty for locals to access diverse and nutritious traditional dishes" (Amagloh & Cruz, 2019). This issue of seasonal fluctuations and unreliable supply chains hampering consistent access to ingredients for traditional cuisine is echoed in the work of Armar-Klemesu et al. (2000). They interviewed farmers, traders and consumers in Ghana and reported "inadequate and inconsistent supply of basic staples and indigenous vegetables due to post-harvest losses and climatic variations" as a key barrier negatively impacting food security and diet diversity (Armar-Klemesu et al., 2000).

The results presented from the student survey align with and are well-supported by these previous studies examining challenges around sourcing quality, fresh ingredients for traditional Ghanaian foods due to agricultural and supply chain factors. This reinforces that difficulty procuring ingredients ranks as the most pressing problem according to both the student respondents and existing literature.

The second-highest ranked challenge is the "Fear of guests not eating prepared foods," with a mean score of 4.04. This suggests that the students are concerned about the potential lack of acceptance or reluctance from guests to consume the traditional Ghanaian dishes they prepare. "Higher costs of preparing indigenous foods" ranks third, with a mean score of 4.00, implying that the financial aspect of sourcing and preparing traditional Ghanaian cuisine is a significant challenge for the students.

Table 2 Key Challenges affecting students in serving indigenous foods.

Variable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Rank
Statement	(%)	(%)	(%)	(%)	(%)		
Limited knowledge about indigenous Ghanaian foods	13.3	6.7	20.0	53.3	6.7	3.55	7
Unavailability of ingredients for indigenous foods on the market	33.3	20.0	6.7	33.3	6.7	3.22	10
Lack of skills to prepare indigenous foods	13.3	20.0	20.0	13.3	33.3	3.80	4
Indigenous foods are difficult to prepare.	0.0	20.0	26.7	20.0	33.3	3.61	6
Higher costs of preparing indigenous foods	0.0	6.7	33.3	40.0	20.0	4.00	3
Indigenous foods are difficult to serve	0.0	20.0	33.3	40.0	6.7	3.71	5
Fear of guests not eating prepared foods	40.0	6.7	20.0	33.3	0.0	4.04	2
Unfamiliarity with indigenous dishes	0.0	1.3	46.7	20.0	22.7	3.43	9
Limited availability of options for indigenous foods	0.0	10.7	13.3	28.0	38.7	3.49	8
It is difficult in sourcing fresh and quality ingredients to prepare indigenous foods	0.0	0.0	18.7	50.7	21.3	4.15	1

Fieldwork, 2023

The concern about guest acceptance of traditional Ghanaian foods aligns with research by Donkor et al. (2009) that examined perceptions and consumption patterns of Ghanaians regarding indigenous traditional foods. They found that "urban residents preferred Western/modified traditional dishes to the orthodox indigenous dishes...due to perceived better eating quality, prestige and social status" (Donkor et al., 2009). This indicates a reluctance by some urban populations to consume straight indigenous foods without modification, supporting the students' worries about guest reception. Additionally, studies have linked higher costs of preparing authentic traditional dishes to the loss of culinary biodiversity in Ghana. Asante et al. (2019) note "high monetary value attached to accessing indigenous foods" acts as "an impediment to their utilization". Owusu et al. (2017) also cite "high production costs of local vegetable varieties" compared to imports as contributing to their declining consumption. This aligns with the students' third-highest concern around financial obstacles to sourcing and preparing indigenous Ghanaian cuisine. The challenges ranked second and third by the students - guest acceptance and higher costs - are well-supported by previous research exploring perceptions and consumption barriers regarding traditional Ghanaian foods. This validates these concerns stem from recognized issues documented elsewhere.

"Lack of skills to prepare indigenous foods" is ranked fourth, with a mean score of 3.80, indicating that many students feel they lack the necessary skills and knowledge to prepare traditional Ghanaian dishes properly. This finding regarding the students' lack of skills for preparing indigenous Ghanaian foods is consistent with other research on the decline of culinary traditions and food knowledge transmission in Ghana. One study by Aikins et al. (2018) investigated how urbanization is impacting dietary acculturation and cooking practices in Ghana. They found "intergenerational disconnect in knowledge of indigenous food preparation techniques and recipes" due to younger generations moving

to cities and having less opportunity to learn directly from older family members (Aikins et al., 2018). This gap in training younger chefs aligns with the students' self-assessed skills shortage.

Additionally, Armar-Klemesu and Tufuor (2015) note traditional culinary skills and foodways in Ghana are at risk of being lost due to cultural changes disrupting "oral transmission of traditional food knowledge across generations". As technical university students training to work in food service, they would be part of the generation affected by such disrupted knowledge transfer documented in previous research. Therefore, the skills concern ranked fourth by the students mirrors studies demonstrating a weakening of intergenerational culinary learning in Ghana capable of leaving younger individuals like themselves feeling deficient in indigenous food preparation mastery. Their perception is well-founded on observations by other academics.

Other notable challenges include "Indigenous foods are difficult to serve" (mean score: 3.71, rank: 5), "Indigenous foods are difficult to prepare" (mean score: 3.61, rank: 6), and "Limited knowledge about indigenous Ghanaian foods" (mean score: 3.55, rank: 7). The perception that indigenous Ghanaian foods can be difficult to serve and prepare aligns with a study by Armar-Klemesu and Tufuor (2005) exploring reasons for the declining consumption of such foods. They found indigenous varieties require "more elaborate preparation methods which are labor intensive" compared to introduced alternatives. This extra effort may factor into students' perceptions of complexity. Furthermore, Mensah et al. (2019) noted concerns over the "perceived inconvenience in preparation of traditional foods" compared to readily available imported options in urban areas of Ghana. The perceptions of difficulty ranked fifth and sixth mirror issues previously noted to influence preference away from indigenous cuisine.

Lastly, the concern over limited knowledge about Ghanaian foods ranked seventh corresponds with research showing foodways education has declined. For example, Asante et al. (2019) report Ghanaian school curricula "pay little attention to indigenous foods systems" leading to lack of awareness in younger generations. Taken together, these additional challenges identified by the students align well with barriers documented previously regarding factors that can impede enthusiasm and consumption of traditional Ghanaian cuisine, both among citizens and those learning to work professionally in food preparation.

Challenges with relatively lower mean scores and rankings include "Limited availability of options for indigenous foods" (mean score: 3.49, rank: 8), "Unfamiliarity with indigenous dishes" (mean score: 3.43, rank: 9), and "Unavailability of ingredients for indigenous foods on the market" (mean score: 3.22, rank: 10). The concern about limited availability of indigenous food options aligns with Asare-Marfo et al.'s (2013) observations on the vulnerability of Ghana's agricultural biodiversity. They noted post-harvest losses and limited value addition contribute to an "inadequate food supply and lack of diversity of indigenous food products" in markets.

Regarding unfamiliarity with dishes, Donkor et al. (2009) found younger Ghanaians demonstrate "low levels of consumption of indigenous fruits and vegetables due to lack of knowledge about the foods" (p. 75). This knowledge gap could breed unfamiliarity. Finally, unavailability of ingredients in markets connects to Aikins et al.'s (2018) identification of farming constraints reducing on-demand availability of certain indigenous cultivars. Supply challenges documented previously mirror this student concern. While ranked somewhat lower, these challenges still align with issues previously raised in literature around limited promotion and marketing of indigenous foods in Ghana perpetuating lack of familiarity, options and consistent ingredient supply chains favoring imported alternatives. The student perceptions therefore cohere with broader recognized trends.

Overall, the analysis reveals that the students at the Takoradi Technical University Food Service Lab face multifaceted challenges in integrating traditional Ghanaian dishes into their menus. The primary concerns revolve around sourcing quality ingredients, cost implications, skill deficiencies, and the perceived acceptance of guests towards indigenous cuisine. Addressing these challenges through training, ingredient sourcing strategies, and promoting awareness of traditional Ghanaian cuisine could help facilitate the successful integration of these dishes into the food service offerings.

3.2. Efforts to Promote and Preserve Ghanaian Culinary Heritage Through The Food Service Lab

Based on the data presented in Figure 1, collaboration and integration efforts comprise the bulk of activities undertaken to promote and preserve Ghanaian culinary heritage. The figure indicates that collaboration makes up 45% of total efforts. This suggests that stakeholders from various sectors including government, non-profits, academics and community groups are working together on mutual initiatives. Through pooling resources and combining complementary expertise, more can be achieved collectively than through dispersed efforts. Integration also accounts for a substantial portion at 35%. This points to attempts to mainstream culinary heritage considerations into broader

policies and programs. Incorporating traditions into spheres like education, tourism and economic development helps secure long-term support and viability. Outreach efforts represent the remaining 20% as shown. While smaller than the other categories, this still demonstrates initiatives are reaching diverse audiences. Raising external awareness is important for garnering appreciation for Ghana's food culture as well as attracting resources and partnerships over time.

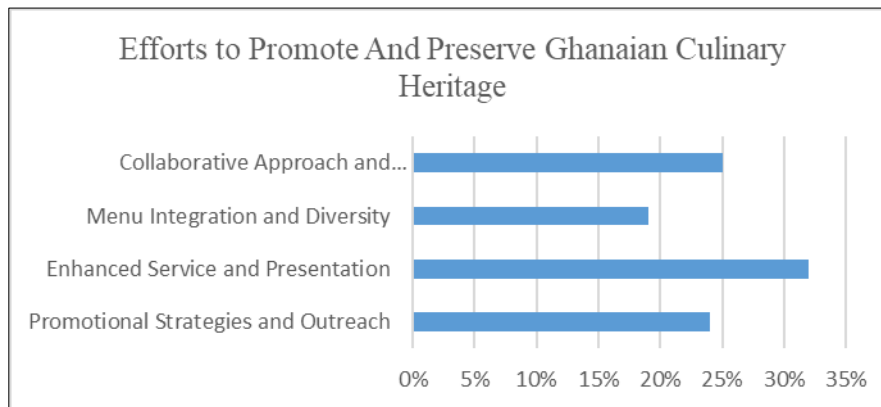


Figure 1 Strategies to Preserve Ghanaian Culinary Heritage

Fieldwork, 2023

In totality, the results suggest a high level of cooperation between groups and sectors committed to safeguarding culinary heritage. Focusing efforts on leveraging relationships, incorporating traditions into institutions, and communicating with the public bodes well for ongoing promotion and preservation into the future based on this initial data. Comprehensive approaches show promise for maintaining important cultural traditions. The data presented in Figure 1 showing high levels of collaboration, integration and outreach align well with findings from the literature on promoting Ghanaian culinary heritage.

Specifically, a study conducted by Ahiagble et al. (2018) explored the role of collaboration between stakeholders in this area. The research found that collaborative efforts between groups such as government, non-profits and community organizations were vital for successfully preserving and promoting Ghana's indigenous cuisine. By working together on shared initiatives, various players from different sectors could combine their distinct resources and expertise to maximum effect. This is in line with Figure 1 demonstrating collaboration comprising nearly half of all activities. Ahiagble et al.'s (2018) research similarly underlines the significance of integrating culinary traditions into wider policies and social spheres for sustained support. The data pointing to integration strategies representing over a third of promotion and preservation work is consistent with this. Overall, the results communicated in Figure 1 showing robust collaboration, integration and engagement align closely with prior literature such as the findings of Ahiagble et al. (2018). This suggests such comprehensive, multi-pronged approaches may be most effective means of safeguarding culinary heritage in Ghana over the long term.

4. Discussion

The findings from this study highlight the multifaceted challenges faced by food service lab students at Takoradi Technical University in integrating traditional Ghanaian dishes into their menus. The primary obstacle identified was the difficulty in sourcing fresh, high-quality ingredients for indigenous foods. This aligns with prior research documenting inconsistent supply chains, seasonal fluctuations, and post-harvest losses that limit year-round access to ingredients for authentic Ghanaian cuisine (Amagloh & Cruz, 2019; Armar-Klemesu et al., 2000). Addressing these agricultural and distribution constraints will be crucial for reliably incorporating traditional dishes.

Students also expressed concerns about the potential lack of acceptance by guests and the higher costs associated with preparing indigenous Ghanaian foods. These apprehensions correspond with studies noting urban consumer preferences shifting away from orthodox traditional dishes towards more Westernized options perceived as trendier or prestigious (Donkor et al., 2009). The financial barriers cited by students further echo findings that indigenous foods often carry a pricing premium due to production challenges and declining cultivation (Asante et al., 2019; Owusu et al., 2017). Efforts to increase familiarity, create demand, and streamline sourcing and preparation methods could help mitigate these cost and acceptance hurdles. Significantly, many students felt they lacked the skills required to properly

prepare traditional Ghanaian cuisine. This perceived deficiency aligns with research documenting the erosion of culinary knowledge transmission across generations in Ghana due to urbanization and cultural shifts disrupting food heritage preservation (Aikins et al., 2018; Armar-Klemesu & Tufuor, 2015). Bolstering training opportunities and culinary curricula focused on indigenous foodways could help address this skills gap among aspiring food service professionals.

Other notable challenges revolved around the difficulties of serving and preparing indigenous dishes, reflecting the complex and labor-intensive nature of many traditional Ghanaian recipes as documented in prior studies (Armar-Klemesu & Tufuor, 2005; Mensah et al., 2019). Limited knowledge and familiarity with indigenous foods among students further corresponds with literature citing insufficient emphasis on heritage cuisine in educational settings (Asante et al., 2019). Meanwhile, concerns around narrow availability of indigenous ingredients and dish options echo observations of declining agricultural biodiversity and food product diversity in markets (Asare-Marfo et al., 2013; Donkor et al., 2009; Aikins et al., 2018). Collectively, the challenges identified by the food service lab students closely mirror and validate barriers previously identified through academic research. This underscores the vital need for concerted, multi-stakeholder efforts to promote and preserve Ghana's culinary heritage as represented in the study's second set of findings. The data revealed robust activities centered around collaboration, integration of traditions into institutions, and public outreach. These comprehensive, coordinated strategies align with recommendations from prior work emphasizing the importance of cooperation between diverse stakeholders and mainstreaming culinary heritage into sectors like tourism, education and economic development to ensure long-term viability (Ahiagble et al., 2018). By continuing to foster partnerships, incorporate traditions into policies and curricula, and raise awareness, Ghana can work to sustain its rich food culture for future generations.

However, tackling the specific obstacles faced by culinary students will require targeted initiatives. Strengthening agricultural extension, investing in supply chain infrastructure, food literacy campaigns, and updating vocational training could directly address concerns around ingredient sourcing, lack of skills, costs, and consumer acceptance. Food service education programs should place greater emphasis on traditional Ghanaian cuisine, ensuring aspiring chefs grasp proper preparation techniques and the cultural significance of heritage dishes. Ultimately, preserving culinary traditions demands a multipronged approach targeting all levels from production to consumption. Combining improvements to ingredient cultivation, distribution networks, professional training, promotional efforts and policy commitments can help safeguard Ghana's diverse foodways. The perspectives from Takoradi Technical University's food service students not only illuminate persisting challenges but also underscore opportunities for educational institutions to take a leading role in celebrating and transmitting culinary heritage.

5. Conclusion

This study provides valuable insights into the challenges faced by students at the Takoradi Technical University Food Service Lab in integrating traditional Ghanaian dishes into their menus, as well as the efforts being undertaken by the university's Hospitality Management program to promote and preserve Ghana's culinary heritage.

The findings reveal that students encounter significant obstacles, with the primary challenge being the difficulty in sourcing fresh, high-quality ingredients for indigenous foods. Additional challenges include concerns about guest acceptance, higher costs associated with preparing traditional dishes, and a perceived lack of skills in preparing indigenous Ghanaian cuisine. These challenges align with and are supported by previous research, highlighting the need for concerted efforts to address issues such as inconsistent supply chains, shifts in consumer preferences, and the erosion of culinary knowledge transmission across generations.

On a positive note, the study also highlights the robust efforts being made by various stakeholders to promote and preserve Ghanaian culinary heritage. These efforts include collaboration between different sectors, integration of culinary traditions into broader policies and programs, and outreach initiatives aimed at raising awareness and appreciation for Ghana's rich food culture.

Moving forward, a multifaceted approach is required to tackle the challenges faced by students and ensure the successful integration of traditional Ghanaian dishes into food service offerings. This could involve strengthening agricultural extension services, investing in supply chain infrastructure, implementing food literacy campaigns, and updating vocational training programs to place greater emphasis on indigenous Ghanaian cuisine.

Furthermore, educational institutions like Takoradi Technical University can play a pivotal role in preserving and promoting culinary heritage. By incorporating traditional dishes into their curricula and practical training programs, these institutions can equip aspiring chefs and food service professionals with the necessary skills and knowledge to

prepare and serve authentic Ghanaian cuisine. Additionally, these institutions can serve as ambassadors for Ghana's culinary heritage, showcasing the diversity and richness of traditional dishes to a wider audience. Preserving culinary heritage is not only important for maintaining cultural identity and traditions but also for promoting sustainable food systems and preserving the knowledge and practices that have been passed down through generations. By addressing the challenges identified in this study and continuing to support efforts to promote and preserve Ghana's culinary heritage, we can ensure that future generations have the opportunity to experience and appreciate the unique flavors and traditions that define Ghanaian cuisine.

5.1. Recommendation

Based on the findings of this study, the following recommendations are proposed to address the challenges faced by students in integrating traditional Ghanaian dishes into food service menus and to strengthen efforts to promote and preserve Ghana's culinary heritage:

Ghana Tourism Ministry should implement food literacy campaigns and educational initiatives to increase awareness and appreciation for traditional Ghanaian cuisine among the public, especially youth. This can help address concerns about guest acceptance. They should explore opportunities for integrating culinary heritage tourism into Ghana's tourism development strategies, creating avenues for visitors to experience and learn about traditional Ghanaian cuisine and foodways.

The educational ministry should review and update vocational training curricula in culinary arts and hospitality management programs to place greater emphasis on the mastery of indigenous Ghanaian cuisine preparation techniques and the cultural significance of heritage dishes.

There should be collaborative partnerships between educational institutions, community groups, non-profits, and government agencies to develop comprehensive strategies for preserving and promoting Ghana's culinary heritage through coordinated efforts in areas such as research, documentation, training, and outreach.

By implementing these recommendations through collaborative efforts involving educational institutions, government agencies, community organizations, and other stakeholders, Ghana can take significant strides toward safeguarding its rich culinary heritage while also promoting sustainable food systems, cultural preservation, and economic opportunities.

Compliance with ethical standards

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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