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## **Assessment of Food Safety Control Measures and Organisational Sustainability: A Case of Selected Hotels in Kigali, Rwanda**

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# Assessment of Food Safety Control Measures and Organisational Sustainability: A Case of Selected Hotels in Kigali, Rwanda

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## Abstract

This study aimed to investigate the sustainability of selected hotels in Rwanda in relation to food safety management procedures. The study focused on assessing the impact of government food safety guidelines, workplace food safety procedures, staff food safety awareness, and government policies on the sustainability of these hotels. A sample of 283 food service staff from selected hotels in Kigali city was chosen at random, with a sample size of 166. Data was analyzed using SPSS to determine the effect of food safety management methods on profitability. Results showed that the findings on food safety guidelines were reliable, with standard deviation values above 0.312 but less than 1, indicating closeness of individual responses. Workplace food safety procedures had high mean values, indicating strong evidence of the existence of such practices. Food safety awareness had standard deviation values above 0.311 but smaller than 1, indicating closeness of individual responses. Government policies had standard deviation values above 0.310 but much less than 1, indicating closeness of responses. Regression analysis revealed that an increase in food safety guidelines, procedures, staff awareness, and government policies would lead to an increase in sustainability for selected hotels in Kigali city. All hypotheses were rejected, suggesting that RDB should supervise these hotels and empower all staff, as well as sensitize hotel owners on the objectives of food safety. The institution should also ensure that all staff are empowered and sensitized to the importance of food safety in the hospitality industry.

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**Keywords:** *Food Safety, Control Measures, Organizational Sustainability, Rwanda*

## 1.0 Introduction

Food safety remains an important issue in industrialized and emerging nations for individuals, food producers, and food control interventions (Lestantyo, 2017). Foodborne diseases (FBD) are linked to epidemics, pose a threat to global public health security, and are a universal health matter. Food safety is a major apprehension for public health. FBD contributes significantly to morbidity and death rates (Andyss, 2020). Although, the worldwide incidence and financial expenses of foodborne diseases are hard to determine, each year worldwide, unsafe food causes 600 million cases of foodborne diseases and 420 000 deaths. In addition, 30% of foodborne deaths occur among children under 5 years of age; and it's estimated that 33 million years of healthy lives are lost due to eating unsafe food globally each year, and this number is likely an underestimation (WHO, 2021).

In the United States, 48 million people get sick and 3,000 die every year from eating food contaminated with bacteria or other diseases caused by parasites or viruses (CDC, 2022). In Australia, there are 5.4 million instances annually, costing the government \$749,4USD million. There is also a serious issue with food poisoning (Havelaar, 2019). In both industrialized and developing countries, individuals, food producers, and government regulators continue to struggle with the pervasive issue of food safety (Lestantyo, 2017). Worldwide, there is a growing sense of alarm about the dangers posed by food-borne disease (FBD) outbreaks to public health. The issue of ensuring that food is safe to eat is becoming increasingly important to the public. Many deaths and illnesses can be traced back to FBD (WHO, 2021).

Developing nations in Sub-Saharan Africa have a hard time keeping up with rising expectations for food safety regulation, and their plight does not appear to have any influence on the legislative process. While this is true, current suggestions on food and food inspections do present a potential for poor nations to directly benefit from increased investment. But developing nations must be ready to create their own food safety monitoring and regulation systems (Webb & Morancie, 2019). Data collected from urban restaurants in Nigeria reveals a worrying lack of up-to-date food hygiene knowledge among the staff. Additionally, food exports from the region and neighboring areas have been rejected since 2011 due to unacceptable levels of pesticide residue in produce, Chloramphenicol and other antibiotic residues in seafood and poultry, pathogens in seafood, and mycotoxins in crops and peanuts (Osagbemi & Aderibigbe, 2018).

In the current environment, where multinational firms are racing to quickly gain competitive advantages, tourism services in particular have grown to be of tremendous significance to many countries (Gul, 2018). In Rwanda, according to RDB (2021), the tourism and hotel industry has grown significantly over the past few decades, serving as a key engine of economic expansion, job creation and innovation. In addition, it has been the largest employer of young people and women. The Meetings, Incentives, Conferences and Exhibitions (MICE) business sector has recently benefited from significant government investment in the vacation travel sector. Tourism is projected to rise over the next decade, contributing an additional 3.6% to GDP by 2020. The impact of the COVID-19 pandemic on the tourism industry will be felt over the next five years, with revenues falling short of projections and job growth slowing.

RCB (2020) claims that even when Rwanda has fully recovered from the epidemic, the tourism and hospitality industries will continue to play a critical role, necessitating persistent efforts to

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develop relevant expertise. Tourism and hospitality sector value chain and the lodging, food and beverage, transportation, retail, and cultural services are all included in the tourism and hospitality sector's value chain in Rwanda. Then, tourist products are delivered by service providers like selected hotels, restaurants, conference locations, and retail services. Rwanda is set to generate up to \$360 million (approx. Rwf372 billion) revenue from the tourism industry in 2022 despite the current environment of post COVID-19 pandemic. Food safety and hygiene in public places like selected hotels, motels, and restaurants are enforced in Rwanda through inspections conducted by the Ministry of Health in collaboration with other organizations, the National Police, and local administrations like sectors, districts and the City of Kigali (RSB, 2020). Therefore, this research aimed to assess the food safety control measures and organizational sustainability, case of selected hotels in Kigali, Rwanda.

### **1.1 Statement of the Problem**

In order to ensure the sustainability of a hotel, a number of factors must be considered. One has to consider taking safety seriously, embracing innovation; and providing service excellence (Havelaar, 2019). In Rwanda, there are several teams around the country meant to examine hotels, restaurants, and other public establishments for food safety and hygiene issues on a regular basis (RSB, 2021). Although these inspections are carried out regularly, the closure of these establishments remain rampant in the country. According to CoK (2022), about 23 hotels and commercial restaurants were closed in 2021 while in 2020, more than 12 food outlets in Kigali city were closed after inspections revealed they were dangerous for revelers due to poor food safety measures in place. To put the hospitality sectors sustainability into perspective, the closed hotels have always experienced the greatest decline in terms of revenues and customer base due to bad picture and loss of stock items the with profound effects on profitability. According to Rwanda Convention Bureau (2020), the hospitality sector made losses of Rfw78 million between 2019 and 2020. In line with the above, the researcher craves to find out the potential factors that inspire the sustainability of selected hotels and precisely food safety control measures. In addition, there is scanty literature in Rwanda regarding food safety control measures. Therefore, this study sought to fill the gap of knowledge on assessment of assess the food safety control measures and organizational sustainability, case of selected hotels in Kigali, Rwanda.

### **1.2 Research Objective**

The study aimed to assess food safety control measures and sustainability of selected hotels in Rwanda.

### **2.1 Theoretical Framework**

#### **2.1.1 Health Belief Model**

The theory argues that an individual's perception of the severity of a health problem and its associated symptoms is an accurate reflection of the latter. According to this hypothesis, people will take measures to prevent the occurrence of health problems or to lessen the severity of health and safety risks if they perceive those problems to be serious. Perceived seriousness encompasses not only one's ideas about the nature of the disease but also one's impressions of how it affects one's capacity to perform in social and professional settings (such as whether it is life-threatening, may result in disability or discomfort). For instance, a person may believe that the flu is not a serious medical condition, but if they believe that missing work for many days will have a significant financial impact, they may view the flu as a very dangerous condition (Faleti & Myrick,

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2018). The theory's researchers discovered that they could predict whether Australians would get the shot by looking at perceived severity after looking at how many of them self-reported obtaining the influenza vaccine in 2019 and food poisoning cases in the UK in 2018. To gauge perceived severity on a scale from 0 to 10, how severe do you believe the food poisoning would be if you ate unsafe food. They discovered that 31% thought eating unsafe food would be a low, 44% a moderate, and 25% a high severity. The researchers also discovered that individuals with a high perceived severity had a markedly higher likelihood of not going to the hotel with unsafe food than individuals with a moderate perceived severity. Besides, people with low and moderate perceived severity of food poisoning reported home prepared food at equal rates (Webb & Morancie, 2019).

### **2.1.2 Theory of Human Service Delivery**

The model of human service delivery comprises a thoughtful of how people work within organizations to deliver services. People are a resource contrasting any other item in any particular chain of delivery in that their significance and obtainability can be challenging to enumerate. Services are arbitrated partly by individual standards, so understanding the eminence that is offered by any service scheme can be complex. Philosophers attempt to comprehend how to form the best structure for the best facilities (Casey, 2017).

Services are understood to be essentially immaterial. They can hardly be felt, moved or even held. They occur as happenings and cannot be re-vended or shared amongst parties. Distributing a service to an individual encompasses having a real individual interrelate with another or/and encounter their desires. For distributing any service to an individual, the scheme fashionable must first reflect the human component entangled. The individuals providing the service ought to be proficient of cooperating in an optimistic and operative manner. Given that services occur as events; they incline to be more adjustable than other yields that a business can deliver. The eminence of one service to the following will diverge more suddenly. Businesses can progress the eminence and steadiness of their services only by prodigious effort (Casey, 2017).

### **2.1.3 Principles of HACCP**

In the 1960s, the U.S. National Aeronautics and Space Administration (NASA) and Pillsbury collaborated to develop the HACCP concept, which was the first pathogen monitoring and measurement requirement imposed on the food industry. This was done to ensure crumb- and pathogen-free food with extensive shelf-life properties for space travel. An important moment in the development of the HACCP system occurred in 1993, when the FAO/WHO Codex Alimentarius Commission adopted the Codex Guidelines for the Application of the HACCP system. HACCP is a set of guidelines for managing food safety that can help you spot and eliminate potential problems before they endanger your product or your customers (Umble et al, 2019).

CCPs, or key control points, must be identified. It is important to pinpoint where potential dangers might be mitigated within your operation; for instance, bacteria like E. coli O157 can be destroyed by boiling raw meat completely. Establish the upper and lower limits: Determine what the acceptable range of a CCP is, so you can tell when it's out of control. For instance, when cooking beef patties, the internal temperature needs to be at least 75 degrees Celsius (or an equivalent time temperature combination, such as 70 degrees Celsius for 2 minutes) to kill any pathogens. Business's size and type should determine the frequency and type of monitoring you perform. For example, if you want to make sure that food in the fridge is kept at 5 degrees Celsius or lower, you should use a probe to check the temperature (Phannindra et al, 2020). Create a record of all actions taken and records kept in accordance with these guidelines. Documentation and records must be

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kept and easily accessible for HACCP-based procedures to be successfully implemented. Maintaining HACCP-based procedures or proving compliance with existing laws without supporting documentation is unrealistic (Webb & Morancie, 2019).

## **2.2 Empirical Literature**

### **2.2.1 Government Food Safety Guidelines and Sustainability**

According to research conducted by Silva and Ariyaratna (2019) on government food safety guidelines and the performance of the hospitality industry in the Canadian province of Newfoundland and Labrador, it was found that implementing effective food safety guidelines could increase the sustainability of the hospitality sector by an astounding 81.4%. We used sampling strategies and regression analysis to examine how hotel industry performance correlates with hotel organizational efficiency. The national economy benefits from competent and efficient hotel administration, which is reflected in the hotel's high presentation and value creation thanks to government food safety requirements that are both properly conceived and enforced.

In a research accomplished by Phannindra et al. (2020) government food safety guidelines in Asian tourism, travel and hotel sector were acknowledged as one of the strongest at a mean of 4.3 which confirms the fact. The study discovered that the government food safety guidelines can possibly provide 73.1% of unparalleled administrations to management in the behavior of their obligations in the most institutions in China. It said to be an advance for realizing concurrence on what assessment and international food safety principles in India, 67.3% of the public and private selected hotels should be accountable and responsible while managing the inspections in the general population area. However, as of late, a mix of various forces has prompted a peaceful transformation of the process. Selected hotels need to exhibit responsibility in the implementation of government food safety guidelines and productivity in service delivery and reporting. In both government and private subdivisions, 86.3% of important suppliers of these institutions are always different in management of businesses government food safety guidelines since they stand for different reasons and objectives and goals.

### **2.2.2 Workplace Food Safety Procedures and Sustainability**

According to the findings of a study that Shekhar (2019) conducted in South America, which investigated the effect of workplace food safety procedures on the sustainability of selected hotels in South America, it was found that selected hotels in South America that undertake some specific phases upon justification fared better than those that did not. In addition to technological advancements and improvements in hotel operations, factors such as these have facilitated the implementation and authorization of management controls at the departmental level in the hotel and tourism industries of Colombia and Argentina. More research findings that were acquired from the industry in Brazil highlighted the role and problems for food safety control measures espoused by more than 87.3% of the population, which might lead to sustainability. According to the findings of the survey, more than 79.7% of managers are ultimately responsible for the adoption of workplace food safety standards in Brazil and other countries in the region for reassuring workplace food safety procedures in the tourism industry. Additionally, they perform key purposes in conquering difficulties, encounters, and linked dangers throughout the complete sector.

An empirical study by Mukhopadhyay (2021) on the role of workplace food safety procedures in sustainability of hotel industry in 2020 in Sub-Saharan Africa. The researcher established that despite the exertions positioned by the outbreak of COVID-19 pandemic by carrying 86.4% of

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restructurings in the direction of engaging efficient food safety procedures, efficiency and effectiveness still rests a foremost encounter for about 72.3% of the hotel revenues. The research findings supplementary discovered that efficacious enactment of workplace food safety procedures and response apparatus within the hotel lead to 83.1% of the sustainability of the selected hotels in South Africa. The researcher linked workplace food safety procedures with performance at the level of 71.0% within hotel industry. Research conclusions which were realized that on food safety control measures processes exposed that workplace food safety procedures facilitate the increase of clientele base mostly from 89.6% of the stakeholders which in turn improves pellucidity and answerability especially in the entire sector.

### **2.2.3 Staff Food Safety Awareness and Sustainability**

Hoffmann (2017) conducted research into the impact of food safety control measures on the productivity of Brazilian selected hotels and service providers. Information was also gathered that illuminated staff food safety awareness adoption's driving forces and roadblocks. According to the results, over 73.8% of employees and managers in Brazil and other South American nations hold the key to widespread implementation of food safety awareness practices. Seventy-five point one percent also cite government support and regulations as crucial factors in boosting financial performance in the hotel industry and commercial restaurants, and these factors play essential roles in overcoming hurdles, problems, and associated risks. Through the use of exploratory factor analysis and structural equation modeling, this study found that selected hotels and restaurants should take into account the country's regulatory climate when deciding whether or not to undertake food safety awareness training for their workers.

Horneff et al. (2016) investigated the essential elements affecting staff food safety awareness in the hotel business in Sri Lanka. They discovered that 67.3% of organizations still struggle with food safety issues despite government changes aimed at increasing staff awareness of the issue. What's more, the results showed that Sri Lanka has successfully implemented procedures for raising food safety knowledge among its workers and a feedback mechanism. They found that 82.0% of hotels saw an increase in profitability when employee food safety awareness was increased. Internal audit research by Naale et al. (2018) found that a focus on food safety amongst employees contributed to a rise in business from virtually all stakeholder groups and a subsequent gain in trust of 78.9 percent. The study also found that a hotel's efficiency and operations are better when the personnel is aware of food safety issues.

### **3.0 Methodology**

The Study aimed to investigate how sustainable selected hotels in Rwanda are in relation to the food safety management procedures. Both descriptive survey and correlational research designs were used to facilitate the achievement of the above objectives. The population of interest for this study consisted of two hundred and eighty-three (283) food service workers in the selected hotels in Kigali city who were randomly selected. Out of 283 people, the sample size of the study was 166 thanks to the Slovin sample size formula. The sampled respondents were provided with questionnaires, which they then filled out and sent back to the researchers for study, while four managers were interviewed. SPSS, a descriptive statistics program, was used to examine the data to determine whether food safety management practices have an impact on the profitability of selected hotels in Rwanda. This study uses both correlation and regression analyzes to assess the strength of the association between the study variables and to test the hypotheses formulated regarding the study.

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## 4.0 Findings and Discussions

### Respondents' views on government food safety guidelines

This sub section discusses the respondents' level of appreciation on impact of government food safety guidelines on the sustainability of selected hotels and the results are clearly indicated in Table 1.

**Table 1: Respondents' level of government food safety guidelines**

Statement	Mean	Standard Deviation
The hotel's vision and service quality can all benefit from adhering to food safety requirements	3.36	0.481
The detection, indication, and execution of activities that boost hotel performance are all made easier with the help of food safety guidelines	4.55	0.312
By following food safety regulations, incidents are recorded in a logical database for use in policymaking	3.35	0.473
Guidelines for ensuring the safety of food help to center attention on internal strengths and resources	4.51	0.340

**Source: Primary data (2023)**

From the study results reached and presented in Table 1, the researcher's intention was to assess the appreciation level of respondents on the impact of government food safety guidelines on the sustainability of selected hotels in Kigali city. The findings in form of mean and standard deviation presented in the above table showed that all standard deviation values were above 0.312 but less than 1 which is an indication closeness of the individual responses from the means. Hence, this study's findings are reliable. Besides, results in terms of mean indicated 3.36, 4.55, 3.35 and 4.51; which showed high and very high mean, which explains that there is strong evidence of the existence of the fact amongst the respective practices. Hence, the practices of government food safety guidelines were witnessed and seem not smooth as they are supposed to be like in any sustainability oriented selected hotel in Kigali city.

More so, the results are in are in line with findings of a research conducted by Silva and Ariyaratna (2019); who cited that government food safety guidelines and the performance of the hospitality industry in the Canadian province of Newfoundland and Labrador, it was found that implementing effective food safety guidelines could increase the sustainability of the hospitality sector by an astounding 81.4%. The researchers also cited that they used sampling strategies and regression analysis to examine how hotel industry performance correlates with hotel organizational efficiency. The national economy benefits from competent and efficient hotel administration, which is reflected in the hotel's high presentation and value creation thanks to government food safety requirements that are both properly conceived and enforced.

Findings are in line with findings of Phannindra et al (2020) that noted that government food safety guidelines in Asian tourism, travel and hotel sector were acknowledged as one of the strongest at a mean of 4.3 which confirms the fact. The study discovered that the government food safety guidelines can possibly provide 73.1% of unparalleled administrations to management in the behavior of their obligations in the most institutions in China. It said to be an advance for realizing

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concurrence on what assessment and international food safety principles in India, 67.3% of the public and private selected hotels should be accountable and responsible while managing the inspections in the general population area. Therefore, all the statements about the government food safety guidelines were agreed and strongly agreed the researcher learnt that food safety guidelines as part of sustainability of selected hotels in Kigali city.

### Respondents’ views on workplace food safety procedures

This section presents the respondents’ appreciation degree concerning the impact of workplace food safety procedures on the sustainability of selected hotels. The results are later explained under the table for better understanding.

**Table 2: Respondents’ views on workplace food safety procedures**

Statement	Mean	Standard Deviation
Food safety practices in the workplace let management assess ongoing tasks and provide justification for how they are currently being performed in order to meet those needs.	4.05	0.316
Selected hotels benefit from food safety standards in the workplace because they facilitate effective communication.	4.27	0.372
With the help of food safety rules at work, administration can forego some of the no longer necessary programs.	4.68	0.363
Incorporating food safety protocols into the workplace aids the hotel management in making more informed decisions.	4.03	0.322

### Source: Primary data (2023)

Based on the data presented in table 2, the realized study results were in relation to appreciation of the impact of workplace food safety procedures on the sustainability of selected hotels in Kigali city.

The research results, in the form of mean and standard deviation data provided earlier, indicated that all standard deviation values were greater than 0.316, although they were still less than 1. This suggests that the individual responses were relatively close to the means. Thus, this study’s means are considered to be an accurate approximation of the mean spreading. Besides, results in terms of mean indicated 4.05, 4.27, 4.68 and 4.03; which showed very high mean, which explains that there is strong evidence of the existence of the fact amongst the respective practices. Hence, the practices of workplace food safety procedures were agreed and strongly agreed and thus the researcher learnt that workplace food safety procedures are part of sustainability of selected hotels in Kigali city.

The findings are supported by the findings of a study that Shekhar (2019) conducted in South America, which investigated the effect of workplace food safety procedures on the sustainability of selected hotels in South America, it was found that selected hotels in South America that undertake some specific phases upon justification fared better than those that did not. In addition to technological advancements and improvements in hotel operations, factors such as these have facilitated the implementation and authorization of management controls at the departmental level in the hotel and tourism industries of Colombia and Argentina. More research findings that were acquired from the industry in Brazil highlighted the role and problems for food safety control measures espousal by more than 87.3% of the population, which might lead to sustainability.

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From the findings, supplementary discovered that efficacious enactment of workplace food safety procedures and response apparatus within the hotel lead to 83.1% of the sustainability of the selected hotels in South Africa. The researcher linked workplace food safety procedures with performance at the level of 71.0% within hotel industry. Research conclusions which were realized that on food safety control measures processes exposed that workplace food safety procedures facilitate the increase of clientele base mostly from 89.6% of the stakeholders which in turn improves pellucidity and answerability especially in the entire sector since all the statements set were both agreed and strongly agreed, it is enough to understand that there is evidence of the existence of the fact that sustainability of selected hotels in Kigali city.

### Respondents’ views on staff food safety awareness

Here, the researcher wanted to find out how the respondents perceive the impact of staff food safety awareness on the sustainability of selected hotels and study results were presented in Table 3.

**Table 3: Respondents’ views on staff food safety awareness**

Statement	Mean	Standard deviation
Management at the hotel carries out oversight for the hotel's food safety initiatives, including educating employees on the importance of the food safety	3.14	0.482
Staff members that are well-versed on food safety issues and they are able to better convey important information during work	3.33	0.431
A hotel's food safety control procedures can only be effective if all of its staff are aware of, and committed to, their roles in enforcing those measures.	4.35	0.311
All employees of the hotel are able to report operational issues to higher management due to food safety training provided to them.	3.27	0.449

### Source: Primary data (2023)

In Table 3, the findings indicate the rates at which the respondents appreciate the impact of staff food safety awareness on the sustainability of selected hotels. The research findings in form of mean and standard deviation presented above showed that all the standard deviation values were above 0.311 though it’s smaller than 1 which is an indication closeness of the individual responses from the means. Thus, this study’s means are considered to be an accurate approximation of the mean spreading. Besides, results in terms of mean indicated a gap in staff food safety awareness and these mean include 3.14, 3.33, 4.35 and 3.27; which showed neutrality that explains that there are gaps with the practices of staff food safety awareness amongst the selected hotels in Kigali city.

In the same line Hoffmann (2017) conducted research into the impact of food safety control measures on the productivity of Brazilian selected hotels and service providers. Information was also gathered that illuminated staff food safety awareness adoption's driving forces and roadblocks. Similarly, according to the results, over 73.8% of employees and managers of selected hotels in Brazil and other South American nations asserted that most hotels were not sustainable due to lack of awareness on food safety awareness practices. Through the use of exploratory factor analysis and structural equation modeling, this study found that selected hotels and restaurants should take

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into account the country's regulatory climate when deciding whether or not to undertake food safety awareness training for their workers.

Therefore, since most of the statements about staff food safety awareness had low mean, it's enough to understand that there are gaps in the subject hence this could be a key factor that is leading to lack of sustainability among the selected hotels in Kigali city. Internal audit research by Naale et al. (2018) found that a focus on food safety amongst employees contributed to a rise in business from virtually all stakeholder groups and a subsequent gain in trust of 78.9 percent. The study also found that a hotel's efficiency and operations are better when the personnel is not aware of food safety issues.

### Respondents' views on government policies

Here, the researcher wanted to find out how the respondents perceive the impact of government policies on the sustainability of selected hotels and study results were presented in Table 4.

**Table 4: Respondents' views on government policies**

Statement	Mean	Standard Deviation
Government programs and government facilities enable hotel industry to attract international meetings which at the end create market for hotels hence sustainability	4.67	0.310
The government uses the policies and different programs to promote products of Rwandan services and hotels in particular internationally	4.13	0.312
Government is vital in supporting the industry by providing funding, mentorship, networking opportunities, and linking hotel entrepreneurs with the international world.	4.48	0.313
Mark-up program helps the government to advertise hotel businesses outside the continents	4.00	0.354

### Source: Primary data (2023)

The findings in form of mean and standard deviation presented in the above table 4 showed that all the standard deviation values were above 0.310, but it's much less than 1 which is an indication closeness of the responses from the means. Hence, this study's means are considered to be an accurate approximation of the mean distribution. Besides, results in form of mean indicated 4.67, 4.13, 4.48 and 4.00; showed very high mean, which explains that there is strong evidence of the existence of the fact amongst the respective practices. This could affirm the positive impact impact of government policies on the sustainability of selected hotels in Kigali city.

In the same line, findings supported by Mayers (2019); effective government policies and practices lead to high performance of any hotel. In addition, Horneff et al. (2016) investigated the essential elements affecting staff food safety awareness in the hotel business in Sri Lanka. They discovered that 67.3% of organizations still struggle with food safety issues despite government changes aimed at increasing staff awareness of the issue. What's more, the results showed that Sri Lanka has successfully implemented procedures for raising food safety knowledge among its workers and a feedback mechanism. They found that 82.0% of hotels saw an increase in profitability when employee food safety awareness was increased. Therefore, from these findings the researcher

learnt that government policies might be in place, but if the staff of hotels to execute some of these policies aren't empowered, there would be less or no sustainability.

### Respondents' views on sustainability of the selected hotels

Here, the researcher wanted to find out how the respondents' appreciation on sustainability of the selected hotels and study results were presented in Table 5.

**Table 5: Respondents' views on sustainability of the selected hotels**

Statement	Mean	Standard Deviation
Food safety control measures help selected hotels in cost reduction	4.42	0.351
Food safety control measures enable selected hotels to reduce risks	4.57	0.313
These controls help selected hotels to increase their customer base	4.35	0.387
Capacity of the employees is well supported by the food safety control processes	3.51	0.493

### Source: Primary data (2023)

The findings showed that all standard deviation values were below 0.323 but less than 1 which is an indication of closeness of the responses from the means. Hence, this study's findings are accurate. Besides, findings were presented in form of mean and they were specified as 4.42, 4.57, 4.35 and 3.51; which largely showed very high mean and this explains that there is strong evidence of the existence of the fact amongst the respective practices. However, the findings revealed in the last statement are in line with the reports cited in table 5 of this study that highlighted less awareness of the employees on food safety.

In the same line, according to Mayers (2018), the sustainability of selected hotel is largely affected by both internal and external factors. Internal factors include lack of incompetent staff, poor decisions on how to operate, allocate resources, and other issues because businesses compete in markets and sectors that have an impact on strategy and outcomes to oversee business operations and accomplish objectives. According to Muigai (2019), the internal factors are only part of the picture when it comes to assessing a service an selected hotel's performance. Due to the nature of the competition in the hotel industry, it is crucial to isolate and assess the different facets of the service product's value propositions in connection to hotel sustainability and performance in general.

## 5.0 Conclusion

In conclusion based on regression analysis, it was discovered that 1 per cent increase in food safety guidelines, food safety procedures, staff awareness of food safety and government policies will lead to 0.410, 0.206, 0.425 and 0.558 increase sustainability of selected hotels in Kigali city; and thus from these findings, all the hypotheses were rejected. However, the results showed that government of Rwanda has successfully implemented policies and procedures for promoting hotel and tourism sector but this is not enough for sustainability of the selected hotels. It needs these hotels to take charge of raising food safety knowledge among its workers and a feedback mechanism. In the same line, a study by Horneff et al. (2016) revealed that hotels are able to see

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an increase in profitability when employee food safety awareness is increased. Therefore, from these findings the researcher of this study it was learnt that government policies might be in place, but if the staff of hotels to execute some of these policies aren't empowered, there would be less or no sustainability.

## 6.0 Recommendations

Referring to the study results, the following are the suggestions and recommendations: Regarding the lack of staff awareness of food safety, RDB should always supervise these hotels and ensure all staff are empowered. The institution should always sensitize hotel owners as well on the objectives of the subject. Concerning the issue of open communication channels to reduce any misconstrued messages, the top management should have put in place correct approaches in partnership with RDB and other leaders.

## REFERENCES

- Anand, P, Kunnumakkara A. B, Newman R. A, Aggarwal B. (2021). *Food Safety Control, performance and employment dynamics*, Berlin: Brussels
- Andyss, R (2020). *Renewed focus on organizational performance in hotels*. Performance theory, London: Oxford University Press.
- Arslanturk et al. (2020), *Impact of Food safety control measures on corporate performance productivity and employment dynamics*, Berlin: Brussels
- Barahona, L and Elizondo, M. (2019). *Adapting the SERVQUAL scale to hotel services: an empirical investigation*”, *Social Services Research*, Vol. 26(6)767-86.
- Bourne, H. (2018). *Food Safety Management in Hotels and Restaurants*. Daryaganj. New Delhi: Sultan Chand & Sons
- Centers for Disease Control and Prevention - CDC (2022). *Centers for Disease Control and Prevention*, Retrieved from <http://web.cdc.org/evaluation/documents/annual-report/2022/ARE-2022.pdf>
- City of Kigali - CoK (2022). *City of Kigali report on the food safety guidelines*, Retrieved from <http://www.cityofkigali.rw.org/en/about/-report-2022.pdf>
- Cooper, H and Schindler, N. (2013). *Research Methodologies*, 2<sup>nd</sup> edition. New York: Pinkwell publishers.
- Dugdale, B. & Lyne, V. (2018). *Renewed focus on Organizational performance in Selected hotels*. Performance theory, London: Oxford University Press.
- Faleti, M and Myrick, L. (2018). *Food Safety and Hotel in Organizations*. 8th edition, New York: Indica center
- Fariás, J and Pimenta, Y. (2018). *Hotel Management and its Role in Authorities: New Zealand Evidence*. New York: Palgrave Publishers Hall  
<https://doi.org/10.53819/81018102t4223>

- Food and Agriculture Organization - FAO (2021). *Annual report of the Food and Agriculture Organization*, Retrieved [https://www.fao./fileadmin/uploaded/FAO\\_Annual\\_Report\\_2020-2021.d.pdf](https://www.fao./fileadmin/uploaded/FAO_Annual_Report_2020-2021.d.pdf)
- Graham K & Marshal L. (2015). *Methodes de recherch  en Sciences Sociales*, 10<sup>e</sup> Edition, Paris : Loursse.
- Graham, T. (2015). *Food safety control systems, designing quality performance services for the public use*. Trinidad: Dell
- Gul, J. (2018). *Best Practices in Food Preparation and finance management*. 1<sup>st</sup> edition, London: Routledge
- Havelaar, M. (2019). *Finance and Hotel Management Decisions and the Service Delivery*, 3<sup>rd</sup> edition, Kampala: Business Publishing Group.
- Hoffmann (2017), *Evaluation of Internal Audit on efficiency*. *Journal of Finance and Economics*, 1(3), 39-50
- Horneff, J, Ghalley, N and Phill, F. (2016). *Factors Affecting Efficiency of Local Government*. *Journal of Finance and Economics*, 1(3), 39-50.
- Huppert, N. (2017), *Hotel management and service Efficiency: Gaps in the Malaysian Public Institutions*, Oakland: SAGE Publications
- Khan, W. (2018). *Hotel Performance Management in an Organization*. Daryaganj. New Delhi: Sultan Chand & Sons
- Kwebena, L. (2018). *Food safety and research: Three Theoretical Perspectives and Criteria for Selective Integration*. *Journal of Hotel Management Research*: 15(1) 3-49.
- Lee, M. (2017). *A Question of Values of Food Preparation Management*. 2<sup>nd</sup> edition, London: British library.
- Lestantyo, H., (2017). *Effect of Food safety control processes in the State and Hotel Governance*, Public Journal: WellComp.com Publishers.
- Mayers, M. (2018). *Organizational performance against Finance Management*. 2<sup>nd</sup> edition, 32:4. New Delhi: Vikas Publishing House.
- Mugende O. M & Mugende A.G (2013), *Modern Research Methods in*, 2<sup>th</sup> edition, MC grow- hill, Irwin
- Muhumuza, K. (2018). *Hotel sector and Financial Information*. 3<sup>rd</sup> edition, Kampala: Business Publishing Group.
- Muigai, G. (2019). *Food safety and its management*. 8th edition, New York: Indica center
- Mukhopadhyay, M. (2021). *The relationship between internal controls and food safety system in hotel management sector*. *Journal of finance*, 5(9)12-14

- Murphy, W. (2020). *Food Safety Management in Public Institutions*. Daryaganj. New Delhi: Sultan Chand & Sons
- Osagbemi E & Aderibigbe, H. (2018). *Food Safety Decisions in Hotel industry*, 2<sup>nd</sup> Edition, Kampala: Business Publishing Group.
- Phannindra et al (2020) *Food safety control processes as the metric for corporate performance*  
*Published by: International Journal of Sustainable Development Strategies.3 (1), ISSN: 2141-014x*
- Rwanda Convention Bureau – RCB. (2020). *Rwanda Convention Bureau report on the hotel sector in Rwanda*, Retrieved from <http://www.rcb.org/en/about/-report-2020.pdf>
- Rwanda Standards Board - RSB (2020). *The Integrated Hotel Business Enterprise Survey in Rwanda 2020*. Retrieved: <http://www.rsb.gov.rw/publication/integrated-hotelbusiness-enterprise-survey-ibes-2020>
- Sarikas M and Weerakkody, K. (2019). *Best Practices in Food Preparation and finance management*. 1<sup>st</sup> edition, London: Routledge
- Shekhar (2019). *Hotel Performance Target Settings and Effective Performance Measurement in Nigerian Hospitality Industry*. *Journal of Finance and Economics*, 1(3), 39-50
- Silva and Ariyaratna (2019). *Evaluation of Internal Audit and efficiency*. *Journal of Local Governments and Economics*, 3(7), 45-52
- Umble K, Greens J and Ramos, B. (2019) *Information Systems and the Expectations from Public Finance Management in modern World*. Munich: GRIN Publishing.
- Webb S. and Morancie, C. (2019). *Hotel Service Efficiency: Gaps in the Malaysian Public Institutions*, Oakland: SAGE Publications