

Long Paper

Food Safety Policy Compliance of Local Government Units in Pangasinan

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Abstract

This study aimed to review the food safety compliance of the Local Government Units in the Province of Pangasinan. This research used a combination of descriptive quantitative and qualitative approaches involving all the 34 city/municipal sanitation inspectors of the ten (10) Local Government Units (LGUs) in Pangasinan who served as the key informants/respondents. This study established that when human settlement areas become urbanized, their population increases which in turn increase the demand for food sourced from food business establishments. Despite some deficiencies, this study ascertained that the LGUs complied with the food safety standards as provided by law. The respondents attribute the gaps between the food safety standards and the LGU compliance with the food safety standards to the insufficient number of manpower resources in each LGU to conduct inspections on food business establishments. This study concludes that there is a significant relationship between the extent of compliance of the LGUs with the food safety standards and their profile variables. In sum, as the number of people, personnel, and business establishments in the LGUs increase, the higher is the extent of compliance of the LGUs with the food safety standards.

Keywords – Local Government Units, food safety, food business establishments, inspection



INTRODUCTION

Food safety remains to be a major global concern in the food supply chain. It is a major public health concern attributed to climate change, increasing consumers' demand and expectations, market-driven requirements, abrupt and changing food production patterns, and international food policies. Globalization also leads to the increase of exposure of populations to more food hazards and risks. This is because as markets become increasingly globalized with each passing year, and the world's population continues to grow, the global food supply chain continues to increase in scale and complexity. Because mass production and distribution of food influence the major shifts and mega trends, governments now give much attention and importance to compliance with food safety standards (Sesotec, 2020). Food safety is essential to achieving holistic global food security. It is an important issue, and probably equally important alongside that of food quantity and access-related issues that hinder the achievement of food security for millions in the world. The globally growing population and the consumer's demand to be provided with a wide variety of food have affected and caused longer and more complex food chain (Uçar et al., 2016).

People living in urban areas represent a global development challenge in ensuring the right to have access to safe, quality, and nutritious food. Most of the population growth is expected in urban areas and is concentrated in the cities and towns. As cities expand, so does the urban consumer's demand for food (Food and Agriculture Organization of the United Nations, 2009). The Philippine Statistics Authority (PSA) revealed that the Philippines recorded a 51.2 percent level of urbanization, or the percentage of the national population residing in urban areas (Philippine Statistics Authority, 2019). Among other factors, population density is a determinant of the demand for goods and services. Every Filipino has a basic right to accessibility and availability of safe food. At the local level, the Local Government Units (LGUs) ensure the safety of food through enforcement of food safety regulations and accessing resources to enhance compliance (Lizada, 2007). LGUs have the general power as provided in the Local Government Code of 1991 to promote public health and safety (Department of Health, 2008). Basically, it is the role and responsibility of the LGUs to implement food safety standards in the food business industry within their jurisdiction such as the Code of Sanitation of the Philippines and the Food Safety Act of 2013 through regular inspection and monitoring. The LGUs have a key role in setting policy and providing legislation that lays down minimum food safety or marketing standards that food businesses must meet. By implementing food surveillance and monitoring programs, the LGUs can verify if the controls in place are sufficient to maintain a safe food supply. Finally, to ensure that consumers' health and interests are truly protected, the LGUs must ensure that consumers receive timely, factual, and balanced information on food safety issues.

In this study, the researcher does not aim to encourage more LGU regulations for those engaged in the food business industry; rather, this study hopes to highlight the importance of a fair and equitable food safety regulatory and policy framework focused

on consumer safety, aligned with food safety standards, and implemented through effective local governance.

LITERATURE REVIEW

Food Safety Policies

The 1987 Philippine Constitution provides that the “State shall protect and promote the right of the people to health and instill health consciousness among them.” Further, Section 12, Article XIII declared that the “State shall establish and maintain food and drug regulatory systems and undertake appropriate health manpower, development, and research, responsive to the country’s health needs and problems” (The Constitution of the Republic of the Philippines, 1987). The country also enacted the Code of Sanitation in the Philippines (Department of Health, 1976) as a reference and guide for the Local Government Units (LGUs) to enforce sanitation requirements in all food establishments within their jurisdiction. The Consumer Act of the Philippines (Republic Act 7394) protects consumers, promotes the general welfare, and establishes standards for the conduct of business and industry. The Food Safety Act of 2013 (Republic Act No. 10611; Article V, Section 15) enumerates the food safety requirements and mandates the Local Government Units (LGUs) to oversee the street food and ambulant vending industry (Republic Act No. 10611, 2013).

LGUs must ensure that the foods for sale are safe and fit for human consumption (Implementing Rules and Regulations of Republic Act No. 10611, 2013). LGUs must take all the necessary measures and actions, strictly implement regulations, and strengthen the dissemination of food safety standards/requirements to the community to ensure the correct observance of proper hygiene and sanitation in the production of food (Aquino et al., 2014).

Food Safety

Food safety and quality control measures ensure that food remains safe and suitable throughout production, handling, processing, packaging, distribution, preparation, and sale (Gardner, n.d.). Managing food safety involves controlling the entire food chain, from farm to fork. To ensure food safety, the Food and Agriculture Organization (FAO) and World Health Organization - Global Forum for Food Safety Regulators agreed in 2002 that there is a global recognition that governments must take actions throughout the food production chain, from the farm and fishing boat to the consumer (Reilly et al., n.d.). Food safety is a public concern (Department of Health, 2008), and its importance to modern human life is complicated to understate. Food contamination at any stage, from production, until it reaches the consumers table, can produce bacteria, viruses, parasites, and toxins that can eventually cause food-borne diseases and are considered threats to food safety. Several cases reveal that foods

bought outside of the home are the primary cause of food-borne diseases (Uçar et al, 2016). The role of the government in ensuring food safety is vital in establishing food safety standards and overseeing their enforcement. Human tragedies, food-borne illnesses, and economic disasters result from consuming contaminated food due to intentional or unintentional personal conduct, non-compliance with food safety requirements, governmental failure in policy implementation, weak governance to safeguard food quality and safety, or a combination of these factors. Governments must carefully investigate all aspects and select areas where they will base the formulation and implementation of food safety policies. The policies should be sufficiently flexible to meet the needs of changing technology (Gardner, n.d.).

METHODOLOGY

Research Design

The study used the descriptive quantitative and qualitative approaches to evaluate the food safety compliance of the Local Government Units in the Province of Pangasinan. According to Penwarden (2014), descriptive research gathers quantifiable information to include surveys and questionnaires that can be used for statistical inference of the target population through data analysis. Trochim (2006), on the other hand, described qualitative approach as a general way of thinking about conducting research. It describes, either explicitly or implicitly, the purpose, stages, and method of data analysis. The researcher sought the answers to the specific questions posed in this study through analysis of documents and conduct of in-depth interviews with key informants.

The researcher also used the Discrepancy Evaluation Model (Ahmad, 2011). The Discrepancy Evaluation Model (DEM), developed in 1966 by Malcolm Provus, provides information for program assessment and program improvement (Buttram & Covert, n.d.). To evaluate something, the researcher inevitably makes comparisons. The model clearly defines objectives and develops a plan to achieve the objectives. The DEM examines the process of objectives attainment and measures the gaps. In this study, the researcher determined the information required to compare actual implementation of LGUs with the defined standards, identified the gaps/discrepancies between the standards and the actual conditions, and the reasons for such discrepancies. The discrepancy model does not prescribe a specific technique for gathering and analyzing information during evaluation. Rather, it lists the steps required to plan the evaluation itself. This approach is very pragmatic, lending itself equally well to both qualitative and quantitative methods.

Population and Respondents of the Study

The study covered the ten (10) LGUs in the province of Pangasinan with the largest population numbers: the three (3) component cities (Urdaneta City, San Carlos City, and Alaminos City), one (1) independent component city, (Dagupan City), and the six (6)

municipalities representing each Congressional District of Pangasinan (Bolinao, Lingayen, Malasiqui, Mangaldan, Pozorrubio and Umingan)(PhilAtlas, 2022). Table 1 shows the number of food business establishments of each LGU.

Table 1. Number of food business establishments of the ten (10) LGUs, CY 2021

District	Municipality	Number of Food Business Establishment
1	Bolinao	299
	Alaminos City*	605
2	Lingayen	382
3	Malasiqui	725
	San Carlos City*	2,119
4	Mangaldan	1,039
	Dagupan City**	1,023
5	Pozorrubio	1,942
	Urdaneta City*	2,740
6	Umingan	751
Total		11,625

* - Component cities; ** - Independent Component City

The municipal/city sanitation inspectors of the LGUs monitor the food business establishments such as restaurants, canteens, water-refilling stations, wet markets, and slaughterhouses as to their compliance with the food safety standards to ensure production of safe food for their constituents. All the city/municipal sanitation inspectors of the ten (10) LGUs served as the key informants/respondents of this study. Table 2 exhibits the total number of the informants/respondents.

As depicted in Table 2, there is a difference in terms of manpower resources or the number of sanitation inspectors, which affects the ability of the LGUs to implement the food safety standards within their respective areas.

Research Instrument

This study utilized a researcher-developed instrument to gather the needed data on food safety policy compliance. The survey questionnaire-checklist served as guide of the researcher in interviewing the respondents and in scrutinizing existing records. The researcher formulated the survey questionnaire-checklist based on professional literature and published articles relevant to the study. A direct, participatory survey and

interview involving the respondents characterized the gathering of the needed information for the study.

Table 2. Number of Sanitary Inspectors as Informants per LGU

District	Municipality	Total Sanitary Inspectors
1	Bolinao	2
	Alaminos City*	2
2	Lingayen	1
3	Malasiqui	3
	San Carlos City*	6
4	Mangaldan	5
	Dagupan City**	9
5	Pozorrubio	2
	Urdaneta City*	2
6	Umingan	2
Total		34

* - Component cities; **-Independent Component City

Data Gathering Procedure

Prior the conduct of the interview, the researcher sent an official letter requesting assistance from the concerned LGUs to allow the gathering of data from the targeted respondents. After the request was granted, the researcher personally interviewed the respondents. The researcher met the respondent/Sanitation Officers in their office (Municipal/City Health Office) for the activity. The researcher briefed the respondents regarding the coverage of the study, encouraged them to ask questions for further clarification, and gave them insights on how to properly fill out the questionnaires. Each of the respondents answered the guide questionnaire. The researcher likewise asked clarifications relative to the answers of the informants.

Treatment of Data

The researcher used the Relative Frequency Theory to determine the probability of an event or activity based on all possible events (Relative frequency, 2022). The researcher also determined the relative importance of each observation (Keni, 2019) using the weighted mean equation method assigned to individual values and the Alpha

method to interpret the result and data collected and determine the comprehensibility and acceptability of the target respondents.

In this study, the researcher likewise used the Pearson r Correlation Coefficient to measure the relationship between two continuous variables (Statistics Solutions, 2021) as shown in Table 3.

To determine the extent of compliance of the LGUs with the standard requirements on food safety, this research utilized the weighted mean drawn from a 3-point Likert Scale with corresponding descriptive equivalents as follows:

Table 3. 3-Point Likert Scale with Descriptive Equivalent

Rating	Mean Scale	Descriptive Equivalent
1	1.00 – 1.66	Non-compliant
2	1.67 – 2.33	Partially compliant
3	2.34 – 3.00	Compliant

For the interpretation of the Pearson r, this study used the following statistical limits and interpretation based on the work of Batacan et al. (2009):

* Statistical limits for r and Interpretation

0 - ± 0.2	- No relationship
± .21- ± .40	- Slight Relationship
± .41- ± .70	- Moderate Relationship
± .71- ± .90	- High Relationship
± .91- ± 1.00	- Very High/Perfect Relationship

RESULTS

Profile of the Local Government Units

Population

The province of Pangasinan has a total population of 3,163,190. The top ten (10) municipalities with the largest population are the three (3) component cities (Urdaneta City, San Carlos City, and Alaminos City), one (1) independent component city, (Dagupan City), and the six (6) municipalities representing each Congressional District of Pangasinan (Bolinao, Lingayen, Malasiqui, Mangaldan, Pozorrubio and Umingan) (Pangasinan Profile, 2019). Table 4 shows the total population of the ten (10) LGUs for Calendar Year (CY) 2021.

Table 4. Total Population per Local Government Unit, CY 2021

District	City/Municipality	Population
1	Bolinao	87,191
	Alaminos City*	96,076
2	Lingayen	109,705
3	Malasiqui	131,381
	San Carlos City*	202,130
4	Mangaldan	112,949
	Dagupan City**	181,932
5	Pozorrubio	87,661
	Urdaneta City*	141,215
6	Umingan	77,133
Total Population		1,227,373

• - Component cities; **- Independent Component City; Source: Based on actual interview from the respondents of the ten (10) Local Government Units

Business Establishments

Dagupan City posted the highest number of business establishments, while Malasiqui recorded the least number of enterprises (Table 5). Population density is one of the factors that explains the difference.

The Food Business Industry

Table 6 reveals the number of food business establishments in each of the ten (10) LGUs in the province of Pangasinan for CY 2021. Urdaneta City registered the highest number of food establishments with 2,640, while Bolinao posted the lowest number of food establishments with 255. Of the total number of WRS from the ten (10) LGUs covered in this study, San Carlos City has the most number of registered WRS with 220, while the Municipality of Umingan listed the least number with only 29 WRS. The figures in Table 6 also reveal that Alaminos City has the most number of wet markets with three (3) active wet markets, while San Carlos City and Dagupan City listed two (2) wet markets each. The rest of the municipalities have only one (1) wet market each. Likewise, all municipalities except Dagupan City have one (1) slaughterhouse in their area. As depicted in Table 5, San Carlos City has the highest number of registered ambulant vendors with 530, while Bolinao logged the least number of ambulant vendors with only 8.

Table 5. Total number of business establishment in each LGUs, CY 2021

District	Municipality	Number of Business Establishments
1	Bolinao	1,722
	Alaminos City*	1,871
2	Lingayen	1,748
3	Malasiqui	1,249
	San Carlos City*	3,800
4	Mangaldan	2,881
	Dagupan City**	4,406
5	Pozorrubio	1,927
	Urdaneta City*	2,964
6	Umingan	2,120
Total		24,310

 Component cities; ** - Independent Component City

Table 6. Food Business Industry of the Local Government Units, CY 2021

District	Municipality	Number of Food Establishment	Water refilling stations	Wet Market/s	Slaughter house	Ambulant Vendors
1	Bolinao	255	42	1	1	8
	Alaminos City*	534	67	3	1	30
2	Lingayen	307	73	1	1	170
3	Malasiqui	628	95	1	1	150
	San Carlos City*	1,896	220	2	1	530
4	Mangaldan	983	54	1	1	21
	Dagupan City**	949	72	2	0	54
5	Pozorrubio	1,895	45	1	1	32
	Urdaneta City*	2,640	98	1	1	46
6	Umingan	720	29	1	1	30
Total		10,807	795	14	9	1,071

• - Component cities; ** - Independent Component City

PERMITS AND CERTIFICATES

Health Certificates/Cards

Table 7 shows that Dagupan City posted the highest number of health certificates/cards issued for food and non-food handlers with 6,637. On the other hand, Bolinao recorded the lowest number with only 360 health certificates/cards released.

Sanitary Permit

Table 8 bares the total number of Sanitary Permits issued (both food and non-food business establishments) for CY 2021. As laid-out in the Table, Dagupan City has the highest number of sanitary permits issued (4,406) among the ten (10) LGUs. This can be correlated to the issuance of health certificates/cards where Dagupan City also recorded the highest number.

Table 7. Total Number of Health Certificate/Card Issued to Food and Non Food Handlers per Local Government Unit, CY 2021

	Municipality	Health card/certificate issued (Food handlers and non-food handlers)
1	Bolinao	360
	Alaminos City	2,632
2	Lingayen	1,700
3	Malasiqui	4,815
	San Carlos City*	2,681
4	Mangaldan	3,821
	Dagupan City**	6,637
5	Pozorrubio	926
	Urdaneta City*	4,442
6	Umingan	1,080
	Total	29,094

• - Component cities; ** - Independent Component City

Table 8. Total Number of Sanitary Permit Issued per LGU, CY 2021

District	Municipality	Total Number of Sanitary Permit issued
1	Bolinao	1,722
	Alaminos City*	1,871
2	Lingayen	1,748
3	Malasiqui	1,249
	San Carlos City*	3,800
4	Mangaldan	2,881
	Dagupan City**	4,406
5	Pozorrubio	1,927
	Urdaneta City*	2,964
6	Umingan	2,120
Total		24,310

* - Component cities; ** - Independent Component City

Standard Requirements for Local Government Unit's Food Safety Policy Implementation

The Local Government Units (LGUs) have the autonomy to create and implement policies that will benefit and protect the people within their territorial jurisdiction. It is also the role of the Local Government Units to protect the health and interests of consumers of publicly marketed food through policy setting or laying down minimum food safety or marketing standards that the food business industry must meet. These policies conforms with the national food safety standards such as the Code of Sanitation of the Philippines (PD 856) and Republic Act 10611 otherwise known as the Food Safety Act of 2013.

Assessment and evaluation of food business establishments. It is vital for LGUs to determine and verify whether hygiene and sanitation practices of food business establishments and the whole food business industry are properly and strictly implemented.

Conduct of regular sanitary inspection and monitoring. The LGU Sanitation inspectors conduct inspections on food business establishments to check, verify, and monitor the sanitary conditions of the production or work area, sanitation and operating procedures of the food establishment, the condition of storage areas, status of equipment including personnel hygiene of workers, and solid waste handling and disposal practices.

Approved Mission Order by the Municipal or City Health Officer. The Mission Order is a document that serves as basis for the sanitation inspectors of the LGUs to conduct inspection and evaluation of food business establishments and verify their compliance with the standard requirements on food safety and other related food safety laws and regulations.

Recording of observations and findings during inspection. The LGU Sanitation inspectors use appropriate forms and checklists during the conduct of inspection and monitoring on the food business establishments. The form or checklist contains the safety standards or requirements to be followed by the food business establishment to ensure the safe production of food. These cover the plant layout and design, construction and maintenance of the premises, toilet provision for workers, products' process flows, other facilities such as hand washing stations, water supply, the food establishment's solid and liquid waste management, pest control system, condition and cleanliness of the utensils, equipment/appliances, and personnel hygiene.

Sample Collection of food products. It is necessary to check and verify the food establishment's conformance with public health regulations as well as the wholesomeness and safety of the food products. The LGU sanitation inspectors collect samples of food and food products processed and sold by the food business establishment during inspection.

Classification of food business establishments. The LGU sanitation inspectors classify the food business establishment based on the result of the inspection and verification of their compliance with the standard requirements on food safety. They calculate and rate the classification by demerit point system based on their compliance (expressed in percentage).

Monitoring and Surveillance of Ambulant Vendors. The LGU Sanitation inspectors do not only conduct inspection on food business establishments but must also include inspection of the food and food products sold by the ambulant vendors. As stated in RA 10611, the LGUs shall have the authority to implement food safety policy within their territorial jurisdiction including activities carried out by ambulant vendors within their area such as, but not limited to, selling of foods, bottled drinks, biscuits, and other pre-packaged foods.

Issuance of Health Certificates. The health card/certificate is a document issued to food and non-food handlers/workers. The LGUs issue the health certificate/card to food handlers or workers who passed the required laboratory parameters set. The health certificate/card is non-transferable.

Extent of Compliance of the Local Government Units with the Standard Requirements on Food Safety

Among the LGUs, Pozorrubio posted the highest rating in complying with the food safety standards with 97.58% (Table 9). The City of Urdaneta ranked second with 96.35%, while Lingayen recorded the lowest compliance rating with 80.37%. Overall, the 10 LGUs registered a compliance rating of 92.96%, specifically in securing the necessary permits and certificates.

Table 10 exhibits the extent of compliance of the LGUs with the standard requirements on food safety. The figures indicate that the LGUs are not compliant in classifying the food business industry. The LGUs are also partially compliant with issuing mission orders and in monitoring and surveillance of ambulant vendors. Overall, however, the 10 LGUs are generally compliant with the food safety standards, with a weighted mean of 2.49.

Table 9. Percentage of compliance of the food business establishments vs. the total number of food establishments of the ten (10) LGUs, CY 2021

District	Municipality	Total Number of Food Business Establishments	Number of Compliant Food Business Establishments	% Compliance
1	Bolinao	299	255	85.28
	Alaminos City*	605	534	88.26
2	Lingayen	382	307	80.37
3	Malasiqui	725	628	86.62
	San Carlos City*	2,119	1,896	89.48
4	Mangaldan	1,039	983	94.61
	Dagupan City**	1,023	949	92.77
5	Pozorrubio	1,942	1,895	97.58
	Urdaneta City*	2,740	2,640	96.35
6	Umingan	751	720	95.87
Total		11,625	10,807	92.96

* - Component cities; ** - Independent Component City

Table 10. Extent of Compliance of LGUs with Food Safety Standards

Indicators	Average Weighted Mean	Descriptive Equivalent
1. Regular Sanitary Inspection and Monitoring.	2.42	Compliant
2. Aids to Inspection	2.71	Compliant
3. Approved Mission Order	2.33	Partially Compliant
4. Recording of Observations and Findings during Inspection	2.84	Compliant
5. Completion of Inspection Report	2.80	Compliant
6. Classification of Food Business Industry	1.50	Not Compliant
7. Monitoring and Surveillance of Ambulant Vendors	2.04	Partially Compliant
8. Records Keeping of Permits and Certificates	2.90	Compliant
9. Revocation of Issued Sanitary Permits	2.90	Compliant
Overall Mean	2.49	Compliant

Legend: 1.00– 1.66 – Not Compliant (NC); 1.67 – 2.33 – Partially Compliant (PC); 2.34 – 3.00 – Compliant (C)

Gaps between the Standard Requirements of Food Safety and Local Government Unit's Compliance

The Code of Sanitation of the Philippines (PD 856) and the Food Act of 2013 (Republic Act 10611) are the reference or basis of the Food Safety Policy of the Local Government Unit. However, there are observed gaps between the compliance of the LGUs and the food safety standards.

Assessment and Evaluation of food business establishments

Conduct of regular sanitary inspection and monitoring. The frequency of inspection of LGU sanitation inspectors to food business establishments is not followed based on the establishment's classification and percentage rating. This is due to the insufficient number of Sanitation Inspectors to conduct the monitoring.

Mission Order Form approved by the Municipal or City Health Officer. Among the ten (10) Local Government Units covered under this study, the Municipality of Umingan does not issue a mission order. Instead, LGU Umingan uses a Travel Order as the document or basis to conduct such activities.

Recording of observations and findings during inspection activities. Of the ten (10) Local Government Units, the Municipality of Umingan does not use the sanitary order form but

verbally discusses the results of the inspection with the owner or representative of the establishments.

Sample Collection of food products. The LGUs do not strictly collect food samples from the food business establishments. Sanitary inspectors only take water samples from water refilling stations for microbiological tests. They do not collect samples from other food business establishments, including those sold by ambulant vendors in all of the ten (10) Local Government Units.

Classification of food business establishments. Among the ten (10) Local Government Units covered under the study, only San Carlos City issues Classification Placard or the Sanitation Standard Rating Sticker (SSRS) to food business establishments inspected by the sanitation inspectors; the rest of the LGUs do not implement this requirement.

Monitoring and Surveillance of Ambulant Vendors. Although LGUs issue health certificates/cards to the registered ambulant vendors, the sanitation inspectors do not strictly conduct monitoring and surveillance activities. Most of the ambulant vendors from the ten (10) LGUs violate the provisions of the Code of Sanitation of the Philippines and the LGUs' own food safety policy.

Issuance of Health Certificates. All ten (10) LGUs issue health certificates or cards to food handlers as well as to non-food handlers. However, the LGUs do not implement the color coding recommended by the Sanitation Code; instead, they issue different colors of the card or certificate.

DISCUSSION

PROFILE OF THE LOCAL GOVERNMENT UNITS

Population

As of 2021, Pangasinan's total population stands at more than 1.2 million. San Carlos City is the most populous, while the Municipality of Umingan has the least number of residents among the ten (10) LGUs under review. The findings imply that as settlement areas become urbanized, the population increases which in turn increase the demand for food. This also means that food establishments such as restaurants, fast food chains, and food stalls/kiosks will evolve and boom. This finding supports the claim of FAO (2009) that as cities expand, so does the urban consumer's demand for food. This finding also corroborates the assertion of Sesotec (2020) that because the world's population continues to grow, the global food supply chain continues to increase in scale and complexity.

Business Establishments

Business establishments in cities outnumber those located in towns. This may be attributed to the influx of people in highly urbanized areas, which mainly rely on trade and commerce to sustain their status. Business establishments contribute to the economy of LGUs by bringing growth and innovation to the community. In addition to providing growth, business establishments can supply important goods and services to consumers, particularly food, which is one of the basic human needs (Ahlstrom, 2017)

The Food Business Industry

Cities again dominated the towns in terms of the number of food business establishments. The figures suggest that the higher the number of food establishments in a certain area, the higher the possibility of encountering food safety issues. This can be correlated to the number of residents in an area, where the LGU with the highest number of population has the highest food consumption and requirement, and vice versa.

Permits and Certificates

Health Certificates/Cards

The health certificate/card validity differs from one LGU to the other, depending on what is approved in their respective municipal or city ordinances. As a pre-requisite to the issuance of health card/certificate, workers/personnel must undergo medical examination. The laboratory tests/parameters required by each LGU are also different from each other.

Sanitary Permits

All business establishments are required to update and renew their Sanitary Permit annually, as this is a pre-requisite document prior to the issuance of a Mayor's Permit for their business operation. The Sanitary Permit is valid for one (1) year and is non-transferable. Dagupan City registered the highest number of sanitary permits issued among the ten (10) LGUs. The results correlate with the number of health certificates/cards issued by the LGUs, where the city recorded the highest tally. It is an indication that Dagupan City has the most number of business establishments and manpower resources/work force among the ten (10) LGUs.

Standard Requirements for Local Government Unit's Food Safety Policy Implementation

As autonomous entities, the Local Government Units (LGUs) formulated and implemented policies that protect their constituents from the hazards of publicly marketed food. The minimum food safety or marketing standards set by the LGUs conform with the national food safety standards such as the Code of Sanitation of the

Philippines (PD 856) and Republic Act 10611 otherwise known as the Food Safety Act of 2013.

The policies include assessment and evaluation of food business establishments, classification of food business establishments, monitoring and surveillance of ambulant vendors, and issuance of health certificates. In assessing/evaluating the food business establishments, it is vital that the LGUs conduct regular sanitary inspection and monitoring, issue mission orders prior to inspection and monitoring, record observations and findings during inspection, and collect samples of food products for laboratory analysis. These policies ensure hygienic and sanitary practices of food business establishments resulting to the safety of food consumed by the public.

Extent of Compliance of the Local Government Units with the Standard Requirements on Food Safety

In terms of complying with food safety standard requirements based on the number of food business establishments, Pozorrubio rated the highest. Food business establishments include food chains, restaurants, canteens, water-refilling stations, wet markets, and slaughterhouses. The overall compliance rating of 92.96% manifest a very high rating of the LGUs in complying with food safety standards as provided in existing laws.

As regards compliance with the standard requirements on food safety, the 10 LGUs are generally compliant with an overall weighted mean of 2.49. The results imply that the LGUs substantially follow the policies on food safety.

The actions of the LGUs conform with the view of Aquino et al (2014) who stated that the LGUs must take all the necessary measures and actions, strictly implement regulations, and strengthen the dissemination of food safety standards/requirements to the community to ensure the correct observance of proper hygiene and sanitation in the production of food. Unfortunately, the LGUs are specifically not compliant with the classification of the food business industry, and partially compliant in issuing mission orders and in monitoring and surveilling ambulant vendors due to the insufficient number of personnel. Interviews conducted by the researcher revealed that the sanitation inspectors also perform other functions indicated in their food safety policy. LGUs have not assigned Food Safety Officer/s as mandated by RA 10611 or the Food Safety Act of 2013.

The LGUs must then look for ways to remedy their deficiencies. As written by Gardner (n.d.), “Human tragedies, food-borne illnesses, and economic disasters result from consuming contaminated food due to intentional or unintentional personal conduct, non-compliance with food safety requirements, governmental failure in policy implementation, weak governance to safeguard food quality and safety, or a combination of these factors. Governments must carefully investigate all aspects and select areas

where they will base the formulation and implementation of food safety policies. The policies should be sufficiently flexible to meet the needs of changing technology.”

Gaps between the Standard Requirements of Food Safety and Local Government Unit's Compliance

The government, particularly the Local Government Units play a special role in ensuring that consumers' health and consumers' interests are paramount (Reilly et al., n.d.). Therefore, strict implementation of regulations and policies pertaining to food safety is necessary. These policies must be focused on consumer's health and safety. Food safety policies of LGUs were crafted based on the provisions of the Code of Sanitation of the Philippines (PD 856) and the Food Act of 2013 (Republic Act 10611). The implementation of the policies revealed certain gaps.

Assessment and Evaluation of food business establishments

Conduct of regular sanitary inspection and monitoring. The insufficiency of personnel caused the failure of the LGUs to regularly inspect and monitor the food business establishments. The interviews conducted revealed that LGU sanitation inspectors carry out various activities aside from inspecting food business establishments. They also conduct inspection activities in agro-industrial establishments, water supply/water refilling stations, funeral establishments, junk shops, tonsorial and beauty establishments, massage clinics, disposal facilities, and solid waste disposals. Aside from inspection activities, sanitation inspectors also conduct water sampling/disinfection of wells and issue permits such as sanitary permits for the food business establishments and health certificate/cards for workers or food handlers.

Mission Order Form approved by the Municipal or City Health Officer. One of the documentary safety requirements necessary for the assessment and evaluation of food business establishments is the Mission Order. The Mission Order is the document issued to sanitation inspectors as basis to carry out inspection activities on food business establishments within their areas. Except for one (1) municipality, all of the LGUs issue Mission Orders prior to the conduct inspection and monitoring of food business establishments. Instead of a Mission Order, the municipality arms the inspectors with a Travel Order.

Recording of observations and findings during inspection activities. Sanitation inspectors write or list down their findings and observations in the Sanitary Order Form during inspection on food business establishments to verify compliance with the requirements of food safety standards. Sanitation inspectors prepare the form in triplicate copies and provide a copy to the establishments within 24 hours. The Local Government Units, except for one (1) municipality, utilize the Sanitary Order Form. The

municipality just discusses verbally the findings of the inspection with the owner or representative of the establishments.

Sample Collection of food products. The sanitation inspectors must collect food samples from the food business establishments that they inspected to determine the wholesomeness and safety of food sold to the consumers. Since the LGUs do not collect food samples, there is no assurance that the food sold is safe. Only water samples are taken from refilling stations for microbiological tests. The LGUs are required to bring the food samples to the laboratory to test their safety. Adherence to this requirement is necessary to ensure the fitness of the food sold for human consumption.

Classification of food business establishments. Only one (1) LGU issues a Classification Placard or the Sanitation Standard Rating Sticker (SSRS) to food business establishments after inspection. The Classification Placard or SSRS is the basis of frequency of monitoring the establishments as a result of the inspection conducted by the sanitation inspectors. The sanitation inspectors compute the frequency of monitoring based on the compliance of the establishments with the food safety standards using the demerit point system expressed in percentage (%).

Monitoring and Surveillance of Ambulant Vendors. The LGUs only issue health certificates/cards to the registered ambulant vendors. The LGUs do not strictly conduct monitoring and surveillance of the activities of ambulant vendors. Food handlers including ambulant vendors must wear the health certificates while they are on-duty or working and when selling food products; however, the food handlers and vendors do not observe this requirement. Likewise, the food products allowed for ambulant vendors to sell are biscuits, bottled drinks, pre-packed foods, and confectioneries, but this requirement is not followed. Ambulant vendors in the streets even used utensils to cook their products sold to customers. These acts violate the provisions of existing policies on food safety like the Code of Sanitation of the Philippines.

Issuance of Health Certificates. All ten (10) LGUs issue health certificates or cards to food handlers as well as to non-food handlers. The Sanitation Code recommends the color of the certificate/card issued to food and non-food handlers for easy distinction (cream for the food handlers and green for the non-food handlers). The Code requires color-coding of the health certificate or card for easy identification of the two types of workers. Although the LGUs issue health certificates or cards to food and non-food handlers, the color-coding requirement is not followed. The LGUs have adopted their own color-coding scheme.

The LGUs need to significantly reduce the gaps between the food safety standards and their implementation efforts. As Lizada (2007) pointed out, LGUs must ensure the safety of food through enforcement of food safety regulations and accessing resources to enhance compliance.,

CONCLUSIONS AND RECOMMENDATIONS

This research gathered that the LGUs designed and implemented their own food safety policy based on existing laws like the Sanitation Code of the Philippines (PD 856) and the Food Safety Act of 2013 (RA 10611). This study ascertained that the LGUs are serious in implementing the food safety policy. The LGUs obtained a high rating in complying with food safety standard requirements as provided in existing laws. The respondents attribute the gaps between the food safety standards and the LGU compliance with the food safety standards to the insufficient number of manpower resources in each LGU to conduct inspections on food business establishments. As revealed during the interviews conducted by the researcher, sanitation inspectors also perform other functions indicated in their food safety policy. There are also no assigned Food Safety Officer/s as mandated by RA 10611 or the Food Safety Act of 2013.

This study concludes that except for the variables number of slaughterhouses and number of ambulant vendors, the extent of LGU compliance with the food safety standards have a significant relationship with their profile variables. The null hypothesis then which states that there is no significant relationship between the extent of compliance of the LGUs with the food safety standards and their profile variables is rejected.

To resolve the gaps identified in the implementation of the food safety standards by the LGUs, the researcher strongly recommends the creation of a Food Safety Task Force in each LGU purposely to address the various concerns relative to the implementation of existing food safety policies. The task force shall be composed of representatives from the Office of the Mayor, City/Municipal Health Office, Social Welfare and Development Office, Environment and Natural Resources Office, Planning and Development Office, Agriculturist Office, Veterinary Office, and Budget Office. They shall elect from among themselves their presiding officer and such other officials necessary to make the task force operational. The members shall undergo training on food safety standards. The task force shall formulate an Implementation Plan of the food safety standards. The LGUs shall appropriate funds for the operation of the task force.

To remedy the deficiencies in the inspection and monitoring of food business establishments including ambulant vendors, the LGUs should hire additional manpower. For this purpose, the LGUs should consider creating the position of Food Safety Officer as mandated by the Food Safety Act of 2013. While waiting for the creation of the position, the LGUs can hire personnel, on job order or contract of service status, who shall be designated as sanitation inspectors after undergoing the appropriate training on food safety policy implementation.

To ensure that the required forms for inspection and certificates/cards are available, the LGUs should allot funds for the printing of the forms. The LGUs should also come up with a Food Safety Plan that shall incorporate the conduct of regular orientation/seminar

for all ambulant vendors within their territorial jurisdiction covering the various food safety requirements including the proper wearing of the issued health certificate or card.

The LGUs should also consider the adoption of an integrated food safety approach, a multi-disciplinary approach involving the whole food chain. The approach integrates the “Farm to Fork” concept which covers production, processing, storage, transportation, and market trading of food and food products. It aims to ensure consumer protection.

The LGUs should likewise consider adopting a risk-based approach during inspection of food business establishments as recommended by the FAO-WHO Global Forum on Food Safety Regulators. The approach gives importance to measures that will have the greatest reductions on food and water borne diseases.

IMPLICATIONS

This study confirmed that due to the steadily growing world population which rely on the market for their daily food consumption, the problems on food safety become more pronounced. This study also established that when human settlement areas become urbanized, their population increases which in turn increase the demand for food. This is because population density is higher in urban areas compared to rural areas. This also means that food establishments such as restaurants, fast food chains, and food stalls/kiosks will evolve and boom. This likewise suggests that the higher the number of food establishments in a certain area, the higher the possibility of encountering food safety issues.

This study likewise proved the significant relationships between the extent of compliance of the LGUs with the food safety standards and their profile variables. In general, as the number of people, personnel, and business establishments in the LGUs increase, the higher is the extent of compliance of the LGUs with the food safety standards. The researcher hopes that the results of this study will encourage the LGUs to institute measures to further enhance their services in ensuring food safety in their jurisdiction.

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DECLARATIONS

Conflict of Interest

No conflicts of interest exist between the author that might be deemed significant to the article's content.

Informed Consent

Informed consent was obtained from all subjects involved in the study.

Ethics Approval

Approval to conduct the study was obtained from the local ethics committee and the administrator of the campus.

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