

UNIVERSITI TEKNOLOGI MARA

**THE UNDERSTANDING OF FOOD
SECURITY AND FOOD TERRORISM
AMONG MALAYSIAN MEDIA
PRACTITIONERS AND PUBLIC
SERVICE PERSONNEL DURING
COVID-19**

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NADZRI**

PhD

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Thesis submitted in fulfilment
of the requirements for the degree
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I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

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ABSTRACT

Food security crises reveal not only structural weaknesses within food systems but also gaps in risk understanding, communication and governance. Despite increased policy attention to food security in Malaysia, deliberate and complex threats, particularly food terrorism, remain insufficiently examined, especially during systemic disruptions such as the COVID-19 pandemic. Empirical insight into the perspectives of key communicators namely media practitioners and public service personnel remains limited. This qualitative study addresses this gap by examining the understanding, interpretations and communication practices of Malaysian media practitioners and public service personnel regarding food security and food terrorism. Four (4) research objectives guided the study: 1) to explore the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel; 2) to analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security; 3) to understand the interpretations and communication of food security and food terrorism by media practitioners and public service personnel in their reporting; and 4) to recommend a model to guide media practitioners and public service personnel in effectively addressing reports on food security and food terrorism. Data collection followed a sequential design. Document analysis was conducted on five (5) key policy documents using a deductive–inductive thematic approach, with findings informing subsequent in-depth interviews with twelve (12) informants. Interview data were analysed inductively using thematic analysis supported by ATLAS.ti 24, adopting a phenomenological lens to capture perspectives and experiences. Guided by Agenda-Setting Theory, Social Capital Theory, the Food Security Model and the Food Crime Terminology Model, findings indicate uneven policy understanding, limited familiarity with food terrorism and inconsistent media framing despite the media's crucial bridging role. The study concludes that strengthening Malaysia's preparedness requires positioning food security policies as national protective firewalls against deliberate threats. It highlights the need for enhanced media and government collaboration, improved public sensitisation and strategic use of digital media platforms. As a key contribution, this study proposes the FSFTact Model to guide integrated communication, governance and prevention strategies for food security and food terrorism in Malaysia.

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LIST OF ABBREVIATIONS

Abbreviations

BERNAS	Perusahaan Padi Beras Nasional
COVID-19	Corona Virus Disease 2019
DSMN	Dasar Sekuriti Makanan Negara 2020
FAMA	Federal Agricultural Marketing Authority
GFSI	Global Food Security Index
FS	Food Security
FT	Food Terrorism
KADA	Lembaga Kemajuan Pertanian Kemubu
MADA	Lembaga Kemajuan Pertanian Muda
MAFS/MAFI	Ministry of Food Security/Ministry of Food Industry
MARDI	Malaysian Agricultural Research and Development Institute
MAQIS	Department of Quarantine and Inspection Services Malaysia
NAFP	National Agrofood Policy 2021 - 2030
NAP	National Agriculture Policy
NSC	National Security Council
SDG	Sustainable Developmental Goals
SSL	Self-Sufficiency Level
UN	United Nations

UNESCO	United Nations Educational, Scientific and Cultural Organization
UNDP	United Nations Development Programme
UNGA	United Nations General Assembly
WHO	World Health Organization

CHAPTER 1

INTRODUCTION

1.1 Background of Study

Media has always been regarded as a crucial tool in disseminating information (Cheng et. al, 2022; Sutjipto et. al., 2022), shaping public opinion (Alawade & Obun-Andy, 2024; Pei, 2023; Ullah & Khan, 2020), influencing behavior (Enikolopov & Petrova, 2017; Liao, 2023) and fostering communication as well as engagement in society. In good and bad times, through thick and thin, the media in its various forms, platforms and channels manages to withstand the test of time. According to Farmer (2022), the media serves as a bridge between experts and the general public. This is particularly true regarding both humanity and scientific matters, where the knowledge gap is significantly larger than for other concerns. Lin et. al (2018) and Schäfer and Taddicken (2015) all concurred that media reporting of certain pressing issues shapes how the public understands and reacts to changes in the world around them. Liao (2023) and Happer and Philo (2013) discussed how the media possess the ability to draw connections and influence beliefs in a way that scientists do not have. Concurrently, Kenski et. al. (2019) also opined how people rely on the media to translate the oftentimes complex terminology, processes and implications of environmental research and conclusions. This includes lawmakers and governing officials, who also rely on the media for updates and analyses on the current issues (Agaki, 2022).

Food security remains a global concern, as all international and local agencies are putting various efforts to attain the Sustainable Development Goal number 2 of ending hunger by 2030 (Covic et.al., 2021; Pawar, 2021). It is thus important to firstly understand the approach of food security as outlined in 1996 during the World Food Summit, where it is described as:

“Food security is defined when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.” (WHO, 1996)

With the definition of food security, the Food and Agriculture Organization (FAO) in 2008 further presented the dimensions of food security, which are:

“There are four (4) dimensions of food security namely the physical availability of food, the economic and physical access to food, food utilisation and the stability of the other three (3) dimensions over time.”(FAO, 2008)

Based on the Maslow’s Hierarchy of Needs (1943), food and security both occupy the top tier due to their indispensable role in promoting well-being. Therefore, ensuring food security is crucial in any nation. Food security is achieved when every individual has unrestricted and consistent availability of sufficient, well-rounded and nourishing food to fulfil their dietary requirements and personal food choices, enabling them to lead productive and healthy lives (Food and Agriculture Organization of the United Nations [FAO], 2008). In order for food to be accessible, it is essential for households to have adequate purchasing power or the ability to consistently obtain high-quality food. Utilisation requires a comprehensive understanding of food storage and processing procedures, as well as fundamental principles of nutrition and care (Rivera & Qamar, 2003). Food security is achieved when there is a consistent and reliable supply of food that is readily available, easily accessible and effectively utilised (Fanzo, 2023). For years, the United Nations put its utmost emphasis of managing food security or insecurity rather, of those third world countries torn by war and famine. Up until now, the importance of food security remains high and one may deduce that its importance will be reflected in the knowledge and awareness of what food security is all about. Scholars like (Ferranti et al., 2018; Guiné et. al., 2021; Jatav, 2024; Maiga, 2010; Shaw, 2007; Simon, 2012; WFP, 2007) all agreed upon the four (4) pillars of food security namely access, availability, utilisation and stability. In addition, throughout the years, food security has undergone a broad expansion in terms of its own dimensions as reported by (HLPE, 2020) with the addition of two (2) more dimensions into food security which are agency and sustainability, respectively.

Prior to 2020, the world has encountered and cushioned many crises which were predominantly economic and geopolitical in nature (Kose et al., 2020). However, a health crisis in the form of a pandemic has resulted in a significant catastrophe which not only impacted the wellbeing of the people but countries found themselves grasping with food shortages further sparking problems in food security (Jatav, 2024). The

pandemic, a devastating one to date in the 21st century is formerly known as Novel Coronavirus 2019, it was first detected in Wuhan, China in December of 2019. The World Health Organization (WHO) declared COVID-19 as a pandemic just a few months after the outbreak in China, infecting close to a billion with million deaths to date as recorded by WHO (Joseph & Kutty Narayanan, 2022).

Threats against a country's food security encompass of many attributed reasons (Azri et al., 2025; Benguettat, 2025), namely manmade or environmentally induced viruses and pathogens affecting human health which capable of causing wide spread plague just as what the whole world has experienced with COVID-19 pandemic. Manmade threats akin to terrorism has brought forth a new term called food terrorism as written by (Taylor, 2008) and (Yoon & Shanklin, 2008). In essence, the World Health Organization (WHO) in 2002 has given a definite definition on food terrorism which is as below:

“An act or threat of deliberate contamination of food for human consumption with biological, chemical and physical agents or radio nuclear materials for the purpose of causing injury or death to civilian populations and/or disrupting social, economic or political stability.” (WHO, 2002)

Fundamentally, when it comes to food security and food terrorism, one may not be able to grasp the importance of having an outlet to communicate and disseminate information in the form of news, news reporting and exposure. In recent years, there exists a growing necessity to analyse the experience, role and responsibility of the media practitioners and public service personnel on the reporting of food security (FS) and the implementation of FS policies in Malaysia, especially with the potential of growing threats against FS during a crisis such as the COVID-19 global pandemic. This is actually where the media can play their part and role to ensure that it is relevant to be using the tools of media to promote or report on food security and food terrorism. Scholars like (Hendriks et. al., 2017; Khan, 2021; Kutyaauripo et. al., 2021) have all discussed on the relevance of media in all dimensions of human security including food security. Khan (2021) even wrote that the nexus between food security and the role of the media has long been established, as Amartya Sen, hailed as one of the founders of human security and winner of the 1998 Nobel Memorial Prize in Economic Sciences, famously pointed out:

“No democracy with a free press has ever endured famine.” (Sen as cited by Khan, 2021)

In 2011, UNESCO, short for the United Nations Educational, Scientific and Cultural Organization has produced a manual handbook for the media specifically the journalists to report on food security and nutrition, focusing more on media located at underdeveloped and developing countries. An excerpt from the handbook has reiterated on the importance that the media reporting on food security is guided accordingly. It further denoted that:

“In recognition of a need to raise awareness and improve media reporting on food security and nutrition, it is grounded in the belief that the media can and should, play an important role in informing the general public and decision makers in developing countries about food security and nutrition related issues.” (UNESCO, 2011)

There have been numerous studies on media reporting, effects and responsibility on pressing humanity issues. Isernia and Marcolin (2018) presented that there are three (3) media effects that are relevant to understand how the media role carries weightage and create awareness on issues such as food security and food terrorism. Initially, the media established the public agenda that is followed by the general population. McCombs and Shaw (1972) discussed that media coverage has the ability to focus people's attention towards some themes, as opposed to others. The allocation of media coverage to specific issues influences individuals' focus, hence increasing the salience of those topics in the public eye (Liao, 2023). Furthermore, Zai and Möri (2025) emphasised the significance of the manner in which an event is portrayed (framing effects). Framing influences an individual's perception and interpretation of an event. Furthermore, experts emphasize the significance of priming, which refers to the media's ability to shape the specific factors that individuals consider when making decisions or forming opinions on a certain issue (Berk, 2025).

According to the Food and Agricultural Organization (FAO), by 2050, the food supply will be impacted by the growing human population because the available resources would be insufficient to meet demand. Championing the crisis as highlighted by FAO requires an all-inclusive resolution that includes to review and revamp better policies for food security, food safety and food defence. In 2023, Malaysia's food import value reached around 78.79 billion Malaysian Ringgit, up from 75.62 billion

Malaysian Ringgit the prior year. The import value of food has consistently risen since 2012, notwithstanding a decrease in 2018 (Siddharta, 2024). Even though local production for food such as rice, meat, fish, eggs, oils, vegetables and fruits have increased significantly over the years, our dependence on food imports remains heavy. This is partially because local food production is still not capable of meeting the demand of the country's growing population, which reached 34.7 million in 2024 (United Nations, 2024). However, the main reason for the lower local food production is due to lower import food prices, which results in farmers switching to growing cash crops instead of food crops (Sundaram & Tan, 2019). Achieving self-sufficiency in food production is crucial, especially under the threats such as the pandemic. During COVID-19, overseas transportations and supply chains were vastly interrupted, which in turn affected the import and supply of food, pushing up the food prices whilst impacting the affordability and availability of food for the people (Gibson, 2012).

Plantation agriculture and food production are the two types of agriculture in Malaysia. Plantation agriculture remains the powerhouse of Malaysia's economy, with palm oil exports reaching RM179.2 billion in 2024 (DOSM, 2025). However, the nation continues to lag in food production, with the Self-Sufficiency Ratio (SSR) for rice dropping to approximately 56.2% and beef to 14.7% (KPKM, 2025). This is attributed to the structural difficulty of food crops. Unlike the 25-year lifecycle of oil palm, food crops require high turnover and a larger workforce (Azri et al., 2025). Furthermore, the rising cost of imported fertilizers and pesticides exacerbated by the weakened Ringgit has placed additional strain on local food security, as over 90% of these inputs are sourced from global markets (CodeBlue, 2025).

Bala et. al. (2017), Firdaus et. al. (2020), Ibrahim and Salim (2020) and Paul (2013) all concurred that Malaysia's food security policy centres around the availability of rice only initially whereby the government has embarked on a protectionist regime to ensure the sector is insulated from the market vagaries particularly supply and price shocks to meet the three-pronged objectives mentioned earlier. The instruments implemented include; price control (farm and retail), subsidies and income transfer, licensing and import monopoly. That said, there is therefore an urgent need for authorities to shift their focus on strategising newer policies with safe food ecosystem in mind. Malaysia's National Security Policy (2019) outlined the security guarantee for the nation's food supply under Strategy 17 and only recently the National Food Security Policy Action Plan (DSMN) 2021-2025. With an adequate timeline of policy

formulation ever since gaining independence, many scholars felt that despite very comprehensive and all-inclusive policies involving all the relevant stakeholders as stated above, the implementation of these policies are still very weak according to Suffian and Suffian (2021) as well as Emir Research as published by The Star in 2022:

"History shows that Malaysia has never been short of policies related to agriculture or food. Ironically, policy abundance has proven insufficient to ensure food security. Past policies have proven inconsistent in terms of self-sufficiency targets and many major food items still rely on import supplementations. Food items with 100% or more self-sufficiency levels still rely on significant external inputs. Policy commitment and implementation remain a central issue, underlined by structural, economic and governance weaknesses."
(The Star, 2022)

Additionally, the focus of previous policies is merely in ensuring that the rice commodity's preparedness that must be adequate, although newer risks are extending beyond that scope. These threats could be in the form of food terrorism where irresponsible parties plan attacks on countries' crops and food chain. The World Health Assembly issued a resolution in 2002 expressing grave concern about hazards to civilians posed by contaminated agents transmitted through food, less than a year after the World Trade Centre terrorist attack. Consequently, WHO released "Terrorist Threats to Food," a blueprint for country members specifically the policymakers focusing on food safety and food terrorism. WHO categorised food safety *"as an essential component of modern, global public health security"* in the foreword, focusing on *"food, food ingredients and water."* Additionally, the document was released by WHO to assist member nations with recommendations on preventing deliberate food contamination. Some of the document's key principles are relevant to unintentional food concerns. Detwiler (2014) discussed that it is vital for those in the sector to understand every aspect of the food supply chain, in order to identify and avoid system breakdowns or breaches which can ultimately lead to food terrorism. The document examined how a single "unintentional contamination" of food or a meal might infect people in hundreds or even thousands with a "severe disabling disease," which further induces the consequences of a more calculated and severe attack on our food supply.

1.2 Problem Statement

Food security has emerged as a critical issue in the 21st century, particularly in the wake of overlapping global crises including pandemics, climate change, geopolitical conflict and economic instability (Azri et al., 2025). In Malaysia, the COVID-19 pandemic revealed significant vulnerabilities in the national food system, particularly in relation to supply chain fragility, reliance on food imports and public anxiety over food availability and affordability (FAO, IFAD, UNICEF, WFP & WHO, 2023). Compounding these challenges is the emergence of a less explored but potentially dangerous threat: food terrorism, defined as the intentional contamination or sabotage of food systems to cause harm, fear or political disruption (WHO, 2002). According to Benguettat (2025), Rusli et al. (2024), Razak et al. (2020) and Karaman (2017), many threats towards food security vary in scale and severity, yet food terrorism stands out as the most severe due to its deliberate, strategic nature and its potential to cause widespread panic, destabilise national food systems and undermine public trust in food safety.

Over the years on the global scale, media role and reporting on food security have evolved from a narrow focus on agricultural productivity challenges to a larger vision that encompasses sustainability, resilience and equity (Kerins et al., 2023; McCluskey et al., 2016; Pereira et al., 2014). In terms of media and food security, Khan (2021) and Kremen and Miles (2012) wrote that food security is primarily discussed in the media in terms of species variety, which promotes growth, stability, ecosystem services and resilience in natural and agricultural ecosystems. Studies by (Frewer et. al., 2002; Marks et. al., 2007; Munene & Kebenei, 2021; Picard & Yeo, 2011; Vilella-Vila & Costa-Font, 2008) have indicated that media reports pose significant impact towards people's perceptions hence showing the essentiality for accurate and unbiased media reporting especially on food security. Likewise, studies on media coverage on food security have also been carried out by Kutyauro et al. (2021), Soroka and Wlezien (2019) as well as Munene and Kebenei (2021) respectively.

As the media serve as primary sources of information for the public on food security issues as opined by Kerins et al. (2023) and Kimenju et al. (2004), it is thus a credible source for educating, informing and raising awareness on how to solve food security issues (Rusli et al., 2024). Isernia and Marcolin (2018) deduced that food security and food crises, genetically modified (GM) food, obesity and to a lesser extent,

the influence of climate change on food sustainability have dominated media coverage of the food issue. The media's chosen solutions to food issues are inextricably linked to the political structure and cultural framework in which they work. Climate change and food security are unrelated in some nations, whereas they are in others.

While Malaysia has implemented policy frameworks such as the National Agrofood Policy (NAP) and the Food Security Policy Action Plan (Azri et al., 2025; Le et al., 2024), little is known about how these strategies are interpreted, operationalised and communicated by two key actors namely media practitioners and public service personnel. These groups serve as critical intermediaries in translating technical policy language into public understanding and action. Their interpretations and communication practices can significantly influence how the public perceives threats to food security, including those stemming from food terrorism. Yet, the current literature lacks empirical insights into how these actors make sense of government policies, frame threats and coordinate their messaging to the public.

Most existing food security studies in Malaysia focus on agricultural productivity, nutritional outcomes or economic dimensions (Ali, 2024; Wong et al., 2024). Despite the fact that these dimensions are vital, they overlook the equally important communicative and interpretive aspects of food security. This creates a gap in understanding how narratives are formed, how risks are constructed and how institutional actors comprehend complex threats that do not fit neatly into one policy domain. Food terrorism, for instance, sits at the intersection of agriculture, national security and public health (Benguettat, 2025), yet there is no uniform definition or shared operational understanding among Malaysian stakeholders. As such, it remains unclear how seriously the threat is regarded or how effectively it is incorporated into existing food security planning and reporting mechanisms.

This ambiguity is compounded by the role of media in shaping public perception. Media coverage, particularly during crises, has the power to frame narratives either in a way that promotes trust and preparedness or fuels fear and misinformation (Entman, 2007). In Malaysia, both state and private media operate under various constraints, including political influence, limited access to accurate data and evolving journalistic norms in the digital age (Weiss, 2014). If media narratives on food security are dominated by episodic, sensationalist or unclear reporting, it may distort public understanding and undermine national strategies. Conversely, if media practitioners are equipped with the necessary tools, training and access to information,

they can enhance food security by promoting accurate awareness, reducing panic and encouraging public cooperation.

Similarly, public service personnel from ministries related to agriculture, health, defence and communication play a vital role in translating policy into implementation (Prasetyo & Prihantoro, 2024). However, they, too may struggle with fragmented understandings of threats towards food security, unclear inter-agency definitions and inconsistent internal communication protocols (Wong et al., 2024). These challenges can hinder coordinated responses, confuse public messaging and weaken overall policy effectiveness. More importantly, the ways in which civil servants define concepts like “food security” or “food terrorism” can significantly shape their operational priorities and engagement with media counterparts.

Prior to the pandemic, Stevens et al. (2020) discussed the public's lack of understanding and awareness regarding the unavailability of food supply as a form of food insecurity. Additionally, the public demonstrated a lack of interest and knowledge regarding food security, as media coverage often utilised overly technical language or simply reported government policies through press releases laden with jargon, failing to present information in accessible terms. Moreover, the onset of the pandemic also introduced a significant complication characterised by a sudden decline in the supply of specific food items, particularly bread and eggs. This situation prompted widespread panic buying, resulting in empty shelves across stores nationwide (Gazali, 2020; New Straits Time, 2020; Omar et al., 2021; Wang & Hao, 2020).

It was only after the meat cartel incident, initially reported by Sinar (2020), prompted subsequent raids by various ministries and government agencies, thereby raising public awareness of threats to food security. This demonstrates the significant role of the two key actors, namely the media personnel in terms reporting, highlighting and disseminating information on food security and its related threats, as well as the public service personnel whom are enforcers and executors of policies. Ssimbwa (2015) asserted that the media plays a significant role in connecting producers, urban consumers, markets, policies and government. Accordingly, this study highlights the importance of exploring the understanding, interpretations and significance of Malaysia's media practitioners and public service personnel in addressing food security and food terrorism during crises.

Malaysia became a member of the World Health Organization (WHO) on April 24, 1958, under the name Malaya. From May 1956 to January 1964, several countries

in South East Asia (ASEAN) including Malaysia, Singapore and Brunei were to consult and report to the WHO Representative Office in Singapore. Later in the year 1964, the office was then relocated to Malaysia specifically in Kuala Lumpur. WHO is the first entity which established a resolution on food terrorism and despite such resolution, research indicates that awareness of food terrorism among Malaysians remains low to moderate, and that the topic has received limited scholarly attention in Malaysia. This is evidenced by a study conducted in the Klang Valley, which assessed respondents' knowledge of food terrorism and found generally low levels of awareness (Khairatun, 2022). It was found that from three hundred and eighty-four (384) questionnaires, responders' awareness on food terrorism activities was quite average. Said study served as a guideline or rather a reference point for future research into a variety of aspects of food terrorism in Malaysia and as such, motivated the researcher to further delve into the topic of food terrorism along with food security to provide recommendations for the media along with the government and thus better prepare the respective governmental ministries and media agencies should such threats or any health crisis and pandemic arrive at our shores.

Truth be told, it did not take long for such crisis to shake the very core of not only Malaysia but also the whole world, when, at the end of year 2019, we came face to face with a serious and contagious disease formerly known as SARS-CoV-2 before being officially named COVID-19. The disease mimics a respiratory infection for which there is no indication that food is a transmission vector (ICMSF, 2020). However, the virus' spread and the actions taken to stop it have had far-reaching consequences for food security, nutrition and food systems (Kakaei et al., 2022). In a number of countries, initial and continued confusion about the nature of COVID-19's dissemination led to the introduction of severe lockdown and physical distance rules. These actions slowed economic growth and disrupted supply chains, triggering new dynamics with cascading impacts on food systems and people's food security and nutrition (Haron & Jalil, 2023; HLPE, 2020). Additionally, the World Bank in October 2021 reported that in 2020-2021, COVID-19 has resulted in a huge increase in the number of people who are food insecure. The United Nations' World Food Program estimates that 272 million people in the countries where it works are food insecure or at danger of becoming so. Acute food insecurity is described as a situation in which a person's life or livelihood is jeopardised due to a shortage of food. Even before the pandemic, hunger was on the

rise, exacerbated by the effects of catastrophic climate events, conflict and other shocks to economic possibilities.

Based on the issues highlighted above, it can be deduced that most of the researches done pertaining to a country's food security stemmed on the discussions and implementations of policy, plan of action including the preparedness to wither threats such as food terrorism (Dardak, 2020; Hassan & Chew, 2021; Koh & Ramasamy, 2021; Suffian & Suffian, 2021). Studies on media and food security, on the other hand, focused mainly on the reporting of agriculture and food insecurity as well as media coverage on food security itself (Kutyauripo et al., 2021; Munene & Kebenei, 2021; Soroka & Wlezien, 2019). The decision to include food terrorism into this research apart from food security is due to the fact that it is not seen as a threat as compared to food insecurity however just as how the pandemic has taken the world by storm, such threats as food terrorism may incur massive disruption towards countries' food security as opined by Razak et al. (2020). To date, the concept of food terrorism remains in a grey zone, evocative but poorly defined in policy and media discourse alike. Without a shared definition or standard operating procedures, both media professionals and public service personnel are left to interpret the concept independently, potentially leading to confusion or miscommunication. If such threats are underplayed, they risk being ignored in planning and communication. If overplayed, they may generate unnecessary public fear or misdirect resources. A better understanding of how these actors conceptualise and respond to the term "food terrorism" is essential to developing more informed, targeted and practical strategies for national food security. This study put emphasis on analysing the components, knowledge, understanding, current approach as well as recommendation for the best course of action to ensuring food security is understood whilst mitigating the threats of food terrorism towards Malaysia all at the same time.

It is worthy to note that based on the literatures of past scholars such as Bellinger and Kattelman (2021) on the issues of both the security and terrorism surrounding food, plenty work and academic research were done to accommodate policies and the implementation of these policies in developed and under developed countries, whereby most of these countries are under the watchful eyes of the United Nations. A developing country like Malaysia however, albeit already equipped with its own policy, framework and enforcement on food security, must be flexible and open for necessary reviews and framework suggestions especially where creating awareness on these policies and

legislations are concerned. That is why it is of utmost importance that a study on leveraging media practitioners and public service personnel understanding and role for enhancing food security and addressing food terrorism in times of health crises as well as the threats towards national security, well-being, safety and security of the citizens is carried out.

Exploratory research on food security, its policies and food terrorism in Malaysia is very limited hence it is very timely for this study be carried out on these issues. This is further supported by Xie (2025) and Le et al. (2024) who concurred that there seems to be a lack of exploration on matters pertaining to the experience and understanding of the media as the entity and anchor behind the dissemination of these policies to the general public. That said, there is a crucial need for a developing country like Malaysia which already possesses an existing food security policy to analyse and review the understanding and experience of the media to gauge whether the reporting of food security and food terrorism by these outlets is effective in creating public awareness and comprehension. Therefore, it is compelling to look into this gap, in order to assist the country to strengthen its national food security policy, but only after making sure that the media narratives and understandings were assessed and explored.

Furthermore, the lack of synergy between media practitioners and public sector actors may result in communication gaps, misaligned narratives and poor preparedness during food-related crises (Sellnow & Seeger, 2021). At present, there is insufficient research investigating how both sectors define, interpret and report on food security and food terrorism in the Malaysian context. There is also a lack of frameworks guiding how media can report on these issues comprehensively and responsibly, particularly in ways that are aligned with national interests without compromising transparency (FAO, 2020; WHO, 2017). This is especially critical in a post-pandemic world, where the convergence of health, environment and security threats demands more coherent and inclusive risk communication strategies (Chu, 2025).

Essentially, this study aims to investigate how Malaysian media practitioners and public service personnel understand, define and communicate issues surrounding food security and food terrorism. By focusing on these two influential groups, this research provides an interdisciplinary analysis that bridges food policy, public administration and communication studies.

1.3 Research Questions

With the problem statement in mind, this research thus aimed to answer these research questions:

- RQ1 What are the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel?
- RQ2 In what ways do media practitioners and public service personnel conceptualise food terrorism as a threat to Malaysia's food security?
- RQ3 How do media practitioners and public service personnel interpret and communicate reports on food security and food terrorism?
- RQ4 How can media practitioners and public service personnel effectively address reports on food security and food terrorism?

1.4 Research Objectives

The main purpose of the research is to study the perspective of media practitioners and public service personnel in food security and food terrorism. In order to answer the research questions above, these specific research objectives were formulated, namely:

- RO1 To explore the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel.
- RO2 To analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security;
- RO3 To understand the interpretations and communication of food security and food terrorism by media practitioners and public service personnel in their reporting;
- RO4 To recommend a model to guide media practitioners and public service personnel in effectively addressing reports on food security and food terrorism.

1.5 Scope and Rationale of the Study

Despite increasing policy attention to food security, there remains limited empirical evidence on how food security and food terrorism are understood, interpreted and communicated by media and institutional actors in Malaysia, resulting in uneven awareness and fragmented narratives. In particular, the deliberate dimension of threats towards food security such as food terrorism has received minimal scholarly and practical attention, leaving gaps in media and institutional communication as well as preparedness. Against this backdrop, the scope of this study delineates the boundaries within which the research was conducted, clarifying its focus and limitations (Kumar, 2012; Simon & Goes, 2013).

This study focused on the understanding, interpretation and communication of food security and food terrorism within the Malaysian context, with particular attention to the roles of media practitioners and public service personnel. The study does not seek to measure public awareness or behavioural outcomes, nor does it evaluate the effectiveness of food security interventions or security responses. To ensure the smooth running of this thesis, the study is confined to Malaysia's institutional and media landscape.

The first phase of the study involved document analysis of five (5) key documents comprising national policies and institutional frameworks as well as international policy manuals and handbooks issued by organisations such as the United Nations (UN), the Food and Agriculture Organization (FAO) and the World Health Organization (WHO). These documents were selected based on their relevance to food security and food terrorism governance. The time frame for the document analysis spans the COVID-19 pandemic period and its immediate aftermath, reflecting a phase of heightened food security vulnerability and risk communication. The second component of the study involved in-depth interviews with media practitioners and public service personnel. Participants were selected using purposive sampling, ensuring that informants met specified criteria, including involvement in food security policy, communication, media reporting or related governance responsibilities. Data collection for interviews was conducted during the pandemic and post-pandemic period, with interviews carried out online.

Methodologically, a qualitative approach was adopted to capture the complexity of meanings, interpretations and professional practices surrounding food security and

food terrorism (Creswell, 2014; Denzin & Lincoln, 2018). The sequential use of document analysis followed by in-depth interviews enabled the study to ground interview inquiry in institutional contexts while allowing participants' lived experiences and professional perspectives to shape the findings. This approach is particularly suitable for exploring under-theorised issues and generating contextually grounded insights (Charmaz, 2015; Kvale, 1994; Patton, 2015). In-depth interviews are an effective tool within qualitative research because they enable the researcher to engage directly with participants, allowing for the flexibility to probe further into topics of interest as they emerge during the conversation (Rubin & Rubin, 2002; Seidman, 2006). This method facilitates a deeper exploration of individual perspectives, providing the opportunity to understand the participants' views in their own words and within their personal contexts (Gubrium & Holstein, 2001).

The rationale for this study stems from the concern that although food security has received increasing policy attention in Malaysia, deliberate threats to food security particularly food terrorism remain poorly understood and insufficiently reflected in communication practices (Khairatun, 2022). Much of the existing literature focuses on food safety, supply chains or agricultural productivity (FAO, 2018), with far less attention given to how media practitioners and public service personnel make sense of, frame and communicate food security alongside intentional threats. By shifting the focus to media practitioners and public service officials, this study addressed a clear empirical and conceptual gap beyond policy texts or public perception alone. With that, the study would hence indulge in Malaysia's food security policies through insights and experiences of participating informants whom are from the relevant government ministries and media institutions.

As this research commenced very much earlier on during the pandemic, circa 2021 to be exact, it is pertinent to mention that many changes have come to fruition with regards to the policy and media landscape, not forgetting the end of the COVID-19 pandemic, as the endemic was announced by the Malaysian government in April of 2022. Thus, it very much obliged to note that measures were taken to ensure that this study stays relevant despite the aforementioned circumstances. This includes safeguarding the findings and warranting that the data collected complied with the current situation and constantly updated for relevance purposes.

1.6 Significance of Study

The COVID-19 pandemic, which severely impacted Malaysia between 2020 and 2022, exposed significant vulnerabilities within the nation's food system, highlighting the urgent need for more strategic and effective communication regarding food security. In this context, the media plays a crucial role not only in disseminating information but also in shaping public perception, fostering resilience and safeguarding national security. It is therefore pertinent to examine the approaches, elements and strategies used by the media in food security reporting, particularly during periods of national crisis, to ensure alignment with broader national security and development agenda (Chee et al., 2022; Hazri, 2022).

This research is significant in its contribution to enhancing the understanding of food security policies, especially in the face of non-traditional threats such as food terrorism. For policymakers, this study aims to provide empirical insights into the communication and perception of food security policies and related risks, notably during national crises. By means of highlighting the role of media–government synergy, the findings support efforts to strengthen public trust, improve risk communication and align food security reporting. The study offers guidance supported by research evidence to enhance policy implementation and preparedness. Drawing on insights into the perceptions and practices of both media practitioners and public service personnel, this study seeks to strengthen the implementation of food security policies to ensure more stable and sustained food access for the population.

From a practical perspective, this study contributes to improving professional communication practices among media practitioners and public service personnel. The study identifies the influence of media reporting on public understanding and awareness of food security issues during crises. It highlights the role of mainstream media in engaging with government agencies and the public, especially in post pandemic era and emerging threat scenarios such as food terrorism (Jolls, 2022). The findings further underscore the evolving role of the media beyond information dissemination towards agenda-setting, crisis communication and the shaping of public discourse (Kerins et al., 2023; McCluskey & Swinnen, 2011).

The study also contributes theoretically by extending the application of established communication theories within the context of human security. By integrating agenda-setting, framing and social capital theories with food security and

food crime models, the research advances a conceptual understanding of how institutional communication operates in relation to complex and underexplored security challenges. This theoretical integration demonstrates how communication theories can be adapted to examine non-traditional security issues, thereby enriching scholarly discourse in media and communication studies while offering a framework for analysing institutional sense-making and trust-building processes (Kerins et al., 2023).

In terms of knowledge contribution, this study addresses a clear empirical and conceptual gap by focusing on institutional understandings of food security and food terrorism rather than policy texts or public perceptions alone. It contributes original perspectives into the Malaysian setting, where deliberate threats on food remain under-researched.

Ultimately, this research aspires to fill a gap in both scholarship and practice by proposing a model that can enhance public communication on food security and food terrorism, contributing to better preparedness, resilience and national stability while offering a foundation for future research on food security, communication and human security (Isernia & Marcolin, 2018). It is hoped that these findings will assist in formulating communication strategies that are not only informative but also empowering for both the public and institutions alike.

1.7 Thesis Structure

This thesis will be divided into sections; first, the statement of problem together with the objectives and scope of the research will be developed accordingly; second, relevant literatures of past studies are discussed as these serve as the foundation to this particular research; thirdly, the methodology used in this study to guide this study in determining the right method of analysis of findings. Next, the findings from this research will be analysed to examine the understanding of food security and food terrorism among media practitioners and public service personnel, including their perspectives on policy, elements and related approaches. Finally, discussion and recommendations of the findings will be followed by a section with concluding remarks on food security, threats of food terrorism and the relevance of the country's current policies.

For the research design, it was decided that this study should opt for document analysis on Malaysia's food security policy along with relevant documents published

by the United Nations on food security and food terrorism to better supplement whilst adding value to this research. Consecutively, the researcher then utilised in-depth interviews as a method to gather data from interviewees namely food security and food terrorism experts attached to relevant government ministries and agencies, mainstream media journalists along with practitioners all of whom have contributed to the completion of this research.

The use of in-depth interviews helped to uncover detailed information about the participants' experiences and beliefs, which is essential for understanding the complex, multifaceted nature of the research topic (Creswell & Creswell, 2018). Furthermore, the qualitative approach facilitated a more empathetic and personalised interaction with participants, fostering an environment of trust that encouraged openness and honesty in their responses (DiCicco-Bloom & Crabtree, 2006). This methodological choice was pivotal in achieving the research objective of capturing the depth and diversity of the participants' perspectives, thereby providing a robust foundation for the study's findings and conclusions (Patton, 2015).

Rutledge and Hogg (2020) opined that an interview is an important qualitative research method in which the study collects data directly from the informants. Interviews are significant in unfolding opinions, experiences, values and various other aspects of the population under study. Interviews are always goal oriented. With a purpose to extract the desired information from a respondent, an interview may be conducted at numerous settings. With the advent of technology, we have witnessed an increase in the number of methods through which an interview can be conducted. Unlike earlier, now, an interview is not mandatory a meeting. It can be conducted over phone or Zoom or Google through various other forms of the internet and telephone without physical presence. Such practise is much more prevalent during COVID19's worldwide lockdown which required everyone to study and work from home.

By using in-depth interviews, the informants were required to share their opinion and thoughts in detail. Therefore, the respondents were selected based on purposive sampling since they were required to match some certain criteria required for this study as explained in Chapter Three. As an exploratory study, other characteristics were not taken into consideration as the objective of this study was to understand the perception of the selected key actors on food security and food terrorism. The outcome and discussions of the document analysis and in-depth interviews will be discussed in

Chapter Four while the conclusion as well as recommendations will follow suit in Chapter Five.

1.8 Chapter Summary

Chapter 1 of this study has discussed on the fundamental requirements of a research whereby the background of the study as well as the problem statement were discussed to answer the four (4) research questions in order to achieve the four (4) research objectives. The scope and significance of the study were also elaborated to allow the readers to gain an insight on the gist of the research followed by the definition of important terms and the thesis structure.

The study seeks to provide an in-depth exploration on the understanding of the media practitioners and public service personnel in terms of both food security and food terrorism. What all began as a health crisis has led up to the disruption of lives and all the dimensions of human security, with food being among those most affected. Without the strong presence and understanding of the media and the public service representing the government, public were put in unrest especially when all were ordered to stay at home during the lockdown. The people relied mostly on media reporting and news to obtain first-hand information from the government via the local media.

Essentially, it is fundamental to explore the understanding and perspectives of the media practitioners and public personnel especially when it comes to reporting on issues concerning food security and food terrorism during a crisis such as the COVID-19 pandemic. The outcome of this can be beneficial for all stakeholders, namely the media and the government. To do so, we must firstly understand the various forms and functions of the media, where it stands in how government policies and approaches are disseminated and implemented. It is also crucial to discover the elements and structure of both food security and food terrorism to seek for ways to link all the three (3) entities symbiotically. Hence, in the next chapter, the study would discuss related and past literatures carried out by other researchers based on which the conceptual frameworks will be established.

CHAPTER 2

LITERATURE REVIEW

2.1 Chapter Introduction

This chapter presents an evaluative analysis of the current literature on media, the public service, food security and food terrorism. The purpose of this chapter is to provide a foundation and context for the research, as well as to outline existing knowledge that is relevant to the research objectives. The current developments in these entities are limited to the time of the COVID-19 pandemic and endemic, hence this review covers those developments along with theories and frameworks intended to guide this study. A summary of the research questions, aims and relevance to this study is presented here after the review of the relevant literature has been completed.

2.2 Conceptual Definitions

To improve the degree of comprehension and the focus of the study, it is crucial for this study to comprehend the terminology and concepts that are frequently used in it. As a result, the concepts and themes that will be employed in this study are further explained in this section. Each theme's descriptions are taken from pertinent, prior studies that have a background similar to the one of this study and they are combined with this study's conclusions and comprehension of the subject.

Conceptual definitions provide a clear and precise explanation of a term or concept, outlining its fundamental attributes and the context in which it is used. These definitions help establish a common understanding among researchers, practitioners and stakeholders by clarifying what a term means within a specific framework or discipline (Bachman & Schutt, 2014). For instance, in social sciences, a conceptual definition might define "social capital" not just as resources but as the networks and relationships that enable individuals to access support and opportunities (Putnam, 2000).

Conceptual definitions are essential for guiding research and ensuring that all parties have a mutual understanding of the key concepts being discussed. They distinguish between different types of definitions, such as operational definitions, which

specify how a concept will be measured in practice (Trochim, 2007). By providing clarity, conceptual definitions facilitate effective communication and analysis, allowing researchers to build on one another's work without ambiguity (Denzin & Lincoln, 2018). In summary, conceptual definitions serve as foundational elements in academic discourse, establishing a clear understanding of key terms and concepts necessary for rigorous analysis and discussion.

2.2.1 Definition of Terms

a) Media

For the purpose of this research, media here can be understood as the collective term for individuals and organisations engaged in the creation, distribution and analysis of information across various channels, including journalism, broadcasting and digital platforms (Zayani, 2021). This encompasses professionals such as journalists, editors and producers, who are essential in shaping narratives and informing the public (McQuail, 2010). Their roles are vital for fostering informed citizenship and ensuring transparency in society, as they not only deliver news but also serve as critical observers of power dynamics (Harcup & O'Neill, 2017). The work of these media practitioners not only informs the public but also serves as a watchdog, holding power to account and facilitating democratic engagement (Karadimitriou et al., 2022). Generally, the term media refers basically to both mass media and social media as both have become intertwined in the days and age of technological advancement (Dwivedi et al., 2021). According to the Oxford Dictionary, mass media refers to sources of information and news such as newspapers, television, radio and the internet, that reach and influence large numbers of people (Oxford University Press, 2023). On the other hand, websites and programs that let users generate and share content or take part in social networking are referred to as social media. It is a type of electronic communication in which people create online communities to exchange information, thoughts, private messages and media assets. Examples include social networking websites, microblogging services, video-sharing websites, blog software and many others (Olawuyi & Mgbole, 2012). The term "social media" was coined by Khan (2017) to describe a user-friendly Internet-based platform that enables users to generate and exchange content in a many-to-many environment, including knowledge, opinions, interests and engagement. Social media,

which is derived from Web 2.0, is defined as Internet-based technologies, tools or concepts that allow for the creation and exchange of user-generated content while enabling users to establish connectivity, identity, relationships, conversations and interactions as well as the sharing of information and content in a many-to-many context (Khan, 2017). In recent times, scholars namely Albadri (2023), Lull (2000) and Newman et al. (2020) all agreed on media being a spectrum set of communication technologies and practices, including both traditional and digital formats that enable the creation, transmission, dissemination, reception and consummation of content across multiple platforms, shaping cultural and social interactions.

b) Public Service

Public service in Malaysia refers to the various services and functions provided by government agencies to meet the needs of the population, ensuring the welfare and development of society (Mohamad et al., 2024). It encompasses a broad range of activities aimed at delivering essential services such as healthcare, education, infrastructure and social welfare. The Malaysian government emphasizes the importance of public service as a means to achieve national development goals and enhance the quality of life for its citizens (World Bank, 2021). In the Malaysian context, public service is guided by principles of efficiency, accountability and transparency. The Public Service Commission of Malaysia plays a critical role in recruitment and oversight, ensuring that civil servants are qualified and capable of delivering effective services (Public Service Commission of Malaysia, 2020). Additionally, the Malaysian government has implemented various reforms to improve public sector performance, including the introduction of performance management systems and citizen feedback mechanisms to enhance service delivery (Mohamed & Ibrahim, 2019). Moreover, public service in Malaysia is influenced by the country's unique socio-political landscape. The government promotes a model of public service that is inclusive and equitable, aiming to address the diverse needs of its multi-ethnic population. This approach is evident in policies designed to provide equal access to services and resources for all citizens, regardless of their background. The commitment to public service is further reflected in Malaysia's Vision 2020 and subsequent development plans, which emphasize the role of public service in achieving socio-economic growth and sustainable development (Economic Planning Unit, 2015). Despite the progress,

challenges remain in the Malaysian public service sector. Issues such as bureaucratic inefficiencies, corruption and the need for ongoing training and development of public servants persist. Addressing these challenges is crucial for enhancing the effectiveness of public service delivery and maintaining public trust (Mahusin et al., 2024). Overall, the definition and execution of public service in Malaysia are dynamic, shaped by ongoing reforms and the evolving needs of its citizens, aiming to create a responsive and responsible government that prioritises the welfare of the population.

c) Food Security

According to Merriam-Webster, the definition of food security stems from the phrase food secure, where the U.S. Department of Agriculture (USDA) defines as access at all times by all people within a household to enough food for an active, healthy life (Merriam-Webster, n.d.). "Food insecurity," on the other hand, occurs when a household's consistent access to adequate food is limited by a lack of money and other resources at times during the year. For the purpose of this research, with the scope being in Malaysia, the angle and definition of food security must be confined to the definition brought forth by the United Nations as the body that governs the realm of Human Security. As such, as presented in the previous chapter, food security shall then be defined as, all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their food preferences and dietary needs for an active and healthy life (FAO, 1996).

d) Food Terrorism

Although the term food terrorism has been around for over two decades now, where it was firstly coined by the Food Safety Department of World Health Organization, it is sufficed to say that there has not been a latest or new definition for food terrorism in recent years. Food terrorism is defined as an act or threat of deliberate contamination of food for human consumption with chemical, biological or nuclear agents for the purpose of causing injury or death to civilian populations and/or disrupting social, economic or political stability (WHO, 2002). The chemical agents in question are man-made or natural toxins and the biological agents referred to are communicably infectious or non-infectious pathogenic microorganisms, including

viruses, bacteria and parasites. Nuclear agents are defined in this context as radioactive chemicals capable of causing injury when present at unacceptable levels. Looking at such definition may bring to the notion of how foreign food terrorism is to Malaysia and Malaysians in general as such catastrophic events involving the act or threat of intentional contamination of food with chemical, biological or nuclear agents for the purpose of causing injury or death to civilian populations and/or disrupting social, economic or political stability have never happened here.

e) COVID-19

The Merriam-Webster dictionary defines COVID-19 as a mild to severe respiratory illness that is caused by a coronavirus (Severe Acute Respiratory Syndrome Coronavirus 2 of the Genus Betacoronavirus), is primarily transmitted by contact with infectious material (such as respiratory droplets) or with objects or surfaces that have been exposed to the causative virus (Merriam-Webster, n.d.). This illness is characterised in particular by fever, coughing and shortness of breath and can progress to pneumonia and respiratory failure.

2.3 Role and Functions of Media

Baran and Davis (2021) posited that media used to refer to both traditional media outlets (Press, Radio & TV) and modern communication and technology platforms (Mobile Phones, Social media platforms like Twitter, Facebook, Instagram, WhatsApp and YouTube) in the contemporary information era. The traditional roles of media are to provide information about the external environment at local, regional and international levels, guide individuals in the proper direction and offer wholesome entertainment.

Technological advancements have significantly changed the public's expectations of the media sector. Technological advancements have increased access to live and on-demand coverage (Siles & Boczkowski, 2012). Audiences are now accessing information and news via various devices and platforms in different formats, not limited to only television (Napoli, 2011). The challenges posed by mass media are hard to underestimate since the media is responsible for producing diverse types of material (Dourish & Mazmanian, 2013). Media content must be intentionally designed

to be consumed in varying ways depending on the viewer's device. Content that is effective in one medium, such as long-form for television or Netflix, may not be as successful on mobile or social platforms where users prefer shorter, more easily consumable content (Jenkins, 2008). It is essential to become mobile and social-friendly in order to remain competitive and have a high viewership.

Furthermore, the public today anticipates continuous news coverage and real-time updates from the news media. Media outlets must offer 24/7 coverage and have skilled individuals staff the news desk continuously (Meikle & Young, 2012). The media is responsible for delivering crucial news, analysis and entertainment content to audiences efficiently, which poses several obstacles for media workers. There is ongoing debate among the public over which news sources to trust, leading to a competition between public and commercial media outlets (Andersen et al., 2023). Public media typically aligns with the state, while privately held media supports citizens and actively engages in changing public opinion. Private and public media sources have converged in distribution, production and print due to economic challenges, resulting in a shared cost arrangement (Barnett, 2013). This convergence has led to a reduction in the diversity of voices typically seen in press systems. This has reduced the quantity of autonomous and competing participants in the market (Wellbrock et al., 2020).

Public media has been employed for state propaganda, frequently seeking to suppress dissenting ideas by omitting them and delivering biased coverage in shaping perceptions (McChesney, 2015). This has resulted in considerable public animosity towards private media, which is frequently regarded as unbiased (Curran, 2011). During periods of low political knowledge, voters tend to have more faith in official media when they hold illiberal sentiments and favour the incumbent. This occurs when policies and discussions are not primarily focused on power, which can greatly pique the state's attention.

Private media is lauded for disseminating trivial content that diverts viewers' attention with non-essential subjects, including live broadcasts, entertainment programs and sponsored advertisements that favour sponsors' interests over the public, as they are significantly dependent on sponsorship revenue (Bagdikian, 2004). This has created a deficit in vital sectors such as agriculture, education and business, which are crucial for the nation's advancement. This has resulted in the people relying on media for educational content that enables them to enhance their life (McQuail, 2010). Private media corporations favour sponsored programming over unsponsored content due to

their profit-oriented strategy (Herman & Chomsky, 2002). The impact of media depends on two factors: the government's capacity for mobilisation and the magnitude of the advertising market. Media bias is particularly evident in instances of state-owned media and a substantial demand for social mobilisation (Djankov et al., 2003).

Conversely, a significant advertising market diminishes media bias in state and private media, however it heightens the government's motivation to nationalize the media (Gehlbach & Sonin, 2011). The ambition of private media to secure advertising sponsorship from government and private firms has led to a "puppet situation" where misconduct is not revealed for fear of losing out on advertising revenue that sustains private media. This has ultimately hindered private press from effectively fulfilling their watchdog responsibilities and verifying the policy processes of both government and private enterprises.

Consequently, the public now relies on online channels, particularly bloggers, for trustworthy and timely information, including breaking news. Social media has altered past media policy planning and implementation trends due to restricted capacity for exploring a wider range of channels, evolving technology trends and reduced government control (Alodat et al., 2023). Private media companies have insurmountable obstacles because they must earn the trust of the public to be effective and lucrative, fostering a democratic environment, which is not always the case in developing nations. This has significantly led to the westernisation of programming on certain channels, with the goal of broadcasting and distributing foreign content as a result of aid with conditions and influence from foreign powers to serve their own goals (Magu, 2015).

2.4 Media Personnel: The Architects of Narrative, Shaping Perceptions and Bridging the Gap Between Truth and Public Consciousness

Media personnel play a crucial role in contemporary society, acting as intermediaries between information and the public (Zhang & Sahli, 2024). According to Kovach and Rosenstiel (2014), the primary purpose of journalism is "to provide citizens with the information they need to be free and self-governing." Thus, media personnel serve as the eyes and ears of the public, ensuring transparency and accountability in society. Their responsibilities encompass various functions, from reporting news to shaping public opinion. Possessing multifaceted roles and

responsibilities of media personnel, their ethical obligations, impact on democracy and the challenges they face in an evolving media landscape are often highlighted. At the core of media personnel's responsibilities is the dissemination of information. Journalists and reporters are tasked with gathering, verifying and presenting news stories to the public. This role is essential for keeping citizens informed about local, national and global events.

Investigative journalism is another critical role performed by media personnel. This involves in-depth reporting that uncovers hidden truths, often regarding corruption, injustice or abuse of power. Investigative journalists, like those involved in the Watergate scandal, have historically played a vital role in holding powerful entities accountable (Baker, 2002). The responsibility of investigating and exposing wrongdoing underpins the integrity of democratic institutions. Media personnel also have a significant influence on public opinion. Through the selection and framing of news stories, they shape how issues are perceived by the audience. According to McCombs and Shaw (1972), the agenda-setting theory posits that media does not tell us what to think, but rather what to think about. This role requires media personnel to exercise discretion and responsibility, as their choices can profoundly affect societal attitudes and beliefs.

Beyond merely reporting news, media personnel facilitate public discourse by providing platforms for diverse voices. Talk shows, opinion pieces and editorial sections in newspapers encourage discussion on various topics, fostering a more engaged and informed citizen. This role is vital for democracy, as it allows for multiple perspectives to be heard, ultimately enriching public debate (Papacharissi, 2002). Media personnel also play a crucial role in cultural representation. They have the power to amplify marginalised voices and reflect diverse experiences in society. As media representation can shape societal perceptions and identities, it is imperative for media personnel to approach this responsibility with sensitivity and inclusiveness (Hall, 1997).

Media personnel are bound by ethical standards that guide their reporting and interactions with the public. Adherence to principles such as accuracy, fairness and independence is essential for maintaining credibility. The Society of Professional Journalists (SPJ) emphasizes the importance of seeking truth and reporting it, minimising harm and acting independently (SPJ, 2023). Ethical lapses can lead to misinformation, eroding public trust in the media. One of the fundamental responsibilities of media personnel is ensuring the accuracy of the information they

report. This requires rigorous fact-checking and verification processes to avoid the spread of misinformation. In an age where “fake news” proliferates, the responsibility to uphold journalistic integrity has never been more critical (Lewandowsky et al., 2017).

Transparency is another essential responsibility of media personnel. Being open about sources, methods and potential conflicts of interest fosters trust with the audience. When journalists disclose their sources or explain their reporting process, it not only enhances credibility but also empowers the audience to critically evaluate the information presented (Dahlgren, 2005). Media personnel must hold themselves accountable for their work. This involves not only correcting errors promptly but also being receptive to public criticism. Accountability mechanisms, such as ombudsmen and audience feedback can enhance the quality of journalism and reinforce trust between media personnel and the public (Gans, 2004). With the rapid evolution of technology and media consumption habits, media personnel must adapt to new platforms and formats. The rise of social media, for example, has transformed how news is reported and consumed. Media personnel are now tasked with understanding digital literacy, audience engagement and the implications of algorithms on information dissemination (Hermida, 2010). Embracing these changes is crucial for staying relevant in the industry.

One of the most significant challenges faced by media personnel is the threat to press freedom. In many parts of the world, journalists face censorship, harassment and violence for their work. According to the Committee to Protect Journalists (CPJ), there were over 200 journalists imprisoned worldwide in 2022, highlighting the ongoing dangers they encounter (CPJ, 2022). Such environments not only hinder the ability to report freely but also pose a significant threat to democracy. The rise of misinformation and disinformation presents another challenge for media personnel. The internet has made it easier for false information to spread rapidly, complicating the task of delivering accurate news. Media personnel must not only combat misinformation but also educate the public on critical thinking and media literacy to navigate the complex information landscape (Lewandowsky et al., 2017). Economic pressures have also impacted media organisations, leading to layoffs and reduced resources for investigative journalism. As advertising revenues decline, many media outlets are forced to prioritise sensationalist content that attracts clicks over substantive reporting. This trend can undermine the quality of journalism and limit the scope of public discourse (McChesney, 2015).

The shift to digital media has disrupted traditional business models, challenging media personnel to innovate. Adapting to new technologies, such as podcasts and social media platforms, requires ongoing training and flexibility. As consumers increasingly turn to alternative sources for news, media personnel must find ways to engage and retain their audience (Carlson & Lewis, 2015). Finally, media personnel frequently face ethical dilemmas in their work. Balancing the public's right to know with potential harm to individuals or communities can be challenging. Journalists must navigate sensitive topics, such as reporting on crime or mental health, while maintaining their ethical obligations to minimize harm (O' Brien, 2021). In summary, media personnel play a vital role in society, serving as informers, watchdogs and facilitators of public discourse (Birkland, 2019). Their responsibilities are extensive, ranging from ensuring accuracy and transparency to combating misinformation and adapting to digital changes. Despite the significant challenges they face, including threats to press freedom and economic pressures, media personnel must uphold their ethical standards and commitment to the public. As society continues to evolve, so too must the roles and responsibilities of those tasked with informing and engaging the public.

2.5 Media and Policy Formulation

The impact of media on the formulation of national policy processes is unequivocal. The media, referred to as the 'fourth estate,' functions as a watchdog for the public by offering a critical analysis of governmental acts (Schultz, 1998). Media, regardless of whether public or private, does not consistently operate in good faith towards the public. This presents a quandary for the public regarding which news source to believe (McQuail, 2010). Technology has profoundly transformed news consumption by offering online social media platforms, hence rendering traditional media obsolete in the digital era (Pavlik, 2001).

The media serves as a powerful tool for shaping governmental decisions and fostering a democratic society. Despite its lack of decision-making authority, it exerts considerable influence on public policy objectives (Cook, 2012). The mass media plays a vital role in influencing public policies by providing government officials and policymakers with essential information and insights into public sentiment through the dissemination of public opinion (Soroka, 2002). The media emphasises and distributes several public issues, encouraging citizens to express their views. This assists

policymakers in incorporating public concerns into the policy framework to enhance the quality of the final draft (OECD, 2020).

The media acts as a watchdog over government operations by monitoring policy implementation to ensure accountability, transparency, awareness, sensitisation and communication (Coronel, 2010). This aids in uncovering unethical practices such as corruption and monitoring government effectiveness, ultimately fostering national progress (Norris, 2006). Mass media efficiently mobilizes people on public concerns such as health, education and the economic environment by encouraging public engagement in addressing difficulties and shaping public opinion to influence effective public policy (McCombs & Shaw, 1972). The policy development process according to Howlett et al. (2009) consists of five (5) stages:

- i. Agenda-setting
- ii. Formulation
- iii. Legitimation and acceptance
- iv. Implementation
- v. Evaluation

The media can put pressure on policy formulation, leading to some policies being recalled before being presented in parliament, as reported by Katsigaire et al. (2023). The media plays a crucial role in the policy cycle by informing and persuading a large audience. However, it can sometimes exaggerate facts and show bias towards either the government or the public, leading to conflicts among different stakeholders (Dunlop, 2009). Olper and Swinnen (2013) discussed that traditional media's limited reach and delayed dissemination have been overtaken by social media, which spreads information rapidly worldwide. However, social media is difficult to regulate due to lack of professionalism, leading to increased dissemination of fake or distorted news. The media has a significant ability to directly influence political elites and policy makers since public opinion is greatly impacted by exposure to both elites and media coverage. Media discourses influence policy matters, creating a reciprocal interaction between political elites and policy makers (Wlezien & Soroka, 2023).

The press in developing nations has evolved during government efforts to advocate for a cooperative role in nation building and development, as well as to act as

a catalyst for social and political change. The press is seen as a crucial institution that focuses on educating rather than entertaining, promoting social stability above racial harmony and contributing to economic development and nation-building (Katsigaire et al., 2023).

2.6 Public Service in Malaysia – A Pillar in National Development

The public service sector in Malaysia plays an essential role in facilitating national development, ensuring governance and enabling the delivery of key services to the population (Mohamad et al., 2024). It serves as the backbone of Malaysia's progress, implementing policies and programs that impact crucial areas such as healthcare, education, infrastructure and security (Ismail, 2011). The development of Malaysia's public service can be traced back to the British colonial administration. After Malaysia gained independence in 1957, the system was retained but adapted to fit the nation's needs, reflecting the growth and demands of a newly sovereign state. Over time, the sector has expanded and reformed to match national development objectives (Güner, 2022). The Malaysian public service is structured under the Federal Constitution, which delineates the roles and responsibilities of various government bodies. The public service is divided into federal and state levels, with the Public Service Commission (PSC) overseeing recruitment and management. The civil service includes several key ministries and agencies responsible for delivering essential services such as health, education, infrastructure and security (Yaakob et al., 2012).

The public service sector is essential in executing government policies, particularly in areas crucial to national growth like infrastructure and social welfare. Ministries and government bodies act as the vehicle to transform political decisions into actionable programs (Ismail, 2011). Malaysia's public service oversees education, healthcare and vocational training, which are key areas in developing the country's human capital. The provision of these services ensures the development of a skilled workforce capable of competing in the global market (World Bank, 2019). Public servants are central to economic planning, budgeting and regulation of industries, ensuring that Malaysia's economic policies are well managed. Government agencies are responsible for public infrastructure development, which is critical for economic growth. Infrastructure projects, such as road networks and public transportation, not only enhance connectivity but also contribute to regional and national economic

progress (Azam & Bakar, 2017). Public service programs in Malaysia focus on improving the quality of life for all citizens. Welfare programs, healthcare services and rural development initiatives help ensure inclusive and equitable growth across various population segments (Khor et al., 2024).

Malaysia has continually implemented reforms in its public service to respond to challenges such as globalisation and the evolving needs of a growing population. One of the key reforms has been the move toward digital governance, under the e-Government initiative, which seeks to improve the efficiency of public service delivery (Siddiquee & Mohamed, 2010). Various programs have been introduced to upskill civil servants, focusing on leadership, ethics and technological innovation (Gowrie et al., 2020). The Malaysian government increasingly relies on PPPs for large infrastructure projects, drawing on private sector expertise while retaining public oversight to ensure national development goals are met (Deep et al., 2019).

While the public service sector plays a significant role, it also faces several challenges such as bureaucracy and red tape where bureaucratic inefficiency and delays are common criticisms of Malaysia's civil service. Calls for streamlining processes have become more urgent as the country aims to create a more agile governance system (Economic Planning Unit, 2019). Corruption within the public service continues to pose a challenge, particularly in procurement processes. The Malaysian Anti-Corruption Commission (MACC) has made strides toward improving transparency (Mahmud & Mohamed, 2023). Serving Malaysia's diverse population, which includes rural and urban communities, is a constant challenge for the public service. Ensuring equitable access to public services across different regions remains a key priority (UNDP, 2016).

Furthermore, in response to these challenges, the Malaysian government has initiated several reforms aimed at improving public service delivery. Siddiquee (2014) elaborated on the Government Transformation Programme (GTP) launched in 2009 aimed to enhance efficiency and effectiveness across public sectors. This program focused on key performance indicators (KPIs) to measure outcomes and ensure accountability. Digital transformation has also been a significant focus. The Malaysian government has embraced technology to improve service delivery, exemplified by initiatives like MyGovernment, which provides a single online platform for accessing government services (Bakar et al., 2015). This digital shift not only enhances accessibility but also streamlines processes, reducing bureaucratic delays. Moreover, public service integrity is being prioritised through the establishment of various anti-

corruption agencies, such as the Malaysian Anti-Corruption Commission (MACC). The MACC's role is pivotal in fostering a culture of transparency and accountability within public institutions (Manan et al., 2023).

Malaysia's public service sector stands as a pillar of national development. As it continues to evolve through reforms, digitalisation and public-private collaborations, the sector's ability to meet the country's long-term goals will be strengthened. The continuous improvement of Malaysia's public service sector ensures its pivotal role in realising the nation's development vision for the future. Moreover, as Malaysia continues to evolve, the resilience and adaptability of its public service will be crucial in addressing emerging challenges and ensuring that all Malaysians can enjoy a higher quality of life. Strengthening public service not only enhances governance but also builds trust and fosters a sense of community, laying the groundwork for a prosperous future.

2.7 Synergy of Malaysian Public Service and Media

The interplay between public service and media in Malaysia is pivotal for promoting transparency, accountability and citizen engagement (Vraga et al., 2012). This relationship is characterised by mutual influence and collaboration, with both sectors aiming to enhance governance and public welfare (Ismail, 2013). Understanding this dynamic is essential for addressing contemporary challenges and improving service delivery. The relationship between the public service and media in Malaysia is both complex and influential. Hamzah (2009) concurred that the media serves as a bridge between the government and the public, shaping public perception of government policies and actions while providing the government with feedback from society. In Malaysia, the media's role in disseminating information about the public service is essential for fostering transparency, accountability and public trust (Musa & Muhammad, 2019).

Malaysians are increasingly demanding transparent governance and accountability from public service officials. Tan et al. (2021) highlighted that clear and effective communication by public service agencies plays a key role in building trust and keeping the public well-informed about policies and services. The media serves a vital function and is very much essential in keeping the public informed about government policies, programs and services (ISPP, 2024). In Malaysia, this role is

crucial in reaching out to a diverse population spread across urban and rural areas. Happer and Philo (2013) emphasised the critical role of the media in reaching diverse populations across both urban and rural areas. By disseminating information widely, the media ensures that individuals, regardless of their geographic location, remain informed about government policies and services. Additionally, Ismail et al. (2017) highlighted the significance of investigative journalism in exposing inefficiencies, corruption and other forms of misconduct within the public sector. This investigative function aligns with the public's growing demand for transparency and accountability in governance. As a watchdog, the media plays a pivotal role in holding public service agencies accountable for their actions and decisions (Ismail, 2013).

However, the relationship between the Malaysian public service and the media is often characterised by substantial government influence and control over media outlets (Kow & Khoo, 2023). Historically, the Malaysian government has exercised strict regulation over the press through ownership structures and licensing laws, thereby restricting the media's capacity to freely criticize government actions (Gomes, 2004; Sani, 2005). Although recent reforms have been introduced to promote greater press freedom, concerns regarding media independence persist. Kow and Khoo (2023) argued that Malaysian media is often perceived as biased, with certain outlets being overly favourable towards the government, while others adopt a more critical stance. This uneven coverage creates public scepticism regarding the objectivity and reliability of media reporting on government policies and public service performance.

The advent of social media has added a new dimension to the dynamic between the public service and the media (Karakiza, 2015; Mahajan-Cusack, 2016). Unlike traditional media, social media platforms provide an unregulated space where information is rapidly disseminated, often bypassing conventional media gatekeepers (Arjomand, 2021; Min, 2023). While this has fostered greater diversity of opinions and facilitated more critical public discourse on public service matters, it has also introduced challenges in curbing the spread of misinformation and disinformation (Firdaus et al., 2024). Recognising the influence of social media, government agencies have increasingly turned to these platforms to communicate directly with the public, thereby reducing their reliance on traditional media channels (Albert & Gisip, 2021).

The Malaysian government actively engages with the media to promote its public service programs. Through official media campaigns, the government ensures that key information about initiatives such as healthcare, economic assistance and

education reforms reaches the public. This partnership helps to build public awareness and support for government policies. Public service agencies in Malaysia regularly hold press conferences and briefings to keep the media informed about new policies, achievements and challenges. These briefings serve as a platform for the government to communicate directly with the public, providing clarity and addressing any concerns. Government agencies are increasingly leveraging social media platforms to communicate directly with the public (Lasi & Basiran, 2021). This approach enables real-time interaction and allows public service announcements to reach a broader audience, especially among younger Malaysians.

Ultimately, the interaction between the Malaysian public service and the media is fundamental to national governance and public engagement (Musa & Muhammad, 2019). While the media serves as a conduit for information dissemination and a mechanism for holding the government accountable, challenges such as government control, perceived bias and the complexities of the social media landscape continue to shape this relationship. Establishing a balanced and transparent media-public service relationship is essential for promoting public trust, enhancing service delivery and strengthening governance in Malaysia.

2.8 Human Security and Human Development Conception

Taking into consideration that food security is a part of human security; this study must therefore firstly engage on the meaning of human security in accordance to the United Nations General Assembly (UNGA) resolution 66/290. Known as an approach to assist Member States in identifying and addressing widespread and cross-cutting challenges to the survival, livelihood and dignity of their people advocating people-centred, comprehensive, context-specific and prevention-oriented responses that strengthen the protection and empowerment of all people. Such approach deviates from the traditional state security which were mainly military and anarchic in nature. The paradigm of human security includes freedom from fear, freedom from want and freedom to live with dignity supporting the seven (7) dimensions of human security namely economic, political, personal, community, environment, food and health securities respectively. The summarisation of the paradigm denotes the basic structure of the existence of the United Nations, an organisation that promotes sovereignty and peace.

Human security literature dates back to the United Nations Development Programme's (UNDP) publication of the "Human Security Framework" in 1994. There are seven dimensions within the Human Security framework namely, environmental, economic, health, personal, community, political and food security. This concept is the brainchild of Haq (1995). This pioneer founder of human security provided five (5) radical steps to achieve human security which includes a human development conception with emphasis on equity, sustainability and grassroots participation; a peace dividend to underwrite the broader agenda of human security; a new partnership between North and South based on "justice, not charity" which emphasizes "equitable access to global market opportunities" and economic restructuring; a new framework of global governance built on reform of international institutions such as the IMF, World Bank and United Nations; and finally, a growing role for global civil society.

Additionally, human security has undergone years of reviewed conceptual definition and expansion but many scholars such as (Ramli et. al., 2012; Menon, 2007) agreed upon human security based on Amartya Sen's development theory, entitled "Why Human Security?" written extensively in 2000 at a 'Symposium on Human Security' in Japan. The United Nations Development Programme (UNDP) promoted "human security" as a new solution to human development concerns based upon this writing. Sen cited a number of risks to sustainable development, including population growth, economic inequity, population movements (e.g., refugees), environmental degradation, illicit drug trafficking and international terrorism, among others.

Teh and Ngu (2019) opined that human security in Malaysia still needs room and time to be developed. A statement by His Excellency Ambassador Hussein Haniff, Permanent Representative of Malaysia to the United Nations at the Plenary of the 66th Session of The United Nations General Assembly, New York in 2012 reiterated Malaysia's cautious approach to human security and the necessity to indulge in a more agreeable definition. Nevertheless, Malaysia welcomes the core values guiding the principles that are enshrined in the UN Charter and the agreement that government should retain the primary responsibility for ensuring the survival, livelihood and dignity of their people and population. Malaysia also believes that human security must be based on local realities as the political, economic, social and cultural conditions vary significantly between one country and the next. Thus, national ownership is of utmost importance in the advancement of human security to the people of a country. Malaysia's own national development experience has always included components of economic

and social growth, with people's welfare constantly at the centre of policy concerns. The necessity to divide the fruits of economic progress evenly is at the heart of those policies in order to avoid potentially deadly national schisms. Malaysia will continue to advocate for a comprehensive approach to threats such as economic disparities, infectious diseases, illegal migration, environmental pollution and degradation, illicit drug production and trafficking, human trafficking and smuggling in persons and international terrorism, among others (Haniff, 2012).

2.9 Food Security Ingrained as a Part of Human Security

Food security is a critical aspect of human security, influencing individual well-being, community stability and national resilience. Defined by the Food and Agriculture Organization (FAO) as the state in which "all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food," food security goes beyond mere availability of food. It encompasses access, utilisation and stability of food sources over time (FAO, 2020). The intricate relationship between food security and human security is denoted in the emphasis of its implications for health, socioeconomic development and global stability (FAO, 2016).

Food security can be assessed through four key dimensions: availability, access, utilisation and stability. Availability refers to the physical supply of food, which depends on agricultural production, food imports and food reserves. Access involves individuals' economic and physical ability to obtain food, which can be affected by income, employment and transportation. Utilisation concerns how food is consumed and absorbed by the body, influenced by nutritional quality and health status. Stability pertains to the consistency of these factors over time, ensuring that food security is not jeopardised by crises such as natural disasters or economic downturns (FAO, 2020).

Food security is a pressing issue globally. According to the FAO, approximately 828 million people were undernourished in 2021 and the number has been rising due to factors such as conflict, climate change and economic instability (HLPE, 2020). The COVID-19 pandemic exacerbated existing vulnerabilities, highlighting the interconnectedness of health systems, food supply chains and economic stability. Understanding food security within the framework of human security is essential to address these challenges effectively.

Human security extends beyond traditional notions of national security, encompassing a broad spectrum of threats to human well-being, including economic, food, health, environmental, personal, community and political security (United Nations, 1994). Food security is a foundational element of this broader framework, as inadequate access to food can lead to malnutrition, disease and social unrest. The interconnections between food security and various dimensions of human security are profound. Food security is closely linked to economic stability. When individuals lack access to sufficient food, their ability to participate in the economy diminishes. Malnutrition can lead to decreased productivity, affecting overall economic growth. The World Bank estimates that malnutrition costs countries up to 11% of their GDP due to lost productivity and healthcare costs (World Bank, 2020). The relationship between food security and health is reciprocal. Poor nutritional status weakens immune systems, making individuals more susceptible to diseases. Conversely, health challenges such as pandemics or chronic illnesses can compromise food security by limiting individuals' ability to work and earn income. Ensuring food security is vital for improving health outcomes and reducing healthcare costs (Gundersen & Ziliak, 2015).

Globally, food insecurity remains a persistent and growing challenge. In 2021, approximately 828 million people were undernourished, driven largely by conflict, climate change and economic instability (HLPE, 2020). The COVID-19 pandemic intensified these pressures by disrupting supply chains, labour availability and household incomes, revealing the fragility of food systems worldwide. These dynamics highlight the importance of examining food security through a human security lens that prioritises people-centred risks and vulnerabilities.

Human security moves beyond traditional state-centric notions of security to address threats to everyday human well-being, including food, health, economic and environmental insecurity (United Nations, 1994). Within this framework, food security is foundational. Inadequate access to food contributes to malnutrition, reduced productivity and heightened health risks, with significant economic costs to states and societies (World Bank, 2020). Food insecurity has also been linked to social unrest and political instability, as demonstrated by food price shocks associated with protests in various regions (Soffiantini, 2020). Within human security discourse, such threats are increasingly discussed under the broader notion of food-related crime and food terrorism, which involves intentional acts aimed at undermining food security, safety and public confidence (Chalk, 2004; FAO, 2018).

2.10 Food Security – A Malaysian Experience

For a start, food security policies in Malaysia were cogently advised to be reviewed earlier in 2021 in the throes of a worldwide pandemic. As this study began much earlier on in 2020 to be exact, that is when the COVID-19 first hit the country, foreseen changes on the food security policies were and are still currently being formulated by the Malaysian government, much to the delight and relief of the researcher. Nevertheless, there is still room for improvement especially considering that aside from a pandemic and health crisis like COVID-19, the government must be open to anticipate other threats such as food terrorism too. Separately, there is also a necessity to acknowledge the role of the media by putting them into the equation of this study as well.

Dardak (2020) reiterated that Malaysia is generally a food secure country, ranking 28th out of 113 countries in accordance to the index by “Global Food Security Index” or “GFSI”. The inclusion into this index shows that all staple foods are mostly available to sufficiently meet the demand. Malaysia has never had to deal with a big scale pandemic prior to the COVID-19 pandemic. The repercussion from this global pandemic has not only affected or confined to the health sector, but has also had an impact on other sectors, resulting in economic, social and political crises around the world. COVID-19 preventive measures namely stay-at-home order, full and partial lockdown, mass quarantine as well as travel and transportation halt, although proved to be quite challenging to adhere to, must be obligated by nevertheless. In terms of food security, (Galanakis, 2020; Shahidi, 2020; Workie et al., 2020) reiterated that COVID-19 brought forth disturbances in food security whereby food supply chains and production came to a halt, followed by drop in earnings also remittances, contributing to strains and food insecurity worldwide. While there were enough food supplies initially, panic-buying by the public, all anticipating supply shortages during lockdowns, caused an imbalance in food supplies.

Long before the existence and agreement on food security, Malaysia started out with agricultural policies which can be divided into two phases namely pre-independence and post-independence. Dardak (2019) and Bakar et. al. (2012) discussed on Malaysia’s pre-independence policy which was designed to benefit British colonial interests and were basically centred on export commodities including rubber, oil palm and cocoa. In Malaysia's early phases of development, Arshad et al. (2014) and

Courtenay (1987) mentioned that agricultural policies and programs were established to address the high incidence of poverty in the agricultural sector, poor foreign exchange reserves and rural development. During the post-independence era, however, the focus has shifted to directing the sector's growth in two key areas: domestic agriculture and export crops. The National Agrofood Policy as elaborated by MAFI (2021), for example, was created to address food security and safety in order to assure food availability, affordability and accessibility. Increased productivity, increased use of machinery and automation, intensified production and strengthened institutional management, particularly at the farmer level, could all help to attain this goal.

The government has been working on a comprehensive reform of the agriculture sector since 2018, which includes a change in the land management program (MAFS, 2024). The isolated policies were replaced with a more comprehensive approach that took into account food supply, processing, governance, the environment and the life cycle of the food system (FAO, 2020). The policies also set the conditions and structure for reaching the second “Sustainable Development Goal (SDG)”, which is to end hunger, achieve food security and enhance people's nutritional intake (United Nations, 2015). To put it another way, Malaysia's new food security policy backed up the “United Nations' Sustainable Development Goals”. In 2019, National Security Council of Malaysia has put forth the importance of food security by including it under National Security Policy under Strategy 17 (NSC, 2019) and by mid-2020 after COVID-19 hit our shores, the then Prime Minister, Tan Sri Muhyiddin Yassin along with the Malaysian Cabinet Ministers have adopted the 2021-2025 National Food Security Policy Action Plan (DSMN) as part of the country's measures to enhance food security (Bernama, 2021).

A briefing paper on the status of the implementation of the Large Scale Smart Paddy Field Project (Smart SBB) was presented during the inaugural cabinet meeting (MARDI, 2021). The project aims to achieve the 75% National Rice Self Sufficient Level (SSL) target as underlined under the Twelfth Malaysia Plan (12MP). Around 15 strategies and 96 initiatives will be implemented based on the framework, focusing on boosting access to safe food at affordable prices, increasing domestic food production, reducing food import reliance and the use of foreign manpower. The Ministry of Agriculture has highlighted five (5) fundamental strategies which are (1) The expansion in the use of technology; (2) Empowering of research and studies; (3) Empowerment of food security data; (4) Expansion of strategic collaborations; and (5) Strengthening the

governance of departments and agencies. The notion of a control measure and enforcement on animal product import and transit operations, as well as a new method to address the limited supply of onion and its price stability, were agreed upon during the meeting as well. Nonetheless, Hashim and Hamid (2020) opined that Malaysia must reform its approach to food production to effectively attain food security. Despite the implementation of four Agricultural Policies, including the most recent National Agrofood Policy (2011 – 2020), the agriculture sector continues to fall short in comparison to the manufacturing, food and ICT sectors. Le et al. (2024) conducted a study on Malaysia's food security preparedness and found that Malaysia is establishing a resilient and sustainable food system by prioritising initiatives that enhance food security, empower the agricultural sector and address crises and emergencies. Malaysia is positioned to enhance its food security resilience and safeguard the well-being of its population through collaborative efforts, regulatory improvements, technological advancements and strategic frameworks such as NAP 2.0, in response to evolving challenges (Le et al., 2024). Figure 2.1 on the following page depicts the timeline of agricultural policies prior to COVID-19 by Khazanah Research Institute (2019) while Figure 2.2 by Dorairaj and Govender (2023) further illustrates the additional action plan with the pandemic put into deliberation and consideration.

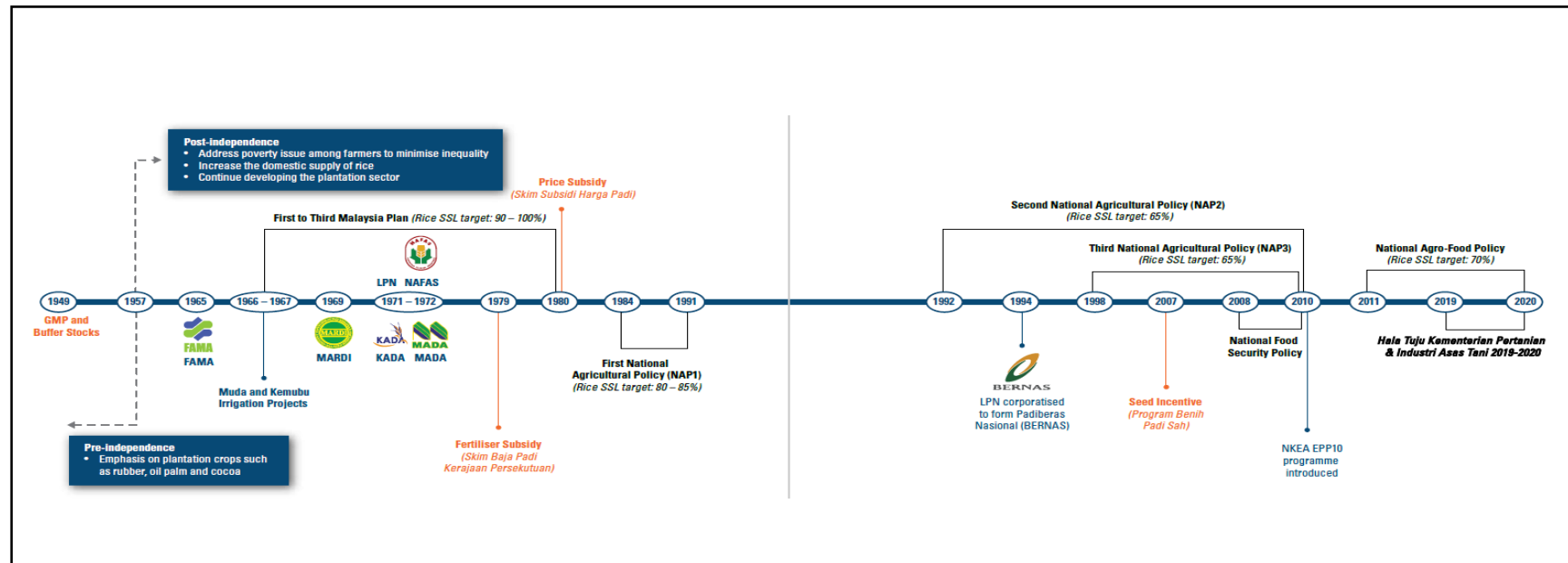


Figure 2.1 A Timeline of Malaysia's Agricultural Policies (Khazanah Research Institute, 2019)

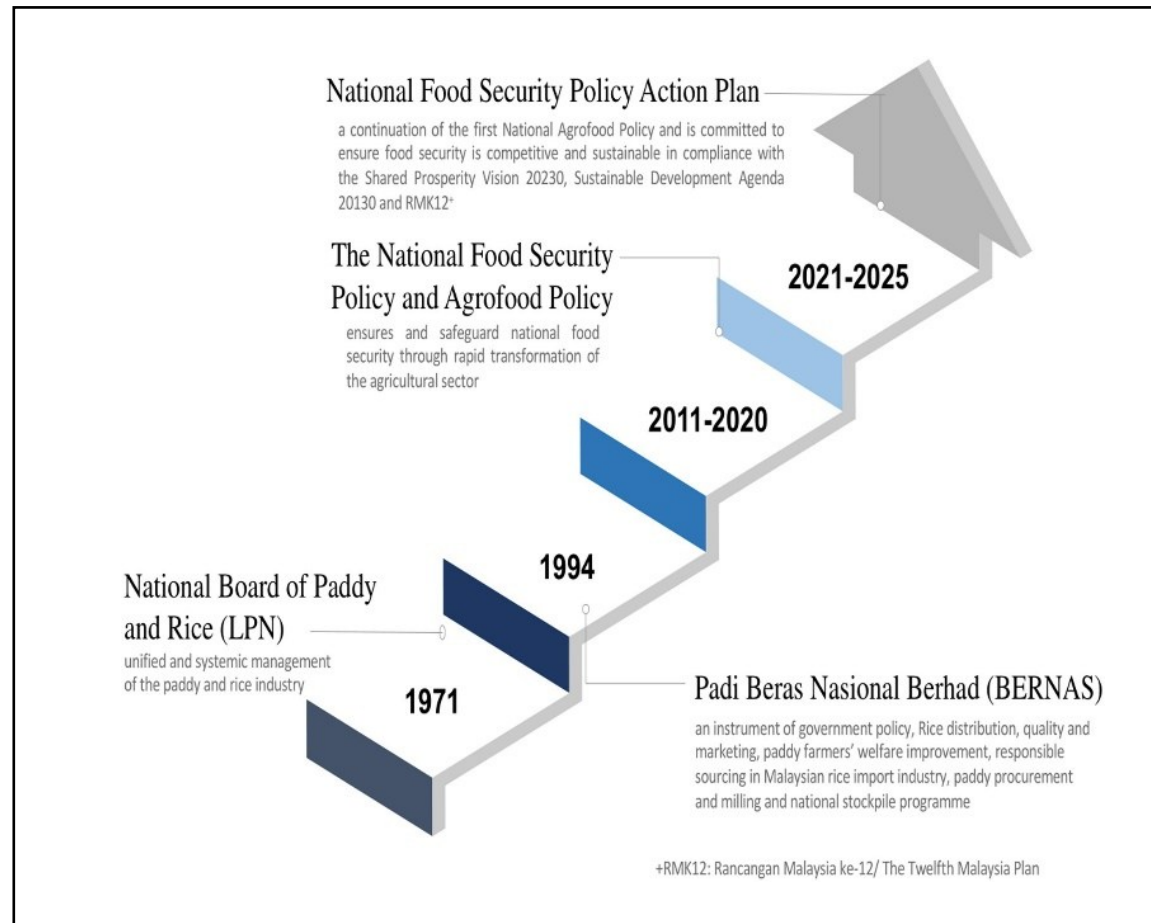


Figure 2.2 A Timeline of Malaysia's Agricultural Policies with Additional Action Plans (Dorairaj & Govender, 2023)

To date, the COVID-19 has mostly challenged food security and harmed household nutrition by causing economic stagnation, income deficits and job losses, notably among migrant workers and disadvantaged households (Kakaei et al., 2022). The ability of households to purchase food and other necessities has been harmed as a result of these dangers. The shutdown of several enterprises and factory operations is estimated to have impacted more than one million immigrants. Agriculture-related activities such as vegetable production and short-term crops such as pineapples have also been reported to be sluggish for several months. Malaysians have successfully declared COVID-19 an endemic on the 1st of April 2022 and while the government has assured the people time and again that food supplies are adequate, we must be ever ready for any future disruption involving food security to cater to the citizens of Malaysia.

FAO (2008) outlined the four (4) dimensions of food security namely the physical availability of food, the economic and physical access to food, food utilisation and the stability of the other three (3) dimensions over time. During the 1996 World Food Summit, it was agreed upon a consensus that food security exists when all people at all times have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. The four pillars of food security are: food availability, access to food, utilisation and stability. As discussed earlier, the HLPE Global Narrative in 2020 also suggested and recommended adding agency and sustainability as supplementary pillars of food security, after putting the COVID-19 pandemic into consideration (HLPE, 2020).

With respect to the dimension of availability, while global grain stocks were relatively high at the onset of the epidemic and continue to be strong, this global scenario conceals local variability and could change over time. Grain production in high-income countries is typically highly mechanised and low-labour intensive, making it less susceptible to disease epidemics among field workers. Unlike grains, horticulture, dairy and meatpacking supply chains are more vulnerable to COVID-19's effects in higher-income countries due to their more labour-intensive nature, susceptibility to food worker illnesses and corporate concentration leading to larger farms and processing facilities where disease outbreaks may spread quickly. Food production could be harmed in the future if supply lines for agricultural inputs are disrupted. Food access, on the other hand, has arguably been the most impacted by the COVID-19 problem. People's capacity to get food has been severely harmed by the global economic

recession created by lockdowns. Short-term coping measures such as savings and asset sales are reaching their limitations or have been depleted as the crisis continues and developing countries have little resources to provide substantial social safety nets (Gerard et al., 2020). Comorbidities have also had a significant impact on some communities, particularly marginalised ones, making them more vulnerable to COVID-19. This has resulted in higher mortality and morbidity rates, with implications for labour, income and food access for lower-income groups (Moseley & Battersby, 2020).

Next, the epidemic has had a significant impact on utilisation and nutrition. Nutrition is critical for maintaining the human immune system and lowering infection risks. However, as people's access to food deteriorated as a result of the crisis, they were unable to purchase a healthful diet (FAO et al., 2020). As previously mentioned, during the crisis, there was a change in consumption toward more processed foods and fewer fruits and vegetables, which contributes to poor nutrition. People who are malnourished in any form are more likely to catching the disease and suffering problems, so these dietary changes could have a cascading effect (Mannar et al., 2020). Access to clean water and sanitation is necessary for good hygiene and safe food preparation, all of which are critical for optimal nutrition. However, the pandemic widened gaps in access to these key services, reducing nutrition while also raising disease risk. Additionally, the above-mentioned serious disruptions to food supply chains are causing instability towards global food supply and access (Béné, 2020). Export limitations on staples like wheat and rice resulted in higher global prices for such products, compared to lower prices for other goods (FAO, 2020). Despite the fact that the majority of the COVID-19 food export limitations were temporary, the danger of further export limits exists (Espitia et al., 2020). Uncertainty over the pandemic's progress and the impact of restrictive measures also affects people's and businesses' capacity and willingness to invest in the agrifood sector (UNCTAD, 2020).

Moving on to the dimension of agency, as the crisis has unfolded, the most marginalised food system participants include food growers and food system workers have had little agency. As previously stated, food system farmers and employees have been on the front lines, experiencing higher rates of sickness and being impacted the most by supply chain disruptions. Loss of jobs and lives has a detrimental impact on the agency. These repercussions have disproportionately impacted youth and women, limiting their agency (FAO, 2020). Physical distance and lockdowns, as well as government emergency measures in some situations, have hampered collective action

and the ability to organise. Finally, the pandemic is intricately linked to the sustainability aspect of food security. The rise in the prevalence of zoonoses which are diseases that spread from animals to humans is linked to the advent of industrial agriculture and COVID-19 is a prime example (Everard et al., 2020). Fragile ecosystems, particularly the destruction of wildlife habitats, are commonly seen as a significant driver of greater human-wild animal interaction, which increases the risk of disease transmission. The earliest stages of lockdown measures, as described above, resulted in a huge increase in food waste due to restaurant closures and falling demand for particular types of foods as the sickness spread extensively (Sharma et al., 2020). The pandemic also raises the possibility that attention and resources will be diverted away from climate change and environmental concerns like as biodiversity loss (Barbier & Burgess 2020), which might have an impact on the food system's long-term sustainability. The social and economic losses, the shift in production methods and the loss of employment and livelihoods that came from the pandemic all have an impact on the long-term viability of food systems.

Consequently, Dardak (2020) discussed that Malaysia has been using three (3) indicators to measure its food security namely the self-sufficiency ratio or SSL, the Global Food Security Index (GFSI) and by measuring the Rice Bowl Index (RBI). The SSL is calculated by dividing the total domestic production with the total available supply in the country with the formula $SSL = \frac{\text{Production} \times 100}{\text{Production} + \text{import} - \text{export}}$. The GFSI indicates the affordability of the people's purchasing food products, the availability of food and the quality as well as safety of the food supplied to the people. Lasty, RBI inspects the key enablers and disablers of food security which comprise of the farm-level and environmental factors, policy and trade as well as demand and trade factors. All of these factors will be examined to gauge which factor will affect a country's capacity to achieve or improve food security. The comparison of the three (3) indicators is as described on the next page.

Table 2.1

Comparative Table of the Three (3) Indicators to Measure Food Security in Malaysia

Details	Self-sufficiency Level (SSL)	Global Food Security Index (GFSI)	Rice Bowl Index (RBI)
Developer and sponsor	Non-applicable	Developed by the Economist Intelligence Unit; Funded by DowDuPont Inc.	Governed by an advisory board; Funded by Syngenta Asia Pacific
Function/Objective	Proxy for food security in Malaysia	Benchmark model to compare and rank food security	Measures robustness in addressing food security issues
Number of Countries	Non-applicable	113 countries	15 countries in Asia Pacific
Indicators	Production, import, export, stockpile	Affordability, Availability, Quality & safety, Natural resources	Farm-level, Environmental, Policy & trade, Demand & price
Calculation	Production x 100 / (production + export - import)	Based on GFSI Excel Model	Qualitative & quantitative index

Source: Dardak 2020

The guarantee of food security in Malaysia is under Strategy 17 of the National Security Policy effectively launched in 2019. The Malaysian government is responsible for ensuring that sovereignty and national security are continuously safeguarded and maintained. Malaysia's national security refers to a state of being free from any threat, whether internally or externally, to its core values (NSC, 2019). These core values are required to be maintained, preserved and strengthened in order to guarantee its survival as an independent, peaceful and sovereign nation. The nine (9) values are as listed in Table 2.2.

Table 2.2
National Security Policy Core Values

No	Values
1	Territorial Sovereignty and Integrity
2	Socio-Political Stability
3	National Integration
4	Good Governance
5	Economic Integrity
6	Social Justice
7	Sustainable Development
8	People's Security
9	International Recognition

Source: National Security Council 2019

In order to maintain and protect the National Core Values, twenty (20) key strategies including the guarantee of food security which is placed under Strategy 17. Meanwhile, the twenty (20) strategies which would necessitate the implementation are as listed on Table 2.3 on the following page.

Table 2.3
National Security Policy Key Strategies

No	Key Strategies
1	Upholding the Federal Constitution
2	Maintaining territorial sovereignty
3	Strengthening territorial integrity
4	Enhancing defence and security capacity
5	Strengthening intelligence networks
6	Reinforcing national systems and institutions
7	Consolidating national unity
8	Bridging the socio-economic gap
9	Unity through education
10	Fostering the spirit of self-reliance
11	Cultivating economic resilience
12	Integrating values of integrity
13	Implementing sustainable development
14	Managing national resources efficiently
15	Guaranteeing human rights
16	Improving the people's well-being
17	Guaranteeing food security
18	Maintaining cyber security and defence
19	Streamlining management of immigrants
20	Maintaining regional cooperation

Source: National Security Council 2019

Strategy 17 of Malaysia's National Security Council Policy which is the guarantee of food security sets to ensure that the supply of food is adequate, easily accessible, safe and affordable by improving food production through optimal utilisation of land, implementation of integrated practices, intensive and sustainable farming, rice stockpiling at a level capable of meeting needs in a crisis, raising productivity by strengthening the infrastructure especially in food-producing areas as well as improving food quality and security by extending best agricultural practices and other related areas (NSC, 2019). Paul (2013) has elaborated on the importance of rice as a commodity in Malaysia and to date most of the research done pertaining to Malaysia's food security has always been on the availability of rice without the

discussion on the potential threats such as food terrorism that has plagued other developing nations just like Malaysia. Mohamad (2021) opined that in the midst of the COVID-19 pandemic, matters relating to achieving food security in Malaysia is halted as more measures are to be undertaken by the government to guarantee the country's food security.

Acting on these concerns, the government has launched the National Food Security Action Plan (DSMN) in 2021 with further details currently being drafted. During a webinar organised by MAFI in May of 2021, the Minister of Agriculture, Dr. Ronald Kiandee presented the keynote address entitled, "National Food Security: Realising Rakyat's Need." Kiandee elaborated on the National Food Security Action Plan which encompasses of insights and strategies formulated from the deliberation of various ministries, agencies, academicians, private sectors and NGOs. The action plans formulated will act as a catalyst for transformation in strategic thrusts. MAFI (2021) elaborated on the Strategic Thrust 1 entails the thrust that intends to enhance technological adoption by focusing on economies of scale and long-term farming. Indirectly, this plan contributes to the National Policy Framework for the Fourth Industrial Revolution (4IR) and the Blueprint for the Digital Economy. Meanwhile, Strategic Thrust 2 aims to boost food security research and development as a means of increasing domestic food production, with a focus on the local development of agriculture inputs such as animal diets, breeds and seeds. Simultaneously, R&D on prospective alternative crops and climate-based food production technologies is emphasised.

Strategic Thrust 3 intends to collect and strengthen data in order to create a food security-specific Big Data Analytics System. This would allow for the development of food security indicators as well as the monitoring and assessment of food security levels in diverse Malaysian locations. Next, the vision of "Food Security as a Shared Responsibility" is translated into Strategic Thrust 4, which aims to strengthen strategic collaboration on food security among ministries, state governments and the private sector. Incentives to keep targeted food imports and labour in the food system as a way of food diplomacy with foreign counterparts, both bilaterally and multilaterally, will make private sector engagement in the food system easier. Finally, Strategic Thrust 5 intends to improve the Department's and Agencies' governance by harmonising grey areas and bridging the gap within the food system to improve monitoring and governance. It entails necessary infrastructure development and upgrades, as well as re-

examining and updating laws and regulations to empower the authority to safeguard and conserve natural resources for our food system's resilience and sustainability.

Consequently, the Malaysian media practitioners and public service involvement with food security especially during and after the pandemic is worthy to be studied as Syafuddin et al. (2024) concurred that the public service plays a vital role in addressing critical issues like food security. The Malaysian government recognizes that ensuring food security is essential for national stability and public health. Various ministries, including the Ministry of Agriculture and Food Security, are actively involved in formulating policies that enhance agricultural productivity and ensure sustainable food supply (Sani et al., 2022). Efforts to improve food security include initiatives aimed at increasing local food production, enhancing supply chain efficiency and promoting sustainable farming practices. Public service agencies collaborate with farmers, stakeholders and the private sector to develop programs that support local agriculture and food distribution systems (Chee et al., 2022).

2.11 Media. Food Security and Sustainable Developmental Goal (SDGs)

In 2015, all countries worldwide reached a consensus on a set of significant development objectives known as the Sustainable Development Goals (SDGs), which encompass eradicating hunger and attaining food security for everyone. Since 2015, the global population of undernourished people has risen by over 153 million, mostly due to the COVID-19 pandemic. Food security and sustainable food production are components of Sustainable Development Goal 2. SDG2 comprises three components:

- i. End Hunger and Achieve Food Security (Target 2.1)
- ii. End all forms of malnutrition (Target 2.2)
- iii. Promote Sustainable Agriculture (Targets 2.3-2.5)

Progress towards achieving the End Hunger aspect of Target 2.1 is evaluated using a metric developed by the Food and Agriculture Organization (FAO) known as the Prevalence of Undernourishment (PoU). FAO monitors food production and trade annually. FAO uses this to determine the number of calories available per person. Additionally, it computes the minimum calorie needs. Caloric needs are influenced by

age, gender, body weight and levels of physical activity. FAO considers all of these factors when determining the minimal caloric requirements for each country. FAO assesses the distribution of caloric availability within a country to estimate the number and prevalence of undernourished individuals in comparison to caloric requirements (FAO, 2018). Achievement of the End Hunger Target 2.1 will occur when the level of undernourishment reaches zero.

Where media is concerned, Bhattacharya et al. (2020) identified five key roles of media in contributing to the SDGs delivery. These include:

- i. Channeling information flow
- ii. Ensuring proper monitoring and accountability
- iii. Acting as an enabler of a 'culture of peace'
- iv. Upholding marginalised voices
- v. Facilitating the localisation of SDGs

Together they published a framework on how media can assist in achieving SDGs and the figure below depicted the suggested framework.

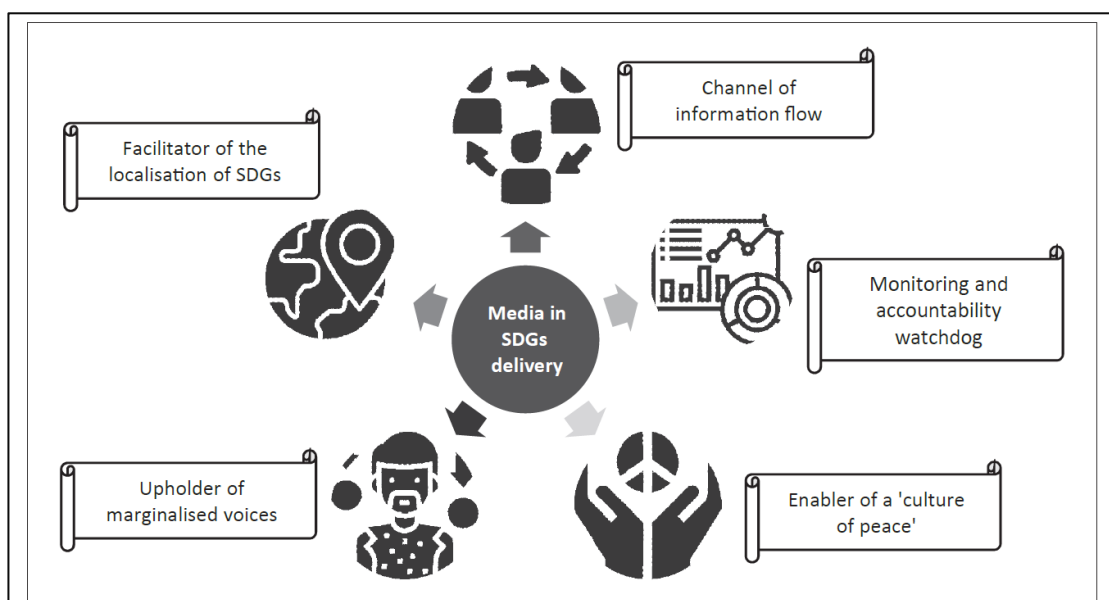


Figure 2.3 Media Engagement on Delivering SDGs by Bhattacharya et al. (2020)

2.11.1 Media as a Channel of Information Flow

A substantial volume of data will be produced to assess the advancement of SDGs. The media and other information providers, especially those on the internet, will incorporate and modify this piece of information into news, articles, talk programs, movies and animations (Singh et al., 2015). The media plays a crucial role in raising awareness about the Sustainable Development Goals (SDGs). An autonomous media can educate and sway public perception regarding government policies. Access to information can be achieved by offering it to the citizens. Public interest journalism offers citizens access to information on crucial aspects of public life that impact their well-being and engagement. Independent, pluralist media not only serves as a conduit for information but also helps in developing knowledgeable, discerning and strong citizens. Media should aim to transform citizens' thought process and empower them to determine their own development, participate, advocate and monitor the successful fulfilment of the SDGs. The media should be meticulous and accurate in using language that suits the audience while conveying information and messages. The media should communicate using simple language and refrain from using technical terms and abbreviations to effectively convey key themes about the SDGs to the general audience.

An effective approach involves delivering precise messaging, avoiding information overload, focusing on basic data and incorporating a human element such as a real-life anecdote. Furthermore, the media should seek for newsworthy events to highlight the Sustainable Development Goals and promote the narratives. At Women Deliver, the Bill & Melinda Gates Foundation promised \$80 million to enhance gender statistics for analysing gender gaps like unpaid work and asset ownership (McCullough et al., 2021). This vow has gained significant attention since experts agree that achieving gender equality (SDG 5) is interconnected with all 17 SDGs and it is crucial to enhance gender data to establish a foundation for gender equality.

2.11.2 Media as a Monitoring and Accountability Watchdog

Glass (2019) concurred that effective governance is essential for achieving sustainable development in a country. A government is more likely to prioritise openness and accountability when there is a conducive atmosphere in the country that

supports free expression, access to information and media freedom. Citizens find it beneficial to hold their government responsible and can participate to guarantee their demands are satisfied through the government. An unbiased, diverse, skilled and autonomous media is essential for enabling efficient governance and encouraging accountable government in a country (Barry, 2005). The media can act as a watchdog by using new media technologies and conducting investigative journalism to hold the government responsible and uncover abuses of power and resources.

The media can enhance accountability in government by monitoring public institutions, revealing malfeasance, offering feedback and pushing for change (Matani & Hassanpour, 2014). The media can offer a platform for discussing and debating important topics relating to the Sustainable Development Goals, contributing to overall responsibility for the 2030 Agenda. They can disseminate information on the progress and obstacles related to the SDGs, emphasize the personal narratives behind the statistics and compel governments to take action to successfully execute the SDGs. They can enlighten the public about the actions or inactions of decision-makers and government officials in comparison to their obligations or commitments. Media can help promote knowledge and expectations for credible, inclusive and participatory follow-up and review discussions related to the SDGs, as stated by MDIF (2023).

The media primarily utilises the 'publishing and dissemination of reports' as a monitoring tool to impact social, institutional and political change. Revealing deficiencies in public institutions might lead to increased pressure on them to improve services for the public (Matani & Hassanpour, 2014). A media outlet may opt to monitor the police's human rights responsibilities towards a minority group (SDG 16) and provide regular reports to bring attention to the issue for stakeholders and decision-makers. The main goal of this procedure is to advocate for human rights and enhance the protection of individuals belonging to a marginalised group (key commitments of the 2030 Agenda). To assess effectiveness, the media must adhere to a rigorous and methodical process, collect information objectively and maintain credibility.

2.11.3 Media as the Enabler of a Culture of Peace

Peace is a crucial component of Sustainable Development Goal 16 and the media has the power to foster a culture of peace within a nation. The UNGA (1999) describes a culture of peace as a collection of values, attitudes, behaviours and lifestyles

that oppose violence and address underlying issues via communication and negotiation among individuals, groups and nations. Two crucial components in the United Nations' approach to promoting a culture of peace are striving for gender equality and enhancing democratic engagement.

Media plays a crucial role in fostering intercultural dialogue by providing platforms for individuals from different cultural, religious and social backgrounds to share their experiences. By offering a space for open conversation, media can dismantle stereotypes, reduce prejudice and create an environment where mutual respect and understanding can thrive (Ghezelsofla & Sayadi, 2020). Through interviews, documentaries and feature stories, media can help build bridges between diverse communities, which is foundational for the Culture of Peace.

In the digital age, social media platforms have emerged as powerful tools for both promoting and threatening peace. On the one hand, social media can help spread awareness, rally support for peace initiatives and provide a forum for marginalised voices. The ability of social media to quickly mobilise communities has been demonstrated in various global peace movements, from the Arab Spring to contemporary advocacy for social justice (Tufekci, 2017). On the other hand, social media can also amplify hate speech, spread misinformation and fuel conflict. Therefore, it is essential for social media platforms and their users to promote responsible discourse and challenge harmful narratives to support the culture of peace.

Media is an indispensable tool in promoting the UN's Culture of Peace (DPPA, 2021). By fostering dialogue, educating the public, preventing conflicts and promoting positive narratives, media can help create a world where peace is the norm, not the exception. However, media must be used responsibly, with a commitment to ethical journalism, truth and fairness. In an increasingly interconnected world, the role of both traditional and social media in advancing peace has never been more crucial.

2.11.4 Media as the Upholder of Marginalised Voices

The media can amplify citizens' opinions and concerns over government policies by facilitating public discussions and conversations. Both conventional and new media can significantly engage individuals in SDGs follow-up and review procedures, especially those who may not have the opportunity to participate (MDIF, 2023). It can increase the involvement of individuals who are able to participate and potentially

reveal difficulties that may go unnoticed. Media frequently downplay the problem of poverty and when they do cover it, they fail to provide individuals experiencing poverty with sufficient opportunity to articulate its true impact on their lives. The media can reach this demographic by promoting the alternative narrative and ensuring visibility and recognition for the impoverished and marginalised individuals. To this end, community radio can be a unique and effective tool to meet the information needs of the marginalised groups (Timalsina & Pradhan, 2019). Community radio can help local communities amplify their voices and strengthen engagement and empowerment for community action.

2.11.5 Media Facilitating the Localisation of SDGs

Global organisations like the UN frequently address topics like poverty reduction and gender equality on a worldwide scale. This can cause the subjects to be unappealing to the audience because they appear abstract and distant in nature (Janoušková et al., 2019). Additionally, shedding awareness on a peripheral problem might be achieved by highlighting a significant story with global appeal. Journalists should seek current, regionally specific viewpoints to engage their audience, as suggested by Truyens and Picone (2021). The situation will inevitably differ based on the context. A country or region can see rapid economic growth despite a significant section of its population living in poverty.

Javed (2024) discussed that the media plays a vital role in the localisation of the SDGs by raising awareness, promoting accountability, showcasing local solutions and fostering citizen engagement. As the global community works toward achieving these ambitious goals, media has the power to shape the discourse and drive the necessary changes at the local level. However, to maximize this potential, media must continue to prioritise accurate, contextualised and inclusive coverage of the SDGs, empowering communities and individuals to contribute to a sustainable future for all. The media's role is crucial in making the SDGs understandable, relevant and accessible to local populations by translating global goals into concrete local actions. As highlighted by MDIF (2023), media coverage helps bridge the gap between global policymaking and the realities on the ground by contextualising SDGs to local needs and challenges. Media platforms also serve as key advocates for the SDGs, encouraging governments and businesses to prioritise sustainable development in their policies and practices.

Social media platforms, in particular, provide a space for citizens to share ideas, raise concerns and advocate for sustainable practices. The rapid spread of information on platforms like Twitter, Facebook and Instagram has enabled grassroots movements and individuals to mobilize around SDG-related causes, creating a participatory approach to sustainable development.

Despite its potential, the media's role in the localisation of the SDGs is not without challenges. One issue is the risk of oversimplification or misrepresentation of the SDGs, which can lead to misunderstandings or disillusionment. Media outlets need to present accurate, comprehensive and balanced coverage to ensure that SDGs are not just reduced to catchy headlines or isolated soundbites. Additionally, the increasing prevalence of misinformation on social media can hinder efforts to localise the SDGs effectively.

2.12 Food Terrorism in the Wake of a Crisis and Pandemic

As terrorising as it may sound, the use of the phrase “food terrorism” is comparatively recent, having gained popularity following the 9/11 terrorist attacks (Razak et al., 2020). Nonetheless, the practise or rather incidents involving food terrorism may be traced throughout human history. This is evident in the publication of a guidebook entitled: Food Safety Issues: Terrorist Threats to Food by WHO in 2002, hence becoming one of the initial literature and references for food terrorism. This has also led WHO (2002) to formulate a definition for such crime to be as follows:

“An act or threat of deliberate contamination of food for human consumption with chemical, biological or radio nuclear agents for the purpose of causing injury or death to civilian populations and/or disrupting social, economic or political stability.” (WHO, 2002)

Intentional contamination can be characterised as food crime with the goal of making a profit or as a terror act with the goal of causing absolute ruin, confusion and panic among the general public. All of these acts of contamination have negative consequences for consumers in the short and long term and they could seriously impact public health and even result in death. Consequently, threats from such terror act/s possess the ability to derange both local and global ecosystems. From 1951 to 2008, Dalziel (2009) reported that there were 391 deaths and 4,355 injuries relating to

deliberate contamination within food supply chain (Dalziel, 2009). Malaysia has recorded quite a number of food crime cases which has the potential of paving the way to food terrorism. One example being the subsequent contamination of water resources in Sungai Kim Kim in Johor which shocked the nation to the state of unrest (Yusof & Suhaini, 2019). Schools were forced to close with some civilians reportedly to be injured from inhaling the chemical poisoning (Razak et al., 2020). Such incident may have sparked the awareness within Malaysian authorities to protect the country's food source and resources against terror acts as the consequences might be more severe and destructive.

Ariffin et al. (2021) expanded on more distressing instances in this country that also warrant for the government's attention. Manipulation of fresh palm oil has been identified as a food crime issue in Malaysia. Artificial eggs and rice were allegedly sold in Malaysian markets between 2011 and 2015. All of this was followed by a government probe. However, it was discovered that the claims were false. Following that, cases involving food crimes were recorded in 2015, including misuse of the halal logo, adulteration of halal certificates and labelling and even worse cases of the halal logo on products containing forbidden components, as well as sales of coffee containing pig DNA. Then there was the introduction of artificial honey manufactured from sugar, starch and corn flour, fake zam-zam water and fake stevia in 2017. The arrest of a 1,500-ton illegal meat cartel smuggling organisation from four foreign countries, notably China, Ukraine, Brazil and Argentina, stunned Malaysia at the end of 2020. The meat cartel syndicate has been exposed and this criminal case has piqued the interest of a number of parties because it is thought to have operated in Malaysia for many years.

The ongoing debate surrounding the definition of food crime has been examined from various perspectives, as under the umbrella of food crime exists different types of classification and characterisation of crimes against food. The Food Crime Terminology Model by is used for the purpose of this study to differentiate the types of food crime and offer better understanding on food terrorism from other types of food crime. The diagram below depicts the model to allow the readers to distinguish food terrorism from other types food crimes. Note that food terrorism and food fraud may carry an almost similar characterisation but past researches on the latter have put very distinctive traits on how the latter is different than the former.

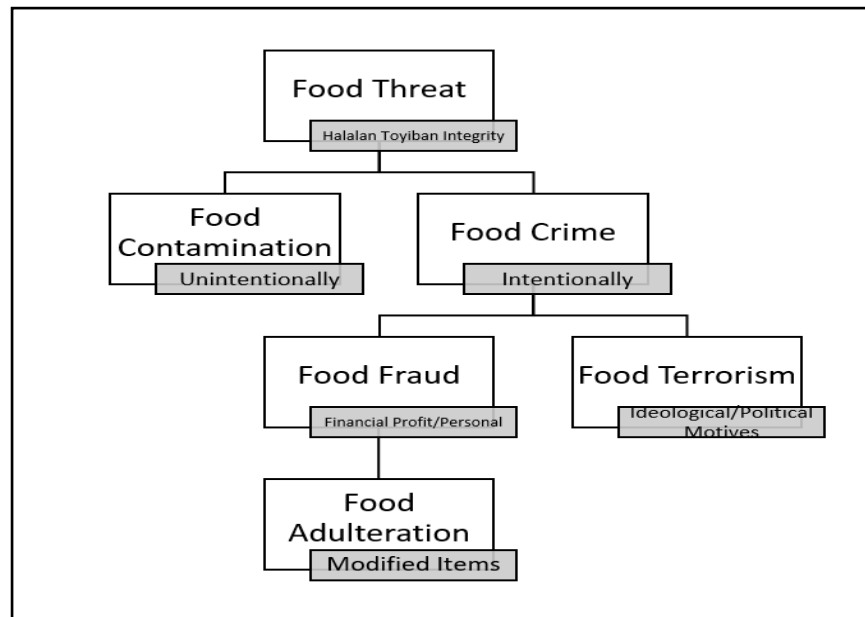


Figure 2.4 Food Crime Terminology Model (Ariffin et al., 2021)

Spink and Moyer (2011) provided the inaugural scholarly definition of food fraud, which remains the most frequently referenced. They first coined the term ‘food fraud’ with the following definition:

“Food fraud is a collective term used to encompass the deliberate and intentional substitution, addition, tampering or misrepresentation of food, food ingredients or food packaging; or false or misleading statements made about a product, for economic gain.” (Spink & Moyer, 2011)

Unlike food terrorism, food fraud instigated scholars to have differing approaches which led to diverse opinions, particularly regarding the identification of offenders and the question of whether the entire food supply chain should be included. Previous scholarly works have explored food fraud in relation to food crime or have proposed alternative categorisations and definitions (Everstine et al., 2024). An example of this distinction can be found in the definition of food crime provided by the Elliot Review, which states:

“Food fraud becomes food crime when it no longer involves random acts by ‘rogues’ within the food industry but becomes an organised activity by groups which knowingly set out to deceive and or injure, those purchasing food” (HM Government, 2014)

In other contexts, food fraud is described as a subset of food crime in various ways. Some scholars argue that food crime encompasses both food fraud and food defence or food terrorism (Cruse, 2019). Food terrorism refers to intentional food poisoning, bioterrorism and sabotage, often carried out by individual employees or organised groups. A notable example of this is the 2018 incident in Australia, where strawberries and other fruits were deliberately contaminated with needles (Khairatun, 2022). This category of crime is distinct from food fraud, as the offender's intent is to inflict harm rather than to achieve financial gain (Manning & Soon, 2016; Spink & Moyer, 2011).

Khan et al. (2021) elaborated that the COVID-19 pandemic has exposed critical vulnerabilities in global food supply chains, raising concerns about the potential for threats on food such as violence and food fraud, including food adulterations, misrepresentation and increased food crime - where food terrorism is classified in (Ariffin et al., 2021). As nations recover from the pandemic, the risk of such attacks may increase due to economic instability, weakened surveillance systems and heightened social tensions (Everstine et al., 2024). The pandemic highlighted how easily food distribution networks can be disrupted (Panghal et al., 2022). Malicious actors could exploit these weaknesses by sabotaging transportation, storage or production facilities. Cyberattacks on food logistics could also be a form of food terrorism (Cartwright & Cartwright, 2023; Manning & Kowalska 2023). Terrorist groups or hostile state actors might target food with biological, chemical or radiological agents in high-risk points include processing plants, farms, supermarkets or agricultural supplies. Attacks on critical food exports such as grain from Ukraine could escalate global hunger and political instability (Leal et al., 2023). The post-pandemic world sees many countries still recovering from economic and healthcare strains, making food security more susceptible to the very many forms of threats (Haji & Himpel, 2024).

2.12.1 Food Terrorism as a Black Swan Event

A Black Swan event is a concept popularised by the economist and philosopher Nassim Nicholas Taleb in his 2007 book *The Black Swan: The Impact of the Highly Improbable*. Taleb defines Black Swan events as rare, unpredictable occurrences that have severe consequences and are often only understood in hindsight. These events challenge the assumptions of traditional risk management and forecasting, highlighting

the limitations of human knowledge in predicting rare, high-impact phenomena (Taleb, 2007). The concept of Black Swan events has important implications for a wide range of fields, including food terrorism. While food terrorism itself is not necessarily a new phenomenon, the potential for a Black Swan food terrorist event refers to a catastrophic, unpredictable biological attack with far-reaching and devastating consequences. These events, like other Black Swans, are typically low-probability occurrences that are often underestimated in terms of risk but could disrupt societies on an unprecedented scale.

As elaborated earlier, food terrorism refers to intentional criminal activities involving food to cause illness, death or fear (WHO, 2002). Historically, the potential for food terrorism has been acknowledged by governments and experts (Williams et al., 2023); however, predicting the timing, method or scale of a food terrorist attack has been exceedingly difficult. This unpredictability aligns with the Black Swan theory, which highlights how rare and high-consequence events often emerge outside of expected patterns, making them difficult to prepare for or prevent (Taleb, 2007). Consequently, Craft (2017) discussed extensively on food terrorism being a plausible threat against food security considering the vast chain of food production from the source to the consumer, making way for potential attacks from the many levels of food production and supply chains.

This study is in agreement with the notion affirmed by the literature that food terrorism event is constituted as a threat towards food security with the assumption that such an event, although rare, unimaginable and unpredictable will bring-forth severe consequences towards nations and national security thus aligning with the Black Swan Event theory. Although this study will not focus on the Black Swan Event per say but rather on the understanding of food security and food terrorism amongst the media practitioners and public service personnel, it is worth to assert the cruciality of food security and food terrorism especially in the event of a global health crisis such as the COVID-19 pandemic.

2.13 COVID-19 a Global Terrorising Threat Towards Human Security and Its Dimensions

COVID-19 was declared a global pandemic by the World Health Organization (WHO) on 30 January 2020. The potential effects of the pandemic to the people and countries around the world were never measured or speculated upon until the WHO

declaration. It is thus understandable that these nations were unprepared for the magnitude and rate of infection of the disease. Moreover, COVID-19 has rolled back a number of developments affecting the seven (7) of human security and there is a lot of uncertainty about how to recover from the pandemic's widespread consequences according to UNDP (2020).

First of all, the economic dimension of human security oversaw poverty and economic recession in many countries with the advent of the pandemic. According to the World Bank and a joint statement by ILO et. al (2020), between 119 and 124 million people will be forced into severe poverty by 2020 as a result of COVID-19 and its economic repercussions, which are compounded by the effects of armed conflict and climate change. Measures to stop the virus's spread, such as frequent lockdowns, caused economic devastation, putting nearly half of the global workforce at risk of job loss.

Access to health services and living in a secure environment are two aspects of health security. The advent of a novel coronavirus has triggered a global public health crisis. Centers for Disease Control and Prevention, CDC (2021) reported that many countries' pandemic experiences have highlighted and intensified structural inequities in their societies. The epidemic has highlighted the importance of socioeconomic determinants of health, such as discrimination and racism, lack of access to sufficient healthcare, education and housing and jobs that put some important but low-paid employees at danger on the front lines. With respect to the environmental security, there is concern that when some states focus their efforts on limiting COVID-19, they may be less able or willing to enforce regulations governing environmentally sensitive activities like mining and logging, resulting in greater environmental harm as reported. During the epidemic, illegal logging, mining and land grabbing have all expanded dramatically across South America and the rising number of environmental crimes appears to be fuelled in part by the low chance of being prosecuted by authorities.

Community security refers to "protection against the dissolution of communities due to the loss of traditional relationships and values, as well as sectarian and ethnic violence" in the context of human security. According to Ghani (2021) and Caballero (2015), analysts warn that the world's poorest countries, which are already afflicted by hunger, sickness, a lack of opportunity, climate change and violence, will become even more unstable. Next is personal security which is pertaining to the right to be free from the threat of physical harm. The European Institute for Gender Equality (2021) reported that as a result of COVID-19, there has been an upsurge in intimate partner violence.

This is also echoed by UN Women (2020) which revealed that in times of crisis, such as conflict, humanitarian crises or economic duress, gender-based violence is known to be intensified. Victims have experienced increased exposure to abusers as a result of movement restrictions and stay-at-home orders aimed at managing the virus, as well as limited opportunities to seek help from formal and informal networks and fewer support services. Moving on to political security, people's political safety entails living in a society that upholds basic human rights. The COVID-19 pandemic is not only a health and economic problem; it has also evolved into a political issue, with authoritarian governments using the pandemic to repress opposition and consolidate their authority.

Finally, food security, as discussed in the previous chapters, is inextricably linked to economic security and pertains to the access to basic nutrition and food supply. Many people who lost their employment or had their working hours reduced lost money and became food insecure. People in both rich and poor countries were further harmed by a lack of social safety. The epidemic has degraded earnings, disturbed markets and disrupted supply networks in impoverished and fragile countries, resulting in food shortages and price rises. Udmale (2020) wrote that COVID-19 epitomises an unprecedented public health crisis, which has triggered significant economic slowdown, threatened food production and had the potential to result in global supply shocks. These consequences, together with unilateral trade restrictions implemented by large production countries, might have serious implications for food security in trade-dependent countries. These effects could have an impact on global supply networks well into the 2020s and beyond. COVID-19 is causing severe disruptions on food supply chains at all levels, from local to global, in a way that our globalised world has never seen before.

Aday and Aday (2020) on the other hand opined that a pandemic is not a new event encountered in the history of humanity because mankind has faced various pandemics in history. Pandemics are characterised by their severe negative consequences on the global economy. COVID-19 has been shown to have an impact on the entire food supply chain, from the field to the consumer, in one of the most vital areas of the economy. There is presently substantial worry regarding food production, processing, distribution and demand in light of recent issues in the food supply chain. Workers' mobility limitations, changes in consumer demand, the closure of food production facilities, restricted food trade laws and financial pressures in the food

supply chain all resulted from COVID-19. Therefore, governments should allow the mobility of employees and agri-food goods.

This overview aimed to show how a human security lens might aid understanding of the COVID-19 pandemic's complex, multi-layered reality, with its linked and mutually reinforcing dangers to human security. There is a domino effect: health crises and containment measures lead to economic insecurity, poverty and unemployment, which in turn leads to food insecurity and hunger. Domestic abuse has skyrocketed as a result of lockdowns. The response to a pandemic diverts resources away from normal regulatory enforcement, such as in the environment and in the worst-case scenarios, it is used for repression. In many regions of the world, environmental degradation has worsened inter-communal and inter-group conflict, making environmental activists and indigenous leaders targets, as well as predatory political elites and governments. Liddo (2021) wrote extensively that the lived experience of people in their daily lives lies at the heart of the human security framework. This stark reminder of governments' responsibility for the lives and well-being of individuals and communities must guide recovery and efforts to "rebuild better."

2.14 Media's Position in Food Security and Food Terrorism Reporting

The role of media in food security has often been overlooked although one must agree that media is a powerful dissemination tool to report and expose news and information to the public at large. Aside from research on food security and food terrorism during a crisis such as a pandemic, this study also intends to look into the role of the media in dimensions of information, communication, innovation and description, among others, as partners in promoting food security, sustainability, production and awareness. Ssimbwa (2015) wrote that the media may be regarded as significant building blocks in intercultural communication and human communication because it is important to integrate interpersonal communication, mass media organisation, small groups and communication contexts of farmer requirements, nation food needs and related emergencies. As a result, radio, television, newspapers, the internet and other forms of communication, as well as journalism as a whole, have ambiguous roles to play in communicating and informing policy and society about the trends and dynamics of food, production, processing and consumption for purposeful livelihoods.

For a start, the term media here will be divided into two (2) which are traditional media in the form of mass media as well as new media branch known as social media. Hasa (2021) deduced that mass media refers to media technologies that reach a large audience. Social media refers to computer-based technology that allows people to generate and share information or participate in social networking. Print media (newspapers and magazines) and broadcast media (television and radio) are the two main categories of mass media but social media platforms include Facebook, YouTube, Instagram, Twitter, LinkedIn, Reddit, Wikipedia and Pinterest. Torossian (2020) divided social media into six (6) types which are Social Networks, Social News, Microblogging, Bookmarking Sites, Media Sharing and Community Blogs. The public is the audience in mainstream media, however with social media, the public can be both content providers and audience. Unlike traditional media, which only allows for one-way communication, social media allows for two-way conversation. This is due to the audience's ability to express themselves on social media. Because it can reach far-flung corners of the globe, mass media still has a greater reach than social media. However, as the internet and social media gain traction, this position may alter in the near future.

Media reporting is a key information source for the public on social and health-related topics including food poverty and insecurity (Picard & Yeo, 2011). Public opinion is diverse and the media often showcases this through polls, vox pops and coverage of mass movements. Despite this, both print and broadcast media continue to influence public opinions significantly. The news media have a significant role in establishing the agenda by controlling the overall discussion and having the ability to shape and limit policy debates. Editorial and journalistic decisions on which aspects of an issue to emphasize can shape problems and propose and validate particular solutions or methods, frequently in alignment with prevailing ideological perspectives. The way food poverty and insecurity are portrayed in the media is crucial for comprehending how public and policymakers' perception of the issue is shaped.

Additionally, there is also a scarcity of study on media coverage of climate change and food security around the world when it comes to mainstream media. The use of mass media has been identified as one of the channels to improve the dissemination of food security information due to the challenges that are associated with the traditional methods of agriculture extension (Apata, 2010). Newspaper coverage tends to be more inclined towards business, political news and other social issues at the expense of food security and agricultural developmental issues (Rani et al., 2009). The

significant variations of the food security issue coverage might be influenced by the fact that climate change issues that constrain journalists in terms of the source of information might be lesser covered as compared to climate change issues that have plenty of sources (Boykoff & Roberts, 2007).

According to a study of evaluating social media's potential capabilities as a food terrorism monitoring system by Newkirk et al. (2012), it was found that the traditional method of health surveillance system cannot be substituted by social media. Nevertheless, incorporating current social media into public health surveillance, conversely, may improve early identification of food threats, food terrorism and foodborne disease outbreaks. Social media may also ease users to report and disseminate outbreaks while maximising detection period. Public health surveillance initiatives could benefit from social media's potential to link illnesses and exposures in ways that increase the sensitivity or timeliness of conventional approaches. Pilipiec, Samsten and Bota (2023) concurred how the advantages of social media in surveillance systems, such as timeliness, representativeness and simplicity of epidemic self-identification, outweigh the disadvantages of specificity and analytical methodologies. Using social media data to supplement existing surveillance systems could lead to a reduction in further morbidity or even deaths relating to food safety and contamination.

2.15 Theories and Models

In qualitative research, Maxwell (2012) provided a concise definition of theory as "a collection of concepts and their proposed interconnections, serving as a framework to represent or simulate aspects of the real world." The significance of theory in the process of conducting research is emphasised in virtually all of the textbooks that are used to teach research technique in the social sciences (Given, 2008). The systematic framework of concepts used to clarify or forecast a specific occurrence serves as a guiding principle for researchers in their analysis of the phenomenon and selection of research methods (Merriam, 2014). When researchers start a study, they may have a "tentative theory" based on their personal experiences or conceptions from academic literature about the phenomena they are investigating.

A theoretical framework is formed by combining a speculative theory with a cohesive assemblage of relevant literature, concepts and theories, together with assumptions, expectations and beliefs. This framework guides a research study by

providing a rationale for the investigation, defining the research questions, selecting appropriate techniques, identifying potential threats to validity and interpreting the findings (Maxwell, 2012; Merriam, 2014). In addition to formulating research studies and comprehending phenomena or hypothesising the validity of theories, theories can also be derived from empirical research. Grounded theory is a widely used methodology that involves generating ideas by constantly comparing and testing emerging hypotheses with data (Glaser & Strauss, 2017). A theoretical framework should not be mistaken for a literature review, as the latter is a compilation of key concepts in the literature, without the inclusion of ideas that provide a systematic approach to understanding problems, methodologies and validity (Rocco & Plakhotnik, 2009).

Rocco and Plakhotnik (2009) further distinguished between theoretical and conceptual frameworks, stating that the former is based on specific theories and aims to investigate a particular topic, while the latter is based on a network of relevant concepts and aims to develop a new theory. For the purpose of this study, the researcher will be using these words interchangeably because the main focus is on a comprehensive understanding of theory and its significance in qualitative research.

The paradigm under which a study is placed is closely connected to its theoretical or conceptual framework. A paradigm, also known as an interpretive framework, refers to the intricate interaction of a researcher's epistemological, ontological and methodological assumptions (Denzin & Lincoln, 2005) that determine the research objectives, questions, methods and findings. These perspectives are connected to a researcher's paradigm, which is influenced by their personal history, sociocultural environment and external factors. The paradigm contains underlying assumptions regarding our knowledge, the nature of existence and these assumptions are connected to core beliefs and value systems (Kuhn, 1970). Educational research is inherently influenced by a researcher's subjective judgement of what is valuable or significant. Values play a role in shaping the way we develop, execute and understand our research (Heng, 2020). Certain values and views are inherent and assumed, while others are clearly stated and controversial. Positionality statements in qualitative research highlight the inherent bias in the process of knowledge development.

Researchers examine how their own identity influences their understanding, interpretations and assessments of the research methodology or subject being studied (Caelli et al., 2003). In the field of social science research, which focuses on the study of human society and interactions, there is a strong connection between humans'

thoughts, feelings and values. Therefore, it can be argued that achieving complete objectivity is difficult to attain. Some scholars have warned that when researchers only embrace specific paradigms, it can restrict or distort their understanding of the subject (Heng, 2020). Therefore, this study believed that it is important to appreciate a range of paradigms and positionalities in research, since they enable us to explore many viewpoints on the phenomena under investigation. A pluralist perspective recognises the necessity of embracing complexity and uncertainty and admits the existence of various types of knowledge and methods of understanding that are influenced by unique circumstances (Andreotti et al., 2011). Essentially, this research is framed by the belief that research is subjective and that multiple paradigms are important. This perspective thus influenced my approach to the literature review, which is qualitative and interpretative.

2.15.1 Agenda-Setting Theory, Framing and Priming

For a society to operate, Lasswell (1971) gave the mass media three (3) roles: monitoring, correlation and transmission of cultural inheritance from one generation to the next. The first role of the media is surveillance, which refers to how the media monitors society for threats and opportunities. The second function denotes how the various mass media are related. The second purpose refers to how the mass media connects various aspects of society, allowing them to collaborate. The third is the transmission of cultural heritage from one generation to the next. Collectively, these functions position the media as a central intermediary between social realities and public understanding.

Grounded in these functions, Agenda-Setting Theory, introduced by Max McCombs and Donald Shaw, explains the media's capacity to shape public awareness and influence the salience of issues in public discourse. Agenda setting does not instruct audiences on what opinions to hold but rather, it shapes what issues are perceived as important through patterns of visibility, frequency and prominence. Accordingly, Agenda-Setting Theory is used in this research as a guide to examine the prioritisation and salience of food security and food terrorism issues and reporting in Malaysia.

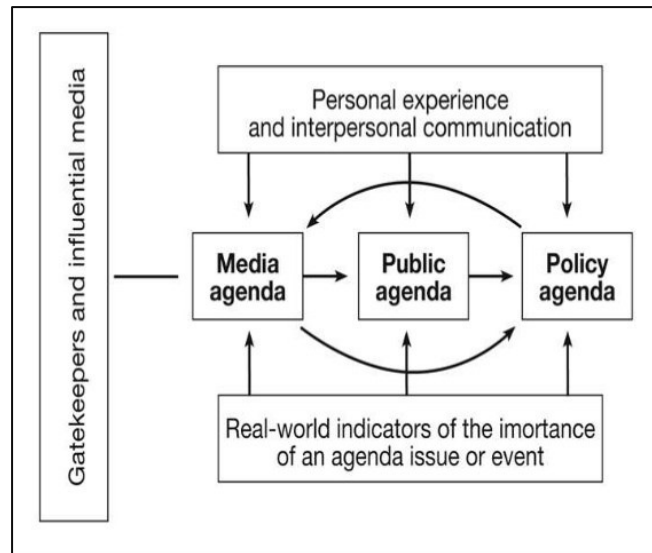


Figure 2.5 Agenda-Setting Model by McCombs & Shaw (1972)

Agenda-Setting Theory is commonly explained as comprising three (3) levels, as outlined by McCombs and Shaw (1972). These levels describe the process through which the media identify issues or objects as important, highlight particular attributes associated with them and subsequently disseminate these emphases across different media platforms. Through this process, issues gain wider visibility and circulation, reinforcing the media's influence in shaping public perceptions.

First-level agenda setting focuses on the selection and prominence of issues or objects. At this level, the media influence public attention by varying the amount of coverage devoted to particular topics, thereby suggesting which issues deserve public consideration. This level has been the primary focus of agenda-setting research (McCombs, 2014). Kim et al. (2024) discussed on second-level agenda setting which essentially involves the emphasis placed on specific attributes or characteristics of issues or objects. At this stage, the media shape the way issues are perceived by highlighting certain cognitive and affective attributes, thereby guiding public interpretation and evaluation of the issue. Finally, the third-level agenda setting, often referred to as intermedia agenda setting, concerns the transfer of issue importance across different media outlets. This level explains how media agendas influence one another, contributing to the wider diffusion and reinforcement of issue salience (Vargo & Guo, 2017).

Agenda setting is closely related to framing and priming, which together explain the operation of media influence beyond issue visibility. Framing extends agenda-setting by addressing how issues are presented and interpreted. While agenda-setting

answers the question of what to think about, framing addresses how to think about it. Framing is sometimes referred to as the second-level agenda-setting because of its strong association with Agenda-Setting Theory. Psychologically, framing effects were demonstrated by Tversky and Kahneman (1973), who showed that different but logically equivalent presentations could lead to different judgments and decisions. Erving Goffman set the framework for the sociological approach in 1974. People, he said, are always trying to make sense of the environment they live in and interpret their own life experiences. Individuals are better at processing new knowledge and they use interpretative schemas or fundamental frameworks to categorise and interpret information. Framing involves the selection and emphasis of particular aspects of reality to promote specific interpretations, evaluations and problem definitions. Bateson (1987) wrote that the media emphasises such events within a certain context, then positions them to encourage or discourage their interpretations of the events. As a result, the media has a selective impact on how people interpret the truth of a situation.

The concept of framing is that the media creates organising themes or narratives that give events meaning. The context and perspective that media provides for a story have an impact on how the audience perceives it. A frame of interpretation is a set of expectations used to make sense of a social situation at a specific moment in time. The media constructs organising themes or narratives that give events significance, which is known as framing. The audience's perception of a story is influenced by the background and perspective provided by the media. A set of expectations used to make sense of a social situation at a certain point in time is referred to as a frame of interpretation.

One of the three common types of frames are firstly, the Equivalence Frame in essence the same information presented in two ways, each with logically equivalent but slightly different wording. Gains vs. losses, full vs. empty and so on are all examples of equivalence frames. Next being the Emphasis Frame, which concentrates on a subset of relevant information about a person, situation or event in order to support a specific definition, interpretation or moral judgement, as discussed by Dimitrova and Strömbäck (2005). The Figurative Frame, which deals with metaphors, hyperbole and irony, is the third and final common type of frame.

The framing theory refers to the way information is presented to an audience in order to impact their decisions and processes. The abstractions that are utilised to build or arrange the meaning of a message are referred to as frames. According to Goffman

(1974), frame analysis promotes people's active classification, organisation and interpretation of their personal life events in an attempt to make sense of them. Ireri (2013) stated that framing research is categorised into two, namely Media Frames and Audience Frames and outlined as an attribution of Responsibility Frame, Conflict Frame, Human Interest Frame, Economic Consequences Frame and International Interest Frame. These frames recur across issues and contexts, enabling comparative analysis of media coverage. Complementing this approach, Boydston (2014) introduced a typology of issue-specific frames, identifying fifteen frames that capture more nuanced, policy- and context-dependent representations. Together, generic and issue-specific frames offer analytical flexibility in examining both broad framing patterns and issue-tailored narratives.

The attribution of Responsibility Frame is a problem in which the answer is attributed to an individual, a group or a government. The journalist writes news stories that influence public opinion and describes the person or organisation responsible for the issue or problem, as well as the person's or organisation's responsibility for providing a solution. The Conflict Frame is a strategy for drawing the audience's attention to interpersonal or collective problems. To capture and retain audience interest, the Human-Interest Frame is utilised to dramatise, personalise or sensationalise news. The Economic Consequences Frame aids media producers in reporting a problem in terms of the benefit or loss it will have on an individual, organisation, county, government or nation. Journalists and editors utilise the frame to bring the audience's attention to the story's relevance or topic. Finally, in a case where international intervention is essential to deliver a solution to a country in conflict, the International Interest Frame is outlined.

To systematise framing processes, Vreese (2005, 2012) proposed a comprehensive framing model that explains how frames operate across different stages of communication. This model distinguishes between frame building, frame setting and frame effects. Frame building refers to how frames are constructed within media content through journalistic routines, organisational constraints, and elite discourse. Frame setting concerns the interaction between media frames and audience interpretations, shaping how individuals understand and evaluate issues. Frame effects refer to the consequences of framing on attitudes, opinions and decision-making. Vreese (2005) developed a process model illustrating the framing mechanism, which visually explains how framing operates in response to these questions and is shown in Figure 2.6.

Building on this model, Brüggemann (2014) further conceptualised framing as involving frame sending, emphasising the strategic transmission of frames from media to audiences and other actors within the public sphere as shown in Figure 2.7.

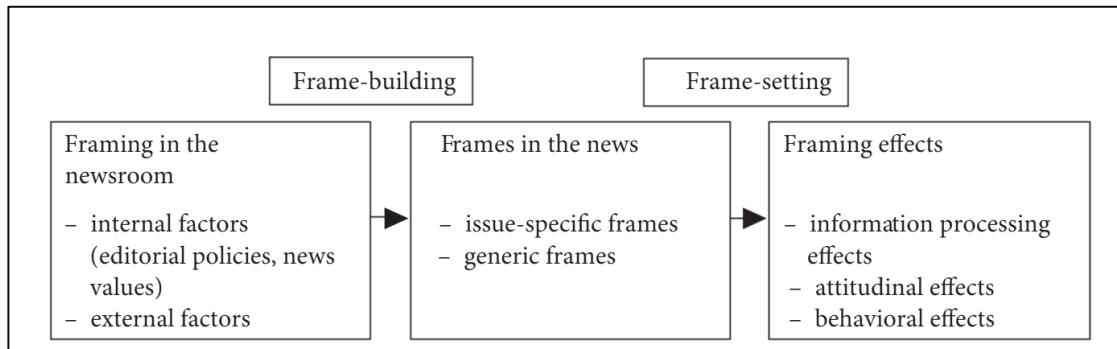


Figure 2.6 A Framing Model by Vreese (2005)

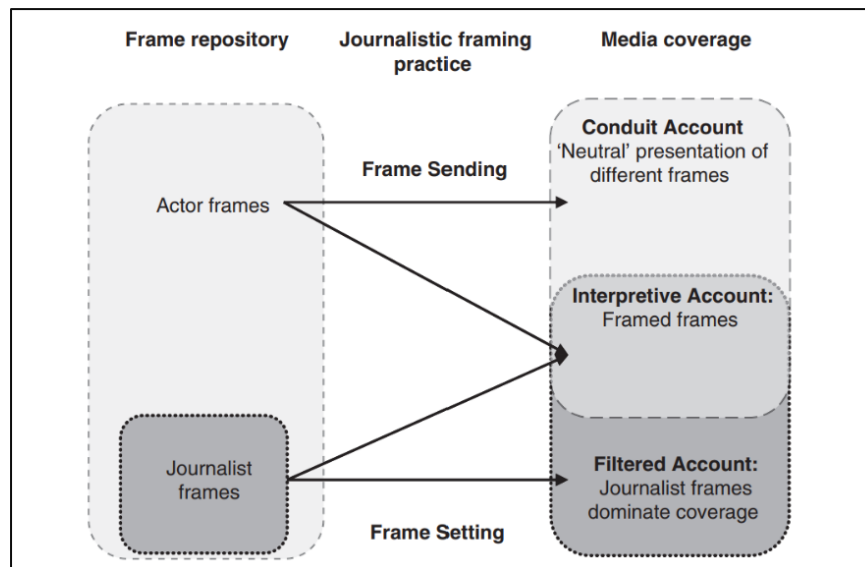


Figure 2.7 Mapping Journalistic Framing Practices (Brüggemann, 2014)

Priming constitutes a further extension of agenda-setting and framing. Priming refers to the process by which repeated media attention to certain issues or attributes increases their accessibility in memory, thereby shaping the criteria audiences use to evaluate related actors, policies or events. While scholars namely McCombs (2014) and McLean (2018) debate whether agenda-setting, framing and priming should be treated as distinct theories or as components under a single conceptual umbrella, many argue that they operate as interrelated mechanisms of media influence. In this study, priming is treated as conceptually linked to agenda-setting and framing, explaining how

sustained emphasis and interpretative cues influence evaluative judgments without explicit persuasion.

Language plays a central role in agenda-setting, framing and priming processes. Vocabulary choices, metaphors and narrative structures contribute to how issues are prioritised, contextualised and evaluated. Importantly, these processes do not always result from deliberate editorial intent; they often emerge from routine journalistic practices, professional norms, institutional constraints, and news values. As such, media influence may occur implicitly through patterns of repetition, emphasis and contextualisation.

In the news production process, raw information is filtered through organisational routines and professional judgments, resulting in selective representations of social reality. Certain aspects of an issue are foregrounded, while others are backgrounded or omitted, producing patterned narratives that shape public understanding. Media organisations therefore function as key agenda-setters and frame-builders, influencing how complex issues are defined and evaluated.

Applied to food security and food terrorism, agenda-setting, framing and priming offer a robust analytical framework for understanding how these issues are prioritised and interpreted within Malaysian media discourse. Identifying dominant frames provides insight into assumptions about causality, responsibility and appropriate responses. As argued by Entman (2007), framing simplifies complex issues by highlighting particular elements, making them more salient and memorable. Understanding which aspects of food insecurity and deliberate food-related threats receive sustained attention helps explain variations in public concern, policy prioritisation, and institutional response (Shiffman & Shawar, 2022).

Essentially, this study adopts Agenda-Setting Theory as its primary guiding framework, as it directly addresses the prioritisation and salience of food security and food terrorism issues. Framing and priming are employed as complementary theories to guide the analysis of interpretation and evaluative effects. By integrating Vreese's framing model, generic and issue-specific frame and priming effects, the study provides a theoretically grounded approach to analysing how Malaysian media practitioners and public service personnel construct, prioritise, and evaluate food-related security issues. The Figure 2.8 illustrates the media framing process model adapted from Scheufele (1999) and Bateson (1987).

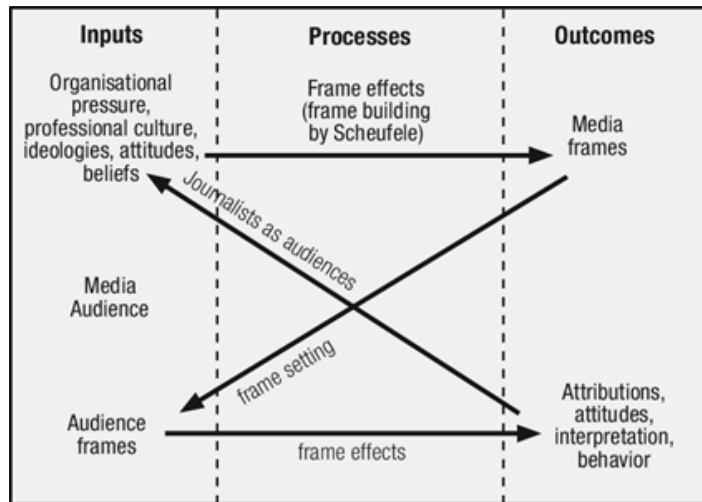


Figure 2.8 A Process Model of Framing, Modified from Scheufele (1999)

2.15.2 Social Capital Theory

Social capital is a multifaceted notion that includes a range of cultural and social value systems (Bhandari & Yasunobu, 2009). It is a widely embraced and attractive concept among social scientists. Many sociologists, anthropologists, political scientists and economists use the idea to clarify different economic and social results. Social capital is the concept of integrating socio-cultural elements to explicate development results. It has become a significant subject of conversation among academics, development specialists and policymakers (Bourdieu, 1986; Coleman, 1988; Putnam, 1993; Narayan & Pritchett, 1999; Portes, 1998). Social capital has roots in the works of classical economists like Adam Smith and John Stuart Mill, as well as sociologists like Max Weber, who offered cultural interpretations of economic events (Guiso et al., 2006). Social capital became a prominent topic in the late 1980s and has since garnered increasing study attention.

The field of social capital research is relatively recent, however there has been a substantial increase in literature on the subject. Despite the extensive body of literature, a universally accepted definition of social capital does not exist. It is commonly defined and measured in a practical and haphazard manner. Recent years have seen a surge in interest and research focusing on refining the notion and methodology of measurement. Currently, according to Van Bakel and Horak (2024), there is some consensus on the conceptualisation and key components of social capital. Social capital is a conceptual notion rather than a concrete fact. Putnam (1993)

elaborated that social capital theory is based on the importance of trust, norms and informal networks, viewing social relationships as significant assets. Relatively, Fukuyama (1995) and Nahapiet and Ghoshal (1998) all addressed social capital as a complex concept that includes social norms, values, beliefs, trust, relationships, networks, friendships, memberships, civic engagement, information exchange and institutions that promote cooperation and collective efforts for mutual gain, ultimately contributing to economic and social progress.

The origins of the concept of social capital can be attributed to Karl Marx, Emile Durkheim, Georg Simmel, John Dewey and Max Weber, who highlighted the influence of culture on economic progress, demonstrating an early understanding of social capital. Pretty and Smith (2004) attributed the origin of the term 'social capital' to Lyda J. Hanifan in 1916, who used it to emphasize the role of community involvement in improving school achievement. The concept of social capital was reintroduced by a group of Canadian sociologists (Seely et al., 1956) during their research on urban communities. Homans (1974) applied it to a theory of social interactions, Jacobs (1992) discussed it in relation to urban life and neighbourliness and Loury (1976) used it to study income distribution. All these authors stress the importance of social networks and the necessity to maintain them. Bourdieu (1986) and Coleman (1988) were the first to systematically introduce the concept and discuss it in academic debates. Robert D. Putnam's ground breaking work in 1993 greatly popularised the phrase among social scientists and caught the interest of scholars and politicians. Social capital is a complex concept that does not have a single definition. Various scholars have defined social capital differently based on their individual interests. Prominent figures in the discourse on social capital definition are Pierre Bourdieu (1986), James Coleman (1988), Robert D. Putnam (1993), Fukuyama (1995), OECD (2001) and the World Bank (2007). Most definitions commonly highlight social relationships that create productive advantages. These definitions differ in their categorisation of social capital as either personal resources or social resources.

Bourdieu categorises capital into three types: economic, cultural and social. Social capital is defined as the total resources, whether existing or potential, that are associated with being part of a stable network of more or less formal interactions based on mutual acquaintance and acknowledgment, essentially, belonging to a group (Bourdieu, 1986). This concept highlights the significance of social networks, namely the benefits and possibilities that group membership provides to its members. Bourdieu

views social capital as a shared resource that gives its members advantages, such as individual benefits. The author emphasizes the practical benefits of social capital in generating economic and social advantages from group participation and the motivation for individual engagement in such groups (Quibria, 2003). The advantages of being part of a group are the foundation of the unity that enables them. Social capital's abundance is influenced by the network's size and the amount of economic or cultural capital possessed by the links. The capital is sustained and strengthened through ongoing investment in relationships by members. Bourdieu's concept of social capital highlights class struggles as a personal resource utilised by individuals to enhance their social standing relative to others. Bourdieu's definition of social capital includes three key elements: social relationships that provide access to resources through connections, the quantity of resources generated by all relationships and the quality of those resources.

Coleman (1990) defines social capital based on its function. It is not a singular thing but a composite of various entities that have two basic characteristics: being a component of a social structure and enabling specific activities of persons within that structure. The entities consist of commitments, expectations, trust and information flows. It is an efficient resource that enables production and allows for the accomplishment of specific goals that would otherwise be unattainable. Social capital is embedded in the network of connections between individuals and groups. It enables the activities of individuals and serves as the foundation of social capital. Seeking participation in a group can be viewed as a logical investment in social capital. Coleman categorises social capital into three forms: reciprocity (trust included), information routes and flow of knowledge and norms upheld by penalty. Actors, whether individuals or organisations, can utilise these tools to accomplish their goals. Unlike other types of capital, it is not entirely interchangeable between individuals or enterprises. Social capital is created via the collective efforts of group members and is intrinsically social in nature. Coleman views social capital as a public good that is present in the interactions between individuals. Bourdieu and Coleman view social networks as the mechanism via which collective capital is preserved and strengthened.

According to Tsounis and Xanthopoulou (2024), Robert Putnam was influential in promoting the idea of social capital. He defines social capital as the elements of social organisation, including as trust, norms and networks, that enhance society's effectiveness by enabling coordinated actions (Putnam, 1993). Social capital is the relationships and connections between people, including social networks and the

standards of mutual exchange and reliability that result from them (Putnam, 2000). Social networks are valuable to him and social interactions impact the productivity of people and groups. Social capital is strongly connected to civic virtue. The quantity of civic associations and level of involvement in those associations reflect the extent of social capital in a society. Social capital is strongly linked to civic engagement, involvement in voluntary organisations and social relationships, which help establish strong norms of reciprocity and trust. Civic involvement networks enhance society collaboration, coordination and communication, bolster reputations and help overcome collective action challenges. Social capital influences the efficiency of individuals and groups and exhibits the attributes of a public good. Due to its collective nature, it cannot be converted into a private good. Capital stocks, including trust, norms and networks, increase through use and decrease when not utilised.

Fukuyama (1995) made a notable contribution to social capital theory. He provided a more precise yet notably distinct notion of social capital whereby it is defined as the capacity of individuals to collaborate towards shared goals inside groups and organisations, mostly based on trust. He described social capital as a specific collection of informal beliefs or standards that are shared by group members, enabling cooperation among them (Fukuyama, 1995). He argued that interpersonal trust is essential for the development of social interactions. Enhanced trust fosters collaboration among individuals, lowers transaction expenses and boosts commercial dealings. Fukuyama focused on the attributes within social connections that enable individuals to interact with others, such as interpersonal trust, reciprocity, shared norms and understandings, ultimately fostering the development of social capital. Fukuyama's notable addition to the social capital theory is introducing a simple and direct method to quantify social capital: the percentage of individuals who believe that 'most people can be trusted'. However, due to the complex nature of social capital, it should serve as just one signal, rather than the sole one.

According to Lin (2001), social capital is described as an investment in social connections that is anticipated to provide benefits in the business world. Lin defines social capital as resources within social networks that individuals access and utilise for their actions. The notion involves resources that are part of social relationships rather than persons and access to these resources is controlled by actors. Social capital can be seen as an investment made by individuals in interpersonal ties that are beneficial in the market. It is an investment in social connections that allows access to and borrowing of

resources from other individuals. Lin's theory of social capital is characterised by a more individualistic perspective. Actors interact and network to achieve rewards. Lin views social capital as a valuable resource based on individuals' relationships and ability to access resources inside their network or group.

Robison et al. (2002) defines social capital as the goodwill or favour shown by one person or group towards another, which can lead to additional benefits, advantages and special treatment beyond what is often anticipated in a transactional relationship. The argument is that this definition encompasses the characteristics of traditional capital, distinguishes between its essence (sympathy) and its functions (possible benefits) and emphasizes the transformative potential of capital that is present in human interactions. Key global institutions, such as the Organisation for Economic Cooperation and Development (OECD) and the World Bank, have established their unique definitions. Social capital, as defined by the OECD (2001: 41), refers to networks, shared norms, beliefs and understandings that help groups cooperate. The World Bank defines social capital as the institutions, connections and norms that influence a society's social interactions. Social capital is described as more than simply the total of the institutions supporting a society; it is the cohesive force that binds them together (World Bank, 2007).

Quibria (2003) examined various definitions and opinions and determined that social capital can be seen as either an individual asset derived from personal networks and social ties or as a collective asset belonging to a cohesive group like a community with shared interests and values. Some have emphasised trust, tolerance, civic involvement and social interactions as essential components of social capital. Some have emphasised cultural and social norm concerns.

Social scientists from various backgrounds adopting social capital have resulted in diverse definitions. The diversity of definitions of social capital is not a result of a lack of understanding, but rather stems from the multiple characteristics of social capital. Robison et al. (2002) suggest that differences in definition have emerged due to scientists incorporating aspects such as potential uses, location and modifiability of service capacity, which the author believes should not be part of the definition. Social capital can be broken down into its components: its nature, location, outcomes (use) and mechanisms of generation. However, the fundamental concept of those definitions aligns with Bourdieu's assertion that social connections are more important than knowledge. There is a vast amount of research on the definition and measurement of

social capital, although none have established a definitive, undisputed definition. There is ongoing academic dispute concerning the definition of social capital and its key components that make it universally applicable. Due to its intricate characteristics, it is relatively uncommon to encounter numerous meanings, making it unrealistic to anticipate a single universal definition. Over time, the idea of social capital has been refined and there is now consensus on its definition.

The various definitions of social capital generally agree that its fundamental basis is in the social relationships that produce advantages for individuals and groups. Social capital is a complex concept that encompasses several types and purposes. Social capital can be seen as a shared resource consisting of social connections, common values and trust that enable collaboration and joint efforts for mutual advantages. It is a valuable asset created through an actor's investment, allowing investors to leverage it as credits due to their relationships. Social relations are seen as a valuable resource for individuals, consisting of information and trust that may be utilised when needed. Access to cash enables the accomplishment of specific objectives that would be unattainable without it. Social connections deteriorate without upkeep; mutual exchange diminishes as time passes; and standards rely on consistent interactions (Coleman, 1990). The actor's investment enhances and fortifies the capital, while disinvestment results in a decrease of the capital. Social capital can be defined and conceptualised based on three main categories: social networks, norms of reciprocity and trust. Social capital includes informal social connections, participation in social networks and groups, civic involvement (volunteering), community and organisational participation (volunteering), confidence in individuals and institutions and norms of reciprocity. It is a resource owned by a group that is created via the shared norms, beliefs, attitudes and behaviours of individuals, which mostly has a favourable impact on economic development.

The idea of social capital is akin to that of human and economic capital albeit not as tangible and measurable as the latter and thus harder to perceive. Nevertheless, irrespective of discipline or theorist, it can be deduced that social capital has to do with people, interaction, networks and resources (Adler & Kwon, 2002; Swartz, 2002; Lin, 1999; Putnam, 1993,2000). In fact, scholars alike are able to conceptualise social capital in terms of resources. Since Weber's writings in 1946, resourcing and accessing resources have become of utmost interest and importance in the field of sociology (Gerth & Wright Mills, 2008). That said, social capital has become crucial for

understanding how resources are both acquired and utilised as part of a theory of resources (Lin, 2001).

Using these concepts as a foundation, social capital may then be described as the social resources that exist in interactions between individuals and groups that can be accessed and used to achieve individual or collective goals as ascertained by (Swartz, 2002). This interpretation of social capital includes instances such as landing a job based on a friend's recommendation, finding a good restaurant by word of mouth or being scouted for work due to a prior excellent testimonial and portfolio. Thus, social links or relationships are the key to social capital.

According to Putnam (2000), social capital can be found in a social bond between two actors or in a communal network of relationships. As a result, social capital is found in one's network, notably in the relationships within it. Previously, Putnam in 1993 further compared social capital to other forms of capital in that it grows with usage and dissipates with inactivity. He also mentions how trust, social networks and social standards act in the same way. Putnam (2000) sees a general reduction in social capital, citing fewer organisational memberships, loosened relationships throughout the country and a sense of lost community as examples.

The term "social capital" is believed to be firstly coined by James Coleman in 1988. It is best described as what exists within a group of people and a structure of relations between actors and among actors leading up to be identified as relations that bring about social action. Coleman came up with the notion of social capital in the quest to merge an agentive, rational actor with structuralist restriction. Both agency and structure are critical components of social capital and neither may be overlooked as these shared values are able to bridge the gap between agency and structure. Coleman's 1988 definition of social capital is based on the comprehension as to how social capital is created with the means in mind. Social capital is found in people's ties (i.e., networks) and is not owned privately (Coleman 1988, 1990). Because these linkages contain resources, Coleman in 1988 viewed relations amongst people to be a social type of "capital." In addition, social capital is to be a resource in and of itself.

2.15.2.1 Dimensions and Types of Social Capital

Nahapiet and Ghoshal (1998) devised the paradigm that distinguishes the dimensions of social capital namely structural, cognitive and relational, which is widely

recognised and utilised for understanding social capital. Social capital contains intricate interrelations between three conceptual dimensions, although being valuable for analytical convenience.

Structural social capital represents a network providing access to individuals and resources, whereas relational and cognitive social capital demonstrate the ability to exchange resources (Andrews, 2010). Cognitive social capital pertains to subjective interpretations of shared understandings, while relational social capital involves sentiments of trust shared across multiple actors within a social environment. A simplified perspective of high amounts of social capital includes strong connections, high levels of trust and a shared sense of goal. Social capital can be comprehended through the interconnection, quality and character of connections, as well as the breadth of a common shared vision (Akram et al., 2016). This pertains to social capital in terms of its structural (connections among players), relational (trust between actors) and cognitive (shared objectives and values among actors) characteristics.

Aside from the dimensions of social capital, researchers have also distinguished the three (3) types of social capital and they are bonding, bridging and linking (Nesa, 2017). Bonding refers to the social capital that arises from interactions among individuals who belong to the same organisations and social circles. Bonding is enhancing existing social connections rather than broadening your social networks. Lyson et al. (2000) defined bonding as interactions that occur within "homogeneous social groups," where individuals share common beliefs and histories. Bridging refers to the social capital produced by encounters among diverse groups of individuals, facilitating the formation of new connections. Bridging refers to exchanges between diverse groups. Heterogeneous groups consist of individuals from diverse social circles. By connecting with these individuals, you are expanding your network and gaining access to new social circles, ultimately enhancing your social capital. Linking refers to the social capital that arises from contacts between individuals or communities and government authorities. Lyson et al. (2000) introduced the phrases bonding and bridging, while Daniel P. Aldrich added the term Linking. Aldrich contends that establishing relationships with those in positions of authority and government is crucial for grassroots community organisations to achieve their goals and for governments to efficiently assist the communities they serve. The dimensions and types of social capital are simplified into the following tables.

Table 2.4
Dimensions of Social Capital

Structural	Cognitive	Relational
Social Structure	Shared understandings	Nature and quality of relationship
• Network ties and configuration • Roles, rules, precedents and procedures	• Shared language, code and narratives • Shared values, attitudes and beliefs	• Trust and trustworthiness • Norms and sanctions • Obligations and expectations • Identity and identification

Source: Nahapiet and Ghoshal 1998

Table 2.5
Types of Social Capital

Bonding	Bridging	Linking
Deepening of existing relationships	Creating new relationships beyond current social circle	Creating social relationships with leaders or government officials to leverage their power and influence

Source: Nesa 2017

2.15.2.2 Social Capital Theory Within the Study

With respect to this study, Nosratabadi et al. (2020) acknowledged that the Social Capital theory has increased food security via two (2) processes of knowledge sharing and product sharing because it produces a synergy that benefits all members of a community. Furthermore, the utilisation of this theory improved food security by strengthening the food security pillars that is, food availability, food accessibility, food usage and food system stability. On top of that, community contact would lead to the exchange of food goods and information, facilitating food availability and access. In general, collective allocation of food and food products among community members reduces household insecurity, offers healthy nourishment to vulnerable families and enhances the food utilisation pillar of food security, all based on food security research deduced in the literature.

Moreover, membership to social networks also boosts community members' resilience and lessens their vulnerability, hence strengthening the food system's

stability. Nosratabadi et al. (2020) established a conceptual model from the findings with the research making a significant contribution to the common literature on both food security and social capital. As a continuation to the previous and to add value to the study of food security, this research specifically entails on viewing and analysing both food security as well as food terrorism during a pandemic-stricken era in Malaysia. With that, testing the Social Capital theory on this research will greatly assist in providing resolutions to address food insecurity and terrorism threats.

Additionally, Craft (2017) also elaborated on the effect of the Social Capital theory towards food security and food terrorism (agro-terrorism), whereby Craft (2017) argued that scholars and theorists have extensively studied Social Capital theory and food security producing an abundance of literature (Craft, 2017). This in turn fosters vigorous and productive debates as well as discussions on the theory's origins, complexity and societal implications. Similarly, Craft (2017) also opined that the future of food security and the threats towards food security remain key topics of discussions within the academia. Within the evolving landscape of this study, social capital theory offers a critical lens for understanding community resilience, institutional trust and collective response mechanisms. Through this study, social capital, defined broadly as the networks, norms and trust that facilitate coordination and cooperation (Putnam, 2000), is theoretically deemed to play a pivotal role in both preventing and mitigating the impacts of food insecurity and food terrorism.

Scholars have argued that social capital enhances food security by enabling community-based solutions, fostering mutual aid and supporting local food systems. High levels of bonding social capital in the form of close ties within communities, can increase food access through informal sharing networks, while bridging capital which are connections between different groups, facilitates broader resource distribution and collaboration (Woolcock & Narayan, 2000). In times of crisis, communities with strong social capital are more likely to mobilize local resources, support vulnerable households and advocate for policy responses. During the COVID-19 pandemic, grassroots food initiatives such as community fridges and mutual aid networks flourished in cities with strong civic engagement and community trust (Wolfson & Leung, 2020). These examples underscore the role of social capital not just in daily food access but in systemic resilience. Social capital theory provides a valuable framework to understand how communities can prepare for, respond to and recover from such events. By investing in social infrastructure namely networks, norms and trust, societies can bolster

their resilience not just against intentional attacks but against the full spectrum of food system disruptions.

All in all, the many extensive body of work and studies done by these scholars have paved the path for this study to seek deeper investigation using diverse methodological lenses and building on robust foundation of previous research. In turn, this study offers unique synthesis by applying complementary methodological perspectives, one derived from the media and the other from the public service, both interconnected symbiotically.

2.15.3 Food Security Model and Food Crime Terminology

Abraham Maslow, an American clinical psychologist, developed one of the most widely accepted ideas regarding human needs, known as the Hierarchy of Needs. Maslow identified five categories of human requirements, which are physiological, safety, social, esteem and self-actualisation, respectively. The requirements are arranged in ascending order in accordance to human needs. The physiological level of requirements, which is of interest to this investigation, whereby food is one. Thus, within the context of Maslow's theoretical construct as depicted below, food is a physiological need of humans.

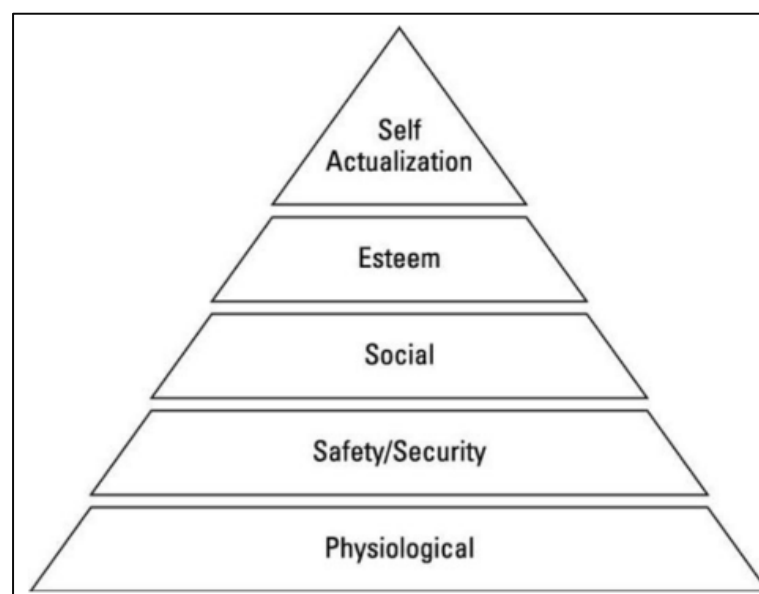


Figure 2.9 Maslow Hierarchy of Needs(Maslow, 1943)

The conceptual model of food security presented in this research is based on a model by Ford (2009) and an extension of Maslow's hierarchy of needs. As discussed earlier, up until a decade before, food security was built up upon the three components namely food access, food availability and food quality where food access refers to the affordability, allocation and preference of food, which includes sufficient traditional and/or store-bought food of preference and of nutritional value. After Ford (2009), more researchers have produced other food security models where Quality is replaced with Utilisation and an addition of another dimension aptly called Stability as discussed by (Bach & Aborisade, 2014; Burchi et. al., 2011; Wagle, 2018). As written earlier in introduction, the suggestion to add two (2) supplementary dimensions namely agency and sustainability by HLPE in 2020 has not been widely recognised by scholars yet. The following figures depict the Food Security Model by (Ford, 2009) and (Wagle, 2018) respectively.

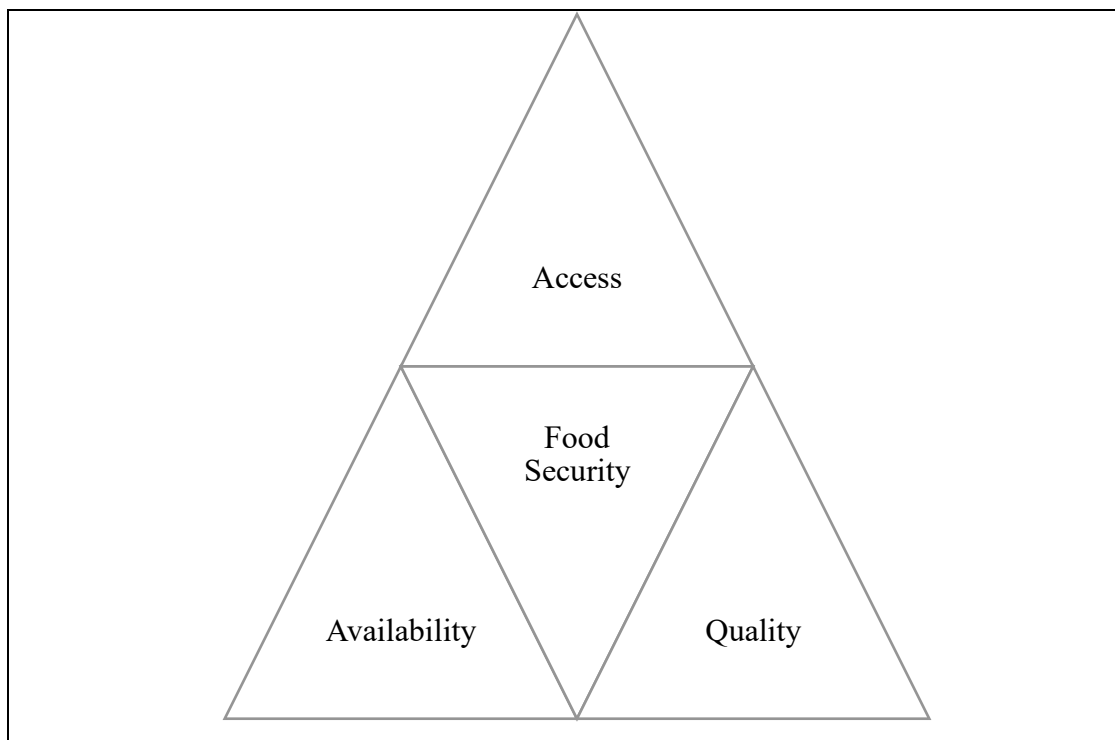


Figure 2.10 Food Security Model (Ford, 2009)

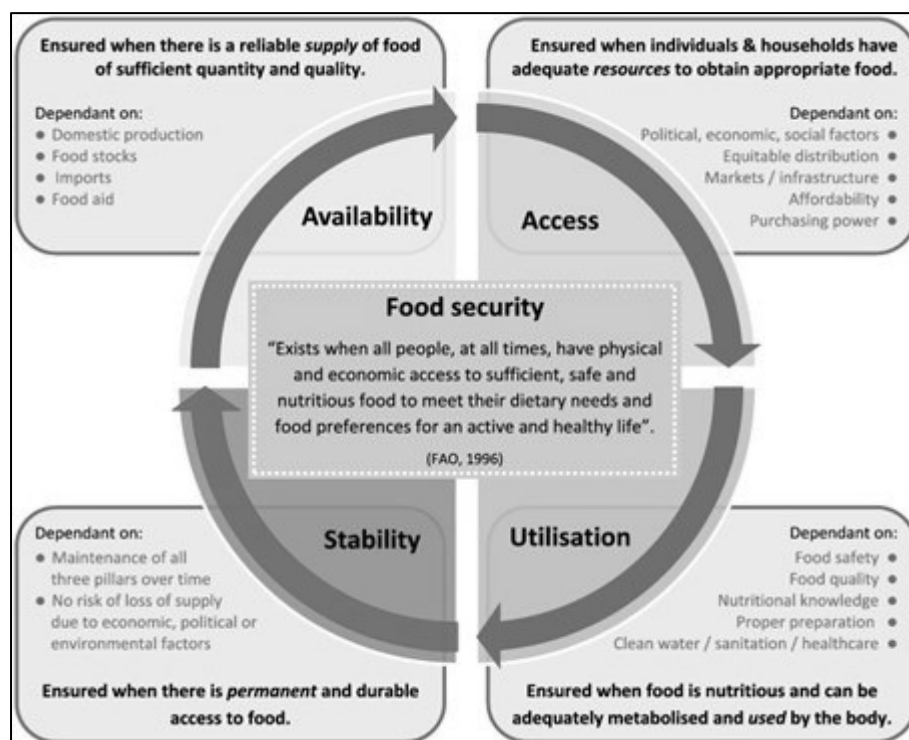


Figure 2.11 Food Security Dimensions (Wagle, 2018)

Ford's conceptual model on food security, although easily comprehensible lacks the discussion and framework on the possible threats of food insecurity and threats. This is where the categorisation of food crime terminology model (Ariffin et al., 2021) comes in handy for this study to explain further where food terrorism originated from as well as differentiating the many forms of food threats and crimes as discussed earlier. The diagram below illustrates the threats to food being categorised into food contamination and food crime respectively. Under food crime is where food fraud and food terrorism are placed. The categorisation is pertinent to this research as food terrorism is a relatively new field (Razak et al., 2020) that is worth to be studied and investigated further.

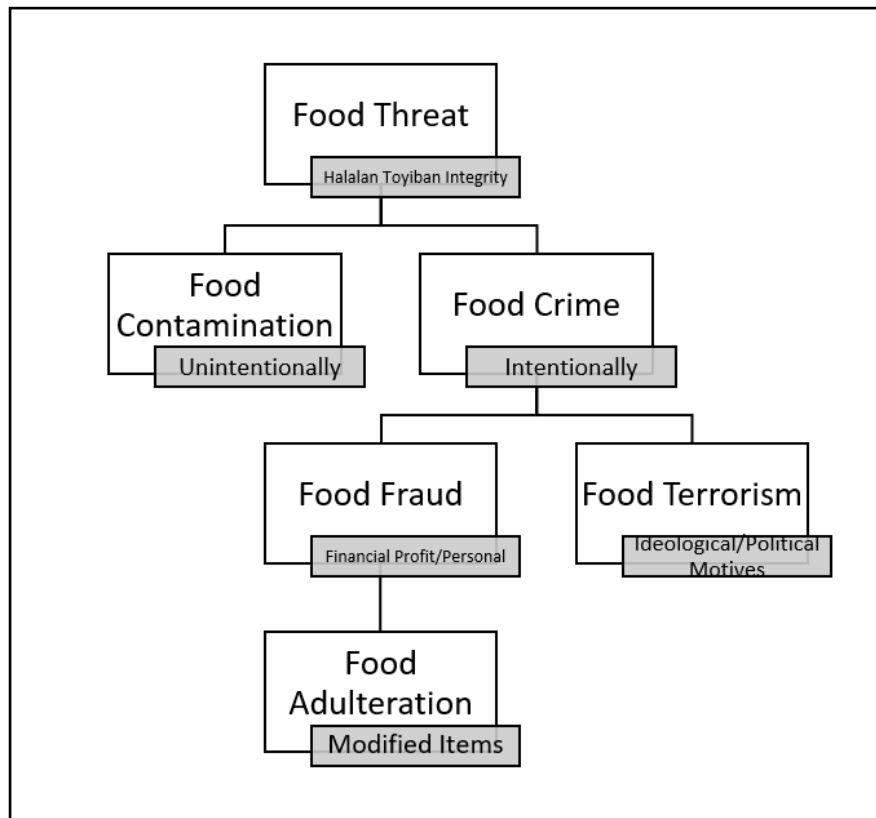


Figure 2.12 Food Crime Terminology Model (Ariffin et al., 2021)

Table 2.6

Summary of Selected Theories and Model to the Study

Summary of theory/model	Application in Research	Period of Study
Food Security Model	To explore the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel;	This study relates all the theories and model to suit the period of study
Food Crime Terminology Model	To analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security;	This study relates all the theories and model to suit the period of study
Agenda-Setting Theory	To understand the interpretation and communication of food security and food terrorism by media practitioners and public service personnel in their reporting;	This study relates all the theories and model to suit the period of study
Social Capital Theory	To recommend a model to guide media practitioners and public service personnel in effectively addressing reports on food security and food terrorism.	This study relates all the theories and model to suit the period of study

2.16 Conceptual Framework

The conceptual framework acts as a guide and stabilising force in research (Ravitch & Riggan, 2017), serving as an integrative ecosystem that enables researchers to systematically connect various elements of a study. This process clarifies their interrelations, discrepancies, overlaps, tensions and the contextual factors influencing the research environment and the examination of phenomena within it. Adom et al. (2018) defined a conceptual framework as a framework that explains the major research either graphically or narratively. Researchers were forced to assess their readings and conclusions to ensure relevance to their investigations because theoretical framework was not something that was visible in literature.

Farrow et. al. (2021) explained that a conceptual framework is a set of coherent ideas or concepts organised in a manner that allows for a better understanding of a particular phenomenon. It is a theoretical construct that helps to clarify relationships between variables and guides the development of research questions, hypotheses and methodologies (Babbie, 2013). By providing a visual representation of these relationships, a conceptual framework facilitates comprehension and analysis. A conceptual framework serves as a foundational structure that guides research and analysis by outlining key concepts, variables and their relationships. It plays a pivotal role in shaping how researchers understand and interpret phenomena within a specific context (Ravitch & Carl, 2021).

A well-structured conceptual framework provides a roadmap for researchers, aiding in the formulation of research questions, hypotheses and methodological approaches (Creswell & Creswell, 2018). It helps to identify and define key variables, ensuring that researchers have a clear understanding of what they are studying and how different elements interact (Miles & Huberman, 1994). A conceptual framework grounds research in established theories, lending credibility and context to the study. It allows researchers to situate their work within the broader academic discourse (Miller, 2010). By providing a visual representation of complex ideas, conceptual frameworks enhance communication among researchers, stakeholders and practitioners, making findings more accessible and understandable (Rocco & Plakhotnik, 2009). At the core of any conceptual framework are the key concepts and variables that define the research. These elements should be clearly identified and defined. For instance, in health research, key concepts might include health behaviour, access to healthcare and health

outcomes (Glanz et al., 2015). A robust conceptual framework is anchored in existing theories that explain the relationships between concepts. Theoretical frameworks provide the necessary context for understanding why certain variables interact in specific ways (Luft et al., 2022).

The first step in developing a conceptual framework is identifying the research problem. A clear understanding of the issue at hand sets the stage for defining key concepts and variables. A comprehensive literature review helps to identify existing theories, frameworks and research related to the topic. This step ensures that the framework is grounded in established knowledge and identifies gaps in the literature (Grant & Booth, 2009). Once the literature has been reviewed, researchers should define the key concepts and variables relevant to the research problem. Clear definitions are essential for ensuring that all stakeholders have a common understanding of the terms used in the study (Creswell & Creswell, 2018). Researchers should then hypothesize the relationships between the identified variables. This may involve developing diagrams or models that visually represent these relationships, which can help clarify complex interactions (Miles & Huberman, 1994). Validation of the conceptual framework involves seeking feedback from peers, stakeholders and experts in the field. This step ensures that the framework is coherent, comprehensive and applicable to the research context (Rocco & Plakhotnik, 2009).

While conceptual frameworks are valuable tools, developing them can pose challenges. Researchers may encounter difficulties in ambiguity in defining key concepts can lead to confusion and misinterpretation. Clear, concise definitions are essential for effective communication (Creswell & Creswell, 2018). Determining how variables interact can be complex, particularly when dealing with multifaceted issues. Researchers must carefully consider the theoretical underpinnings of their frameworks to ensure accuracy (Luft et al., 2022). Striking a balance between a framework that is too simplistic and one that is overly complex can be challenging. A well-designed framework should capture essential elements while remaining accessible (Rocco & Plakhotnik, 2009). As research progresses and new insights emerge, conceptual frameworks may require revisions. Researchers must be willing to adapt their frameworks to reflect evolving understanding (Miller, 2010).

A conceptual framework is a vital component of the research process, providing structure, clarity and guidance. By delineating key concepts, variables and their relationships, researchers can enhance their understanding of complex phenomena and

contribute to academic discourse. Whether in social sciences, education or health research, conceptual frameworks serve as foundational tools that inform research design, facilitate communication and ground studies in established theories. As research continues to evolve, the development and refinement of conceptual frameworks will remain essential for advancing knowledge across disciplines.

With regards to this study, from Maslow's Theory, safety and security make up part of the basic needs before one can fulfil both psychological and self-fulfilment needs. This study then found Ford's Conceptual Model and Wagle's Food Security Dimensions to be very helpful in constructing the conceptual framework, along with the categories of Food Crime Terminology by Ariffin et al. (2021) where they have managed to categorise food terrorism as a part of food crime. Moving from there, this study then developed a conceptual framework for this research which employs two (2) theories namely: Agenda-Setting Theory and the Social Capital Theory. As the first theory is widely used and widely regarded as the gold standard or rather quintessential media and communication theories, a little bit more of focus is then put on the Social Capital Theory which this study found suitable and applicable to further assist the study. Thus, the following framework shown in Figure 2.13 was created to aid in the study's direction and understanding.

This study adopts an integrated conceptual framework that positions Social Capital Theory and Agenda-Setting Theory as complementary interpretive lenses. Social Capital Theory informs the relational contexts within which media practitioners and public service personnel operate, particularly through bonding, bridging and linking mechanisms that shape trust, authority and information flow. Agenda-Setting Theory, in turn, frames the prioritisation and salience of food security and food terrorism within media and policy discourses. Media practitioners and public service personnel are conceptualised as key actors whose understandings of food security and food terrorism are shaped through institutional roles, professional norms and crisis contexts. Food security is examined through its established dimensions of availability, access, utilisation and stability, while food terrorism is analysed as a multidimensional construct encompassing threat-based, political and ideological framings. Rather than treating these dimensions as discrete variables, the framework emphasises their role in shaping interpretive outcomes, including policy orientations, reporting practices and the development of a grounded model for food security and food terrorism reporting in Malaysia.

Madekhan (2019) explained that theory serves as the overarching framework and guiding principle throughout the entire qualitative research process. Thus, in order to generate innovation in this study, a hybridisation of theories was developed which combined the elements from the Agenda-Setting and Social Capital theories. According to Papy and Jakubowicz (2017), hybridisation is a design innovation that combines independent concepts and knowledge to create new identities that are present in a new knowledge base. In this study, hybridisation is employed to bring together two theoretical perspectives in a complementary manner, exhibiting a symbiotic relationship, allowing their key concepts to be meaningfully aligned and examined together. Consequently, hybridisation in this study functions as an integrative analytical strategy that enhances conceptual coherence and depth, rather than as an attempt to construct a new theory.

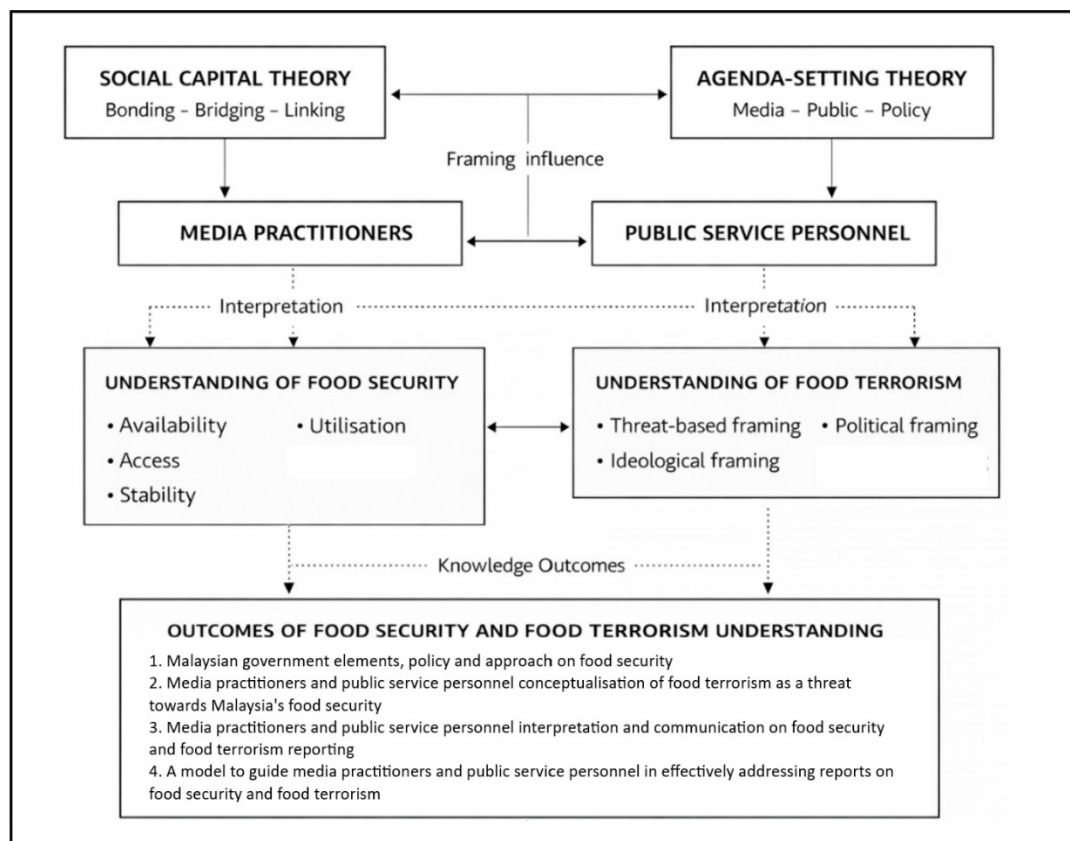


Figure 2.13 Conceptual Framework of “The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID-19”

2.17 Analytical Matrix

Table 2.7 depicts the analytical matrix that systematically aligns the research questions, research objectives and methods of inquiry. The matrix serves as a guide to ensure coherence between the study's research objectives and the data collection strategies adopted. By mapping each research question to its corresponding objective and method of inquiry, the matrix clarifies the utilisation of document analysis and in-depth interviews to address issues related to food security and food terrorism from the perspectives of Malaysian media practitioners and public service personnel.

Table 2.7
Analytical Matrix for “The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID-19”

Research Questions	Research Objectives	Method of Inquiry
What are the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel?	To explore the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel;	- Document Analysis - In-depth interviews
In what ways do media practitioners and public service personnel conceptualise food terrorism as a threat to Malaysia's food security?	To analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security;	- Document Analysis - In-depth interviews
How do media practitioners and public service personnel interpret and communicate reports on food security and food terrorism?	To understand the interpretation and communication of food security and food terrorism by media practitioners and public service personnel in their reporting;	- In-depth interviews
How can media practitioners and public service personnel effectively address reports on food security and food terrorism?	To recommend a model to guide media practitioners and public service personnel in effectively addressing reports on food security and food terrorism.	- In-depth interviews

2.18 Chapter Summary

The chapter provides a review of pertinent preceding research all relevant to this study. Before embarking further on the methodology and analysis of the research,

document analysis and systematic review were employed to summarize the key ideas from this literature and a better grasp of the associated fields of study was gained.

This study began the chapter by discussing on the position of media in food security and food terrorism reporting and found relevant literature on the latest development on both new and traditional media along with the scarcity reporting on both food security and food terrorism especially before the pandemic.

Next, this study proceeded with the conception of United Nations' Human Security and Human Development, the concept that houses food security essentially. Subsequently, the literature on food terrorism in the wake of a crisis and pandemic were discussed followed by the COVID-19 pandemic deemed as a global terrorising threat towards human security and its dimensions, one of which is, food security.

Thereafter, this study elaborated on the theories and framework which could be guiding this study namely the Agenda-Setting Theory, Social Capital Theory, Food Security Model and Food Crime Terminology. Finally, both the conceptual framework and analytical matrix for better clarity and understanding were subsequently developed. In the following chapter, this study shall elaborate on the paradigm, methodology and methods used to further guide the study, including the research design, data sources, sampling strategy, data collection procedures and analytical approach adopted to ensure the completion of the study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter focuses on the development of the research design that connects the methodological talks with the research questions in order to achieve the goals and objectives of this study. This chapter provides an explanation of the study's design, which includes data production and analysis. The purpose is to formulate the study's findings and conclusion. This study is conducted qualitatively due to the ardent interest to explore the research problem and produce rich and meaningful results and findings. Furthermore, the researcher is also interested to divulge into the experiences of the selected informants and gain their broad perspective on the subjects being investigated.

According to Goundar (2012), research methodology is a methodology that explains the methods that are required in order to gather and analyse data in order to address the issue statement of the research study. The ultimate emphasis of this study is to analyse the understanding of food security and food terrorism among Malaysian media practitioners and public service personnel. Research objectives were developed to cater to the ability to provide academically competent answers to the research questions.

For this chapter, this study will delve into the approach taken for this entire study. It describes in detail the processes followed to develop this study, with particular attention on the following four (4) key research objectives: RO1) To explore the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel; RO2) To analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security; RO3) To understand the interpretation and communication of food security and food terrorism by media practitioners and public service personnel in their reporting; and RO4) To recommend a model to guide media practitioners and public service personnel in effectively addressing reports on food security and food terrorism. The steps and procedures utilised in data collection and analysis process are also discussed along with how the data are presented as key findings and results.

3.2 Research Paradigm

Gaining insight into the fundamental principles and beliefs that form the basis of a study aids in elucidating its structure and organisation (Easterby-Smith et al., 2012). Several academics (Bell et al., 2022; Saunders et al., 2019) have employed different descriptions, classifications and categorisations to elucidate the research philosophies of epistemology and ontology in relation to research methodologies. Nevertheless, despite the similarities in their perspectives, inconsistencies still emerge from the application of these philosophies since certain academics frequently have conflicting opinions or struggle to establish a universally accepted definition. This has resulted in a state of confusion and disorder over the definitions of these notions. Hence, the increasing perplexity arising from this absence of agreement remains a cause of concern, particularly for research students. Mkansi and Acheampong (2012) argue that researchers often struggle to select the appropriate research philosophy and approach due to the absence of shared understanding. This predicament can potentially impact the results of a study.

A research paradigm provides the foundational worldview that guides how a study understands reality (ontology), the nature of knowledge (epistemology) and the appropriate ways of generating that knowledge (methodology). Paradigms shape not only methodological choices but also how research problems are framed, how data are interpreted, and how claims are justified (Creswell & Poth, 2018; Guba & Lincoln, 1994). In social science research, particularly within communication, policy and security studies, paradigmatic positioning is critical because social phenomena are embedded in meaning-making processes rather than governed solely by observable causal laws. Issues such as food security and food terrorism are therefore not merely technical or material conditions, but socially constructed concepts that acquire meaning through discourse, institutional practices and media representation (Bryman, 2016; Denzin & Lincoln, 2018). As such, the choice of paradigm must align with the study's aim to explore understanding, interpretation and communication rather than measurement or prediction.

Guided by these considerations, this thesis is situated within an interpretivist research paradigm. Interpretivism assumes that social reality is multiple, context-dependent and constructed through human interaction and shared meanings (Pervin & Mokhtar, 2022). From this perspective, phenomena such as food security and food

terrorism do not exist as fixed, universally understood realities; instead, they are understood differently by actors depending on their institutional roles and professional experiences. This paradigm is particularly appropriate for examining the perception of Malaysian media practitioners and public service personnel in terms of these concepts during the COVID-19 pandemic, a period marked by uncertainty, heightened risk perception and evolving policy narratives.

Ontologically, the study adopts a relativist position, recognising the coexistence of multiple realities. Media practitioners and public service personnel may hold differing, and at times competing, interpretations of food security priorities, risks and responsibilities. These variations are not treated as errors or inconsistencies, but as meaningful reflections of institutional positioning and communicative practice. Such an ontological stance aligns with qualitative communication research that seeks to understand how meanings are produced, negotiated, and sustained within specific social and organisational contexts (Creswell & Poth, 2018).

Epistemologically, the study is grounded in subjectivism, whereby knowledge is viewed as co-constructed between the researcher and the researched. Data generated through interviews and document analysis are understood as situated accounts rather than objective representations of reality. Meaning emerges through interpretation, reflexivity and engagement with participants' narratives, policy texts, and media discourse (Nickerson, 2024). The researcher therefore plays an active interpretive role, acknowledging positionality while striving for analytical rigour and transparency.

3.3 Research Design

Research design is a critical component of any research project, providing the blueprint that guides the entire study from conception to conclusion (Akhtar, 2016). It outlines the methodology and procedures for collecting and analysing data, ensuring that the research questions are addressed effectively. A well-structured research design is essential for several reasons namely it helps clarify the research objectives and questions, allowing researchers to maintain focus throughout the study (Creswell & Creswell, 2018). This clarity is vital for guiding data collection and analysis. A strong research design enhances the validity and reliability of findings. Validity refers to the accuracy of the measurements and whether the study truly assesses what it intends to measure. Reliability concerns the consistency of results across different trials or studies

(Bryman, 2016). Effective design allows researchers to manage time, resources and finances efficiently. By planning the methodology, researchers can anticipate potential challenges and allocate resources accordingly (Maxwell, 2012). A well-thought-out research design incorporates ethical considerations, ensuring that the rights and well-being of participants are safeguarded (Israel & Hay, 2006).

Research designs can be broadly categorised into three main types: exploratory, descriptive and explanatory. Exploratory research is used when the research problem is not well-defined. This type of design aims to generate insights and understandings about a phenomenon, often leading to the formulation of hypotheses for future studies. Common methods include qualitative approaches such as interviews, focus groups and open-ended surveys (Saunders et al., 2019). Descriptive research aims to provide an accurate portrayal of a phenomenon. It involves collecting detailed information to describe characteristics or patterns. This type of research often employs quantitative methods, such as surveys and observational studies, to analyse data statistically (Creswell & Creswell, 2018). Finally, explanatory research seeks to explain the relationships between variables, often through hypothesis testing. This design is typically associated with quantitative research and employs methodologies such as experiments and correlational studies (Bryman, 2016). Explanatory research aims to identify cause-and-effect relationships, making it crucial for testing theories.

The context in which the research is conducted significantly influences the design. Factors such as cultural norms, available resources and the specific population being studied must be considered to ensure the design is relevant and appropriate (Maxwell, 2012). Every research design has limitations in the form of factors that may affect the study's validity or reliability. Researchers should acknowledge these limitations and consider how they may impact the findings (Creswell & Creswell, 2018). Delimitations, on the other hand, define the scope of the study, outlining what is included and excluded from the research (Fink, 2017). While a research design provides a structured approach, researchers should remain flexible and adaptable. Unforeseen challenges may arise during the research process, necessitating adjustments to the original design. Researchers must be prepared to address these challenges while maintaining the integrity of the study (Bryman, 2016). Research design is a fundamental aspect of the research process, serving as a roadmap for data collection and analysis. By providing clarity, enhancing validity and addressing ethical considerations, a well-structured research design facilitates meaningful inquiry and contributes to the

advancement of knowledge. Understanding the various types of research designs and their components is essential for researchers aiming to conduct rigorous and impactful studies.

With respect to this study, the main aim of the study is to discover the Malaysian media understanding on food security and food terrorism during COVID-19 with the goal to answer the research questions and ultimately achieve the research objectives as discussed earlier in Chapter One. Before proceeding to discuss on the rationale of selecting the qualitative analysis, it would be apt to firstly deliberate on the ontology and epistemology considerations first.

3.4 Qualitative Research Methodology

Qualitative research is rooted in an interpretive philosophy, where the aim is to comprehend how individuals make sense of their worlds and their experiences. This approach is often used when a study or research seeks to explore phenomena in their natural settings, focusing on meaning and context rather than statistical generalisation. According to Denzin and Lincoln (2018), qualitative research involves an interpretive, naturalistic approach to the world, meaning that researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them. Generally, research employing a qualitative design is particularly well-suited for exploring the complexities of social phenomena, which are often subjective and multi-dimensional. By using a qualitative approach, the underlying reasons, opinions and motivations that shape participants' experiences, providing a holistic understanding of the research problem can be uncovered (Creswell & Poth, 2018). The choice of a qualitative design is driven by the nature of the research questions guiding this study. When the research seeks to explore 'how' and 'why' questions, qualitative methods are typically the most appropriate (Yin, 2018). If a study is interested in understanding the experiences and perceptions of individuals within a specific social or organisational context, making qualitative methods is ideal for capturing these dynamic and context-specific insights. Qualitative research also allows for flexibility in the research process. As Patton (2015) noted, qualitative designs are emergent rather than tightly prefigured. This flexibility is advantageous when the research aims to capture the complexity and diversity of participants' perspectives, as it

allows the researcher to adapt data collection and analysis procedures in response to what emerges during the study.

This study aimed to address research inquiries that is best suited under the qualitative approach. Qualitative approaches offer informants the autonomy to explicate their ideas and provide responses to inquiries using their own language (Lim, 2024), so capturing the unique perspectives of distinct groups (Carroll & Rothe, 2010). Qualitative research is valuable for finding different responses that can arise from an individual's experience (Alderfer & Sood, 2016). As discussed in the previous chapter, it is sufficed to say that previous study in the field of media reporting on food security or food terrorism has primarily relied on statistical analysis to establish a correlation. In contrast to quantitative approaches, qualitative procedures are characterised by open-ended and adaptable nature, which facilitates the discovery of new material and ensures that the perspectives of participants are given due consideration (Willig, 2008). Qualitative research emphasizes the comprehensive exploration of the intricacies and dynamics of human experience (Ashworth, 2003) and delves deeply into the complexity and processes involved (Marshall & Rossman, 2006). Participants are given the chance to provide more extensive and detailed responses, which is not commonly observed in quantitative approaches (Denzin & Lincoln, 2005).

Within the domains of food security and human security, qualitative approaches have been widely adopted to explore meanings, narratives, institutional practices and communicative processes that shape perceptions and responses to threats (Béné et al., 2019; Maxwell, 2012). The history of qualitative dates back to the thinkers of the interpretivism philosophy. According to Crotty (2020), scholars of interpretivism argued that human beings and their social surroundings cannot be investigated in the same way that physical phenomena can and that social science study should be distinct from natural science research rather than attempting to mimic it. Furthermore, according to Saunders et al. (2019), interpretivist study possesses the objective of developing a novel and distinctive knowledge and analyses of social veracities and contexts.

In media and communications, Lindlof and Taylor (2011) argued that qualitative research is all about generating knowledge pertaining to communication, hence has long been the dominant methodology. Mahoney and Goertz (2006) mentioned that qualitative researchers consider causation from the standpoint of need while quantity firmly stands on the notion that a large number of observations has a better possibility of producing valid results as quantitative researchers seek to identify causes that affect

the values of an outcome across a large population. This simply means that quantity, unlike quality, entails 'controlled' studies in which the researcher is unaware of the outcome until the treatment is administered.

Additionally, academic researches on food security and technology too, employ the qualitative technique as presented by Doyle et al. (2017), where the use of qualitative analytical techniques is typically connected with the study of data sets focusing on concerns such as the presence or absence of a specific class or kind of sample, pattern identification and cluster analysis. These strategies are commonly used in the food sciences to deal with food authenticity, classification, discrimination, fraud and provenance. In recent years, qualitative analysis has become more important in both food research and industry applications, addressing concerns about food fraud and traceability. In order to complete the research, this study strictly worked in aiming to focus on answering the research questions as follows: RQ1) What are the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel? RQ2) In what ways do media practitioners and public service personnel conceptualise food terrorism as a threat to Malaysia's food security? RQ3) How do media practitioners and public service personnel interpret and communicate reports on food security and food terrorism? and finally RQ4) How can media practitioners and public service personnel effectively address reports on food security and food terrorism?

That said, the design for this study employs a qualitative method of exploratory study using thematic analyses via document analysis and in-depth interviews whereby the latter would be consisting of inquiring semi-structured questions with the use of ATLAS.ti 24 application to interpret and analyse the texts and findings thereafter. The answers to the research questions mentioned earlier would be collected through virtual meetings. Several sessions of interviews would take place involving media practitioners from various media organisations and relevant government agency officers from the Ministry of Agriculture and Food Security and its agencies.

For this research, after the completion of the document analysis, a series of in-depth interviews were carried out. Chan et al. (2013) explained that in-depth interviews may be conducted through various mediums such as internet, telephone and face-to-face. For informants based overseas, the interview may be conducted through online meetings. Views and opinions obtained from the interview will be used for discussion in the later sections of this research. As the researcher opted for in-depth interviews, the

first phase of the research starts with planning, developing instrument, collecting, analysing and disseminating the findings. The list of informants would be firstly identified. Informants were selected based on their knowledge and proficiency relating to this study (Denzin & Lincoln, 2005).

The qualitative design adopted in this study allowed for an in-depth exploration of the research problem, providing rich insights into informants' experiences and perceptions. The use of document analysis, purposive sampling, semi-structured interviews, thematic analysis and strategies to ensure trustworthiness ensured that the research is methodologically sound and that the findings are both credible and meaningful. By employing a qualitative approach, this study sought to contribute to a deeper understanding of the complexities of human behaviour within the context of the research problem. In conclusion, the success of a research akin to this relies greatly on the analytical process of the findings. Therefore, to ensure that this study was constructed efficiently, the researcher adopted the standard process of a qualitative study as illustrated in Figure 3.1.

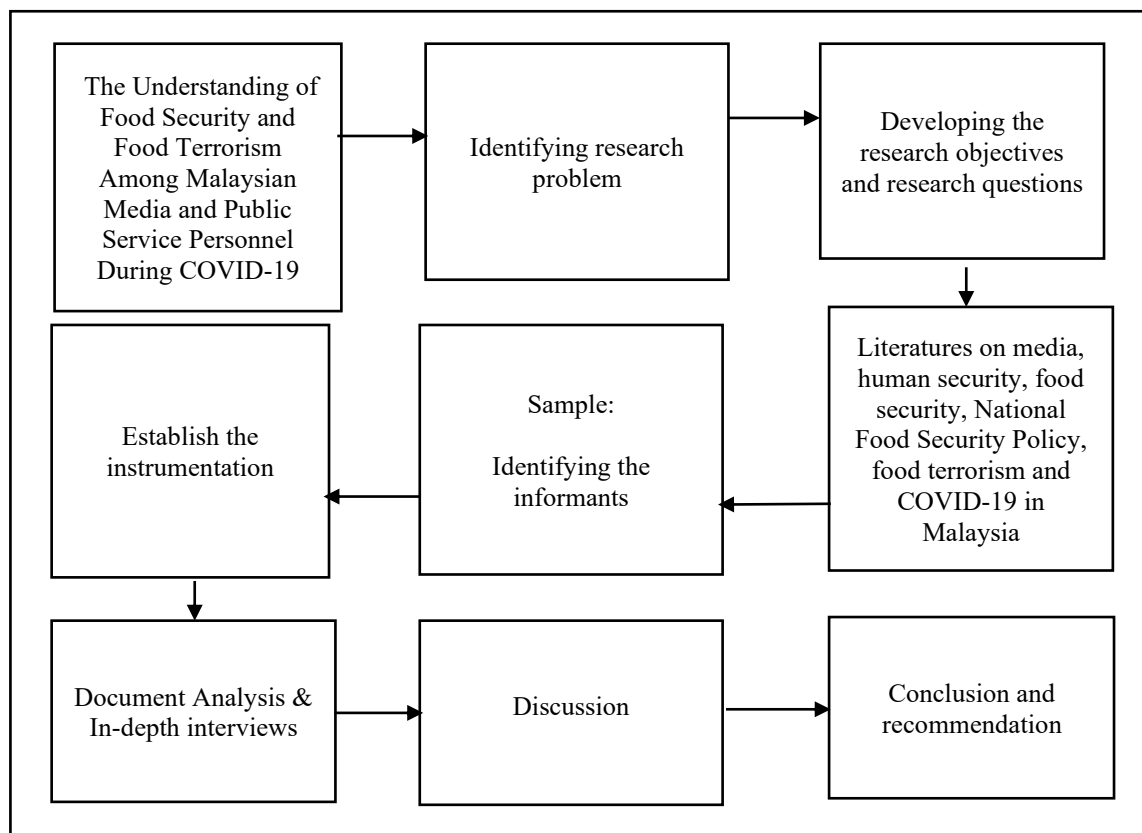


Figure 3.1 Research Process for “The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Personnel During COVID-19”

3.4.1 Phenomenological Approach

This study adopts a phenomenological approach to explore how Malaysian media practitioners and public service personnel understanding and experience with regards to food security and food terrorism. Phenomenology is a qualitative research strategy focused on understanding people's lived experiences and the meanings they attach to those experiences instead of testing hypotheses or generalising outcomes to large populations (McLeod, 2024). It seeks to describe phenomena as they are perceived by individuals in their real-world contexts, making it especially suitable for studies that prioritise subjective meaning and personal perspectives (Oluka, 2025).

Phenomenology is appropriate for this study because it allows the researcher to examine how informants make sense of complex, socially embedded phenomena such as food security and food terrorism within their professional roles. Through methods such as document analysis and in-depth interviews, phenomenological research enables a deep exploration of informants' interpretations, beliefs and perceptions. It emphasises the importance of capturing experiences as they are lived and described by informants, which provides insights into how these issues are understood and communicated in practice (Frechette et al., 2020).

Tavakol and Sandars (2025) also concurred that by prioritising informants' voices and reflective descriptions, the phenomenological approach supports an in-depth understanding of informants' experiences shaped by their professional contexts and personal engagements with the subject matter. This approach goes beyond surface-level description to reveal the essence and meaning of the phenomena being studied, thereby contributing to richer insights that align with the objectives of this research.

3.5 Research Setting

Bhattacharya and Geertz (2008) discussed deliberately on research setting, referring it to the environment where the study is conducted. It encompasses not only the physical space but also the social, cultural and organisational contexts that may influence the behaviours, attitudes and interactions of participants. In qualitative research, understanding the nuances of the research setting is essential because it can directly affect the data being collected (Creswell & Poth, 2018). The research setting is a crucial component of any study, as it provides the context within which data collection

takes place. A well-defined research setting ensures that the findings are contextualised and allows for a clearer understanding of how various environmental and situational factors influence the results. In qualitative research, the setting is not just a backdrop but an integral part of the study that can shape the dynamics of data collection and interpretation. According to Coombs (2022), a research setting should align with the research questions and objectives, providing a fertile ground for observing and interacting with participants in their natural environments.

While the research setting is a critical element of qualitative research, it can also present challenges. One potential issue is the researcher's positionality or the way in which their presence in the setting may influence participants' behaviour. In some cases, participants may alter their responses because they know they are being observed or because they perceive the researcher as an outsider. To mitigate this, the researcher must engage in reflexivity, continually reflecting on their role in the research process and the ways in which their presence may be shaping the data (Finlay, 2002). Another challenge is access to the research setting. Gaining permission to conduct research within a specific setting, such as an organisation or community, can be difficult. The researcher must build trust with gatekeepers and stakeholders to ensure that they are granted the necessary access. This involves negotiating entry into the setting and ensuring that ethical considerations, such as informed consent and confidentiality, are respected (Yin, 2018). During the completion of this thesis, the researcher faced the inadvertent event of having to relocate to India with the spouse and family for work with the Malaysian Consulate in Mumbai. As a result, the interviews were conducted online through Google Meet.

The sample size in qualitative research tends to be smaller than in quantitative research because the aim is not statistical generalisation but rather the depth of understanding. According to Guest, Bunce and Johnson (2006), data saturation, where no new information or themes are emerging, typically occurs within a range of 12 to 20 interviews, depending on the complexity of the phenomenon being studied. This study followed a similar approach, adjusting the sample size as necessary to ensure saturation. Researchers are required to select appropriate sampling technique in qualitative studies in order to establish rigour and credibility (Lowenberg 1993; Sandelowski, 1995). If the sample chosen is information-rich and the researcher's analytical abilities are robust, qualitative research is considered relevant. Two types of sampling procedures that have

been examined in earlier qualitative studies are purposeful and theoretical sampling (Coyne, 1997).

The sampling selection procedure for this study was guided by purposive sampling, consistent with the qualitative and phenomenological research design adopted. Documentary sources and participants were deliberately selected based on their relevance, expertise and direct involvement with issues related to the study, ensuring the relevance of the data obtained. This approach enabled the researcher to engage with informants who possessed specialised knowledge and experiential insights necessary to address the research objectives. While this section outlines the general sampling rationale within the research setting, a detailed explanation of the informant characteristics and justification of sample size is provided in the ‘Sampling Strategy and Research Informants’ section of this chapter.

3.5.1 Location of the Study

The essential element to consider when organising the in-depth interview for this study is the study's location (McGrath et al., 2019). The designated venue for data collection was selected based on the informants' convenience to ensure full participation and a suitable environment during the interview procedure. This facilitated a seamless operational process and the reliability of the informants during the session. To provide an optimal interview environment and ensure high-quality recordings, a tranquil atmosphere and a comfortable location are essential (Ritchie, 2011).

The initial location of the study was established to be in Malaysia with main setting in Kuala Lumpur, Selangor, Putrajaya and Sabah however due to the constraints mentioned earlier, all of the interviews were subsequently done online. Nevertheless, to ensure the seamless execution of data gathering, the researcher would devise a contingency plan. If an informant abruptly cancels the interview, they would be rescheduled at the earliest opportunity in accordance with the arrangement. All acquired information was documented and recorded for study purposes. All informants received a consent document to address potential challenges in data collecting, referred to as field difficulties, which may pose a difficulty. Furthermore, the researcher ensured the confidentiality of the informants. Creswell (2016) states that a researcher safeguards participant confidentiality by assigning numerical identifiers or pseudonyms to individuals.

In phenomenology, the study seeks to understand a phenomenon based on the informants' perspectives and to identify the essence of its true meaning. Daymon and Holloway (2010) identify several common features in phenomenological studies: (i) articulating the underlying philosophical basis; (ii) bracketing assumptions; (iii) upholding assumptions; (iv) focusing on a main phenomenon; (v) working with a small sample; and (vi) applying thematic phenomenological data analysis. The study acknowledged the uniqueness of each individual's core essence. The individual actions were comprehended through the researcher's understanding of the lifeworld of individuals and their shared perspective. The researcher must access individuals' thoughts to interpret their motives, actions and social contexts from the perspective of the studied population. In this instance, they were personnel from the media practitioners and public service personnel, respectively.

3.6 Data Collection Procedure

Qualitative research commences by establishing assumptions and employing theoretical frameworks to guide the investigation of research problems, focusing on the interpretation of social or human problems ascribed by individuals or groups (Marshall & Rossman, 2006). Furthermore, the process of data collection is essential in qualitative methodology, significantly influencing the precision and reliability of research results. The calibre of the data obtained can ultimately dictate the legitimacy of the findings in the study. (Stenfors et al., 2020). Alternatively, certain scholars have highlighted that qualitative research data is obtained by deliberate inquiries, rather than merely collecting data in its unaltered environment, taking into account the sensitivity of the individuals and locations involved (Weis & Fine, 2000). Mason (1996) highlighted that the process of collecting data is simultaneously a process of generating data. After reviewing relevant literature from several authors, the researcher opted to adopt the phrase data inquiry strategy to describe the comprehensive methods encompassing the collection and analysis of data (Denzin & Lincoln, 2018). Consequently, the researcher employed two strategies, namely document analysis and in-depth interviews.

The utilisation of these strategies was necessary to acquire relevant data that would effectively meet the research objectives of this research. The primary method used to gather data was in-depth interview process, supplemented by document analysis as a validating source of information. Darlington and Scott (2002) refer to this strategy

as a common approach because it entails the integration of qualitative data inquiry approaches. The majority of the qualitative investigations incorporated the integration of many data inquiry approaches, which allowed researchers to capitalize on the advantages and disadvantages of each technique (Hajar, 2005). For the purpose of this study, the data collection procedure is thus divided into three (3) phases and is depicted by the following diagram.

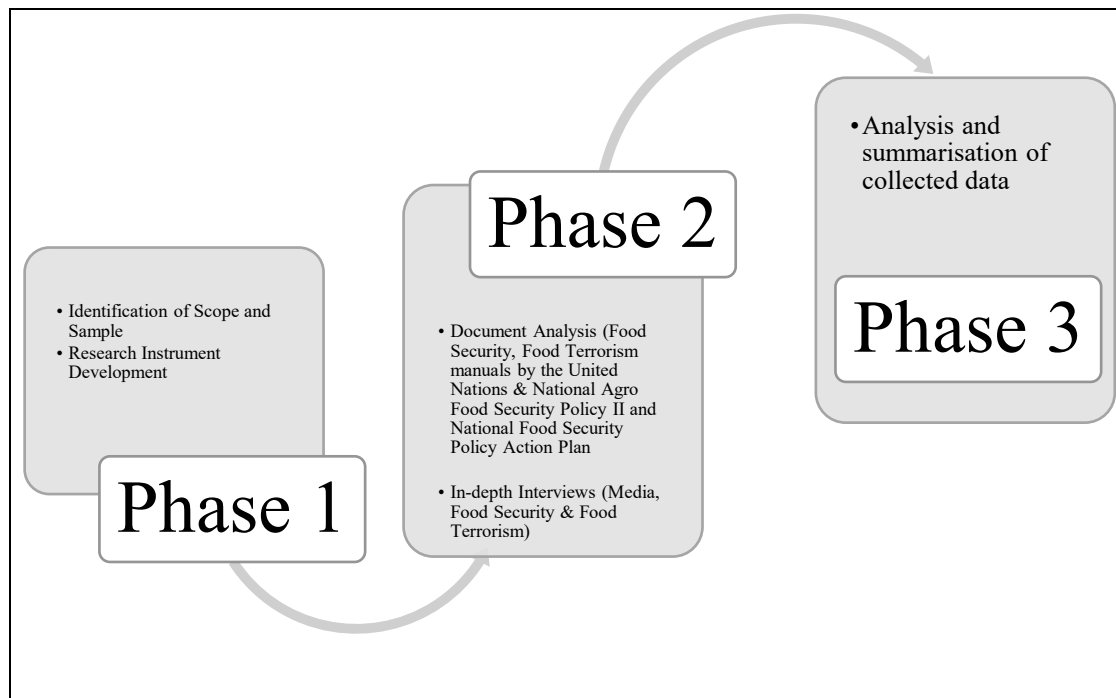


Figure 3.2 Data Collection Procedure for “The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID-19”

Before the data collection process was executed, the researcher carried out a few procedures to ensure the smoothness of the process. These procedures were:

- i. Developed the code sheet for the document analysis of policies of FS and FT as well as the research instrument in the form of interview protocol and;
- ii. Passed the Research Ethics Committee to carry out in-depth interviews;
- iii. Selection process for informants and getting the approval to be interviewed within the stipulated date and time; and
- iv. Completed the data collection, followed by data analysis and finally developing the model and guidelines of the research.

The combination of strategy yielded a multi-method process within the qualitative research method of this study and can be depicted by the following figure:

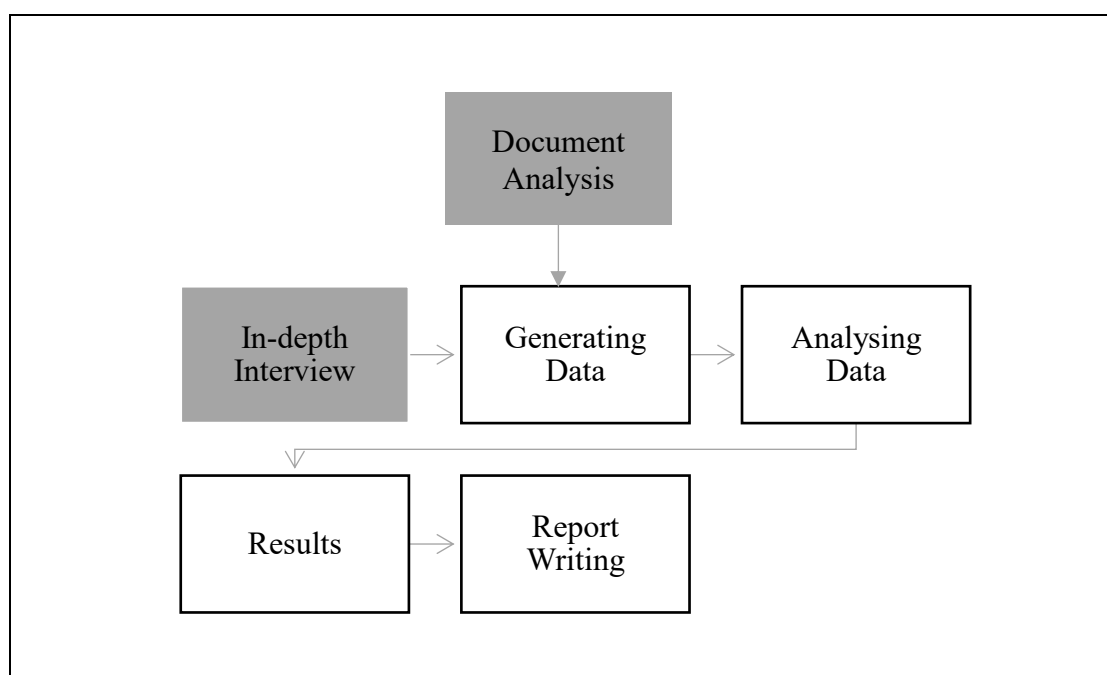


Figure 3.3 Multi-method Data Collection Strategy for “The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID -19”

3.6.1 Data Collection Strategies

As the strategy of inquiry involved both document analysis and in-depth interviews, it is pertinent that the researcher set a requirement for the research subject in order to answer the research questions and ultimately achieve the research objectives. The breakdown for the research subject is as shown in Table 3.1 and Table 3.2 respectively.

Table 3.1
Data Inquiry Strategy for Research Questions and Research Objectives

Research Questions	Research Objectives	Strategy of Inquiry
What are the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel?	To explore the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel;	In-depth interview Document analysis

Research Questions	Research Objectives	Strategy of Inquiry
In what ways do media practitioners and public service personnel conceptualise food terrorism as a threat to Malaysia's food security?	To analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security;	In-depth interview Document analysis
How do media practitioners and public service personnel interpret and communicate reports on food security and food terrorism?	To understand the interpretation and communication of food security and food terrorism by media practitioners and public service personnel in their reporting;	In- depth interview
How can media practitioners and public service personnel effectively address reports on food security and food terrorism?	To recommend a model to guide media practitioners and public service personnel in effectively addressing reports on food security and food terrorism.	In-depth interview

Table 3.2
Subject Requirement for Strategy of Inquiry

Strategy	Requirements	Details
Document Analysis	Government policy and manual handbook	Determined by past literature, library search and document analysis
In-depth Interview	Informants in: Media Food Security Food Terrorism	Practitioners and personnel determined via purposive sampling

3.6.2 Data Collection Instruments

This study employed two primary data collection instruments, implemented in sequential phases, to address the research objectives comprehensively. The research design was structured to ensure that institutional and policy-level perspectives were first systematically examined before eliciting experiential and interpretive insights from informants. Accordingly, Phase 1 involved document analysis, followed by Phase 2 consisting of in-depth interviews. This sequential arrangement enabled the findings from the document analysis to inform and refine the focus of the interview phase, thereby strengthening analytical coherence and methodological rigour.

In Phase 1, document analysis was utilised to examine official policies related to food security, food terrorism and governance. This phase established the policy context and institutional priorities that underpin national and international food security discourse. Building on these findings, Phase 2 employed in-depth interviews as the primary instrument for capturing expert perspectives, interpretations and lived experiences that could not be fully discerned from documentary sources alone. Conducted sequentially, the two phases allowed for triangulation between documentary evidence and interview data, enhancing the credibility and depth of the study's overall findings.

3.6.2.1 Phase 1: Document Analysis

Phase 1 of this study employed qualitative document analysis to examine the policy, elements and approach throughout the years since its conceptualisation within five (5) official national and international policy documents. Document analysis is a qualitative research method that involves systematically reviewing and interpreting documents to gather relevant data for a study (Morgan, 2022). This technique allows researchers to extract information from various types of documents, such as reports, meeting minutes, academic articles and organisational records (Bowen, 2009). The primary purpose of document analysis is to provide context and depth to research findings. By analysing existing documents, researchers can gain insights into historical contexts, organisational practices and social phenomena that may not be captured through interviews or surveys (Merriam, 1998).

This method is particularly useful in exploratory research, where understanding the background or evolution of a topic is crucial. Each document type offers unique insights and helps build a comprehensive understanding of the research topic (Flick, 2018). One of the main advantages of document analysis is that it can provide rich, contextual information without requiring the researcher to interact with participants, thus minimising ethical concerns related to consent (Flick, 2018). Additionally, it allows for the examination of historical trends and longitudinal changes over time. However, limitations include the potential for incomplete data, as not all relevant documents may be available. Researchers also face challenges related to the interpretation of documents, which may be influenced by the researcher's biases (Merriam, 1998).

The first process of data collection involved document analysis of the current and past Malaysian government policy along with the manual handbook on food security and food terrorism by the United Nations. Aside from that, the two (2) theories and two (2) frameworks consisting of the Agenda-Setting Theory, Social Capital Theory with Food Security Model and Food Crime Terminology framework respectively. The collection of journals and relevant work on this study was also done simultaneously using various platforms and channels. This study adopted an abductive approach to document analysis. Deductively, the analysis was guided by established food security frameworks and communication theories, while inductive analysis allowed themes and patterns to emerge from the data. This combined approach ensured theoretical grounding without constraining the emergence of context-specific insights (Timmermans & Tavory, 2012; Braun & Clarke, 2021). Document analysis served as a foundational phase, providing analytical grounding for subsequent phases examining media and public service perspectives.

Thematic analysis was then conducted to deduce the relevant themes to construct the interview protocol for the next inquiry strategy which is the in-depth interview. The study's themes and subthemes can be discerned by analysing the key findings of previous studies, the empirical information gathered in the field of study, as well as the researcher's own expertise and the perspectives shared by the informants. The resulting themes are derived from the inductive process, wherein generic codes are constructed based on the study of the materials and subsequently devised an interview protocol.

The document analysis began with a clear definition of the analytical focus and scope of the study. This phase examined how food security is framed within policy and normative documents, with particular attention given to conceptual definitions of food security, the dimensions through which it is articulated, policy approaches and governance mechanisms, and security-related risks, including non-traditional threats. Documents were selected using purposive sampling based on their relevance, authority, and policy significance. To ensure analytical rigour, inclusion criteria were applied, whereby only official government or international organisation documents with explicit relevance to food security and food terrorism were considered. The unit of analysis comprised meaningful textual segments, such as paragraphs or policy statements, that articulated concepts related to food security, policy orientation, analytical approach or security threats.

Following document selection, the preparation, collection and organisation of documents were undertaken. All selected documents were retrieved from official government portals and United Nations or World Health Organization repositories to ensure authenticity and credibility. Prior to analysis, documents were organised chronologically and thematically. An initial assessment was conducted to evaluate the authenticity of each document, its intended purpose and target audience as well as potential sources of bias including normative, strategic or political orientations. In total, five (5) documents were examined, representing both national and international policy positions. The five (5) documents are listed in Table 3.3.

Table 3.3
List of Documents Analysed

No.	Document Title	Issuing Body	Year	Level
1	National Food Security Policy Action Plan (DSMN) 2021–2025	Ministry of Agriculture and Food Security, Malaysia	2021	National
2.	National Agrofood Policy 2.0 (NAP 2021–2030)	Ministry of Agriculture and Food Security, Malaysia	2021	National
3.	The State of Food Security and Nutrition in the World Report (SOFI 2022)	Food & Agriculture Organization of the United Nations (FAO)	2022	International
4.	Terrorist Threats to Food	World Health Organization (WHO)	2003	International
5.	Food Defence	Institute of Food Science & Technology	2021	International

Data analysis was conducted using a structured coding process that combined inductive and deductive logic. Each document was read repeatedly to achieve familiarity with its structure, policy orientation and thematic emphasis. This familiarisation stage enabled immersion in the data and the identification of recurring concepts and patterns across documents. Coding proceeded through three analytical stages. During the initial stage, open coding was applied line by line to capture key ideas related to food security, policy priorities, governance arrangements, preparedness measures and security risks. At this stage, codes remained descriptive and inclusive.

The subsequent axial coding stage involved grouping and refining related codes to identify relationships and patterns across the dataset. For instance, codes relating to availability, access, nutrition, and stability were consolidated under broader food security dimensions. In the final stage, selective coding was undertaken to identify and integrate core themes into coherent analytical categories. This stage involved aligning emergent themes with theoretical constructs and research objectives, resulting in comprehensive interpretations.

To support consistency and transparency in the analytical process, a codebook was first developed to define and guide the application of analytical codes. Building on this, a code sheet was used during the document analysis phase to systematically record coded findings across documents. The code sheet captured keywords and thematic groupings related to food security conceptualisation, dimensions of food security, policy approaches, definitions of food terrorism, preparedness and response mechanisms, including types of threats. The use of a code sheet enabled structured documentation of analytical observations and enhanced the transparency and auditability of the document analysis. Table 3.4 presents the code sheet used to record findings from the document analysis phase of this study.

Table 3.4
Code Sheet for Document Analysis of Study

No.	Keyword	Document Title	Category (Food Security/Food Terrorism)	Extracted Sentence (Verbatim)	Interpretations
1	Definition				
2.	Elements/Dimensions				
3.	Approach				
4.	Response Mechanism				

Following the coding process, the findings were interpreted and synthesised to comprehend how food security is presented as a policy priority, discussed as a multidimensional and security related issue in national and international policy documents. By comparing common themes and differences across these documents, the analysis provided important background information that supported and guided the subsequent in-depth interviews, helping to shape the focus of questions and better

understand how informants perceive and interpret food security and food terrorism. Rigour was ensured through transparent documentation of procedures, systematic coding and triangulation. The use of ATLAS.ti 24 further enhanced credibility and clarity. Reflexivity was maintained throughout the analytical process to ensure alignment between data, theory and research objectives (Guest et al., 2024). The results of this phase are presented narratively in Chapter 4, supported by tables and thematic summary.

3.6.2.2 Phase 2: In-depth Interview (Online)

The subsequent methodological phase employed a qualitative approach through in-depth expert interviews, which was deemed most appropriate for examining the understanding, interpretations and perceptions of informants regarding food security and food terrorism. This approach aligns with the objectives of the study, as it enables an in-depth exploration of expert knowledge, institutional perspectives and experiential insights that cannot be adequately captured through documentary sources alone. Specifically, the in-depth interviews were conducted to explore informants' perspectives on existing food security policies, governance arrangements and the extent of awareness and preparedness concerning potential food terrorism threats in Malaysia. Through this method, the study sought to generate nuanced insights into how food security challenges and risks are understood at the institutional and professional levels, thereby supporting the formulation of informed conclusions and policy-relevant recommendations aimed at strengthening national preparedness and resilience. All in all, this study aims at providing a relevant recommendation or better still, a solution to better prepare Malaysia in the event of food terrorism causing grievances to food security with the assistance of media reporting and dissemination.

As the selected informants are deemed able to provide comprehensive information and knowledge which will then be translated into relevant data needed to ensure the success of this study, the researcher has agreed with Dorussen et al. (2005) whom mentioned that authoritative guidance carries even more weight for the direction of this study. Although qualitative research entails a mix of observations, interviews and document reviews, specific information is almost always acquired through open-ended questions that allow for direct quotations, making the interview a crucial component of the inquiry. Sharan Merriam, a pioneer in the field of educational

qualitative research, observed in 2009 in which there is essentially no consistency between writers in how (the philosophical) part of qualitative research is articulated. In other words, Merriam (2009) pointed out that, in classic qualitative manner, a researcher interprets the topic based on one's unique, socially constructed way. In terms of data collection and analysis, qualitative research presents to be truly fragmented, with a lot of jargon.

Additionally, Merriam (2009) often emphasised that data collection and analysis for qualitative method will almost always occur together. Henceforth, exploratory phenomenological approach will be employed as the appropriate methodology with respect to this study. The exploratory phenomenological approach focuses on investigating individuals' lived experiences of a phenomenon that is not yet well understood, particularly in contexts where existing theoretical frameworks are limited or absent (Creswell, 2013; Van Manen, 2016). This approach is well-suited for studies aiming to explore emerging issues by capturing the subjective meanings and perceptions of those directly involved.

As noted by Lester (1999), phenomenology provides deep insight into how individuals make sense of their experiences, especially when these experiences are complex or unfamiliar. In exploratory research, the goal is not to test hypotheses but to generate understanding and identify patterns of meaning (Stebbins, 2001). Within this context, data collection often includes in-depth interviews, discussions, textual analysis and observations, allowing for a rich, multi-layered interpretation of participants' realities. Thus, the exploratory phenomenological approach is particularly appropriate when the aim is to understand how individuals perceive and make sense of a phenomenon for which clear outcomes or variables have yet to be established. Furthermore, Denzin and Lincoln (2005) discussed that the qualitative research method focuses on getting a better understanding and grasp of a phenomenon such as natural settings, attempting to make sense of or interpret the phenomena in terms of the meaning towards individuals assigned to them. Simon and Goes (2013) described qualitative research as a set of techniques, that is used frequently in social science and marketing where data obtained from small group of informants and are not analysed with statistical techniques.

The five (5) approaches as discussed by (Creswell & Poth, 2018) towards qualitative research consist of grounded theory, case study, ethnography, narrative research and phenomenological research. The common methods used according to

Bhandari (2020) are observations, interviews, focus groups, surveys and secondary research. The explanation for the approaches by Creswell and Poth (2018), including the data collection methods discussed by Bhandari (2020) are explained in the tables on the following page while the table below describes the types/source and form of qualitative data along with the five (5) steps of data analysis. To better assist the researcher in conceptualising the research instrument, a research matrix is developed to gauge which research objective befits which selected theory and model. As mentioned in the previous chapter, the researcher has chosen the Agenda-Setting Theory which is an extension or a mixture rather, of the quintessential media theories by Manzoor (2019) along with the Social Capital Theory by Coleman (1988) and Putnam (1993). By adopting such research matrix, the researcher may be able to have a clearer view on the whole direction of the study especially considering the cruciality of asking the right and relevant interview questions or inquiry to the informants. Table 3.5 presents the interview protocol to guide the researcher in this study.

Table 3.5
Interview Protocol

Research Objectives	Research Questions	Theory & Model	Inquiry Strategy	Sample Questions
To explore the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel;	RQ 1	Food Security Model	Document Analysis	How impactful is the media when it comes to reporting of food security and food terrorism?
			In-depth interview	What about the media reporting on food security and food terrorism in current times?
				How has COVID-19 change the media landscape in Malaysia?
To analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security;	RQ 2	Food Security Model, Food Crime Terminology	Document Analysis	What is food terrorism and examples of food terrorism events/activities?
			In-depth interview	How is the awareness of Malaysians on food terrorism?

Research Objectives	Research Questions	Theory & Model	Inquiry Strategy	Sample Questions
To understand the interpretation and communication of food security and food terrorism by media practitioners and public service personnel in their reporting;	RQ 3	Agenda-Setting Theory	In- depth interview	Do you feel that food terrorism poses a great threat to Malaysia and Malaysians? Is Malaysia's food security at threat of food terrorism? What is the best approach for Malaysia in terms of guaranteeing food security and championing food terrorism threats in Malaysia?
To recommend a model to guide media practitioners and public service personnel in effectively addressing reports on food security and food terrorism.	RQ 4	Social Capital Theory	In-depth interview	Has the media given plenty information and insight on the Government's plans to review and introduce newer food security policies after COVID-19? How can we integrate the role of the media in disseminating policies on food security and preventing food terrorism threats?

The data collection process to answer the first, third and subsequent research questions involved semi-structured in-depth interviews where standardised interview questions were asked to different informants. Researchers can employ the probing technique during the interview session to obtain more detailed data. According to (Creswell & Poth, 2018), there are eleven (11) stages of research that are required to produce a comprehensive interview process of a research, namely:

- i. Determine the research questions that need to be answered using the interview instrument.
- ii. Determining which informants will be selected based on the sampling method that has been selected for the study.
- iii. Differentiate the types of interviews by determining the practical and appropriate mode to answer the research questions.
- iv. Application of research ethics.
- v. Data collection is done with appropriate equipment and procedures.
- vi. Using the interview protocol that has been prepared.
- vii. Refine the interview questions by doing a pilot study first.

- viii. Determine the appropriate location for the interview process.
- ix. Obtain the informant's consent through the party responsible for the informant.
- x. Researchers need to ensure good interview procedures are followed.
- xi. Determine the method of analysing interview data.

For this study, the informants who have been selected were given advance notice, along with a consent and confidentiality form. Interview appointments were initially made at specified locations however, just when the researcher received the Research Ethics Committee approval to start data collection in April of 2022, the research had to be put on hold due to having to relocate to India for work. Consequently, all of the interviews planned were conducted online using the Google Meet platform. The interview process took between 30 and 50 minutes for each informant. The frequency of interviews was made based on the data obtained where the researcher stopped repeating the interview process when the data obtained was saturated. The interview was recorded into google drive and the transcription process of the interview was carried out afterwards with data analysis using ATLAS.ti 24 software. The verification process of the interview audio transcript was carried out using the member checking process which will be explained further along this chapter.

3.6.3 Sampling Strategy and Research Informants

For the purpose of this study, the researcher has opted for the qualitative method, done via document analysis as well as expert in-depth interviews where the selected informants have vast experience in being involved directly and indirectly with the media, food security and food terrorism. In qualitative research, sampling can be defined as the selection of specific data sources from which data is collected to address the research objectives. The sample processes in qualitative research are not clearly established. In qualitative research, the objective of the study affects participant selection, which is found to rely substantially on the researcher's judgement. This degree of flexibility in the qualitative sample technique has confounded some researchers and increased the risk of errors (Morse, 2015). Small samples are used in qualitative research since they are deliberately chosen for the study (Patton, 2015). The feedback

provided by the sample, who are the informants, is crucial to the reliability and generalizability of qualitative research findings. Sampling strategies are typically non-probabilistic and purposive. If purposive sampling is used, participants are selected based on specific characteristics or criteria relevant to the research questions (Patton, 2015). This approach ensures that the sample includes individuals who have direct experience with or knowledge of the phenomenon under study, which is crucial for generating rich and relevant data.

Gentles et al. (2015) elaborated on sampling in qualitative research in terms of the aspects of variations in the sampling concepts pertaining to the three (3) research traditions, namely Grounded Theory, Phenomenology and Case Study respectively. For Grounded Theory, sampling is basically about not specifying on the sample, whereas in Phenomenology, sampling is about choosing informants and finally for Case Study, sampling must consider the cases chosen as well as the data sources within the case (Gentles et al., 2015).

For the purpose of this analysis, the phenomenological approach was used; where collecting data through qualitative methods including document analysis of policies presented extensively in the previous chapter and interviews. After the document analysis was used to achieve the second objective, the researcher then proceeded to the next inquiry strategy which were in-depth expert interviews. This approach was selected to recognize the views given by the experts and journals, most importantly, their opinion, assumption and knowledge (Lester, 1999), giving a differences yet collectively extensive contribution.

In terms of sampling technique, this study adopted the method of purposive sampling that is presumed to be appropriate in selecting experts who are dedicated in the field of human security, the dimension of food security in human security, food terrorism and the role of media as a whole. Their knowledge and passion for this field bears importance towards providing information on the current policies on food security, threats of food terrorism and media reporting in Malaysia from the viewpoint of human security within the specific time frame given to conduct this study. Furthermore, purposive sampling is deemed to be the most suitable method as it uses the researcher's own judgement in selecting the interviewees with a specific purpose in mind, by which the selected experts represent the deliberate choice of informants due to the qualities they possess. As a non-random technique of sampling, the informants

are selected by the virtue of their knowledge, experience and passion in the field (Etikan, 2016).

According to Shaheen et al. (2016), purposeful sampling resides on the proposition that information-rich samples are to be selected to have an in-depth view of the phenomena. A researcher requires adequate time to select desired respondents, preferably after few visits to the observational sites. These pre-visits are vital in assisting the researcher to only opt for relevant samples intended to reach the purpose of the study. Categories such as age, gender, experience, functional role or ideology of the organisation may serve as the starting points for researchers to narrow down on a location of the study, according to (Patton, 2015). Often small in size, purposeful or purposive sampling largely depends on information-rich cases for in-depth study. Purposeful sampling allows researchers to choose information that will assist in answering the research questions whilst reaching the desired objectives (Merriam, 2014; Yin, 2011).

In qualitative research, smaller samples are used simply because, unlike quantitative research, the main goal of sampling in qualitative research is to obtain information that is valuable for understanding the complexity, depth, diversity or context surrounding a phenomenon, not to represent populations. Additionally, in qualitative research, an often-advocated condition for assessing when an adequate sample size has been obtained is called saturation (Charmaz, 2006; Merriam, 2014; Morse, 2015) and will be discussed in the following section. As the approach of this study is by way of an exploratory study, the researcher would have twelve (12) informants ranging from editors, journalists and government officers.

By using the purposive and purposeful sampling method explained earlier in this chapter, the researcher has defined a certain set of criteria for the samples to be utilised for this study and ultimately reach the research objectives. The criteria for the sample are as the following:

- i. Malaysian Citizens;
- ii. Regardless of race, gender or marital status;
- iii. Residing in Malaysia or overseas;
- iv. Actively working or possesses experience in mass media and/or government administration;
- v. Involved or possesses experience in food security and/or food terrorism.

Questions were prepared and these questions were segregated according to the expertise of the informants in order to fulfil the four (4) research objectives and answer the four (4) research questions thereafter. The data collected during the interview sessions will be further synthesised into themes. These themes were then analysed using thematic analysis and later put on ATLAS.ti 24 software before being presented as research findings. A clearer understanding on the outcome of the collected data is crucial to complete this research.

3.6.4 Ethical Considerations

Ethical considerations in qualitative research differ substantially from those in quantitative approaches, primarily due to the evolving and interpretive nature of qualitative inquiry. Ethical responsibility in this study applies to both document analysis and in-depth interviews and was observed continuously throughout the research process. As qualitative designs remain flexible and responsive to emerging data, ethical principles must be consistently practised and upheld at all stages of the study (Kang & Hwang, 2021).

With respect to document analysis, although this method does not involve direct interaction with human informants, ethical considerations remain integral to the responsible utilisation of documentary sources. All documents analysed in this study were obtained from publicly available, open-access and officially released sources, including international organisations and government agencies. The researcher exercised due diligence in the selection, interpretation and synthesis of documents to ensure accurate representation of policy intentions, institutional positions as well as contextual meanings as proposed by O'Leary (2014). Care was taken to avoid selective citation and misinterpretation of documentary evidence. All sources were properly acknowledged in accordance with academic conventions, thereby upholding principles of transparency, accountability and scholarly integrity.

Ethical considerations for in-depth interviews on the other hand differ due to the relational and interactive nature of this method. The relationship between the researcher and participants develops over time as the research unfolds. Eungoo (2021) emphasised that such relationships in qualitative research are often characterised by trust and mutual understanding rather than contractual obligation. Consequently, ethical principles

relating to respect and autonomy were strictly observed throughout the interview process.

The fundamental role of research is to advance knowledge for the betterment of society without compromising social norms or causing harm. Researchers should therefore refrain from posing intrusive or sensitive questions that may cause discomfort, tension or distress. Ethical principles and research procedures were clearly communicated to informants prior to data collection to ensure transparency regarding the purpose of the study and informants' rights. Failure to adhere to ethical standards may undermine the validity, reliability and overall integrity of research findings (McCulloch, 2018).

In line with these principles, participation in the in-depth interviews was entirely voluntary, with no coercion or inducement used to obtain consent. Informants retained the right to decline participation or withdraw at any stage, and alternative informants were identified when consent was not granted. Informed consent and research assurances were provided prior to data collection, and sufficient information about the study was disclosed to support informed decision-making. Informants were not expected to possess prior technical knowledge of the research topic. Confidentiality and anonymity were strictly maintained through the use of pseudonyms, and no personal identifiers were disclosed.

Although various ethical guidelines, institutional policies and professional codes exist, ethical decision-making ultimately rests on the researcher's values, sensitivity and moral judgement (Merriam, 2014). Accordingly, this study prioritised clear and accessible communication with informants (Sanjari et al., 2014). Issues related to confidentiality, anonymity, audio recording procedures, research objectives and dissemination of findings were explained in advance and written consent was obtained prior to the commencement of interviews. While some informants consented to the use of their real names, the majority preferred pseudonyms, reinforcing the importance of mutual agreement in safeguarding privacy and research integrity.

Sanjari et al. (2014) further highlighted the need for qualitative researchers to minimise bias and ensure that data collection is driven by systematic inquiry rather than personal assumptions. Consequently, ethical research practice in this study required ongoing refinement and reflexivity. Ethical principles guided both document analysis and interview-based data collection, with particular emphasis on impartiality,

transparency and trust, while protecting individuals and institutions from potential risks and unintended consequences.

3.7 Data Analysis

In terms of data analysis, the direction of this research will lean towards qualitative thematic analysis to answer RQ1, RQ2, RQ3 and RQ4. There are four (4) general methods to analysing qualitative data. Despite the similarities in procedures, these approaches have fundamentally dissimilar concepts. The first method is document analysis and used to characterise and categorise popular words, phrases and ideas. Next, is the thematic analysis where patterns and themes in qualitative data should be identified and interpreted. Textual analysis on the other hand, examines the text's substance, structure and design. Finally, discourse analysis is used to look at communication and how language is used to achieve specific outcomes in various contexts.

The data analysis is determined by the type of data obtained (Ghazali & Sufean, 2016). In qualitative research, data collection and analysis is an activity that is carried out simultaneously (Merriam, 1998). For this research, the analysis began with the first document reading and the first interview. In other words, data analysis was carried out when the first data was obtained. The process of data analysis was carried out continuously throughout the duration of this study. Figure 3.4 on the following page explains data analysis process made in this study.

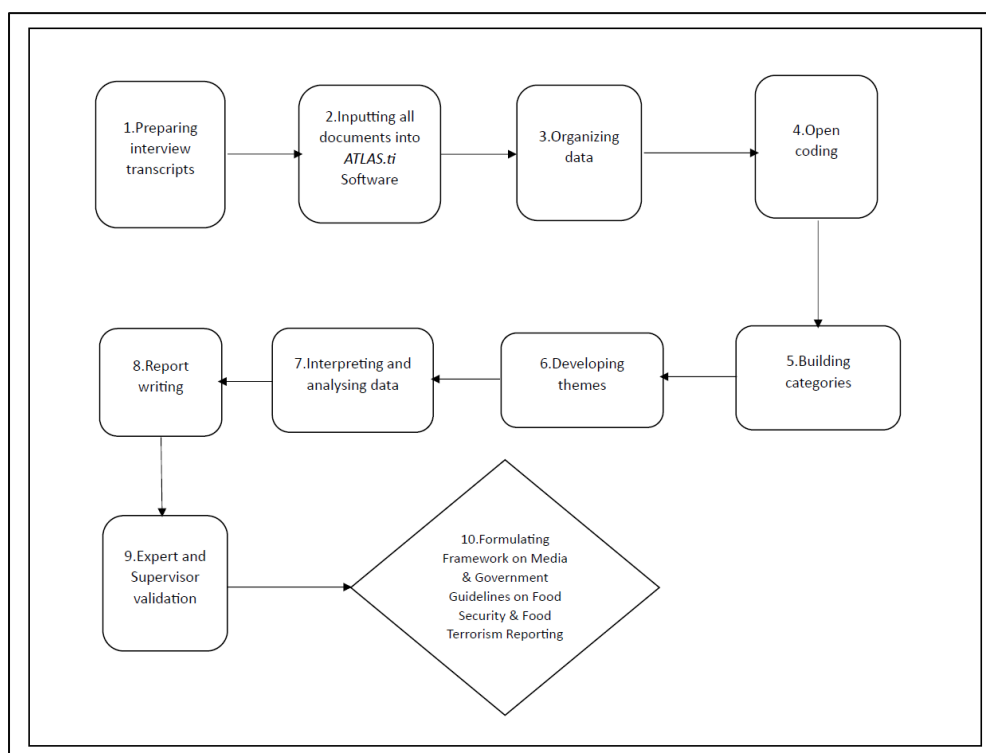


Figure 3.4 Data Analysis Process for “The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Personnel During COVID-19”

3.7.1 Data Analysis Technique

This study employed thematic analysis to analyse data obtained from document analysis and in-depth interviews. All relevant documents were reviewed systematically, while interview recordings were transcribed verbatim prior to analysis. The data were examined to identify repetitive ideas, patterns and meanings related to food security and food terrorism as perceived by Malaysian media practitioners and public service personnel. This approach allowed the researcher to organise the data in a structured manner while remaining grounded in document contents and participants’ actual expressions.

Braun and Clarke (2006) recommended thematic analysis to be utilised to identify, analyse and interpret patterns across the dataset. Initial coding was conducted by closely reading the documents and transcripts to generate preliminary codes. These codes were then compared, refined and grouped into broader themes that reflected shared meanings and perspectives across participants and data sources. According to Saldaña (2013), some code categories that have been given specific coding may need to be improved into subcategories. And when some of the main categories are compared

and combined in various forms, researchers will produce specific themes, even concepts and theories. The themes were developed in relation to the research questions, ensuring that the analysis remained focused on addressing the study's objectives while allowing important insights to emerge from the data. Figure 3.5 describes the Streamlined Codes-to-Theory Model by Saldaña (2016).

The data analysis process employed different analytical approach for different data collection methods. Document analysis was guided by an abductive approach, whereby policy documents and official texts were examined through iterative engagement with existing theoretical frameworks and prior literature. In contrast, the analysis of in-depth interview data followed an inductive approach, allowing themes and meanings to emerge from participants' accounts. The term deductive means the codes that have been prepared in advance based on the theory used in the study or based on the research question (Bingham, 2021). For the inductive coding method, the codes were generated through the researcher's interpretation on the analysed text to predict a general theory. Together, these approaches complemented each other by combining interpretations based on existing theories with insights that emerged directly from the data.

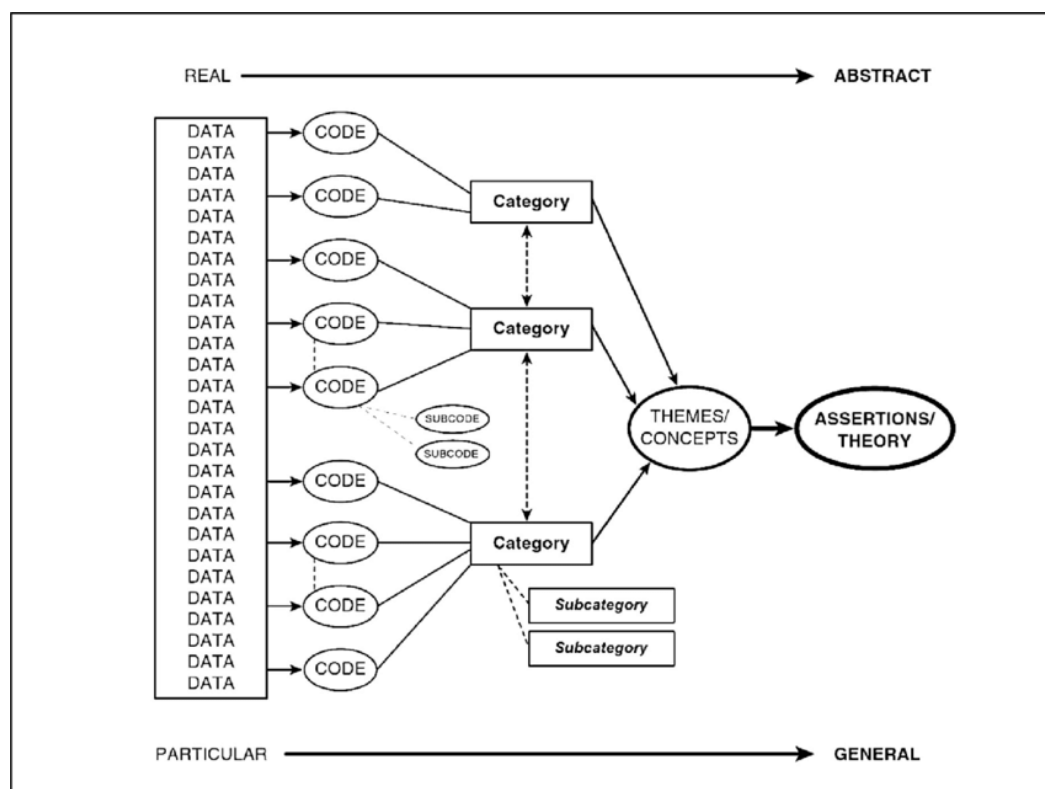


Figure 3.5 Streamlined Codes-to-Theory Model by Saldaña (2016).

3.7.2 Thematic Analysis

Thematic Analysis (TA) is a commonly employed method in qualitative research with the purpose of identifying, analysing and reporting patterns, also known as themes, within data (Braun & Clarke, 2006). This approach includes identifying and examining significant themes that pertain to the description of the phenomena and its connection to societal issues (Daly et al., 1997). Braun and Clarke (2006) assert that thematic analysis (TA) is a fundamental approach for qualitative analysis, equipping researchers with important skills applicable to various other forms of qualitative analysis, as many of them are essentially theme in nature. Transactional Analysis (TA) is extensively employed in psychological research and is acknowledged as an independent method (Braun & Clarke, 2006). Braun and Clarke (2006) introduced a framework consisting of six distinct stages for doing thematic analysis, which are outlined in Table 3.6.

Table 3.6
Phases of Thematic Analysis

Phase	Process Description
Familiarising self with the data	Transcribing data; reading and re-reading the data and noting ideas
Generating initial codes	Coding for interesting features of the data, systematically across the data set
Searching for patterns and themes	Reviewing codes and beginning to collate these into potential themes across the data set
Reviewing themes	Checking whether the data supports the themes and the level of the coded extracts and across the data set; generating an initial map of themes
Defining and naming themes	Refining the thematic map in relation to specific themes and how these link to tell a story; generating clear definition and names of themes
Writing the analysis	Selecting vivid extracts to illustrate themes; analysing these in relation to the research questions

Source: Braun and Clarke 2006

Thematic analysis is a versatile approach that may accommodate various epistemological stances as it is not constrained by any pre-established theoretical framework (Braun & Clarke, 2006). While these viewpoints offer flexibility, it is advisable to explicitly define them in the research. This is because the research

epistemology determines what can be stated about the data and influences the formulation of meaning (Willig, 2008). Thematic analysis, based on critical realism, recognizes how individuals interpret their experiences and how the larger social context influences these interpretations. It also emphasizes the importance of considering the material and other constraints of reality (Priya & Dalal, 2019). Thematic analysis enables the evaluation of social and psychological aspects within the data set (Braun & Clarke, 2006).

When doing theme analysis, the researcher must contemplate many decisions, as outlined by Braun and Clarke (2006). Initially, it is recommended that the researcher must determine the criteria for defining a theme. Braun and Clarke (2006) emphasize the significance of researcher discernment and maintaining adaptability in this determination. If a theme appears to capture anything relevant in relation to the study questions, it is regarded appropriate to include it. The researcher must determine the methodology they will employ to discern themes or patterns in the data. The process can be approached in either an inductive or bottom-up manner, wherein the themes that are identified are closely connected to the data itself (Patton, 2015). In this scenario, data has been deliberately gathered for the purpose of doing study and it may have limited correlation with the inquiries posed to the informants. This method is devoid of the researcher's theoretical curiosity and the data is not imbued with any preconceived analytical notions. Alternatively, one may employ a theoretical or deductive or top-down methodology to examine the viewpoints of informants regarding both food security and food terrorism along with their portrayal in the media.

Thematic analysis is guided by the researcher's theoretical framework. According to Braun and Clarke (2006), the researcher must determine the specific level at which the themes should be detected. This can be accomplished through a semantic approach, where the analyst focuses on identifying themes within the explicit or surface meanings of the data without seeking any additional information beyond what the participant has spoken or what has been written. Thematic analysis can also occur at a latent level, where it seeks to find and investigate the underlying ideas, assumptions, conceptualisations and ideologies that shape or guide the semantic content of the data. This study employed both latent and semantic level of analysis.

Braun and Clarke (2006) said that thematic analysis is a valuable approach for studying areas that may lack sufficient research or when exploring the perspectives of informants who are unfamiliar. Additionally, it aims to comprehend the interpretations

individuals assign to their social environment (Pulla & Carter, 2018). Thematic analysis has a specific benefit in its ability to effectively identify constructs, as noted by Lawrence (2012). Thus, TA was considered advantageous for the objectives of this investigation. Braun and Clarke outlined a six-phase methodology for doing thematic analysis, as shown in Table 3.1. The initial stage entailed gaining familiarity with the data by means of transcribing, reading and engaging in repeated reading of the data. It is crucial for the researcher to thoroughly engage with the data in order to have a comprehensive understanding of its extent and scope. After becoming acquainted with the data, the researcher could identify initial codes (Maguire & Delahunt, 2017). According to Boyatzis (1998), a code is the fundamental unit of raw data or information that can be meaningfully understood in relation to a certain phenomenon.

In phase three, the codes were categorised into possible themes. At the start of the research, it could be useful for the researcher to create an initial thematic map to categorise the codes into categories. After the development of a collection of primary themes, phase four focused on the process of enhancing and perfecting these themes and their corresponding subthemes. The thematic map was re-examined to verify its alignment with the data set, specifically in relation to the viewpoints of informants on food security and food terrorism and its portrayal in the media. According to Braun and Clarke (2006), one approach is to assess the coded excerpts by carefully re-reading them and determining if they exhibit a logical and consistent arrangement. In level two, the research examined the validity of the themes in connection to the data set using a similar procedure. This resulted in a conclusive concept of the many themes and their cohesive integration. In the last stage, it was necessary to determine the fundamental nature or core of each subject and the specific elements of the data that it encompassed. Each theme could thereafter be labelled to provide readers with a clear understanding of its subject matter.

To facilitate the thematic data analysis, the researcher has adopted a non-linear six-phase thematic analysis framework by Braun and Clarke (2006) as explained earlier. In the initial stage of analysis, the interviews were carefully read and transcribed. A verbatim account was used, including punctuation, to accurately capture the information conveyed by the informants (Braun & Clarke, 2006). Bird (2005) contended that this step was crucial in gaining familiarity with the data. In phase two, an inductive approach was employed to code the data using a bottom-up method. The transcripts were thoroughly examined and noteworthy codes were annotated alongside the transcript.

During the coding process of the transcripts, prominent characteristics started to emerge and patterns and distinctions within the data became evident.

The researcher maintained a constant awareness of Braun and Clarke's (2021) ability to comprehend and interpret the data using a theoretical perspective, referred to as 'analytic sensibility', during the entire process of theme analysis. It also pertains to the capacity to generate profound understandings of the significance of the data that go beyond the superficial level; to discern patterns or meanings that are connected to wider psychological, social or theoretical considerations. Upon analysing the data, the researcher observed the presence of conflicting components in the informants' conversations. Based on the principles of social construction, language is perceived as a means of expressing a specific argument or perspective (Billig, 1991). Thus, in order to include language, linguistic components were integrated into the coding. According to Smith (2008), researchers can focus on several linguistic elements, including pronoun usage, laughing, pauses, functional components of language, tone, repetition and metaphor. The linguistic components were perceived as beneficial to the informants' viewpoints.

Data extracts were identified and annotated, then grouped based on their similarity, resulting in the formation of themes during phase three. The topics were categorised based on the perceived significance and portrayal of the codes. The data analysis followed a recursive methodology, involving iterative movement across all six phases (Braun & Clarke, 2006).

During the progression of the study to phase 4, a total of four primary themes were discerned each of which had around two to six categories of subthemes. Preserving the informants' perspective and accounts was crucial during the process of themes collapsing. To maintain credibility, the transcripts and initial codes were consistently reviewed and revisited. The thorough elaboration on the employment of this six-phase framework is as shown in Table 3.7.

Table 3.7

Six-Phase Thematic Analysis of “The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Personnel During COVID-19”

Phase	Researcher's Process Description
Data Familiarisation	Began by listening to each interview recording once to familiarise with the data before transcribing it. Engaged in active-listening to gain comprehension of the main topics discussed throughout each interview before transcribing. Transcribed each interview by hand immediately after listening to the recording. After finishing the transcription of all interviews, carefully reviewed the transcripts multiple times and made notes if necessary. After transcription, twelve (12) documents were produced, denoting one for each informant.
Generating Initial Codes	The researcher uploaded the transcribed the twelve (12) documents into the ATLAS.ti 24 software and created a file consisting of all the transcribe documents. The evolution of coding process was tracked in a spreadsheet, with data items documented in the first column and iterations of codes in each successive column. To 'Apply Codes' simply highlight the desired quotations to add codes to find subsequent categories and themes. All in all, 179 in vivo codes were identified before merging them into 68 codes with 403 quotations from all 12 documents.
Searching For Patterns and Themes	The researcher proceeded to this phase once all pertinent data elements had been encoded. The current emphasis transitioned from analysing individual data items within the dataset to analysing the overall significance and meaningfulness across the dataset. The encoded data is examined and analysed to determine how various codes might be merged based on shared meanings in order to create themes or sub-themes. Frequently, this process entails consolidating many codes that possess a comparable fundamental concept or data characteristic into a solitary code. From the 68 codes, the researcher merged them into 15 code categories.
Reviewing Themes	The researcher generated an initial map of themes in accordance to the research questions to have a better view of the codes belonging to which potential themes. As the research questions were categorised into three (3) entities namely media, food security and food terrorism, the researcher adopted two levels of review as per suggested by Braun & Clarke (2006) of employing Patton's (2015) 'dual criteria for judging categories' (i.e. internal homogeneity and external heterogeneity). At this stage, four (4) themes were deduced but without a refined name or identity.
Defining and Naming Themes	The task of selecting naming themes may appear insignificant and so be given less consideration than it truly deserves. Nevertheless, assigning names to themes is a highly significant undertaking. Theme names serve as the initial clue to the reader regarding the content that has been extracted from the data. Names should be succinct, informative and easily remembered. The predominant inclination is to generate names that serve as descriptions of the theme. Braun and Clarke (2021) promote the cultivation of originality and endorse the utilisation of captivating titles that can promptly engage the reader's interest, while effectively conveying a significant part of the subject matter. Therefore, they propose that it could be beneficial to scrutinize data elements in search of a concise excerpt that could serve as a punctuation for the theme label. The labels for the four (4) themes will be further discussed on the following chapter of Findings and Analysis.

Phase	Researcher's Process Description
Writing The Analysis	The documentation of qualitative research is intricately intertwined with the entire analytic process (Braun & Clarke, 2021). Similar to prior phases, it is probable that a recursive approach will be necessary for report drafting. The write-up can also undergo changes and developments as the codes and themes evolve throughout the analysis. Phase six can thus be regarded as the culmination and ultimate examination of the report, which the researcher would likely have commenced writing prior to conducting their theme analysis.

Source: Braun and Clarke 2006

3.7.3 ATLAS.ti 24 as Data Analysis Technique

Analysis of the data obtained for this study was carried out using ATLAS.ti 24 software. The software was chosen because it is able to analyse text (including PDF), images, video and audio easily (Soratto et al., 2020). For this study, the interview transcripts were evaluated and the themes determined via the interview protocol were matched with the interview transcripts obtained. Meanwhile, the new codes that appeared were analysed thematically by creating code groups in ATLAS.ti 24. As a result, the researcher made a report in the form of a text to answer the research questions regarding the Malaysian government policy, element and approach of food security as reported by the media.

In order to analyse the data of this study, the researcher has taken into account several qualitative data analysis steps as suggested by Creswell and Poth, (2018) and Saldaña (2013) by using ATLAS.ti 24 as a tool to produce themes or final findings. The first step is the preparation and compilation of qualitative data for analysis purposes. According to Creswell and Poth (2018), preparing data for qualitative analysis involves two (2) processes.

The first process is the organisation and transfer of information from verbal or written form to a typed file. The subsequent process involves the process of making decisions related to how to analyse the data, either manually or using computer software. In this study, the first step was done by doing a transcription process, which was transferring audio and video recordings to data in the form of text. Through the process of transcription, all the information in audio form that has been obtained through the recording of the interview session with the informant was transferred to the data in verbatim form. In order to facilitate the subsequent process, the arrangement of the transcription text has been made in the form of a table. All video and audio

recordings, as well as verbatim text were then transferred into ATLAS.ti 24 and named according to the recorded informant number.

For the second process, the researcher chose to analyse the qualitative data that had been obtained by using the ATLAS.ti 24 software. This decision was taken to facilitate the process of data analysis to be done in a systematic manner, aside from carrying out manual thematic analysis as suggested by Braun and Clarke (2006) which will be presented in the next section of this chapter. According to Creswell (2012), researchers may choose to conduct qualitative data analysis either manually or by using certain software. In this study, the researcher used the ATLAS.ti 24 software to supplement the process of analysing the documents carried out and reported in the writing in Chapter 2 of this study.

The second step is the exploration of data coding. This step is also known as preliminary exploratory analysis which involves the researcher's efforts to read the transcripts that have been prepared to obtain a general view related to the data obtained, taking important notes deduced in the transcripts, rearrangement of the order of the data and make considerations on the need to supplement the existing data (Creswell, 2012). In this study, the researcher has examined each transcript provided to obtain a general overview of the media practice of reporting and expressing the information relayed to them by the government whereby the information may be in the form of formulation of new policy or press releases.

The third step is data coding. This step requires the researcher to locate the text segments and determine the code for the text segments. A text segment refers to a sentence or paragraph related to a code, while a code refers to a label used to describe a text segment. According to Creswell (2012), text segments are coded based on two purposes in a research report, namely to provide an overview and to provide a theme for a text. There was a total of 179 *in vivo* codes that were identified at the beginning of the data analysis process to answer the first and second research questions. Next, the researcher has made a deductive process by forming small groups of codes that have the same theme using the code group process in the ATLAS.ti 24 software. Themes are the result of coding, categorisation or analytical reflection, not something that is itself coded (Saldaña, 2013). In this study, the researcher has determined certain codes as themes for each response expressed by the informant during the interview sessions. The text segments related to each code were marked and organised according to the theme that has been set.

The fourth step is theme construction. This step involves the researcher's efforts to answer the main research questions and form a deep understanding of a phenomenon being studied through the construction of themes (Creswell 2012). Theme refers to similar codes that are grouped together to form one main idea. In this study, the themes are based on the first and second research questions. The researcher matched the findings of the themes built through the code group from ATLAS.ti 24 according to the objectives of the study that have been stated into the form of a written report in Chapter 4 of this study.

The fifth step is reporting the research findings. This step requires the researcher to report the findings based on the themes and codes that were identified in the fourth step. According to Creswell (2012), although there are various visual representations that can be done to report qualitative findings, what needs to be emphasised is the narrative discussion. In this regard, Creswell (2012) provides some suggestions that can be used including dialogue that supports a theme, reporting interview data excerpts, using metaphors and analogies and reporting a variety of perspectives and conflicting evidence. For the context of this study, the report of findings is done by using excerpts from responses given by informants during in-depth interview sessions.

This study developed a Cross-Tabulation table using the Code-Co-Occurrence Table analysis method in the ATLAS.ti 24 software to see the frequency of themes that have been analysed for each informant. This process can form a triangulation of the findings of this study where it is possible that there are two different codes for the same quote (ATLAS.ti, 2024). The results of this analysis have yielded diagrams in the form of network and Sankey diagrams respectively, which have assisted this study to answer the final research objective by integrating the findings from the first to the third research objectives to form a framework for the comprehensive guideline on reporting of food security and food terrorism for the media.

According to Friese (2019), network diagrams are concept maps that "aid creativity, help in detailing the entire structure of an idea or LOA and enhance metacognition in the form of elucidating and thinking about knowledge" (Friese, 2019). Sankey diagrams on the other hand, is a flow visualisation tool that helps in the analysis of data transitions, often representing the movement of data, themes or coded segments from one category or group to another. Sankey diagrams are typically used to illustrate the relationships between different codes or code groups based on their frequency or the volume of data they represent (Soratto et al., 2020). The diagram visually aids in

identifying key relationships and patterns in the data whereby nodes represent codes or themes, arrows (flows) show the relationships or co-occurrences between codes and flow width reflects the strength or frequency of connections. The wider arrows represent stronger connections or more frequent co-occurrences of codes. The direction and size of the arrows help in understanding how different codes are related or how data flows between categories. The largest flows can reveal central issues or concepts in the data. It can only be done after the process of analysing the study data is completed. Next, the researcher has submitted suggestions for improvement so that it would benefit the media as well as the relevant ministries in the Malaysian government.

3.7.4 Developing Conceptual Model from Thematic Analysis and ATLAS.ti 24 Software

The conceptual framework of this study has been explicitly explained in Chapter 2 and to ensure that this study could contribute more to the field of mass communication and media studies, a conceptual model would also be derived and presented in the final chapter of this study. In order to develop the conceptual model, this study utilised the thematic analysis by Braun and Clarke (2006), the conceptual model development using thematic analysis by Naeem et al. (2023) as well as by employing ATLAS.ti 24 software to identify the keywords and codes. According to Naeem et al. (2023), a systematic thematic analysis would be able to yield a conceptual model by using an extension of Braun and Clarke's (2006) thematic analysis process. A novel six (6) step process by Naeem et al. (2023) is as described below:

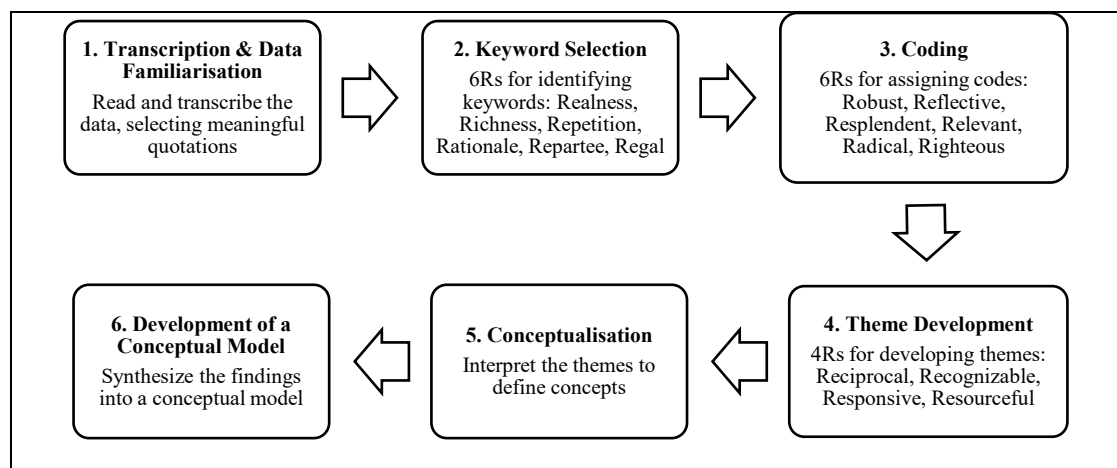


Figure 3.6 Six-Step Thematic Analysis Process by Naeem et al. (2023)

Additionally, with the novel six step process completed, a conceptual model can then be derived which will then essentially assist the understanding and comprehension of the study. This study adopted both of the work of Braun and Clarke (2006) and Naeem et al. (2023) along with the utilisation of ATLAS.ti 24 software to complete the study successfully. Figure 3.7 further illustrates the development of conceptual model as discussed by Naeem et al. (2023).

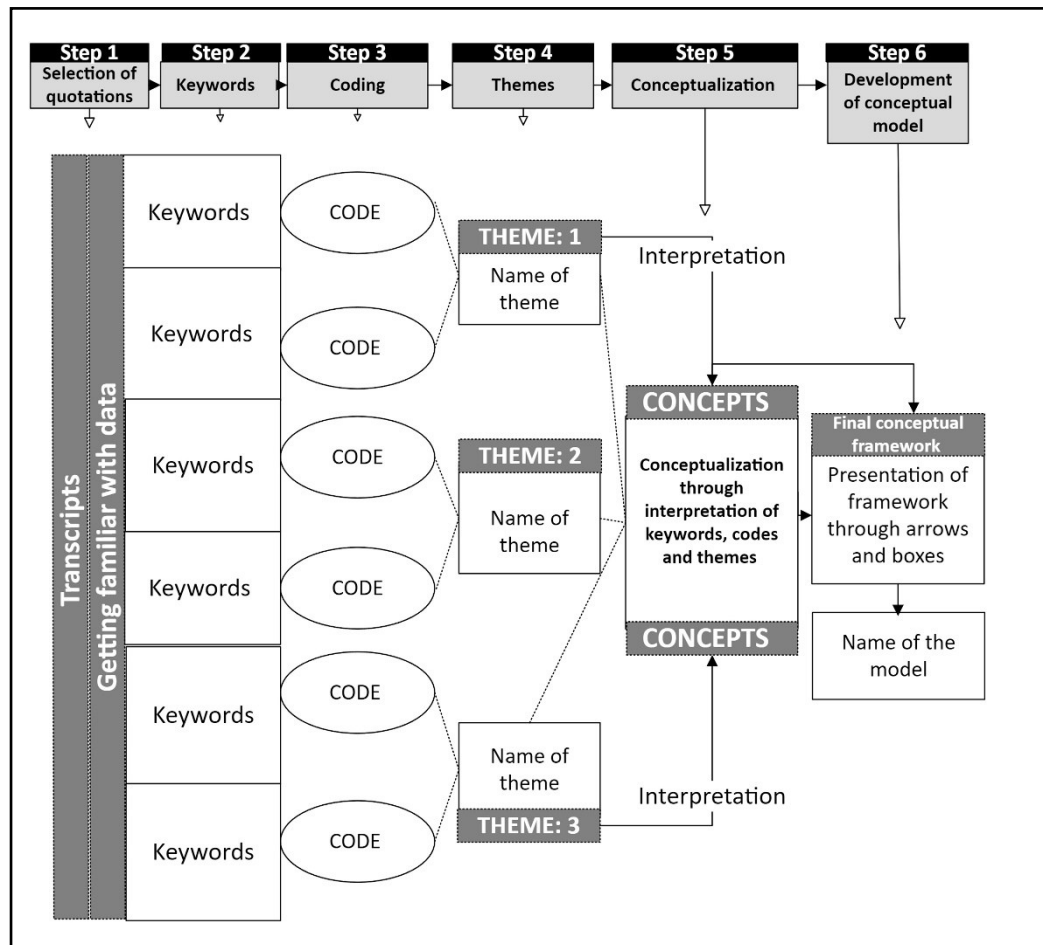


Figure 3.7 A Systematic Thematic Analysis Process: A Novel Six-Step Process for Conceptual Model Development in Qualitative Research by Naeem et al. (2023)

3.7.5 Data Analysis Reflexivity

As discussed in the earlier section, again quoting Merriam (2014), data analysis and collection for qualitative research would always go hand in hand, simultaneous in nature. Merriam wrote in her book:

“In one pile to your left are a hundred or so pages of transcripts of interviews. In the middle of the table is a stack of field notes from your on-site observations and to the right of that is a box of documents you collected, thinking they might be relevant to your study.” (Merriam, 2014)

When the researcher is overwhelmed with a lot of information, here is where Merriam’s solution to such scenario comes in handy. After gathering data from the first informant and documenting relevant information, almost immediately themes, may emerge. The second set of data might be compared to the first to see whether a preliminary category emerges. Data collecting will be more orderly soon after, as the researcher's thoughts will be more clearly focused and honed and emergent theory will be in the works. That said, the process of organising, reducing, consolidating, comparing and reconfiguring interpretive data paves the way for the organisation, reduction, consolidation, comparison and reconfiguration.

According to Creswell (2013), in order to analyse qualitative data, one must first understand how to make sense of textual documents and conversations or visuals in order to inform answers to research questions. Data analysis in qualitative research, according to Henning et al. (2004), is a process that is continuing, developing, iterative or non-linear. Patton (2015) observed that there are no clear-cut or agreed-upon terms to describe the various types and processes of qualitative analysis. Teddlie and Tashakkori (2009) discussed the usage of thematic analysis using a variation of approaches including categorising and contextualising narration.

Analysis consists of more than just coding, sorting and sifting (Chowdhury, 2015). Analysing entails disassembling words, sentences and paragraphs in order to organise, reduce and describe the data for one’s interpretation and comprehension (Henning et al., 2004). Patton (2015) defined thematic analysis as any qualitative data reduction and sense-making effort that takes a large volume of qualitative material and attempts to identify core consistencies and meanings. The researcher personally required extensive amount of time to plan for the interview considering the circumstances that will be shared in the following chapter. For the technicalities of this research, proceeding with a qualitative method of this study with thematic analysis method proved to be very challenging but enjoyable at the same time as Braun and Clarke often remarked.

3.8 Role of the Researcher

To collect data through in-depth interviews with informants, the researcher served as the primary instrument in this study. No research assistants were involved during the data collection phase, as it was deemed appropriate and more effective for the researcher to conduct the interviews independently. According to Denzin and Lincoln (2018), the researcher can function as a “human instrument,” facilitating the interaction between informants and the data being gathered. In addition, Holmes (2020) emphasised the importance of the researcher maintaining objectivity by setting aside positionality, personal biases, assumptions, expectations and prior experiences.

The researcher recently completed her Master’s degree in Information and Media Warfare Studies, during which she developed a strong foundation in qualitative research methods, particularly in conducting one-on-one in-depth interviews. Her academic training emphasised critical inquiry, ethical engagement with vulnerable populations and the exploration of lived experiences in contexts of insecurity and resilience. She has conducted several research interviews as part of her academic work, including a qualitative study on community resilience, public diplomacy and human security. Through these experiences, she became familiar with essential skills such as crafting interview questions, employing probing techniques, practicing active listening and facilitating open-ended dialogue to generate rich, meaningful insights. Although these interviews were conducted within an academic context, the methodological rigour and reflexive approach required closely aligned with professional qualitative research practices.

For this study, the researcher ensured that informed consent was obtained from all participants and that all interviews were accurately transcribed using a computer. Additionally, the researcher had previously undertaken qualitative research methodology training, with a focus on phenomenology, to stay informed on the latest developments relevant to exploring food security and food terrorism in the realm of media practitioners and public service. Most importantly, in a commitment to objectivity, bias mitigation and the assurance of a well-rounded perspective, the researcher independently initiated contact with informants without reliance on pre-established connections. This approach demonstrates the researcher’s dedication to impartiality and methodological rigour in the data collection process, thereby preserving the integrity of the study’s findings.

3.9 Research Time Frame

For the completion of the study, the researcher opted for a specific time frame for data collection to be in September 2022 to June 2023. The researcher obtained the approval from the Research Ethics Committee (REC) in April 2022 and soon after preparations were made for the relocation to Mumbai. The researcher flew to Mumbai in July of 2022 and whilst settling in and amidst all the constraints, the researcher embarked on the pilot study involving two data inquiry strategies which were the in-depth interview and the document analysis in August 2022. The actual data inquiry took place a month later and the researcher spent a good nine months to complete the process taking into consideration the availability of the informants and having them to agree on meeting via virtual platforms.

3.10 Strategies to Achieve Rigour, Credibility and Trustworthiness

It is crucial to develop specific methods to ensure trustworthiness and rigour in research, allowing the researcher to assess the quality of work effectively (Johnson & Waterfield, 2004). To safeguard data integrity and ensure reliability, the researcher seeks validation from another researcher. Qualitative research recognizes various perspectives and the influence of social construction on defining meaning, but it is important to determine the amount of confidence held by the informants (Johnson et al., 2020). Padgett (2009) stated that trustworthiness encompasses credibility, transferability, auditability and confirmability. Furthermore, the researcher also sought for supervisor consultation and guidance on ensuring the trustworthiness of the research. This study employed four strategies to improve the validity of the research, namely triangulation, member checking, peer examination and saturation.

3.10.1 Triangulation

Triangulation is a research technique that uses two or more methods in data collection (Cohen et al., 2002). This process involves supporting evidence from different sources in an effort to further understand a theme or perspective (Creswell, 2013). Triangulation is a validity procedure where researchers use various different sources of information to form themes or categories in a study. There are several types

of triangulations commonly used in qualitative research such as data triangulation, researcher triangulation, theoretical triangulation, method triangulation and environmental triangulation. This study has used two triangulation strategies, namely data triangulation and theoretical triangulation.

Three types of data collection methods namely document analysis and in-depth interview and systematic review were used in this study. The use of three (3) different data collection methods has further strengthened the data obtained. Theoretical triangulation involves the use of various professional perspectives to interpret a set of data or information. The researcher has employed frameworks and theories to complete this study which are the Food Security Model and Categorisation of Food Threats along with two (2) theories which are Agenda-Setting Theory and the Social Capital Theory. The integration of the framework and theories can increase the validity of the data obtained and further ensures the triangulation of the research. The triangulation of this study is illustrated in Figure 3.8.

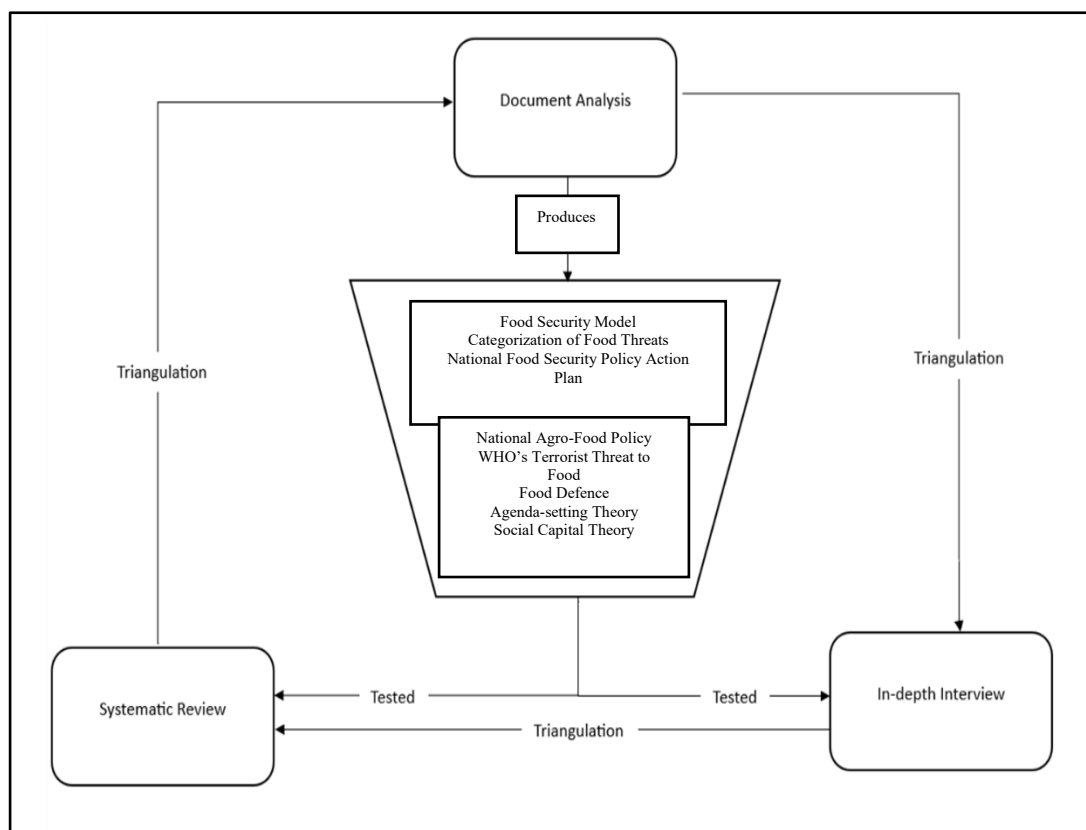


Figure 3.8 Triangulation Process for “The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID-19”

3.10.2 Member Checking

Creswell and Miller (2000) noted that member checking consigns the validation process from researchers to informants in a study. Guba and Lincoln (1994) emphasised that member checking is the most important strategy for building credibility in a study. This step entails presenting data to the informants for validation of the findings and accompanying narrative. One approach is to involve a focus group of informants to analyse the findings or the raw data, such as transcriptions, personal diaries or field notes and provide comments to enhance the credibility of the qualitative study.

For the purpose of this research, the researcher also adopted the member checking approach for the in-depth interview sessions. As they would agree to participate upon signing the consent letter, the researcher took necessary procedures to give each informant a printed copy of the transcript in order for them to go through and make possible amendments. The researcher also welcomed the suggestion or decision of the informants if they would want to be interviewed again to ensure that the findings were conclusive and precise. Once amendments were made in agreement with the informants, the researcher proceeded with asking the informant to check on the transcription before concluding the data collection process.

3.10.3 Peer Review

In this study, the researcher sought assistance from her colleagues whom are PhD students from various universities who also conduct qualitative studies or have experiences doing qualitative research. These colleagues have helped to evaluate the appropriateness of the codes and themes that have been constructed. Peer review is the review of data for evaluation purposes by either colleagues or people who are usually involved with research or the phenomenon being studied (Merriam, 1998). This approach allows for the development of themes and categories from research findings. Discussions were also held to increase the reliability of the findings in the form of categories and themes formed by the researcher after going through the analysis process.

3.10.4 Point of Saturation

The researcher deduced that saturation is crucial to the extent of being explored in qualitative technique references involving sampling. Both Morse (2015) and Sandelowski (1995) agreed how saturation is an essential subject which usually refers to a point of homogeneousness where informational duplication in which subsequent data collecting adds little or no new information to the investigation. Saturation has also grown to be considered as an indicator that sufficient information is collected.

Hence, purposive sampling, which is often utilised in qualitative research as discussed earlier, more often than not undergoes the saturation process. Saturation is hence vital in indicating and appraising data credibility of a respective qualitative research. In line with the discussion by (Hennink et al., 2019), saturation has its origins in the grounded theory technique of qualitative research, where it is used to prove data sufficiency for theory construction; nevertheless, it is also used to support sample sizes for qualitative investigations other than grounded theory, such as phenomenology.

As recent as 2022, Hennink and Kaiser (2022) again discussed on the most accurate method to identify sampling sizes to reach saturation for qualitative research which the researcher found very helpful in determining the right sample of study. A total of 23 studies that employed either empirical data ($n = 17$) or statistical models ($n = 6$) to evaluate saturation and presented an array of methods to evaluate saturation were identified, which eventually indicated that saturation can be attained within a narrow range, that is for semi-structured interviews around nine to seventeen (9–17), whilst focus group discussions of approximately four to eight (4–8) groups (Hennink & Kaiser, 2022). This is highly applicable to research with generally homogeneous study populations and carefully stated objectives. As reiterated before, saturation is often regarded as the fundamental principle for establishing sample sizes in qualitative research. However, there is limited guidance available on how to put this principle into practice, except within the context of grounded theory. The results attained by Hennink and Kaiser (2022) was based on the systematic review focusing on the identification of studies that have empirically evaluated the concept of saturation in qualitative research. Several methodologies were used to test saturation and the sample sizes required to achieve saturation were essentially identified.

The summarised table and figure of the process and methods to reach saturation for semi structured interviews which the researcher adopted and utilised to complete

this study are shown in Table 3.8 and Figure 3.9 where the former described the strategies to assess saturation while the latter depicts the sample sizes required to achieve saturation in empirically based tests utilising in-depth interview data. The results for each dataset utilised in the experiments, with a sample size of 16, are displayed as distinct data points. The depiction of results at different sample sizes is done by drawing a line from the lowest to the maximum recorded sample size, while also noting the parameters that influence this range. In order to ensure comparability across research, writers present the saturation level closest to 90% when reporting varying levels of saturation.

The findings indicate that in 16 different tests employing diverse methods of saturation, the number of interviews required for saturation ranged from 5 to 24. The minimum sample size required to achieve saturation was 5 interviews, as demonstrated in a study conducted by Constantinou et al. (2017). This study focused on a homogeneous population and aimed to validate survey findings by attaining saturation in broad categories. Collectively, these study parameters may account for the attainment of saturation after conducting 5 interviews. The largest sample sizes used to achieve saturation were 20-40 (Hagaman & Wutich, 2017), where saturation of overarching themes was sought across four nations and 24 (Hennink et al., 2019), where saturation was sought in the interpretation of codes, including codes that were less relevant to the research topic. These saturation goals necessitate further data, which could substantiate the larger sample sizes observed for saturation. With the exception of these unusual cases, the majority of datasets achieved saturation after doing between 9 and 17 interviews.

On average, saturation was obtained after 12-13 interviews, even when different methods were employed to evaluate saturation. The majority of these studies had a very uniform study population and differed in their target level of saturation for codes, categories or a combination thereof. Merely three research employed a diverse sample. Two of these studies achieved saturation with a sample size bigger than the average (at 16 interviews), whereas one study achieved saturation with a smaller sample size (at 9 interviews). Hence, we observed no discernible correlation in saturation based on this particular attribute. Moreover, it was challenging to discern any discernible trend of saturation based on the sequence of data, as the majority of tests did not compare saturation levels between examining data in the original interview order and the randomised order. Those that conducted a comparison observed either no disparity or a

little larger sample size for saturation when comparing the random order of interviews with the actual order. Both randomised and non-randomised studies included in this study encompassed a wide range of sample sizes.

Table 3.8
Strategies to Assess Saturation in Empirical Tests

Type of Approach	Description of Approach	Articles Reporting Strategy
Code Frequency Counts	This approach involves reviewing each interview or focus group transcript and counting the number of new codes in each successive transcript or set of transcripts, until the frequency of new codes diminishes with few or no more codes identified. Several articles additionally randomised the order of data to assess the influence of sequential bias on saturation. Some articles added additional elements to the code frequency counts, such as batch comparison, a stopping criterion or saturation of higher order groupings of data, as outlined below.	Ando et al. (2014); Guest et al. (2006, 2017); Morse et al. (2015); Namey et al. (2016); Hennink et al. (2019); Constantinou et al., 2017); Young and Casey (2019)
Comparative Method	This approach adds a more structured comparison to the code frequency count approach above. It involves reviewing data in pre-determined batches, such as quartiles of data (instead of reviewing each interview separately) and listing all new codes in a saturation table for each batch of data. The subsequent quartile of data is then reviewed and compared to the first quartile to determine any new codes, this comparison of data batches continues until few or no new codes are identified, whereby saturation is achieved.	Turner-Bowker et al. (2018)
Stopping Criterion	This approach adds a stopping criterion to the code frequency count approach above. It involves reviewing an initial sample of interviews (e.g. 6 interviews) or focus groups to identify new codes and using a pre-determined stopping criterion, which is usually the number of consecutive interviews/groups after the initial sample where no new codes are identified in the sample (e.g. 2 or 3 interviews with no new codes). Saturation is reached when no new codes are identified after the stopping criterion of x interviews after the initial sample or the number of new codes is under a predetermined threshold (e.g. <5%). In other studies, the stopping criterion was based on repetitions of a code, such as 3 or 5 instances of a particular code or theme were identified.	Francis et al. (2010); Guest et al. (2020); Hagaman and Wutich (2017); Hancock et al. (2016)
High-Order Groupings	This approach uses a higher order grouping of codes in the code frequency count approach above. It involves counting higher-order groupings of codes such as meta-themes, salient themes or categories. For example, Coenen et al. (2012) counted conceptual categories. Hagaman and Wutich (2017) counted codes to determine the <i>most prevalent</i> codes in the data set, then randomised the interview order via bootstrapping to determine the average number of interviews needed to identify the most prevalent codes in data. Weller et al. (2018) focused on identifying saturation for the <i>most salient</i> items in data.	Coenen et al. (2012); Hagaman and Wutich (2017); Constantinou et al. (2017)

Type of Approach	Description of Approach	Articles Reporting Strategy
Code Meaning	This approach does not focus on counting codes as the basis for determining saturation (as used in the approaches above), instead achieving a full understanding of codes is the indicator of saturation. It involves reviewing an interview and noting each issue (or code) identified, then in subsequent interviews identifying whether any new aspects, dimensions or nuances of that code are identified, until nothing new is identified and the code has reached saturation. Codes may reach saturation at a different point in the data set.	

Source: Hennink & Kaiser 2022

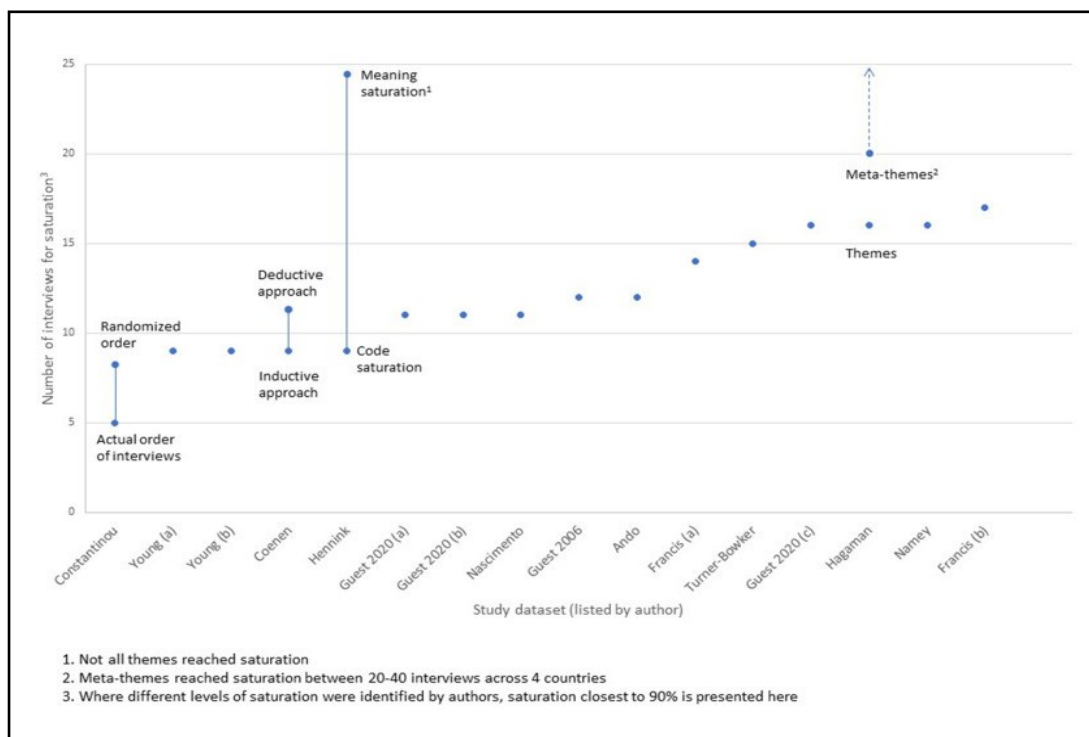


Figure 3.9 Sample Sizes for Saturation from Empirically Based Tests Using In-Depth Interview Data by Hennink and Kaiser (2022)

3.11 Research Reliability and Validity

Reliability in a qualitative study pertains to the study's integrity, ensuring there are no assessment errors in the instrument used for data collection (Ghazali & Sufean, 2016). Reliability also pertains to the degree to which a study may be replicated with consistent outcomes. Various methodologies can be employed to ensure the dependability of a research project. Golafshani (2015) defined validity as the degree of consistency and stability of a measurement, measuring tool, study or questionnaire over

time in comparison to a certain notion. Reliability assesses if a measure consistently produces the same results when applied to the same idea within a specific population or sample of informants. This study's reliability can be assessed using two methods employed by researcher, namely the pilot study and the code-co-occurrence-table analysis in the ATLAS.ti 24 software.

3.11.1 Pilot Study

Running a pilot study helps identify potential issues in the major research project, such as non-compliance with interview protocols or unsuitability of methodologies or instruments. A pilot study of both methodologies was done after approval by the REC. The pilot study began after receiving approval from REC in April 2022. The framework assisted the researcher in addressing potential shortcomings in the research design, particularly in the instrument and data inquiry procedures. The researcher was able to enhance the method of identifying informants, conducting interviews, formulating questions and analysing data. The pilot study involved two approaches chosen by the researcher for implementation.

For the first strategy which is the document analysis, the researcher synthesised existing public and government documents by accessing online repositories as well as relevant institutional avenues. This included an examination of five (5) open-source materials such as the United Nations' frameworks and policy documents, alongside Malaysian government policies to ensure comprehensive contextual and policy coverage. For the second strategy which is the in-depth interview, the researcher got in touch with two (2) informants to test for data saturation, which in the actual process took eight (8) of them. The researcher selected the informants based on the purposive sampling method where the selection involved practitioners in the respective fields.

3.11.2 Code Co-Occurrence Table Analysis

Golafshani (2015) stressed on the importance of the reliability of a study is related to the reliability and consistency of the data that has been collected. To prove the consistency of the results from the data that has been obtained, the researcher has evaluated the frequency of codes and themes that have been analysed for each informant. Through the ATLAS.ti 24 software, researchers have analysed some codes

that are crossed with other codes through the code-co-occurrence table process. As a result, the researcher was able to produce a cross table of the same quote frequency with different coding. This process will also form a triangulation of the findings of the study where it is possible that there are two different codes for the same quote as discussed by Scharp (2021) and Saldaña (2013).

3.12 Ethics Approval

Prior to approaching any informants for interviews, this research project obtained ethics clearance from the University's Research Ethics Committee. A formal application was subsequently presented to the Committee, after which the approval was granted. Prior to obtaining clearance, the researcher was obliged to expound the methodology, furnish a statement and consent form in clear English and delineate the proposed questions for the study as part of the Ethics clearance process. In order to maintain anonymity and confidentiality, signed consent forms and informants' information were stored separately from the digital recordings, transcribed materials and demographic characteristics, as required by the Data Protection Act and as attached on Appendix. The researcher alone transcribed the interviews. The informants were explicitly notified that only the researcher, supervisors and examiners possess the authority to view the transcribed information. During the completion of this thesis, the researcher faced the inadvertent event of having to relocate to India with the spouse and family for work with the Malaysian Consulate in Mumbai. As a result, all the interviews were conducted online.

3.13 Chapter Summary

The chapter commenced with examining the ontological and epistemological views and their influence on sampling, data collecting and analysis in a comparative and contrasting manner. The text provided a comprehensive explanation of how the selected methodologies would ultimately lead to the development of the constructivist epistemology, which in turn facilitated the research methods and data gathering. This chapter explored the methodological concerns and appropriate approaches to achieve the project's objectives, as well as the examination of the data. The data collection and

analysis process were thoroughly explained to enhance transparency. The qualitative methodology utilised in this study necessitates preparation, comprehension of the problem and information analysis. Without planning, the outcome could be different, contradict the problem description and result in insufficient investigation. In-depth interviews are necessary for the research and the questions that are created must fit the goals of the investigation. Figure 3.10 on the following page illustrates the overall methodological structure of the study, outlining the sequential and logical flow from the research objectives and questions to the selected qualitative strategies. It demonstrates how document analysis and in-depth interviews were systematically integrated to guide data collection, analysis and interpretation, all with the intention to address and reach the study's objectives. The subsequent chapter presents the findings and discussion derived from the analysis of documents and in-depth interviews. The results are organised in accordance with the research questions and analytical framework, allowing for a systematic interpretation of key themes and patterns.

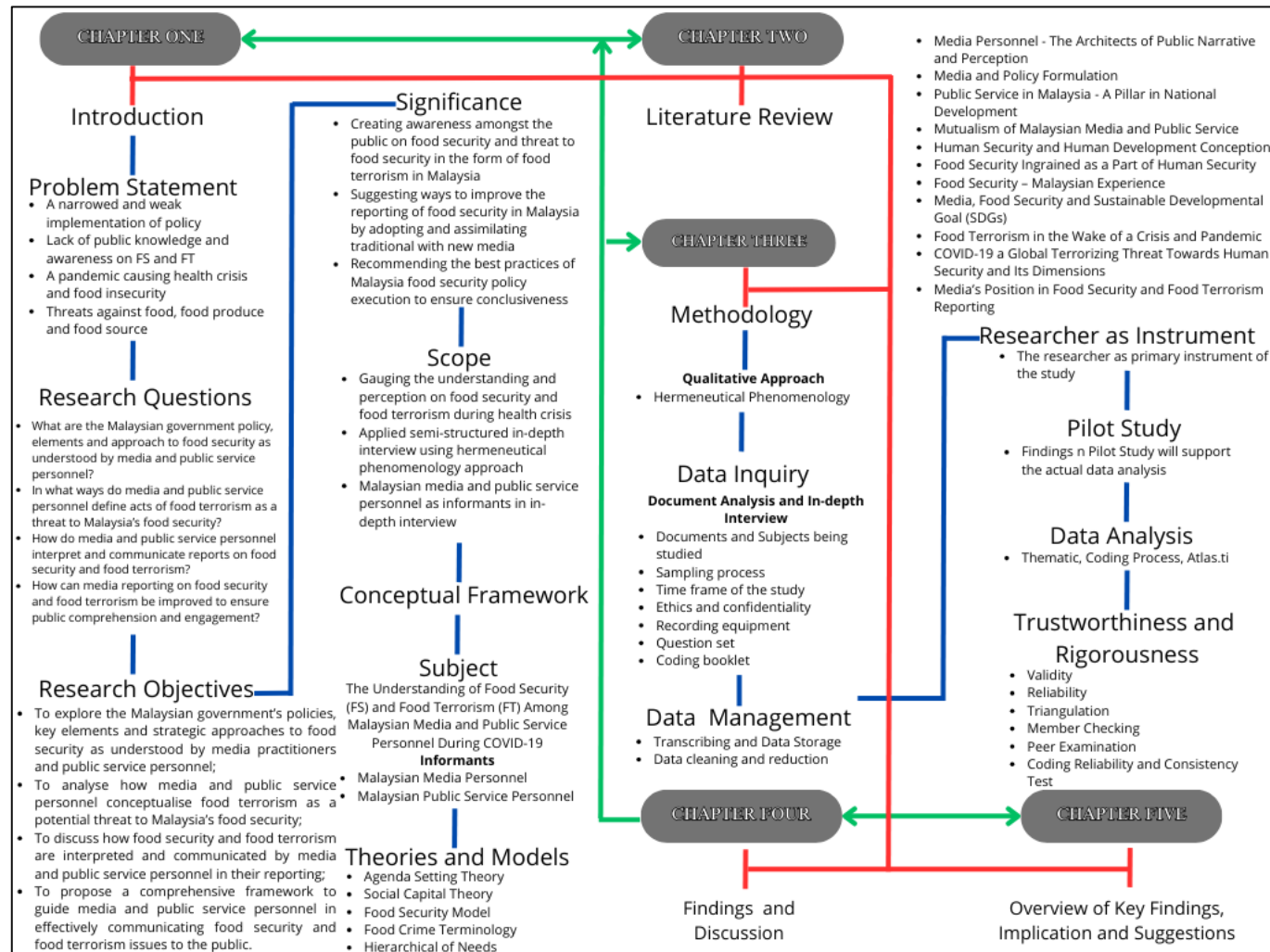


Figure 3.10 Research Design Map for “The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID-19”

CHAPTER 4

FINDINGS AND DISCUSSION

4.1 Chapter Introduction

This chapter will probe in detail the outcome of the study through the adoption of document analysis of selected textual policy documents as well as qualitative in-depth interviews analysis. In this chapter, the researcher will further elaborate and utilise the methodology used to successfully answer the objectives raised in Chapter One of the study. The data gathered during these sessions were compiled and analysed using thematic analysis with the use of ATLAS.ti 24 software as mentioned in the previous chapter.

4.2 Overview of Data Analysis Procedure

The data analysis comprised two phases whereby phase 1 involved qualitative document analysis of selected national and international policy documents to identify the policies, elements and approach surrounding food security and food terrorism. This phase established the foundation by exploring the conceptualisation of food security and the threats of food terrorism. Phase 2 consisted of in-depth interviews with media practitioners and public service personnel, which allowed for the probing of food security and food terrorism interpretation and communication. Together, these phases enable a comprehensive understanding of the alignment between media and public service communication and priorities.

4.2.1 Phase 1: Document Analysis

The analytical process for this study commenced immediately upon the completion of the data collection phase and was conducted in two sequential phases. The first phase involved document analysis, which served as a foundational analytical strategy to answer the first two (2) research objectives and ultimately inform the subsequent interview phase. A total of five (5) key documents relevant to food security

and media communication were purposively selected and systematically analysed. The findings from this document analysis are presented and discussed in the subsequent sections of this chapter and were also used to support and triangulate the interview data. Table 4.1 below lists the five (5) documents selected for this study with each document labelled accordingly.

Table 4.1
Documents Selected

No.	Document Title	Document Label	Issuing Body	Year	Level
1	National Food Security Policy Action Plan (DSMN) 2021–2025	FS 1	Ministry of Agriculture and Food Security, Malaysia	2021	National
2.	National Agrofood Policy 2.0 (NAP 2021–2030)	FS 2	Ministry of Agriculture and Food Security, Malaysia	2021	National
3.	The State of Food Security and Nutrition in the World Report (SOFI) 2022	FS 3	Food & Agriculture Organization of the United Nations (FAO)	2022	International
4.	Terrorist Threats to Food	FT 1	World Health Organization (WHO)	2003	International
5.	Food Defence	FT 2	Institute of Food Science & Technology	2021	International

4.2.2 Phase 2: In-depth Interviews

The process of data collection for the in-depth interviews took seven (7) months to complete, from September 2022 to March 2023. The insights from the pilot interviews were systematically reflected in the procedures for the in-depth interviews. Participant responses were transcribed verbatim by the researcher to extract key points or excerpts relevant to the study. These data were subsequently organised, analysed and are presented in this chapter. The interpretation of the findings was guided by the study's theoretical framework and supported by document analysis conducted by the researcher.

The interviews were successfully executed, owing to the full cooperation of the participants.

The researcher has narrowed down the initial selection of informants to twelve (12) informants whom were divided into two (2) categories. The first category being the public service personnel and industry players relating to food security (FS) while the other category is informants from the media background which may consist of those working for the government or otherwise. The informants were labelled as H1 up to H12 with H1 to H6 being the public service personnel and industry players while H7 to H12 were the media and informants working in the realm of media which included public relations and corporate communications as described below on Tables 4.2 and 4.3 respectively.

Table 4.2
Informant Profiles

No. of Informants		12
Gender	Male	7
	Female	5
Location	Selangor	2
	Putrajaya	5
	Kuala Lumpur	4
	Sabah	1
Designation	Public Service	3
	Academician at Public University	3
	Practitioner	2
	Journalist	4

Table 4.3
Informant Designations and Specialisations

Informant (H)	Designation
H1	Expert of Food Security and Agricultural Technology (MARDI)
H2	Food Security Researcher at the Institute for Development Studies Sabah
H3	Director of Malaysian Investment Development Authority (MIDA)
H4	Senior Lecturer and Food Terrorism/Fraud Expert at Universiti Putra Malaysia

Informant (H)	Designation
H5	Business Owner and Industry Player
H6	Industry Player
H7	Head of Public Relations and Corporate Communications at the Ministry of Agriculture and Food Security (MAFS)
H8	Policy & Planning Unit Officer at Malaysian Quarantine and Inspection Services (MAQIS)
H9	Assistant Editor (Crime Desk) at Sinar Harian
H10	Assistant Editor at Sinar Harian
H11	Assistant Editor at Berita Harian
H12	Reporter at News Portal

a) Informant One (H1): Expert of Food Security and Agricultural Technology, MARDI

H1 is an academic researcher from Malaysian Agricultural Research and Development Institute (MARDI) with ardent interest in Food Security. Holding a vast experience in undertaking research on marketing agricultural produce, innovation management and technology transfer/commercialisation of technology, he was appointed as the Director of Economic, Social Science and Agribusiness Research Centre, the Director of Strategic Planning Centre and his last position before retiring in 2019, the Deputy Director General (Development and Operations), MARDI. In addition to publishing more than 100 articles, books, book chapters, research papers, annual reports and manuals, he has delivered more than 50 presentations at local, national and international seminars and conferences.

b) Informant Two (H2): Food Security Researcher at the Institute for Development Studies Sabah

H2 is a researcher at the Institute for Development Studies with interest and expertise in Food Security Policy. A fellow PhD Candidate, H2 has over 5 years of experience in policy studies particularly involving Sabah's agricultural policy and research. As this study also focused on the policy of food security, it is very apt to get insights from the policy expert as well.

c) Informant Three (H3): Director of Malaysian Investment Development Authority (MIDA)

H3 is currently a Director at MIDA, having previously served as the Assistant Director of both Foreign Direct Investment Division as well as Electrical & Electronics Division at MIDA headquarters in Kuala Lumpur. His responsibilities at MIDA comprise of promotional activities to attract foreign direct investments to Malaysia. These activities encompass of investments relating to manufacturing of food and beverages, among others. MIDA in general also oversees and facilitates local and foreign investments of businesses and enterprises. H3 has just completed his Master's degree Business Administration at Universiti Teknologi MARA, also possesses a certificate in public diplomacy and skills from the Institute of Diplomacy & Foreign Relations (IDFR), Ministry of Foreign Affairs. H3 is a suitable candidate for this interview due to his vast and extensive experience in diplomatic and promotional activities and investment ventures.

d) Informant Four (H4): Senior Lecturer and Food Terrorism/Fraud Expert at Universiti Putra Malaysia

H4 currently works at the Department of Foodservice & Management, Faculty of Food Science & Technology, Universiti Putra Malaysia. She is an expert in food terrorism and fraud, franchising, management and food regulatory and policy. H4's other interest includes food tourism, safety and defence, regulatory and policy including commercialisation. H4 completed her PhD in the United States and has direct experience with food fraud and terrorism incidents in the US including policies used there to prevent more incidents from happening.

e) Informant Five(H5): Business Owner and Industry Player

H5 is an industry player with experiences dealing with BERNAS, Malaysia's partner in the rice and paddy industry. BERNAS and its affiliates are engaged in the acquisition and handling of paddy. Having previously worked for the government and now running a family business based in Petaling Jaya, Selangor, H5 has the knowledge on the country's staple food and the process behind it.

f) Informant Six (H6): Business Owner and Industry Player, Private Ownership

H6 is an industry player in a privately owned company, one of leading exporters of branded processed food products and agricultural commodities to over 85 countries. The company's products are highly valued by discerning consumers worldwide, including in regions such as South East Asia, the Middle East, the Commonwealth of Independent States, Africa and the Pacific Basin Nations. This brand is well-known in Malaysia's import sector and the researcher believed that H6 could provide valuable insights on the country's food security and food terrorism, particularly from a global perspective.

g) Informant Seven (H7): Head of Public Relations and Corporate Communication, the Ministry of Agriculture and Food Security (MAFS)

H7 is a government official from the Ministry of Agriculture and Food Security (MAFS) or formerly known as the Ministry of Agriculture and Food Industry or MAFI. The name rebrand has proven how food security has become the main concern of governments around the world, Malaysia included. With the inclusion of food security as one of the main agenda, the ministry is responsible for drafting, planning and implementation of food security policies, not forgetting to ensure that the national food supply system is guaranteed in terms of availability, accessibility, use and stability in all agro-food activity chains including production, processing, distribution, preparation, food safety and nutrition.

h) Informant Eight (H8): Policy & Planning Unit Officer, Malaysian Quarantine and Inspection Services (MAQIS)

H8 was actually referred to by H7 considering that MAQIS is one of the agencies under MAFS and often regarded as the first-hand food/agriculture security provider in entry and exit points all over Malaysia. On paper, MAQIS provides integrated services relating to quarantine, inspection and enforcement at entry points, quarantine station, premises quarantine and certification for the import and export of plants, animals, carcasses, fish, agricultural produce, soils and microorganism and

include inspection of and enforcement relating to food and for matters related to it. H8 is an officer with almost 7 years of experience with MAQIS with ardent participation at raids and security surveillance all around Malaysia's border. H8's experience will add so much value to this study with respect to the potential of food terrorism if such event were to occur.

i) Informant S9 (H9): Assistant Editor (Crime Desk), Sinar Harian

H9 has been with Sinar Harian for almost 15 years and is currently the Assistant Editor at Sinar Harian's Crime Desk, covering local crime news whilst researching and finding leads for the news outlet. One notable scoop for H9 was the meat cartel incident which caught the nation by storm. H9 was amongst the first to get the lead and was actively included and involved with the raid by PDRM and MAQIS.

j) Informant Ten (H10): Assistant Editor, Sinar Harian

H10 has been with Sinar Harian for over 10 years and is currently the Assistant Editor at Sinar Harian, covering local news whilst researching and finding leads for the news outlet. H10 was also involved in the exposure of the meat cartel scandal and alongside H9, was amongst the first to get the lead and was actively included and involved with the raid by PDRM and MAQIS. Both H9 and H10 were selected for this research based on their expertise on the media reporting along with the hands-on knowledge on possible terrorist threats against food and food security.

k) Informant Eleven (H11): Assistant Editor, Berita Harian

Another journalist on the list is H11 who has approximately 12 years of experience with Berita Harian, Malaysia's renowned news outlet. H11 is no stranger to food security as he has been assigned to report on the country's food security even before the pandemic. H11 has definitely provided valuable insights on the reporting of media on food security as well as the media point of view with matters pertaining to food terrorism threats. Not only that, it is also part of H11's responsibility to always engage media with the ministry and the Minister of MAFS especially with the launch of Malaysia's latest Food Security Policy 2021-2025 or DSMN 2021-2025.

1) Informant Twelve (H12): Reporter, Online News Portal

H12 is also a journalist on the list whom has approximately 5 years of experience with a Malaysian news portal. H12 has first-hand knowledge of remote news reporting during the pandemic as well as food security including the government efforts on its policies. H9 was chosen in order to discover the views from those working in digital media which was heavily utilised during the MCO phase.

The researcher managed to gain deep insights and understanding from both groups as these twelve informants were encouraged to elaborate their views and opinions within the interview sessions. Although the data collected were saturated by the eighth informant, the researcher resumed to the twelfth informant to ensure that no new themes emerged and to verify that the quality of the data collected was sufficient to address the research objectives and answer the research questions effectively as discussed by Hennink and Kaiser (2022).

The most engaging aspect of handling a large dataset lies in the process of categorising subcategories, categories and themes. The researchers approached this systematically, dividing the task into stages. Initially, the researcher managed an extensive list of in vivo codes to identify the central focus. According to Silver and Lewins (2014), in the initial stage of analysis, open or in vivo coding is employed, facilitating a detailed examination of small data segments and enabling comparisons among them. The next step involved refining this list to determine the appropriate codes that would effectively address the research question. During the first level of analysis, between 500 to 400 quotations with 179 in vivo codes were identified. This extensive list was then reduced by half to establish the codes, with the remaining fifty (50) percent used to develop the overarching themes. This is in line with Friese (2019) whom suggested that in-vivo codes must not exceed three hundred (300) during the first stage of coding.

The researcher assigned meanings in this study by analysing the perspectives of each informant, with H1 to H6 categorised under public service and H7 to H12 under the media category (Table 4.3). Transcripts from 12 verbatim accounts were identified and organised, aligning them with the research questions and identifying emerging themes. Given the substantial volume of data, the researcher faced challenges in sorting, categorising and recognising themes, which required a strategic approach. Despite these challenges, the process proved highly engaging and productive, enabling the researcher

to derive meaningful insights and achieve the study's objectives. The inductive approach of the qualitative study design effectively captures the essence of exploring the understanding and experience of the informants on food security and food terrorism. The coding reliability and consistency were assessed alongside the data analysis process to ensure clarity and validity in the identified categories. To enhance the robustness of the method, the researcher has opted to utilise ATLAS.ti 24 to assist in sorting and categorising the quotations into in vivo codes and eventually codes and themes.

4.3 Food Security and Food Terrorism: Informants' Insights

Food security and food terrorism are critical issues that affect global stability, public health and economic development. Insights from informants hailing from two distinct categories, namely the public service and media personnel shed light on both phenomena, offering nuanced perspectives that enrich our understanding of their interconnected nature.

Informants emphasised the importance of ensuring access to safe, sufficient and nutritious food for all populations. Findings that emerged include the pillars of Food Security as defined by the FAO (2022) which are access and availability where they highlighted challenges in ensuring equitable food distribution, particularly in regions with economic disparity or those affected by climate change. Additionally, the informants also provided feedback on supply chain disruption as a significant threat to food security, often exacerbated by geopolitical tensions, as such this is also in unison with what have been discussed by Smith et al. (2020). Next, the informants also elaborated on the policy and governance whereby the role of effective governance in establishing resilient was underlined. Several informants stressed the need for sustainable practices to maintain long-term food availability. They advocated for adopting innovative technologies, in line with United Nations' sustainable developmental goals.

Food terrorism on the other hand was mutually defined as the intentional contamination or disruption of food supplies to cause harm or fear, emerged as a growing concern by the informants. Their insights focused on the awareness and prevention; whereby the informants pointed out the need for heightened awareness among stakeholders, including governments, food producers and consumers, to recognize and mitigate risks associated with food terrorism. This involves training

personnel, strengthening monitoring systems and fostering public-private partnerships. Informants noted that incidents of food terrorism could severely damage public trust in food safety systems, with long-term economic and social repercussions. Building and maintaining trust through transparent communication and effective crisis management were deemed crucial.

Finally, informants highlighted the interplay between food security and food terrorism, noting that threats to food security could increase the risk of food terrorism, as desperation or exploitation of vulnerabilities becomes more likely in unstable food systems. Addressing food insecurity was seen as a preventive measure against food terrorism, fostering resilience and stability. These insights collectively underscore the importance of holistic approaches to safeguarding food systems, integrating cultural, technological and governance perspectives to ensure both security and safety in the food sector.

4.4 Research Findings

The document analysis findings show that food security is mainly discussed in policy and normative documents as a practical and developmental issue. Most documents focus on the dimensions of food security, namely, availability, access, stability and affordability as well as emphasis on government coordination and efforts throughout the years. Food security is treated as an important national concern, but deliberate threats such as food terrorism receive little direct attention, especially in national policy texts. Instead, these threats are usually grouped under food safety or biosecurity. This focus suggests that policy attention is directed more towards managing systems and resources than towards addressing intentional risks to food systems.

The findings also indicate that policy documents rely on technical and administrative language, with strong emphasis on preparedness, regulation and coordination. These patterns helped shape the in-depth interview questions by highlighting key themes as well as areas that receive limited discussion in policy texts. The document analysis supported the interview phase by guiding attention to whether public service personnel and media practitioners follow the same policy focus or introduce different perspectives based on their professional experiences. In this way, the document analysis provided a useful foundation for the interview discussions on food security and food terrorism.

The in-depth interview phase on the other hand, demonstrated the comprehension of both public service and media personnel on food security and food terrorism. The two (2) groups of informants, comprising public service personnel and media practitioners, are organised into two distinct segments. The first segment delineates the category of the public service's group, while the subsequent segment of this chapter examines the media informants' experiences and perceptions regarding food security and food terrorism during the span on the pandemic.

Based on the findings, the researcher is equipped to clarify questions and effectively relate the responses provided by informants, whether from public service or media categories. Each informant possessed distinct understandings, backgrounds, educational levels and types of expertise warranted. Consequently, the integration of these variables facilitated the findings of this study.

The interview sessions have generated rich data and information pertaining to the study that the researcher was undertaking. These data were then segregated into themes for further thematic analysis before being graphically depicted into diagrams via ATLAS.ti 24. The researcher felt that the findings would be much easier illustrated in accordance to the research objectives, respectively. The research objectives and aims are (i) to explore the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel; (ii) to analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security; (iii) to understand the interpretation and communication of food security and food terrorism by media practitioners and public service personnel in their reporting; and (iv) to recommend a model to guide media practitioners and public service personnel in effectively addressing reports on food security and food terrorism. Therefore, this section aims to interpret and describe the significance of the findings albeit prior understanding of the research problem statement has been investigated.

4.4.1 Malaysia's Food Security Policy, Elements & Approaches as Perceived by the Media Practitioners and the Public Service Personnel (RQ1)

To achieve the first research objective which was to explore Malaysian government policy, element and approach of food security as perceived by media practitioners and public service personnel, the researcher must firstly delve into the

country's ever changing policies involving food security, which consisted of the reason and brief history of its formulation, the changes being made thus far as well as the effectiveness and participation from relevant parties. Phase 1 involved document analysis of relevant Malaysian food security policies, frameworks and official materials, which primarily addressed Research Objectives 1 and 2.

4.4.1.1 Food Security Policy, Elements and Approaches: Document Analysis

For the document analysis phase, five (5) documents were purposively selected and analytically grouped based on their thematic relevance to the research objectives. Documents labelled FS1, FS2 and FS3 focus primarily on food security policies, frameworks as well as strategic approaches and were therefore analysed to fulfil Research Objective 1. In contrast, documents labelled FT1 and FT2 centre on threats of food specifically on food terrorism and were analysed to address Research Objective 2.

Although the documents were grouped according to their dominant thematic focus, all documents were subjected to the same systematic coding and thematic analysis procedures. The document analysis further served as a triangulation mechanism to corroborate findings from the in-depth interviews with media practitioners and public service personnel. The document labels "FS" and "FT" were assigned by the researcher solely for analytical organisation and do not imply mutually exclusive thematic boundaries. While the documents were mapped to specific research objectives for analytical clarity, overlaps between food security and food terrorism themes were acknowledged and examined where relevant.

This section presents findings related to Research Objective 1, which seeks to explore Malaysian government policy, elements, and approaches to food security as perceived by media practitioners and public service personnel. To address this objective, three (3) key documents namely National Food Security Policy Action Plan (DSMN) 2021–2025, National Agrofood Policy 2.0 (NAP 2021–2030) and The State of Food Security and Nutrition in the World Report (SOFI) were labelled FS1, FS2 and FS3 were analysed. These documents comprise national policy instruments and an international benchmark report that collectively outline policy direction, strategic priorities, and institutional approaches to food security. The analysis of these documents provides the policy foundation for understanding food security, which subsequently informs and is compared against perceptions expressed by interview participants.

Table 4.4
Food Security Policy, Elements and Approaches

Categories	Document	Verbatim Extract	Thematic Interpretation
Policy Orientation	FS 1	“Dasar Sekuriti Makanan Negara 2021–2025”	Establishes food security as a formal national policy priority rather than a sectoral or ad-hoc concern.
	FS 1	“Sekuriti Makanan Negara (SDG 2: Zero Hunger / FIES / POU), GFSI & CPF.”	Aligns national food security discourse with global indicators, elevating its legitimacy and urgency.
	FS 1	“Wawasan Kemakmuran Bersama dan Rancangan Lima Tahun Malaysia.”	Positions food security within long-term socio-economic development planning.
	FS 2	“NAP 2.0 is formulated as the government’s effort to safeguard food security through the transformation of the national food system.”	Positions food security as a strategic national concern requiring systemic transformation rather than incremental adjustment.
	FS 2	“A sustainable, resilient and technology driven agrofood sector that prioritises food security and nutrition.”	Elevates food security as a core policy priority embedded within national development goals.
	FS 2	“This policy supports the aspirations and future direction of the national agrofood sector to be more sustainable, resilient and highly technology driven.”	Signals long-term policy commitment, guiding how institutions and stakeholders prioritise food security.
	FS 3	“This chapter presents an updated global assessment of food insecurity and nutrition... and a report on progress towards meeting SDG Targets 2.1 and 2.2.”	Establishes SOFI as an authoritative global agenda-setting document guiding how food security is prioritised internationally.
	FS 3	“The rebound of GDP growth... did not translate into gains in food security.”	Elevates food security above economic growth as a core evaluative benchmark.
Elements (Dimensions)	FS 1	“Ketersediaan, akses, penggunaan, kestabilan dan kemampanan.”	Defines food security as multidimensional, shaping how the issue is understood and measured.
	FS 1	“Pengeluaran domestik, kapasiti import, stok makanan, bantuan makanan.”	Identifies structural components that constitute food availability and access.
	FS 1	“Nutrisi dan kualiti, keselamatan makanan, pematuhan standard (myGAP, HACCP, GMP, HALAL).”	Frames food security beyond quantity to include quality, safety, and standards compliance.

Categories	Document	Verbatim Extract	Thematic Interpretation
	FS 2	“Economic, social and environmental elements as key principles.”	Frames food security as multidimensional, integrating livelihood, sustainability, and economic growth.
	FS 2	“Improve food safety and nutritional well-being of Malaysians.”	Expands food security beyond availability to include nutrition and safety.
	FS 2	“Self-Sufficiency Level (SSL) of major food commodities.”	Establishes measurable indicators that define what ‘food security’ means in policy terms.
	FS 3	“Major drivers of food insecurity and malnutrition: conflict, climate extremes and economic shocks.” (Foreword)	Frames food insecurity as structurally driven by intersecting crises.
	FS 3	“Hunger affected 278 million people in Africa, 425 million in Asia...”	Quantifies severity, reinforcing urgency and scale.
	FS 3	“The prevalence of undernourishment (PoU) and the prevalence of moderate or severe food insecurity based on FIES.”	Defines food security through measurable global indicators.
Approach (Strategies)	FS 1	“Strategi Utama: Pengeluaran tempatan, stokpail, makanan alternatif, optimum guna tanah.”	Indicates a self-reliance and resilience-oriented policy approach.
	FS 1	“Strategi Sokongan: R&D, pengukuhan infrastruktur, e-commerce, kewangan, pelaburan swasta.”	Shows a systemic approach relying on innovation, markets, and private-sector participation.
	FS 1	“Strategi Pemboleh Daya: Koordinasi antara kerajaan, komunikasi, pemantauan pasaran, kerangka fiskal, perundangan dan regulatori.”	Emphasises governance, coordination, and communication as enabling mechanisms.
	FS 2	“Five (5) policy thrusts have been formulated with emphasis on modernisation and smart agriculture.”	Frames modernisation and technology as key solutions to food security challenges.
	FS 2	“Strengthening domestic market and produce demand-driven and export-oriented products.”	Emphasises market mechanisms and competitiveness as part of food security governance.
	FS 2	“Build talent that meets demand of the industry.”	Highlights human capital as a structural determinant of food security.

Categories	Document	Verbatim Extract	Thematic Interpretation
	FS 3	“Build resilience against future shocks.” (Foreword)	Frames resilience as the dominant solution paradigm.
	FS 3	“Repurposing food and agricultural policy support to make healthy diets more affordable.”	Advocates policy realignment rather than increased spending.
	FS 3	“Public-private partnerships will be extremely important.” (Foreword)	Normalises multi-stakeholder governance in food security.
Framework (Model)	FS 1	“Model Sistem Makanan Negara.”	Presents a holistic systems framework linking all stages of the food chain.
	FS 1	“Input → Pengeluaran → Pemprosesan → Pembungkusan → Pengedaran → Pengguna.”	Simplifies food security into a linear system, facilitating public and media understanding.
	FS 1	“Berlandaskan Kerangka Sekuriti Makanan Negara (KSMN).”	Anchors policy actions within an institutionalised national framework.
	FS 2	“Advance towards sustainable agricultural practices and food systems.”	Frames sustainability as inseparable from long-term food security.
	FS 2	“The overall NAP 2.0 policy framework encompasses policy statement, principles, objectives and policy thrusts.”	Constructs food security as an integrated governance framework rather than isolated programmes.
	FS 2	“5 Thrusts, 21 Strategies, 77 Action Plans.”	Provides a structured hierarchy that guides implementation and evaluation.
	FS 2	“Clear communication between stakeholders involved is crucial.”	Emphasises coordination and communication as enabling mechanisms of food security governance.
	FS 3	“Progress towards SDG 2.1 and 2.2.”	Anchors food security within the SDG accountability framework.
	FS 3	“Prevalence of undernourishment... FIES.”	Institutionalises evaluation through indicators.
	FS 3	“Transform agrifood systems.” (multiple sections)	Frames food security as a system-wide transformation challenge.

The analysis of Table 4.4 reveals a consistent and structured articulation of food security across the analysed documents, organised around four core analytical categories: policy orientation, elements, approaches, and frameworks. Across DSMN 2021–2025, NAP 2.0, and SOFI 2022, food security is positioned as a formal policy concern that is embedded within broader national and global development agendas. The documents consistently present food security as an issue requiring sustained policy attention, rather than as a temporary or sector-specific concern.

In terms of policy orientation, the findings indicate that food security is institutionalised as a priority through explicit policy instruments and alignment with long-term planning frameworks. Nationally, DSMN establishes food security as a dedicated policy focus, while NAP 2.0 situates it within the transformation of the agri-food system. At the global level, SOFI 2022 positions food security within international development commitments and monitoring mechanisms. Collectively, these orientations demonstrate that food security is framed as a legitimate and enduring policy priority across governance levels.

The analysis further shows that food security is consistently defined through multiple elements, rather than a single dimension. DSMN explicitly outlines availability, access, utilisation, stability, and sustainability as core components. NAP 2.0 expands these elements by incorporating economic, social, and environmental dimensions, alongside nutrition and food safety. SOFI 2022 reinforces this multidimensionality by identifying hunger, malnutrition, and food insecurity through quantitative indicators and by highlighting structural drivers such as conflict, climate extremes, and economic shocks. Taken together, the documents conceptualise food security as a complex condition shaped by interrelated material, nutritional, and systemic factors.

With regard to approaches, the findings indicate convergence around strategies that emphasise system strengthening and resilience. DSMN highlights domestic production, stockpiling, and enabling strategies such as coordination, communication, and regulatory mechanisms. NAP 2.0 foregrounds modernisation, smart agriculture, market mechanisms, and human capital development as key approaches. SOFI 2022 emphasises resilience-building, policy realignment, and multi-stakeholder engagement as means of addressing food insecurity at scale. Across the documents, approaches are oriented towards long-term capacity building rather than short-term interventions.

The analysis also demonstrates that food security governance is operationalised through structured frameworks that organise implementation and evaluation. DSMN employs a national food system model that links inputs, production, processing, distribution, and consumption. NAP 2.0 adopts a hierarchical framework consisting of policy thrusts, strategies, and action plans. SOFI 2022 relies on global accountability frameworks anchored in SDG targets and standardised indicators such as PoU and FIES. These frameworks provide formal structures through which food security is monitored, coordinated, and assessed.

Across all categories, the findings indicate alignment between national and global documents in terms of how food security is positioned, defined, and addressed. Food security is consistently treated as a system-based policy issue that requires coordination across sectors and levels of governance. The table, when synthesised in its entirety, shows that Malaysian food security policy is articulated within a broader institutional and discursive environment shaped by both national priorities and global benchmarks. This establishes the policy-based reference point for understanding how media practitioners and public service personnel encounter, interpret and make sense of food security in their professional contexts.

4.4.1.2 Food Security Policy, Elements and Approaches: In-depth Interviews

The findings from Phase 2, obtained through in-depth semi-structured interviews with media practitioners and public service personnel, extended the analysis by addressing Research Objectives 1 through 4. While Phase 2 served as the main source of empirical insights into perceptions, interpretations and lived experiences of the informants, Phase 1 was utilised as a triangulation strategy to contextualise, corroborate, and enhance the credibility of the interview findings, particularly in relation to policy intent, policy evolution and institutional approaches to food security in Malaysia.

Additionally, to gauge the understanding of the media and practitioners in the policy, framework and approaches thus far, the researcher pursued the selected informants with relevant questions during the semi-structured interview sessions and the outcome of all the interviews relating to the first research objectives was analysed thematically which then produced initial codes which were segregated into themes of

namely knowledge, awareness, relevance, effectiveness and involvement as well as participation respectively.

Table 4.5
Categories and Themes Derived from In-Depth Interviews on Food Security Policy, Elements and Approaches (RQ1)

Categories	Sub-themes	Themes Derived
Commitment	Knowledge	Media Practitioners and Public Service communication and insights on Food Security.
Proficiency	Awareness	
Concept	Relevance	
Understanding	Importance	
Economy	Effectiveness	
Individual Sustenance	Involvement and Participation	
Media Role		
Sovereignty		
Acknowledgement		
Crisis		
Price Hike		
Inflation		
Purpose		
Significance of FS		
Rebranding		
Implementation		
Value Chain		
Government Policy		
Discourse		
Engagement		
Aid		

a) Knowledge on Food Security

All of the informants interviewed had similar knowledge when asked about Food Security, further on will be abbreviated as FS. According to the H1, FS can be viewed from three (3) separate angles namely individual, nation and international. These different angles project different levels of knowledge, awareness and action but ultimately all of H1's description of FS relates to the very foundation of FS in

accordance with the definition upheld by the UN which are availability, affordability, access and utilisation. One of the public service informants, H1 stated that:

“When we discuss/talk about food security, we may segregate it into 3 distinctive levels or phases...”

“From the global or international aspect, food security is very much a subject of interest and is always under the radar of the WTO. Fundamentally, food security is the responsibility of a country to ensure that supply is enough in the market...”

“Secondly is the national or county level where the country has the ability to provide food and food produce for domestic consumption....”

“Finally, the individual aspect. An individual is deemed food secured when he/she is able to have access to affordable and nutritious food supply anytime anywhere...”

“We can then conclude that the concept of food security is very dynamic from one place to the other.”

(H1)

Other public service personnel suggested that FS can be explained via by strictly viewing it from the United Nations’ (UN) official definition and dimensions of FS. The information on UN’s FS is made free and available for all, accessible via online as well as offline. With that in mind, the informants and public at large are able to obtain information on FS without having the hassle of looking for its meaning and dimensions academically.

“Generally, the UN food security approach consists of 4 dimensions, whereas we also have the Global Food Security Index or GFSI to measure food security. The 4 dimensions namely availability, affordability, resilience and environment, each having their own indicators to focus on. In the case of Malaysia, our indicator is SSL along with GFSI as it is more comprehensive as a food security indicator as SSL only measures the production or the availability dimension in food security...” (H2)

“From my line of work, the term food security refers to the readiness of food supply for public consumption. I understand that there is a specific definition of the terms according to the UN which is the body that is responsible for the food security, overseeing and measuring the food security according to countries of the world,” (H3)

“Ok, first of all, food security has its own definition and when we talk about food security it is mostly related to food supply chain. So food security itself refers to the availability, accessibility and affordability of sufficient and nutritious food” (H4)

Out of all the expert informants interviewed, H5 and H6 displayed general and not specific knowledge on FS but all showed that they were all aware of FS whereby data on awareness will be discussed in the following point below.

The informants from the media category on the other hand reiterated on the meaning of FS in terms of the 3 basic entities of FS which are availability, accessibility and affordability. They also added that it is important for the people to distinguish between food security and food safety, reiterating that both terms cannot be used interchangeably and that both do not carry the same meaning and attributes.

“Food security on the other hand, although a lot of people perceive it as food safety, one must remember that it carries the meaning of the availability of food supply. Food security is a better term to describe the readiness of food instead of the term I mentioned earlier that is, “Food Supply Guarantee.” (H7)

In addition, the informants under the media category are also generally knowledgeable on FS as their line of work primarily allows them to gain access to the implementation and the structure of FS, especially when the government and the world have all pledged to ensure that FS is taken seriously following the COVID-19 pandemic and the disruption and shortage of food supply that it has caused to the world.

“According to my understanding food security is to have the guarantee of food availability at all times regardless of circumstances whether during calm and in times of crisis like the COVID-19 pandemic..” H11)

“Food security is the access of the community to adequate, safe and nutritious food and food source.,” (H12)

Based on the interviews held, it can be deduced that most of media practitioners have adequate understanding and proficiency on food security (FS) as they were able to describe the core elements of FS as defined by the FAO (2022) under the United Nations (UN). The description for these elements, namely availability, accessibility and affordability are easily available ever since FS is established by the UN, hence the public in general may obtain information regarding this in various media reports, publications, policy dissemination and resources.

The public service personnel group on the other hand also possessed similar knowledge on the concept of FS as the media personnel, with the exception of H1 and

H2 whom were able to delve deeper on describing the newer policies and elements ingrained in FS especially with the recent commitment and outlook on FS by the government after the pandemic putting very substantial focus on the people's individual sustenance and the country's economy.

This clearly shows that the understanding on FS by both parties, media practitioners and public service is satisfactory. The informants also reminded the researcher to distinguish the concept and differences between the food security (FS) and food safety. These terms may sound similar but both carry different meanings in this broad spectrum pertaining to food, as discussed by Balan et. al. (2020) whom defined the latter as an umbrella term that encompasses many facets of handling, preparation and storage of food to prevent illness and injury and Ene (2020) whom stated that the latter (food safety) is an aspect of FS.

Table 4.6 depicts the code–document analysis which shows relatively balanced engagement between media practitioners and public service personnel, with 28 and 25 coded quotations respectively, although differences in emphasis are evident. FS Knowledge: Commitment emerged as the most dominant dimension across both groups, indicating that food security is primarily framed as an institutional and policy responsibility. This convergence suggests strong agenda-setting effects, whereby sustained emphasis positions food security as a long-term national priority. FS Knowledge: Understanding and Proficiency were also prominent, reflecting the complementary roles of the two actor groups. Media practitioners emphasised understanding, consistent with their role in interpreting and contextualising food security issues for public audiences, while public service personnel highlighted proficiency, aligning with their operational and implementation responsibilities. This differentiation reflects framing practices shaped by institutional roles.

Table 4.6
Knowledge on Food Security

		Media 6 12 247	Public Service 6 12 156	Totals
◇ FS Knowledge: Commitment	12 19	9	10	19
◇ FS Knowledge: Concept	12 6	2	4	6
◇ FS Knowledge: Economy	12 4	3	1	4
◇ FS Knowledge: Individual Sustenance	12 1	1	1	1
◇ FS Knowledge: Proficiency	12 11	6	5	11
◇ FS Knowledge: Understanding	12 12	7	5	12
Totals		28	25	53

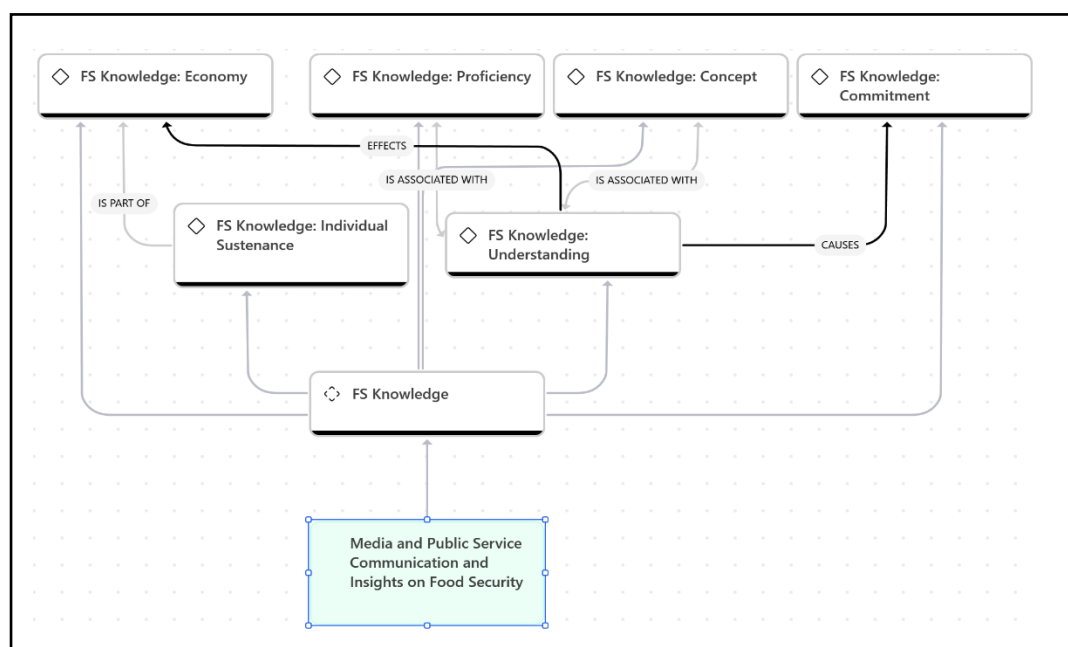


Figure 4.1 Network Diagram for Knowledge on Food Security

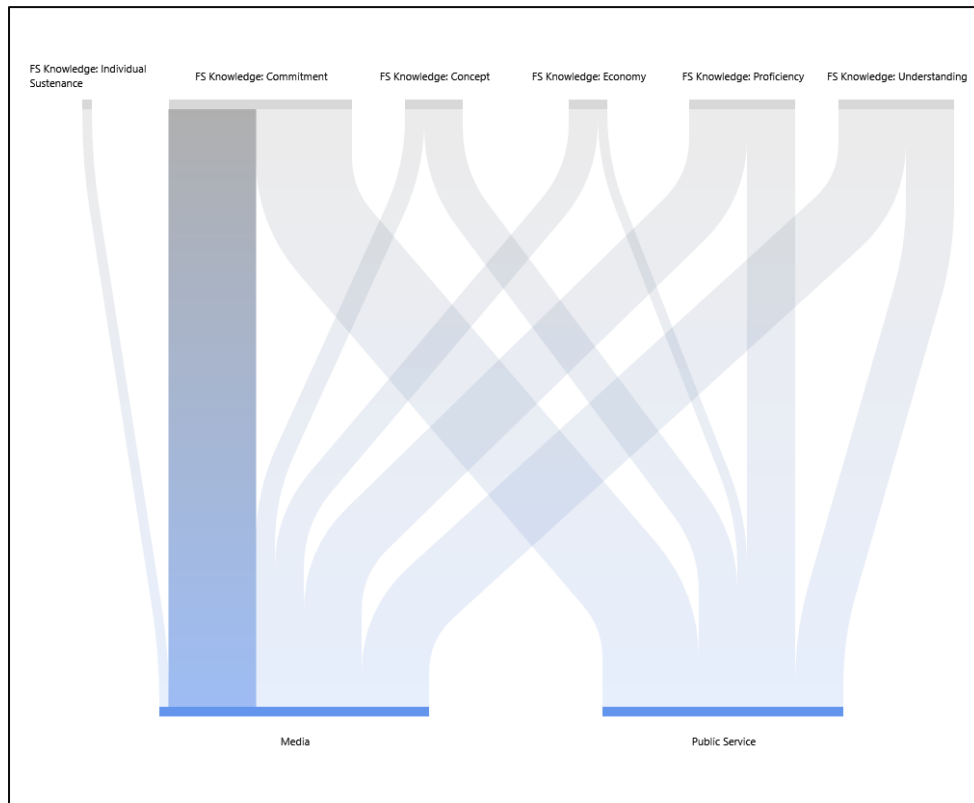


Figure 4.2 Sankey Diagram for Knowledge on Food Security

Figure 4.1 is the network diagram depicting the Food Security (FS) Knowledge category constructed as a multidimensional and relational phenomenon across both media practitioners and public service personnel. Six interrelated codes emerged from the data: commitment, concept, economy, individual sustenance, proficiency and understanding. These codes form an integrated knowledge structure that reflects institutional priorities and communicative practices, addressing the research objective of examining how food security is perceived and framed by key actors.

In contrast, FS Knowledge: Concept, Economy and Individual Sustenance received comparatively less attention. The limited focus on individual sustenance indicates that household level and lived experiences of food insecurity are marginal within dominant narratives. This suggests a predominantly top-down framing of food security, where macro-level governance and institutional capacity are prioritised over micro-level vulnerability. From a priming perspective, repeated emphasis on commitment and proficiency may condition audiences to associate food security with state capability rather than individual welfare.

The Sankey diagram depicted by Figure 4.2 visually reinforces these findings by demonstrating strong relational flows between both actor groups and the dimensions

of commitment, understanding and proficiency, alongside weaker connections to economic and individual sustenance codes. The network view further reveals that FS Knowledge operates as the central construct, with understanding functioning as a key intermediary associated with conceptual knowledge and proficiency, while also contributing to commitment. Economic considerations appear largely as outcomes rather than drivers and individual sustenance remains weakly integrated, reinforcing the dominance of institutional level discourse.

Overall, the findings demonstrate that media practitioners and public service personnel contribute symbiotically to the construction of food security knowledge, reinforcing shared priorities centred on governance and responsibility. While this alignment supports policy coherence and agenda continuity, it also reveals a gap in the representation of individual and community level food insecurity. Addressing this imbalance has important implications for more inclusive food security communication and responsive policymaking.

b) Awareness on Food Security

For this section the researcher would like to inquire the awareness of FS amongst the informants as well as its policy and framework especially after the COVID-19 pandemic. The qualitative nature of this research has allowed the researcher to engage in very rich information with the selected informants whom are public service personnel. in this field. Although the nature/s of their designations varied but all of the informants have provided desired responses pertaining to the awareness of FS in Malaysia.

For the public service personnel, H1, H2 and H3 stated that the awareness is already there particularly after COVID-19. H1 agreed with the presence of FS by saying that,

“The awareness is definitely there. This is evident from the responses and reactions of the public when it comes to price hikes, inflation, food shortages that were expressed via social media. That is one indicator of the awareness on food security, what more with the pandemic that we were facing. (H1)”

H1 further added about the association of the 4 FS elements as outlined by the UN with awareness as such,

“The people in this country associate food security with the price of food and if we go back to the 4 elements of food security, which are availability, accessibility, utilisation and nutrition the accessibility element is the main concern of our people. To summarize we already have awareness ingrained amongst the people.”(H1)

Another public service personnel, H2 opined that FS awareness is quite limited amongst the public,

“Food security was sensationalised during the pandemic where we had to face panic buying and endured shortages of rice and poultry not only in the peninsular but in Sabah as well. That was when people became more aware of food security, food safety and proper hygiene.”(H2)

Moving forward the public service personnel group category felt that the awareness of FS was very limited, until after it was reported by the media, highlighted mostly after the pandemic. With media being the catalyst to help spread awareness, all the said informants agreed that awareness came after the pandemic. H3 mentioned that he was not all familiar with the terms involving FS until after it was vastly reported by the media and believed that many people were just like him when it came to FS awareness.

“With food security being reported everyday during COVID-19, I think that Malaysians are more aware of food security and with the help of the government agencies we are able to increase such awareness.” (H3)

Next in the public service category namely H5 and H6 respectively were also aware of FS since the latter is heavily involved in the government-backed rice supply industry, by mentioning that,

“In terms of food security, the government prioritises the production of rice. It’s wrong to say that the public is not aware of the importance of essential food items.”(H6)

Out of the public service informants, only H6 stated that the awareness varies among the people, that is,

“The awareness of food security among Malaysians can vary based on factors such as education, socioeconomic status and exposure to information. While some segments of the population may be well-informed about food security issues, others might have limited awareness.”(H6)

In the media group, H7 added the term Food Sovereignty after the public became more aware of FS by elaborating that,

“So, in our country, the awareness of food supply amongst the public in general is definitely there, industry players and people involved with the industry are already well informed on food security. But when we had to face the consequence of a crisis such as the COVID-19 pandemic, the realisation hit us hard that aside from other threats towards our national security and sovereignty, we also faced the impending crisis towards our food sovereignty....” (H7)

while H8 added that,

“.....just like the previous government, the focus is still on food security. Still towards that.” (H8)

H9 and H10 being reporters were only made aware of FS after having to report about it during the height of COVID-19 while H11 admitted that the awareness on FS was very low amongst Malaysians by stating that,

“I can safely say that the people’s awareness on food security is very low before..” (H11)

Another reporter interviewed, H12 also felt that the awareness has been very low all along and only improved following the food shortages during the pandemic. H12 claimed that,

“I personally feel that the awareness on the term is still very low before compared to now..” (H12)

With the spill over effect of the pandemic, H9’s workspace has now established a specialised desk on FS and news relating to FS, setting the agenda right to ensure that the public will be well aware of FS.

“We have already established a food security desk in our office where previous focus was on agriculture and crops. With such awareness and public hunger on the issue, we have even begun writing about food security itself....”(H12)

Based on these findings, the public service informants had mixed reactions when it came to the awareness of FS. Although this group personally felt that the awareness on FS is there, all agreed that this was further heightened during the pandemic. Pre pandemic, the informants opined that the awareness was low compared to during and post pandemic. This concurred with Awang (2015) whom have expressed the lack of awareness of Malaysians with issues pertaining to food security. For the media informants, most are aware of FS even before the pandemic as they were given tasks to cover news and reporting on FS both locally as well as internationally. In any given circumstances, most issues will gain exposure and awareness if there exist occurrences that require people to act on them.

The code–document analysis at Table 4.7 reveals a stronger emphasis on FS awareness among media practitioners (47 quotations) compared to public service personnel (32 quotations), indicating the media’s central role in amplifying food security concerns. FS Awareness: Acknowledgement emerged as the most dominant code (n = 20), followed closely by Challenges (n = 18) and Crisis (n = 18). This pattern suggests that food security awareness is primarily driven by recognition of the issue and its difficulties. Media practitioners contributed more frequently across these dominant codes, reflecting their agenda-setting role in foregrounding food security as a public concern. Public service personnel also engaged with these codes, though with slightly lower frequency, often situating them within policy responses and institutional constraints.

Table 4.7
Awareness on Food Security

		Media 6 247	Public Service 6 156	Totals
◇ FS Awareness: Acknowledgement 20	11	12	8	20
◇ FS Awareness: Challenges 18	11	11	7	18
◇ FS Awareness: Crisis 18	11	10	8	18
◇ FS Awareness: Inflation 2	11	2		2
◇ FS Awareness: Media Role 11	11	5	6	11
◇ FS Awareness: Price Hike 5	11	5		5
◇ FS Awareness: Sovereignty 5	11	2	3	5
Totals		47	32	79

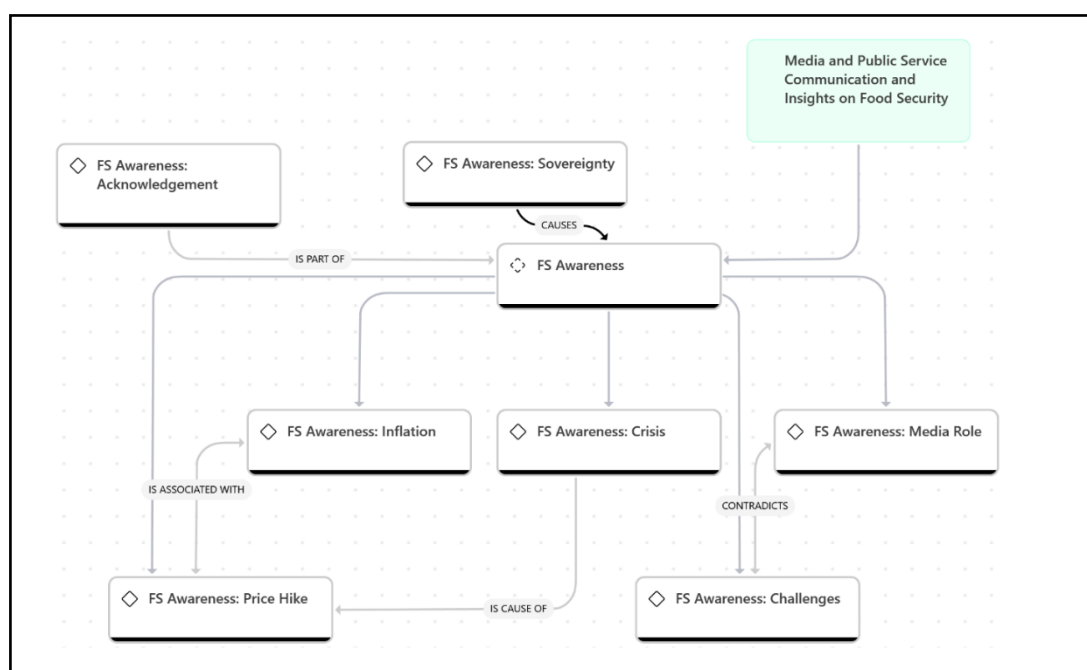


Figure 4.3 Network Diagram for Awareness on Food Security

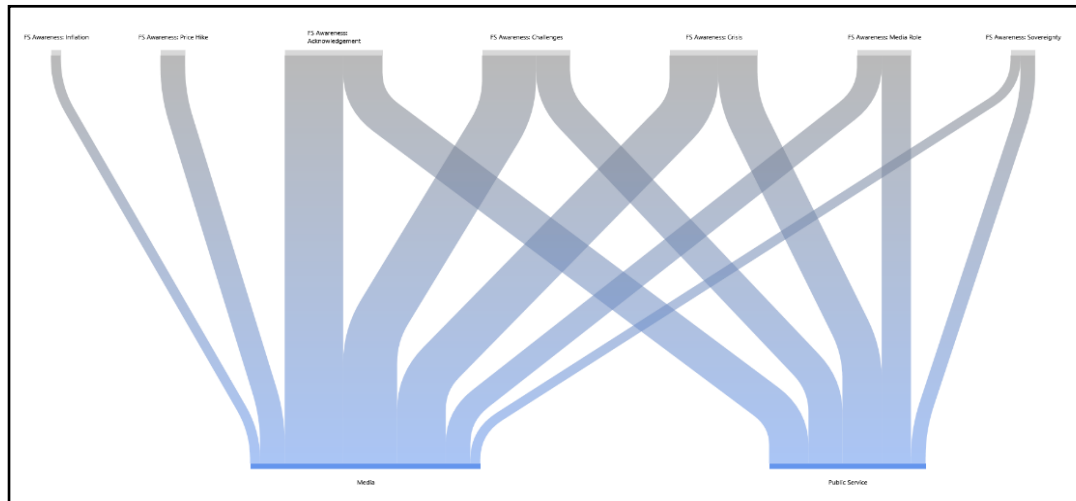


Figure 4.4 Sankey Diagram for Awareness on Food Security

Figure 4.3 describes the Food Security (FS) Awareness category with seven (7) interrelated awareness codes emerging from the data: acknowledgement, challenges, crisis, inflation, media role, price hike and sovereignty. Together, these codes illustrate the communication and construction of food security awareness within public and institutional discourse, addressing the research objective of understanding how food security issues are made visible and salient.

Contrary to expectations, FS Awareness: Inflation ($n = 2$) and Price Hike ($n = 5$) appeared less frequently overall. While references to price hikes were present exclusively among media practitioners, inflation was mentioned only marginally and solely by media actors. This finding indicates that, within this dataset, economic indicators were less central to awareness construction than broader challenges and crisis narratives. FS Awareness: Sovereignty ($n = 5$) was also comparatively limited, suggesting that discussions of national self-sufficiency is not dominant in Malaysia's food security discourse.

FS Awareness: Media Role ($n = 11$) occupied a middle position, with relatively balanced contributions from media and public service personnel. This reflects a shared recognition of the media's influence in shaping food security awareness, while also revealing pressures surrounding responsibility, framing and the potential public outcry. The informants often spoke of the media as serving two functions at once namely helping the public understand food security issues, while also occasionally intensifying public concern.

The Sankey diagram in Figure 4.4 reinforces these findings by illustrating stronger flows from both actor groups towards acknowledgement, challenges and crisis-related awareness, while comparatively thinner flows are observed for inflation, price hikes and sovereignty. This visual pattern suggests that both media and public service actors tend to focus on immediate concerns. Overall, the findings demonstrate that FS awareness is largely reactive and event-driven, with media practitioners playing a leading role in elevating recognition of food security challenges and crises. While this enhances issue salience and public responsiveness, it also risks narrowing food security awareness to immediate disruptions.

c) Relevance of Current Policy and Approaches

When asked about the relevance of current policy and approaches by the government with the intention to gauge the level of significance, H1 mentioned that,

“We initially focus our food security to rice and because of that we would always ensure that our rice supply is always available for consumption.,” (H1)

H1 further stated that throughout the years, newer policy is introduced to add value and replace previous one to ensure that the country’s resources are fully utilised. H1 added,

“With the National Agrofood Policy 2.0 (nation 2.0) our focus will not only be on rice, but also other competitive advantage commodities... In a way our food security aside from rice we must also take into consideration other competitive advantage food produce to further increase our food security..... Policies on food security will always be reviewed whenever necessary as it is may act as a shield towards of food security,” (H1)

further indicating that any policy involving food security is all time relevant to avoid any crises. As mentioned earlier, most policies and framework are the outcome of crises and crisis management. Henceforth, all of the informants seemed to agree that the current policy has always been relevant but must be open for annual if not monthly reviews.

H2 shared her experience of reviewing and researching on Sabah's FS policy and said,

“ Sabah has its own policy as well which kickstarted in 1992 where this policy fully aligned with the national's. Land for paddy plantation belonged to the state as the state has full autonomy on land. However this fell short when it comes to the implementation of the said policy as slowly food is deemed no longer prioritised in both the state and federal level pre-pandemic...” (H2)

Such statement also resonated with H3 who said that,

“To say that it is relevant I think that it is more relevant now more than ever. People are constantly updated on the status of our food security and I see that governments are also emphasising more on food security especially after covid19. To say that we are food insecure I think the level of food insecurity that we faced during covid or now is not as bad as in other countries.” (H3)

The remaining informants expressed that while the policies remained relevant, there still are areas where significant change needed to be done. H4 said,

“Ok when we talk about food security, it is all time relevant. UN's food security approach is based on the principle of the nations giving access to sufficient food for the people of the country. When the UN introduced this approach, all the countries seem to want to comply, all UN members wanted to comply, including Malaysia. The Malaysian government would try to adopt the SDGs (Sustainable Development Goals) which does not come with challenges....” (H4)

while H5 and H6 respectively said,

“I have read about the UN's approach and normally, our country will adhere to their ruling. For the sake of universal interest, we follow, just like the rest of the world's nation. It is the relevant benchmark towards development.....” (H5)

“While Malaysia has made significant progress in achieving food security, there may still be areas where the UN's approach and guidance could provide valuable insights and support...” (H6)

With that, the public service personnel group seemed to be in agreement that adding and reviewing policies are always crucial with or without the existence of incidents such as a pandemic. While the relevance of the current policy and approaches

are all time high, the media informants' views and input were mixed where some applauded the government's approaches while the rest felt that a lot has to be improved especially in terms of implementation.

For example, H7 stated about the stringent process of creating policies in Malaysia and that there was always committee set-up to oversee the progress of the new policies. H7 said,

"The agro food policy is one policy where we do our research and also test this small scale policy and not otherwise..we should always refer to the GDP and then we look at the self sufficiency level (SSL) of rice in which the production level must be around 70% to 80%. ... from all the policies then we formulate new ones with a special committee to carry forward existing policy while discussing on new ones., " (H7)

However, H11 and H9 seemed to think otherwise as H11 mentioned that,

"On paper I feel that the policy is comprehensive but as usual the real hurdle with our government will be during the implementation phase..." (H11)

while H9 said,

"As I have mentioned earlier, when our country is unable to produce food for our own consumption and with us being so accustomed to rely heavily on imported food we had to bear the consequence of almost being food insecure which is very dangerous for any country to face..." (H9)

All in all, it can be concluded that the relevance of current policy and approaches by the government will always be significant and also constantly reviewed to add value and ensure that they are comprehensive to meet the needs of the people. The public service informants mostly agreed to constant policy and approach reviews while the media informants were mixed as they felt that these policies were only relevant on paper and planning phase but the implementation have proven otherwise. A lot has to be done in ensuring that all of the phases of policies are discussed and carried out thoroughly.

The Food Security (FS) Relevance category as presented in Table 4.8, indicates that relevance is articulated through two closely linked codes namely purpose and strategy. A total of 19 coded references were identified, with media practitioners

contributing 12 quotations and public service personnel contributing 7. FS Relevance: Purpose emerged as the more prominent dimension (n = 10), followed closely by FS Relevance: Strategy (n = 9). Media actors contributed equally to both purpose and strategy, suggesting a balanced emphasis on the importance of food security matters and the way it should be addressed. In contrast, public service personnel demonstrated slightly stronger engagement with purpose than strategy, reflecting an institutional focus on policy justification and alignment with national objectives, rather than on communicative or administrative detail.

Table 4.8
Relevance of Current Policy on Food Security

	Media 6 11 247	Public Service 6 11 156	Totals
◇ FS Relevance: Purpose 11 10	6	4	10
◇ FS Relevance: Strategy 11 9	6	3	9
Totals	12	7	19

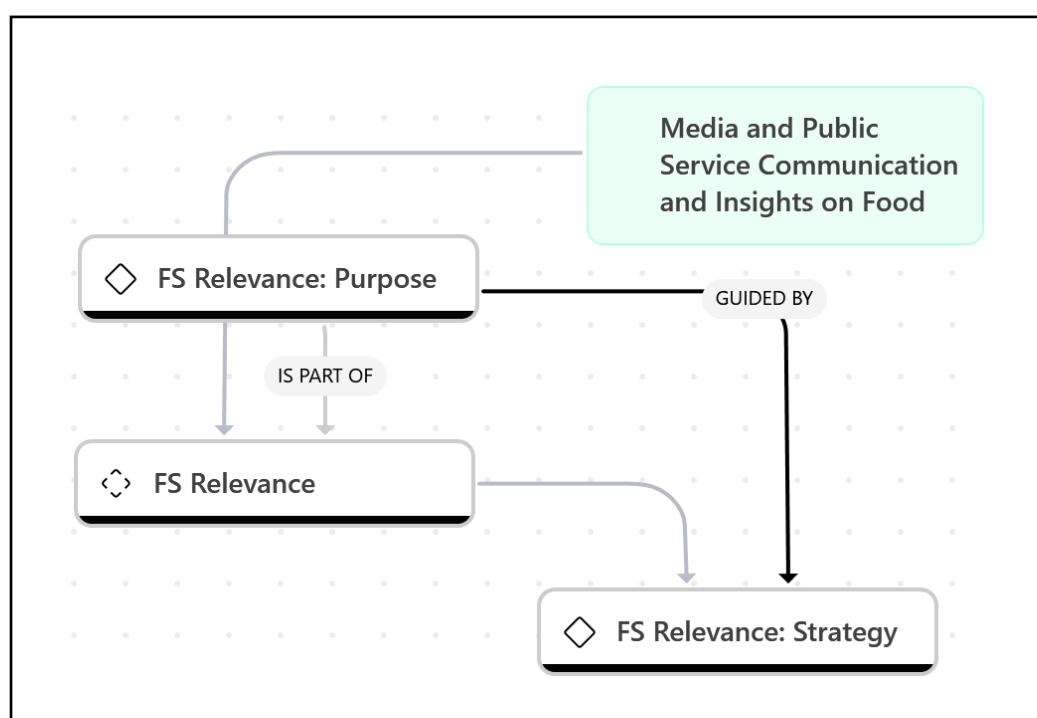


Figure 4.5 Network Diagram for Relevance of Current Policy

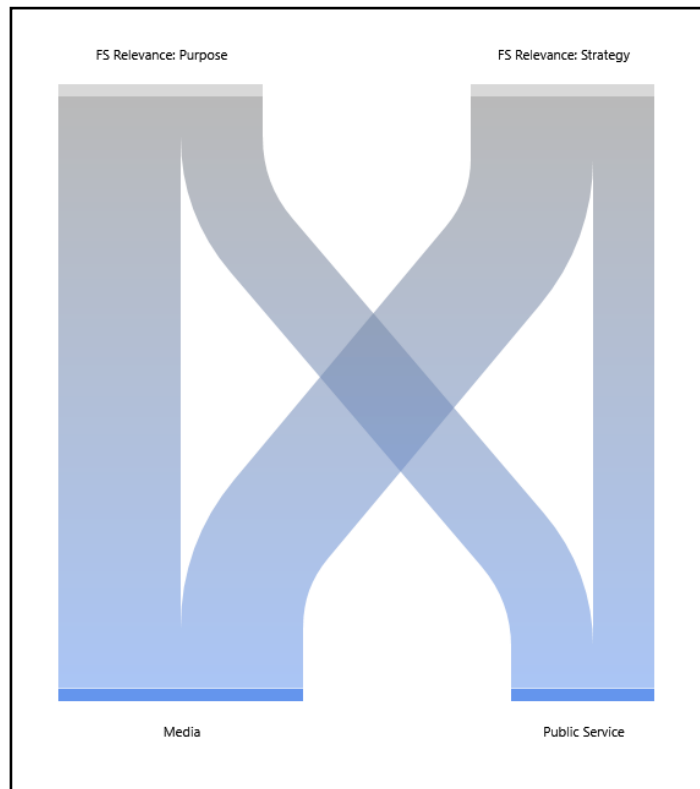


Figure 4.6 Sankey Diagram for Relevance of Current Policy

The network diagram presented by Figure 4.5 further clarifies the conceptual relationship between the two relevance codes. FS Relevance functions as the central node and is directly linked to Malaysia's food security policy, framework and approach, indicating that relevance is grounded in national policy orientation. Within this structure, purpose is positioned as an integral component of relevance, while strategy is shown to be required for purpose to be meaningfully realised. This relationship suggests that articulating the relevance of food security extends beyond defining its importance and necessitates clear strategic direction to translate intent into action. The network structure reflects a sequential logic, whereby policy purpose establishes legitimacy, and strategy operationalises that legitimacy through planned interventions.

The Sankey diagram on Figure 4.6 highlights this interdependence by showing strong and relatively balanced flows between media practitioners and public service personnel across both relevance dimensions. The even distribution of these flows suggests a shared understanding between the two groups that the relevance of food security is shaped through both purpose and strategy. Media engagement across both dimensions reflects their role in presenting food security as an issue that matters and can be acted upon, while public service engagement points to the importance of aligning strategic direction with policy implementation. Taken together, these patterns indicate

that FS Relevance is not subject to competing interpretations but is instead shaped through common recognition of intent and the need for clear strategic direction, reinforcing the complementary roles of media practitioners and public service personnel.

d) Importance of Food Security and its Policies

To qualitatively measure the importance of FS and its policies, the informants were inquired regarding the Maslow's Hierarchy of Needs where security and safety are placed on the bottom two (2) and listed as the basic needs for humans along with physiological needs, i.e., food, water, warmth and rest. The first group whom were the public service expressed the importance of food and its accessibility to humans. With that, H1 responded on the individual level of FS whereby the availability element of FS comes into play. H1's response showed the importance of FS from all levels specifically individual, community or nation and global level.

"An individual is deemed food secured when he/she is able to have access to affordable and nutritious food supply anytime anywhere. By nutritious here we mean that the food supply must comply to the local context which differs from another country to the next, from developed countries or otherwise..." (H1)

H2 further denoted that priority should be given to FS and it must not only be deemed important during crises but instead should be prioritised at all times.

"....we must bear in mind that food security must always be prioritised no matter the time or instances..." (H2)

H3, on the other hand, firstly explained on the importance of FS again on individual level and at the same time very appreciative of the importance of FS and congratulated the government for ensuring that FS and its policies remained pertinent. H3 stated,

"If we look at the term food security whereby food must be readily available at all times, then yes, it is important for food to fulfil our needs to live. I mean food is needed to fuel energy for humans to live..." (H3)

“....but without food or just the thought that there won't be any food available for humans it will create some sort of dissonance that will affect our mental health because we become panicked instantly at the thought of we wont be having anything to eat. This will in turn affect our psychological being at the thought of not being able to eat or at the thought of not having any food at all. This domino effect is something that we always take for granted...” (H3)

For all informants under the public service group from H4 onwards agreed that FS and the policy of FS are very crucial to the well-being of the citizens and Malaysia. H4 mentioned about how the pandemic affected the public's livelihood causing food insecurity and such incidents were not isolated as the numbers were large, indicating the importance of FS that comes with a sustainable and good policies. H4 stated that,

“When there was restriction on the movement and the economic activity all halted, it affected a lot of livelihoods of many people so these challenges led to the food insecurity particularly among those from low income household...” (H4)

This was followed by H5 whom mentioned,

“...since it comes from the government and it's been given a high precedence. As a citizen, I feel that food is an important source for humans...” (H5)

and finally, H6 echoed,

“Yes, food security is important not only for providing physical nourishment but also for fulfilling psychological needs among Malaysians and people worldwide,” (H6)

further agreeing how FS, its policies especially in Malaysia are necessary when they also comply with the Maslow's Hierarchy of Needs theory studied in this research.

For the media group of informants, most agreed that it is the government's task to value the importance of FS and it all depends on the government to prioritise FS over other avenues. This prioritisation is done to assist the people as it helps to cushion the effects of a pandemic where everything was disrupted. For example, H7 stated that,

“....we have to always think of their livelihood as without them producing food, we are not able to supply the whole country with these food items. If they cannot work on their farms and land and harvest their crops? So we did not halt this value chain and we always ensure that the chain is not distracted...” (H7)

H9 mentioned about the guarantee which is provided by the government to its people, further showcasing the importance of providing food to fulfil people’s physiological and psychological needs, as outlined by Maslow’s Hierarchy of Needs. H9 said that,

“As food security is now under the its own ministry with agencies like FAMA, MARDI and etc. When there is a ministry undertaking that then you can see the importance. If there is no guarantee then the people will be in unrest...” (H9)

while H11 also repeated on the guarantee by clarifying that,

“The guarantee of food must be all year round and always available at all times not only during wars or pandemic as the effect of food insecurity is greater and real...” (H11)

The Food Security (FS) Importance category, as presented in Table 4.9, indicates that importance is articulated through a single, clearly defined dimension: significance. A total of 23 coded references were identified, with media practitioners contributing 13 quotations and public service personnel contributing 10. The relatively balanced distribution across both actor groups suggests a shared recognition of food security as an issue of high importance. Media practitioners referenced significance slightly more frequently, reflecting their role in highlighting the broader societal implications of food security, while public service personnel framed its importance within institutional responsibility and policy relevance.

Table 4.9
Importance of Food Security and its Policies

	Media 6 23 247	Public Service 6 23 156	Totals
◇ FS Importance 23	13	10	23
Totals	13	10	23

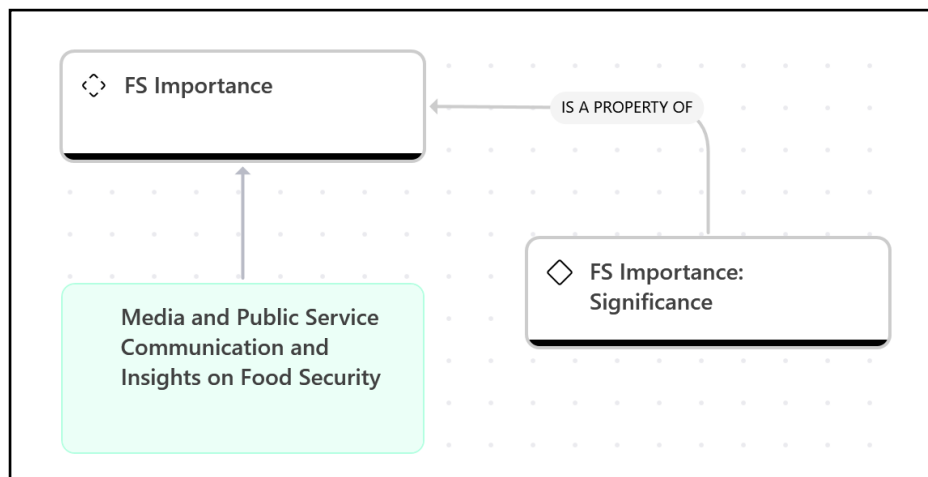


Figure 4.7 Importance of Food Security and its Policies

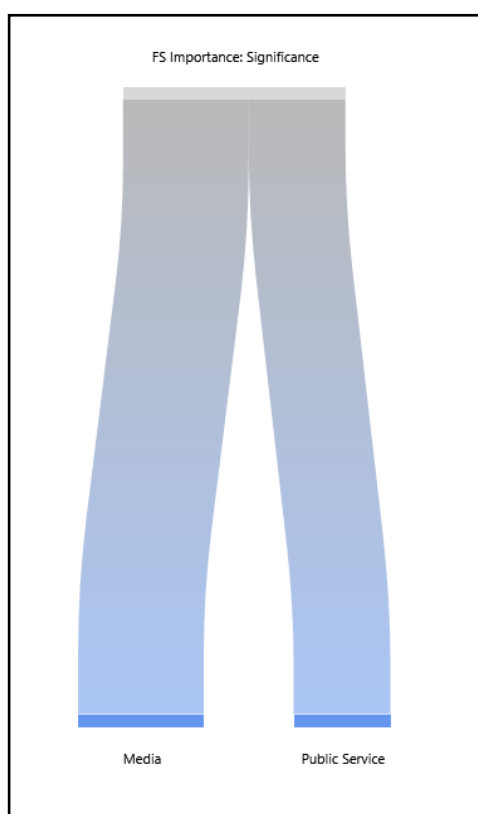


Figure 4.8 Importance of Food Security and its Policies

Figure 4.7 is the network diagram which positions FS Importance as a core construct directly linked to FS Importance: Significance, which is shown as an inherent property of the broader theme of media and public service communication on food security. This structure indicates that importance is not treated as a contested or fragmented concept, but rather as a foundational understanding embedded within how food security is communicated. The absence of multiple sub-dimensions suggests

conceptual clarity, with both actor groups aligning around the view that food security carries intrinsic national and public significance.

The Sankey diagram depicted by Figure 4.8 visually reinforces this shared emphasis, showing strong and evenly distributed flows from both media and public service actors towards the significance of food security. The parallel thickness of the flows reflects a consistent level of engagement across actor groups, indicating that food security importance is widely acknowledged rather than driven by one dominant communicator. Together, these patterns suggest that FS importance functions as a common grounding point within food security discourse, providing a stable foundation after which awareness, relevance and knowledge were initially constructed.

e) Effectiveness of Current Policies

At the beginning of the study the researcher has put very much emphasis on the effectiveness of the current FS policies considering the duration of this research which took place at the height of a worldwide pandemic. It is of utmost importance to gauge whether the current policies were adequate in order to signal the government to review these policies for the betterment of the nation's wellbeing.

The informants had mixed responses on the effectiveness as the interviews took place during the transition from pandemic to endemic phase. Nevertheless, the researcher took the cue that governments must be ever ready to review and revamp policies in times of need and crises. For the public service personnel informants, most felt that the planning and paperwork phase are commendable however Malaysia always felt short when it comes to the implementation of policies. H1 said,

".....and we have shifted our focus on growing other commodities such as fruits and vegetables. With the National Agrifood Policy 2.0 (NAP 2.0) our focus will not only be on rice, but also other competitive advantage commodities..," (H1)

H2 supplemented by saying,

"In terms of policy I think the current one is quite comprehensive as it considers other existing policies as well as aligning with the SDG goals.." (H2)

H3 quoted some examples on room for improvement,

“Well the fact that we have never had any major crisis when it comes to food I reckon the policy is ok but there is always room for improvement...” (H3)

H4, H5 and H6 also mutually agreed that essentially the effectiveness of the policies would depend on the initiatives provided by the government and while there are/were a lot of initiatives launched, the execution of these initiatives is/was not on par or realised in accordance to what has been planned. H4 said,

“Another matter that I would like to highlight, when the Malaysian government launched the urban farming initiative, it came with a policy on that to build resilient sustainable food source within the community..” (H4)

H5 also added,

“I heard about DSMN from my FB newsfeed. We did share and discuss it but not in whole.. When the government changed, we’re not sure if the policy is still there. It’s good if it is....” (H5)

H6 opined,

“The effectiveness of these policies and programs can vary over time and in response to changing circumstances. Overall, Malaysia has made strides in ensuring food security for its population, but continuous efforts and adjustments are required to address ongoing challenges and maintain a stable and secure food supply.” (H6)

The second group consisting of media practitioners had mixed responses on the effectiveness of the current and previous policies. H7 being the media liaison of MAFS, felt that pre-existing ecosystem which linked the government and the industry players was already in place way before the pandemic and with the pandemic and MCO, some adjustments were to be made to coordinate and assist the industry players. H7 stated,

“Our ecosystem has always been there even before the pandemic and during the pandemic we did not stop our engagement with our clients....” (H7)

H8 on the other hand, mentioned about enforcement and shortage of enforcers being the concern of the effectiveness,

“If you focus on enforcement, there are many channels. For example, everyday inspection, that's normal. If you want to highlight it, it is under strength/ staffed. We just do not have enough officers. Imagine the 57 entrances, not including the new doors we identified, which the exporter asked for MAQIS to be there as well...” (H8)

H9 meanwhile, felt that the current policies are not so effective, with loopholes more apparent during the pandemic. H9 said,

“Our policy should focus more on production of enough food for our people and problem is it is never enough. I believe our policy covers a lot of things but do we really follow the policy by the book? Sometimes it is difficult to translate policy into action if you have land, logistic and quality problems.” (H9)

Finally, H12 said that the pandemic became a catalyst to the effectiveness of the current policies, whereby he mentioned,

“The government needs to formulate better policies to safeguard our food security to avoid the same problem of food shortages or food insecurity to befall us again, just like it did during the pandemic..” (H12)

The Food Security (FS) Effectiveness category is depicted by Table 4.10, in which effectiveness is articulated through three (3) interrelated dimensions which are government policy, implementation and rebranding. A total of 56 coded references were identified, with media practitioners contributing a substantially higher number of quotations (38) than public service personnel (18). FS Effectiveness: Government Policy emerged as the most dominant dimension (n = 27), followed closely by Implementation (n = 26), while Rebranding appeared only marginally (n = 3). This distribution suggests that perceptions of effectiveness are largely anchored in formal policy direction and the ability to translate policy into practice, rather than in symbolic or communicative repositioning. Media practitioners engaged most strongly with government policy, contributing 20 references compared to 7 from public service personnel. This indicates that the media play a significant role in evaluating and scrutinising the effectiveness of food security policies, often from a public

accountability perspective. In contrast, references to implementation were more evenly distributed, with 15 media and 11 public service quotations, reflecting shared attention to practical execution, operational challenges, and delivery outcomes. The minimal presence of rebranding, limited entirely to media references, suggests that narrative or image-based efforts are viewed as peripheral to substantive assessments of effectiveness.

Table 4.10
Effectiveness of Current Policies

	Media 6 247	Public Service 6 156	Totals
◆ FS Effectiveness: Government Policy 27	20	7	27
◆ FS Effectiveness: Implementation 26	15	11	26
◆ FS Effectiveness: Rebranding 3	3		3
Totals	38	18	56

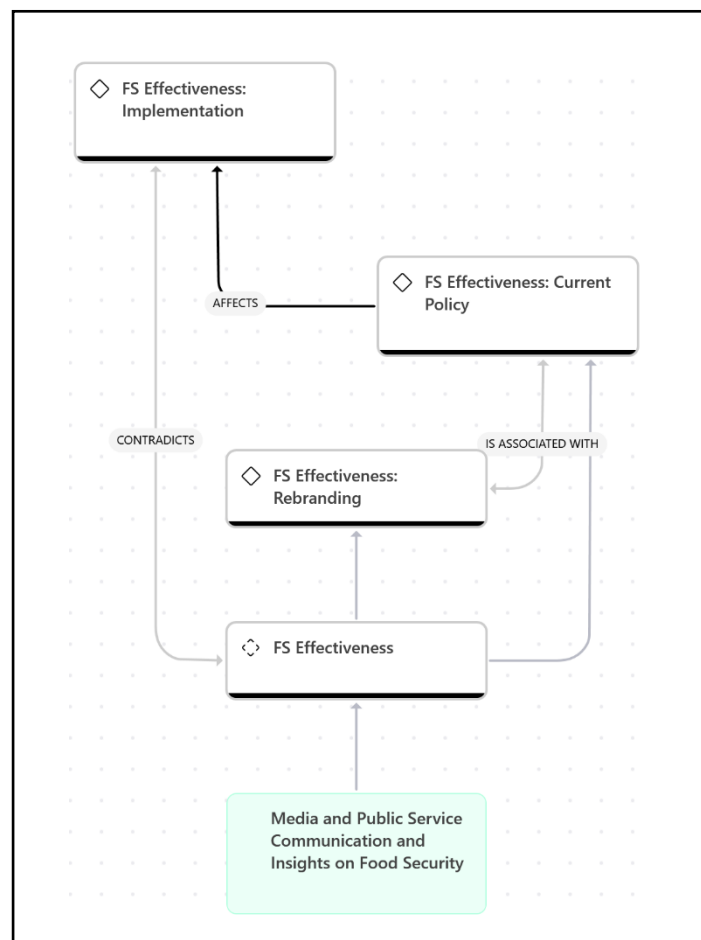


Figure 4.9 Network Diagram for Effectiveness of Current Policies

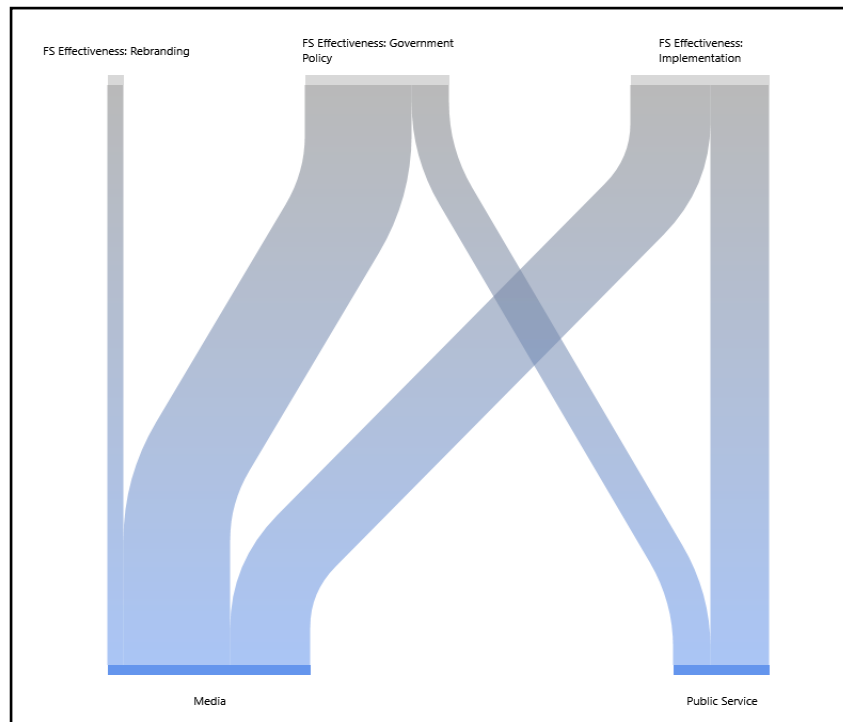


Figure 4.10 Sankey Diagram for Effectiveness of Current Policies

The network diagram provides as shown in Figure 4.9 provided deeper accounts into the relations between the codes. FS Effectiveness functions as the central construct and is directly linked to Malaysia's food security policy framework and approach, reinforcing the idea that effectiveness is evaluated primarily within a policy context. Within the network, implementation is shown to be closely associated with government policy and to actively affect perceptions of effectiveness, highlighting the importance of execution in shaping judgments about policy success. Rebranding, by contrast, is positioned in a contradictory relationship, suggesting scepticism toward symbolic or cosmetic changes that are not supported by tangible policy outcomes or implementation progress. This relational structure reflects a critical stance in the data, where effectiveness is judged less by messaging and more by material impact.

The Sankey diagram in Figure 4.10 reinforces these patterns by showing strong flows between both actor groups and the dimensions of government policy and implementation, alongside a notably thin flow for rebranding. Media contributions dominate the flow towards government policy, underscoring their evaluative and watchdog role, while public service contributions are more concentrated around implementation, reflecting their proximity to operational realities.

Essentially, the effectiveness of current policies depend heavily on governance to ensure sustainable practices and constant review of policies. Most of the informants

interviewed tend to agree that while the current policies are comprehensive on paper however the implementation phase of these policies are often challenging and problematic. As discussed by Peters (2001) and Basu (2015), ineffective government bureaucracy is one of the central obstacles to successful policy implementation causing government policies to fail due to administrative inertia, poor coordination and the inherent challenges within bureaucratic systems. Moreover, the failure to implement public policies often stems from miscommunication, lack of expertise and inadequate resources.

f) Involvement and Participation of the Public on Food Security

As the researcher employed the Social Capital Theory as one of the theories used in this study, it is thus important for the researcher to seek the involvement and participation of the public and community regarding FS, be it policy formulation, monetary or material assistance in the past, present as well as the future. Hence, the informants were all inquired pertaining the degree of public involvement where FS is concerned.

Firstly, the public service personnel group informants agreed that public participation is apparent and mostly involved industry players and those directly involved with FS. Aside from the policy makers, the government made sure that the public is also made known and aware of the formulation of policies with the dissemination of news, media releases and information by the media. According to H1, the public here mainly referred to the industry and business players and those who are directly engaged with the government. During his stint in MARDI, he mentioned that,

“Generally, the government does ensure contribution and feedback from the public every time a newer policy is planned. It is however, a closed event, limited to the head of communities in suburban and villages as well. We also include industry players – farmers, producers and growers, people who are directly involved with the agriculture industry..” (H1)

H1 also added,

“We involve the public via survey and research particularly done by MARDI on technological adoption and from there we develop policy on food and agriculture...” (H1)

H2 opined that the length of public involvement varied from federal government to state government. Speaking from experience, H2 explained that,

“They were not involved in any policy making unlike their predecessors. They just cannot remember when new policies were developed and were only familiar with the existing ones...” (H2)

and added,

“Sabah used to have its own state-owned agency on paddy but were shut down along with BERNAS. Currently all the subsidies and assistance come from federal agencies whereas state government leases machinery and devices for paddy farming..” (H2)

The explanation from H2 deduced how in some states of Malaysia, there is a limitation towards how involved the federal government can be and, in some cases, the state government will be the one entity to decide on involving the public. H3 was also hopeful in opining that the government has done a lot to ensure that the public is well informed of its plans to review and formulate policies whether direct or indirectly. H3 stated that,

“But in terms of policy formulation just as other policies before, yes government does consider public involvement but to some extent. We need people’s feedback and when we say people, there are levels and not just public at large. There must be experts and those with certain background and experiences to assist the government in making policies.” (H3)

Just as H1, the term townhall was again mentioned by H4, whom believed that the government is indeed moving towards public inclusivity more that before when it comes to policy making and formulation. H4 elaborated that,

“The engagement with these stakeholders are done via townhall. Townhall or public consultation is part of the policy making process. Each and every ministry is responsible for their own policy making and will usually take into account the effects on all the stakeholders..” (H4)

H5 being the amongst those who are directly involved with this government’s initiative commended the government for their commitment to serve industry players

and stakeholders. H5 also felt that through own experience, the government provided room for all to have their say in the policies by saying that,

“We can see the government is committed to helping small industry players...” (H5)

H6, also another industry player opined that inclusivity is key towards excellent output and by right these stakeholders should carry a bigger definition involving more people aside from these industry players. Anyone interested with FS should be given adequate information and assistance to spark interest and increase awareness.

“Inclusive and participatory policy formulation can lead to better outcomes and greater public support. Involving diverse stakeholders, including civil society organisations, communities, experts and the private sector, can provide valuable insights, local knowledge and a broader understanding of the challenges at hand. It can also increase transparency, accountability and ownership of the policy, making its implementation more effective.” (H6)

The second group of informants were divided on the public participation and involvement of FS. H7 who is responsible for anything relating to media and hailed from the Ministry (MAFS) itself also elaborated on how the public, shareholders, stakeholders and those related to the ministry would engage in briefings and discussions, usually held during network meetings and government official events. H7 stated,

“All these farmers, producers and fishermen are under the ministry’s ecosystem and they can be deemed as our clients where we also have their details kept in our database system and statistics. This is one of our means to ensure the right channel of communication..” (H7)

H11 concurred with H7 in terms of defining those involved and participated in the FS policy formulation and assistance are the stakeholders and industry players. H11 also added that the public as a whole always get left behind when it comes to policy formulation although these policies will affect them the most.

“As of now, we do not really see the involvement of public in general, however I feel that the stakeholders and those associated with the industry have had discussions and participated in giving their thoughts on policy formulation..” (H11)

Similarly, H12, too felt that the public should be engaged more rather than being left in the dark whenever any new policies pertaining to FS is being discussed or formulated.

H12 said,

“We were told that more time was required to ensure public’s involvement and participation on this, all to raise awareness on food security...” (H12)

The analysis of Food Security (FS) Involvement and Participation category, as presented in Table 4.11, shows that involvement is articulated through three (3) interrelated codes namely engagement, discourse and aid. A total of 25 coded references were identified under this category, with media practitioners contributing 14 quotations and public service personnel contributing 11. This relatively balanced distribution indicates that both actor groups recognise the importance of active participation in food security efforts, though their emphases differ slightly. FS Involvement and Participation: Engagement emerged as the most prominent dimension (n = 17), suggesting that involvement is most commonly understood in terms of ongoing interaction, collaboration, and participation in food security initiatives. Media actors contributed more strongly to engagement-related references, reflecting their role in mobilising attention and encouraging public participation. In contrast, Discourse (n = 7) and Aid (n = 6) appeared less frequently, indicating that while communication and material support are recognised, they are not the primary ways in which involvement is framed.

Table 4.11

Involvement and Participation of the Public During Policy Formulation

		Media 6 11 247	Public Service 6 11 156	Totals
◇ FS Involvement & Participation 11 25		14	11	25
◇ FS Involvement & Participation: Aid 11 6		2	4	6
◇ FS Involvement & Participation: Discourse 11 7		3	4	7
◇ FS Involvement & Participation: Engagement 11 17		11	6	17
◇ FS Knowledge 11 51		28	23	51
◇ FS Relevance 11 19		12	7	19
Totals		70	55	125

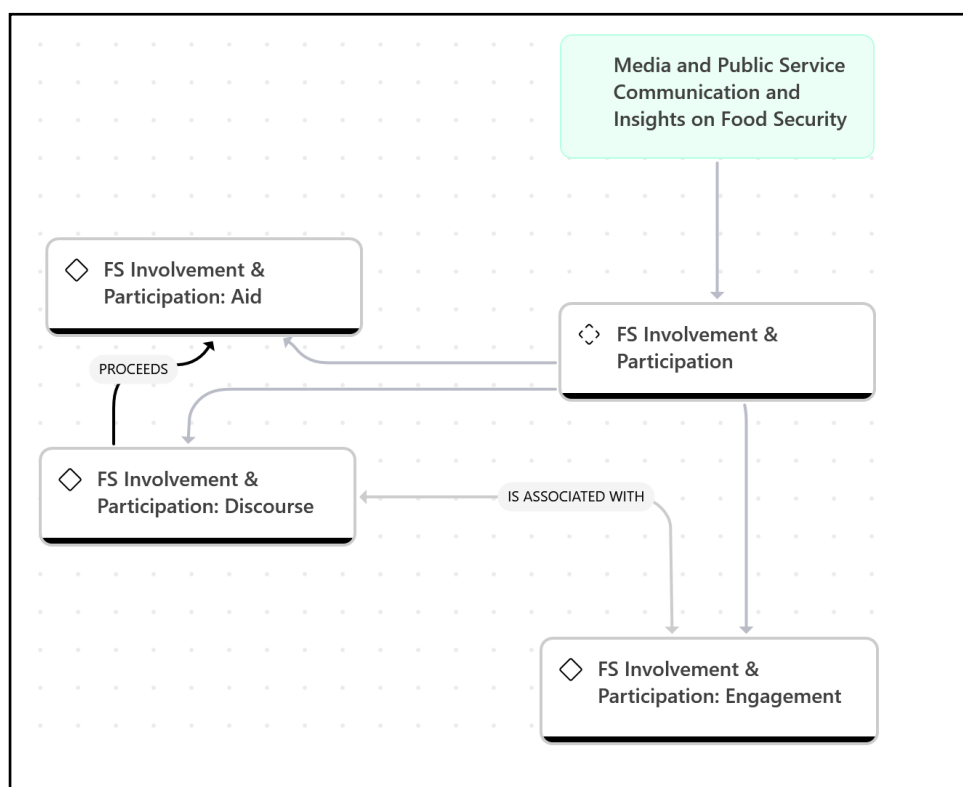


Figure 4.11 Network Diagram for Involvement and Participation of the Public During Policy Formulation

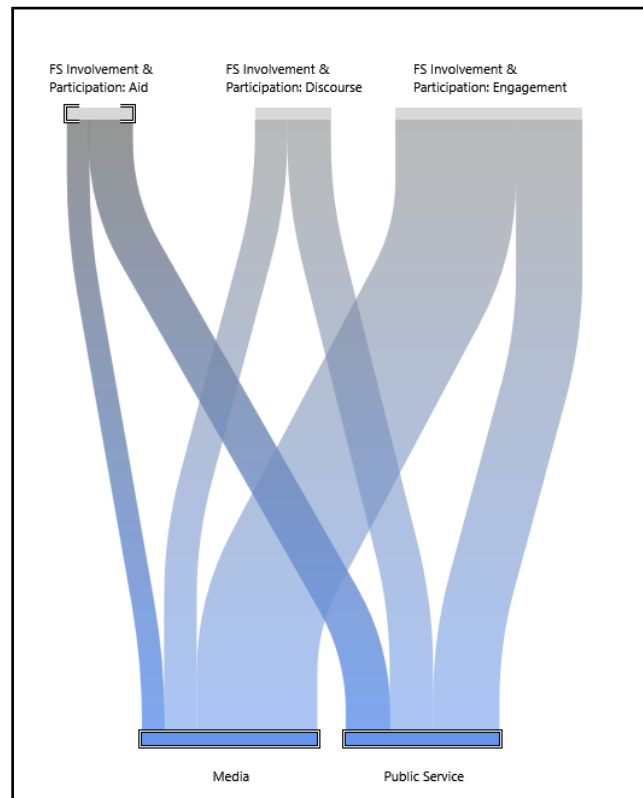


Figure 4.12 Sankey Diagram for Involvement and Participation of the Public During Policy Formulation

The network diagram presented by Figure 4.11 provides further analysis into FS Involvement and Participation as this category functions as the central construct and is directly linked to Malaysia's food security policy, framework and approach, reinforcing the idea that participation is embedded within national policy orientation. Within the network, engagement occupies a central position and is shown to be closely associated with both discourse and aid, indicating that meaningful involvement requires not only active participation but also sustained communication and tangible support. Aid is framed as involving the provision of resources, while discourse is positioned as a necessary component that must be included to legitimise and sustain engagement. This structure suggests that participation is understood as a multi-layered process, where action, communication, and support are interconnected rather than isolated.

The Sankey diagram visually presented by Figure 4.12 illustrates strong flows from both media and public service actors towards engagement, alongside thinner but noticeable flows towards discourse and aid. Media contributions are notably pronounced in engagement-related flows, highlighting their role in shaping participatory narratives and encouraging public involvement. Public service contributions are more evenly distributed across engagement, discourse and aid,

reflecting the responsibility for coordinating participation through policy mechanisms, institutional communication and support programmes. The overlapping flows between actor groups suggest a shared understanding that effective food security participation depends on sustained engagement supported by communication and practical assistance.

Overall, these findings indicate that FS involvement and participation are primarily framed as active engagement rather than as one-off aid delivery or abstract discussion. Both media practitioners and public service personnel emphasise participation as an ongoing process that requires interaction, dialogue and support. While this framing highlights a commitment to inclusive involvement, the comparatively lower emphasis on aid suggests that material support may be viewed as secondary to engagement and discourse. This pattern aligns with broader findings in the chapter, where food security is consistently framed as a collective responsibility that extends beyond policy formulation to include active participation from multiple actors within society.

4.4.2 Identifying Food Terrorism and its Threats (RQ2)

As the second research objective of this study was to explore food terrorism (which will be abbreviated as FT hereafter) and its threats towards Malaysia's national food security during a pandemic akin to COVID-19, it was of utmost importance for the researcher to study the term, its threats towards FS and the country including its people. It is also crucial to note that this study is conducted within the duration of the transition from the pandemic towards the endemic of COVID-19 and therefore the responses of informants would be limited to such period.

This section aims to analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security. The document analysis done involved two (2) documents which were the WHO's Terrorist Threats to Food: Guidance for Establishing and Strengthening Prevention and Response Systems document as well as Institute of Food Science & Technology's Food Defence document labelled FT1 and FT2 respectively. These documents focus on food terrorism and food defence from an international perspective and provide key definitions, threat narratives and risk considerations relevant to food systems. The findings from the document analysis offer a conceptual framework for understanding food terrorism as a

security issue and serve as a basis for triangulating interview data related to perceived threats to national food security.

The main reference for FT is based on the definition by the United Nations as well as a few research papers, two of which were written by Malaysian scholars. This study looked at the Food Crime Terminology by to distinguish the differences amongst FT and other food crimes as well as the cause and types of incidents deemed as FT, FT awareness as well as measures to control and halt any threats involving FT. The study also attempted to find any credible association of FT and FS or if there existed any possibility to value- add FT control measure into FS policy formulation.

4.4.2.1 Food Terrorism Elements and Conceptualisation: Document Analysis

The analysis of the document analysis on Food Terrorism for RO2 indicates a coherent construction of food terrorism as a threat to food security across the WHO guidance document (FT 1) and the IFST Food Defence (FT 2) information statement. Using the same analytical categories of policy orientation, elements, approaches and frameworks, the findings show that food terrorism is consistently articulated as an intentional threat with implications extending beyond food security into public health, economic stability, governance and public confidence.

In terms of policy orientation, both documents explicitly position food terrorism as a credible and legitimate risk to food systems. FT 1 defines malicious contamination of food as a real and current threat, while FT 2 frames food defence as a necessary response to intentional contamination by criminal or terrorist actors. Across both sources, food terrorism is not presented as hypothetical, but as a recognised category of risk that warrants institutional preparedness and governance attention. This orientation establishes food terrorism as a relevant component within broader food security considerations.

With regard to elements of food terrorism, the analysis shows that threats are conceptualised as multidimensional. Both documents identify deliberate contamination as the core threat mechanism, with vulnerability distributed across the entire food supply chain from production to consumption. FT 1 emphasises the potential health, economic, social and political consequences of food terrorism, including illness, death, market disruption and erosion of public confidence. Similarly, FT 2 highlights structural vulnerabilities related to physical access, personnel, operational processes and system

complexity. Collectively, these elements indicate that food terrorism is framed not only in terms of physical harm, but also in terms of systemic fragility and societal impact.

In examining approaches, the findings demonstrate a strong emphasis on prevention, preparedness and response. FT 1 identifies prevention as the first line of defence and underscores the importance of surveillance, alert systems, and emergency response capacity. FT 2 similarly foregrounds food defence planning, deterrence measures and rapid response mechanisms. Both documents also emphasise the role of communication in managing food terrorism incidents, particularly in relation to maintaining public confidence and reducing panic. Across the analysis, approaches are oriented towards anticipatory and capacity-building measures rather than reactive or punitive responses.

The analysis further shows that food terrorism is governed through coordinated frameworks globally. FT 1 situates food terrorism within national and international emergency preparedness and public health response systems, emphasising coordination among health authorities, law enforcement agencies, and the food industry. FT 2 places food defence within a broader food protection framework that intersects with, but is distinct from, food safety and food fraud systems. Both documents adopt a supply-chain-wide framework in which responsibility and vulnerability are distributed across multiple actors and stages of the food system.

When synthesised, the findings indicate a high alignment between both documents on the conceptualisation of food terrorism. Food terrorism is consistently defined as an intentional threat that undermines food security through physical harm, economic disruption and loss of public trust. The synthesis as shown on Table 4.12 further demonstrates that food terrorism is embedded within food security discourse as a governance and preparedness issue, rather than treated as a separate or isolated security concern. This analysis establishes a clear reference frame for examining the conceptualisation of food terrorism as a threat to Malaysia's food security among media practitioners and public service personnel.

Table 4.12

Food Terrorism Elements and Conceptualisation: Document Analysis

Categories	Document	Verbatim Extraction	Thematic Interpretation
Policy Orientation	FT 1	“The malicious contamination of food for terrorist purposes is a real and current threat.” (Executive Summary)	Food terrorism is thematically positioned as a credible and ongoing threat, legitimising concern among policymakers, media, and public servants.
	FT 1	“Food may be a vehicle for disseminating chemical, biological or radio nuclear agents.” (Executive Summary)	Food systems are framed as potential attack vectors, elevating food security beyond supply concerns.
	FT 2	“Food defence programmes protect food from intentional contamination through the use of biological, chemical, physical or radionuclear agents... by malicious, criminal or terrorist threats and activities.”	The document positions food terrorism not as hypothetical but as a recognised category of risk to food security, creating a policy orientation where intentional threats are treated alongside broader food safety concerns.
	FT 2	“Originating in the United States, food defence programs are a part of Global Food Safety Initiative (GFSI) certification...”	Links food defence to global food safety governance standards, suggesting international policy reference points for how threats are addressed and understood.
Elements: Nature of the Threat	FT 1	“Food terrorism is defined as an act or threat of deliberate contamination of food... for the purpose of causing injury or death... or disrupting social, economic or political stability.”	The threat is conceptualised as multidimensional, affecting health, economy, governance, and social order.
	FT 1	“Deliberate contamination of food at any vulnerable point along the food chain, from farm to table.” (p.4)	Food terrorism is framed as a system-wide vulnerability, not confined to a single sector.
	FT 2	“Food defence is a separate area that addresses food system vulnerabilities (physical, personnel and operational security) to prevent deliberate attacks on food...”	Threat elements are conceptualised as distinct categories of vulnerability, emphasising that intent and access are core to threat understanding.
	FT 2	“The modern food supply is... long and sophisticated, and therefore provides numerous opportunities for deliberate contamination at production, processing, retail and foodservice stages.”	The complexity of the food system itself is identified as an element of vulnerability, framing risk as dispersed rather than isolated.

Categories	Document	Verbatim Extraction	Thematic Interpretation
	FT 2	“Deliberately contaminated food could cause morbidity and/or mortality on a global scale.”	Frames threat consequences as public health catastrophes, linking intentional contamination to widespread human harm.
Elements: Consequences	FT 1	“Illness and death... economic and trade effects... social and political implications.”	Consequences extend beyond health into national stability and public confidence, reinforcing threat severity.
	FT 1	“Fear and anxiety may contribute to reduced confidence in the political system and government.”	Terrorism impact is framed as psychological and political, aligning with media amplification dynamics.
Approach: Prevention	FT 1	“Prevention... is the first line of defence.” (Executive Summary)	Prevention is thematically prioritised, shaping expectations of proactive governance.
	FT 1	“The key to preventing food terrorism is establishment and enhancement of existing food safety management programmes.”	Food safety systems are reframed as counter-terrorism mechanisms, not merely health tools.
Approach: Preparedness & Response	FT 1	“Member States require alert, preparedness and response systems... capable of minimizing risks from food terrorism.” (Executive Summary)	Preparedness becomes a core dimension of food security, shaping institutional interpretations.
	FT 1	“Risk communication is essential to reduce panic and loss of public confidence.”	Communication is framed as central to managing terrorism impact, directly relevant to media roles.
	FT 2	“A robust food defence plan can help to facilitate a rapid response if an incident occurs...”	Reinforces that preparedness and rapid responsiveness define governance approaches to intentional threats.
	FT 2	“The aim of a food defence plan is to prevent an incident or attack... respond rapidly and efficiently and enable rapid recovery and restore consumer confidence...”	Approach emphasises prevention first, with response and recovery as integrated functions — a theme likely to influence how media and officials frame threat narratives.
	FT 2	“Plans for food defence focus on facility, operational, cyber and personnel security...”	Preparedness is not limited to physical food safety; it includes operational and personnel safeguards, giving a broader conceptualisation of how threats are managed.

Categories	Document	Verbatim Extraction	Thematic Interpretation
Framework: Food System Perspective	FT 1	“Food can be contaminated deliberately at any point along the food chain.”	A food system framework structures how vulnerability and responsibility are understood.
Framework: Governance & Coordination	FT 1	“Effective response requires coordination among health authorities, law enforcement, and the food industry.”	Food terrorism is framed within a whole-of-government and whole-of-society framework.
Framework: Global–National Linkage	FT 1	“With the globalization of the world’s food supply, an attack on one country’s food supply cannot be seen in isolation.”	The threat is framed as transboundary, legitimising heightened national and media attention.
	FT 2	“Food defence forms the food protection ‘umbrella’ of food safety management systems.”	Places food defence within a broader governance framework, implying that food terrorism mitigation is part of an integrated system of food protection.
	FT 2	“Using Good Agricultural Practice, GMP, HACCP... threats to food safety can often be reasonably anticipated. This is not the case with food defence...”	Draws a distinction between predictable risks (food safety) and unpredictable intentional threats (food defence) — shaping how practitioners differentiate threat types.
	FT 2	“Food defence programmes... focus on prevention of deliberate attacks... at any point in the supply chain.”	Highlights a supply chain governance framework where every node is potentially threatened, expanding conceptual coverage of risk.

4.4.2.2 Food Terrorism Elements and Conceptualisation: In-depth Interviews

Following the completion of the document analysis, Phase 2 of the study involved in-depth semi-structured interviews with selected media practitioners and public service personnel. These interviews enabled the researcher to move beyond policy texts and international frameworks to capture informants’ experiential knowledge and interpretations of food terrorism within the Malaysian setting. While the documentary findings established the conceptual boundaries of food terrorism, the interviews provided richer insights into the understanding and prioritisation of such threats by informants directly involved in information dissemination and policy implementation.

Table 4.13

Categories and Themes Derived from In-Depth Interviews with Informants on Food Terrorism Elements and Conceptualisation (RQ2)

Categories	Sub-themes	Themes Derived
Understanding	Knowledge of Occurrences	Media Practitioners and Public Service risk perception of Food Terrorism towards Malaysia's Food Security
Isolated Incidents	Vigilance	
Significance Participation	Perception on Threats	
Awareness	Impact of Occurrences	
Observation	Preventive Measures	
Perception		
Risk		
Enforcement		
Gov Administration		
Protocol & Legislation		

a) Knowledge and Occurrences on Food Terrorism

It is pertinent for the researcher to firstly inquire on the informants' knowledge on FT within the context of Malaysia. By confining to Malaysia, the researcher was able to understand the term better, together with comprehending the occurrences that would be regarded and constituted as FT. With that in mind, H1 mentioned that he has heard of the term before but might be confused with food contamination. H1 opined that there is a fine line to differentiate these terms and one must refer to international organisations to further confirm those differences. H1 stated,

"I have heard of food terrorism although have not delved deep into the subject. I have also done some research pertaining to food terrorism ..." (H1)

H2 also gave a similar response and stressed that to date no occurrences on FT has been recorded on our soil but rather on food smuggling,

"There weren't any food terrorism activities other than food smuggling. It has always been food smuggled to the borders between Tawau and Kalimantan in Indonesia..." (H2)

while also mentioning,

“There was no disturbances or intentional destruction on food crops or items. People were kidnapped and taken hostage...” (H2)

H3 gave a concrete response on the knowledge of FT by saying that,

“I am familiar with terrorism and previously thought of terrorism being a one dimensional thing – act of terror to a place by group of people or individual. Food terrorism is quite a new term especially in Malaysia and to quote any examples of food terrorism is quite hard for me personally...” (H3)

Out of all the informants, H3 possessed some direct knowledge and experience on food terrorism during her stint in the United States, believed to be the first country to declare war on terror. H3 mentioned,

“But in terms of food terrorism we can interchange that with food sabotage and people will understand better..”

“If you were to ask the food terrorism situation or trend in Malaysia, then it is closely related to what I’ve mentioned before about intentional contamination, adulteration or tampering with food products...”

(H3)

whereas H6 resorted to looking for the definition online as the term is quite new for him as compared to FS and found that,

“Food terrorism refers to contaminate food supply chain for the purpose of causing harm, panic, economic disruption or public health concerns. Adding poisons, chemicals or fake ingredients to food on purpose with ill intention.”

(H6)

The media group informants’ point of view on FT varied as some have a little exposure on FT while others have not heard of FT. This is accommodating to the researcher in gauging the level of knowledge and information on FT amongst Malaysians in general. Media practitioners’ unfamiliarity with FT spoke volumes on the awareness of FT in this country, what more as the mouthpiece of news and indirectly

the government, it is suffice to say that more needs to be done on ensuring the public is informed of FT. The first informant from the media, H7, mainly focused on the aspect of the entities safeguarding the country from FT by stating that,

“....we have never encountered instances where we are exposed to such threats. Furthermore, in Malaysia we do have framework with specific enforcement to do preventive measures and to safeguard us from these threats. Our line of defence is quite all-inclusive as we put emphasis on the starting line of where these threats may originate from...” (H7)

H9 and H10 regarded food terrorism as a risk to the nation but remained an unknown risk as there has never been any official declaration of a situation being deemed as food terrorism occurrence in Malaysia. H9 said,

“Food terrorism is something new even for me as someone working with the media. This research led us to doing my own research on this. The threat is very terrifying if it really happens...” (H9)

while H10 echoed,

“Unlike in foreign countries but despite that we just have to be extra careful...” (H10)

H11 understood food terrorism as sabotage towards food items and crop,

“Generally, there is no direct and clear example of food terrorism here in Malaysia. From my understanding, the sabotage element on water source or food and crops, can be referenced as food terrorism threats however this fact is still debatable and needs further clarification from experts..” (H11)

H12 also brought up the word ‘risk’ as well as ‘threat’ when asked about food terrorism. He was quoted as saying,

“Food terrorism is a new form of terrorism on food which is very rare and has not reached/happened in Malaysia yet. I am no expert on this field, but could this actually mean threats on food and its supply?” (H12)

and continued stating,

“We have had incidents involving pollutions and food poisoning, also shortages on certain food items but I am unsure whether that can be considered as food terrorism...”(H12)

The code–document analysis of Food Terrorism (FT) Knowledge category, as shown in Table 4.14, indicates that knowledge of food related threats is articulated through five (5) interrelated codes: understanding, isolated incidents, media reports, significance and participation. A total of 42 coded references were identified, with media practitioners contributing 24 quotations and public service personnel contributing 18. FT Knowledge: Understanding emerged as the most prominent dimension (n = 16), followed closely by Isolated Incidents (n = 13). This distribution suggests that food threats are most commonly understood through general awareness and discrete events rather than through sustained engagement or collective action. Media practitioners and public service personnel contributed evenly to understanding related references, indicating shared baseline awareness of food threats across institutions.

References to isolated incidents were also frequent, particularly among media practitioners, reflecting a tendency to frame food threats as episodic or incidental occurrences. In contrast, media reports (n = 6) and participation (n = 3) were comparatively limited, suggesting that formal reporting and public or institutional involvement play a smaller role in shaping food threat knowledge. FT Knowledge: Significance (n = 4) appeared modestly overall but was more frequently referenced by public service personnel than media actors, indicating that institutional actors are more likely to regard food threats within a broader national or policy significance framework, even if this framing is not dominant.

Table 4.14
Knowledge on Occurrences of Food Terrorism

		Media 6 247	Public Service 6 156	Totals
◇ FT Knowledge: Isolated Incidents	13	8	5	13
◇ FT Knowledge: Media Reports	6	4	2	6
◇ FT Knowledge: Participation	3	2	1	3
◇ FT Knowledge: Significance	4	1	3	4
◇ FT Knowledge: Understanding	16	9	7	16
Totals		24	18	42

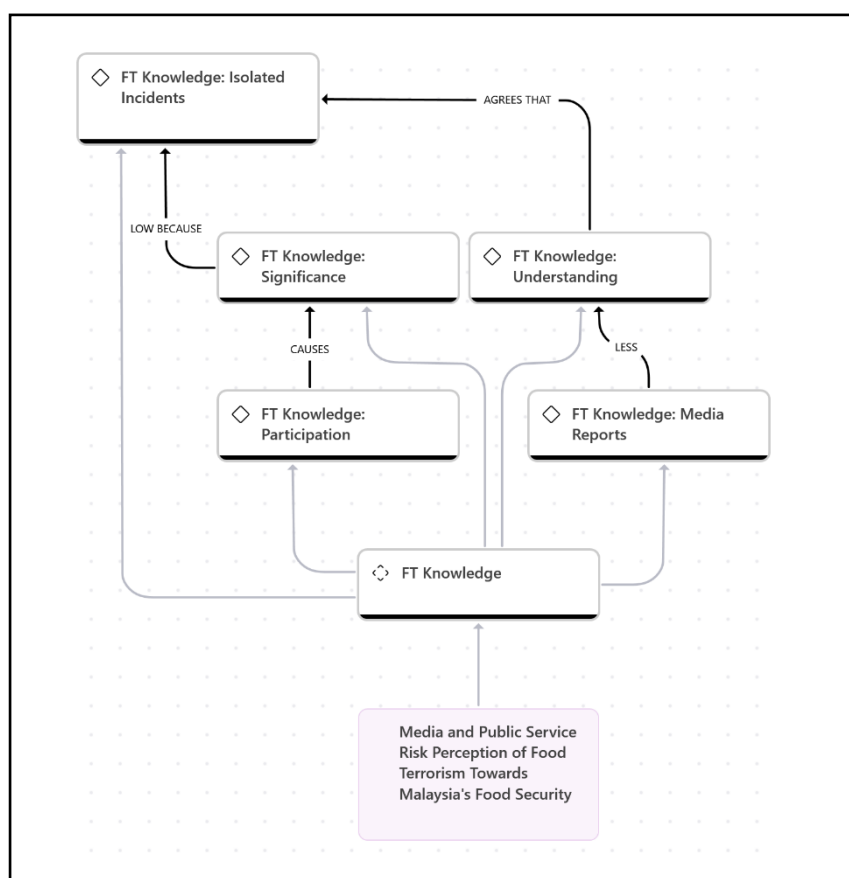


Figure 4.13 Network Diagram for Knowledge on Occurrences of Food Terrorism

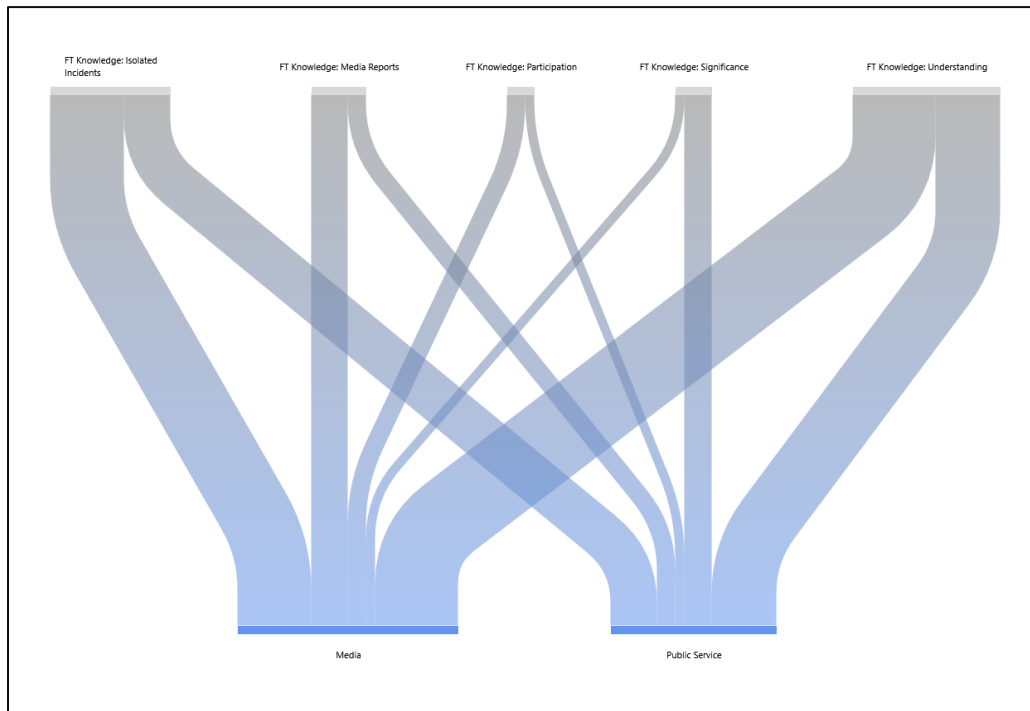


Figure 4.14 Sankey Diagram for Knowledge on Occurrences of Food Terrorism

The network diagram as depicted by Figure 4.13 provides deeper insight into how these dimensions are conceptually related. This category functions as the central construct linked to the identification of food threats and their associated risks. Within the network, understanding occupies a pivotal position and is shown to be shaped through media reports, though this relationship is characterised as limited, suggesting that media coverage alone does not fully translate into deeper comprehension. Isolated incidents are closely associated with understanding, reinforcing the idea that food threat knowledge is often built around specific events rather than systemic analysis. The network further indicates that significance is perceived as low, which in turn constrains levels of participation. This structure suggests a reinforcing cycle in which limited recognition of the broader importance of food threats contributes to reduced engagement and collective response.

The Sankey diagram in Figure 4.14 reinforces these relational patterns by illustrating strong flows from both media and public service actors towards understanding and isolated incidents, alongside noticeably thinner flows towards participation, significance and media reports. Media contributions are particularly pronounced in relation to isolated incidents, highlighting the role of event-driven reporting in shaping food threat narratives. Public service contributions, while more evenly distributed, also concentrate around understanding rather than participatory or

strategic dimensions. The relatively weak flows associated with participation and significance indicate that food threats are not widely framed as issues requiring sustained public involvement or long-term strategic attention.

Taken together, these findings suggest that FT knowledge among media and public service actors is largely descriptive and reactive, grounded in awareness of specific incidents rather than in comprehensive threat assessment or proactive engagement. While basic understanding of food threats is evident across institutions, the limited emphasis on significance and participation points to a gap between recognising food threats and mobilising policy-driven responses. This pattern mirrors broader tendencies observed across the chapter, where immediate events dominate, potentially constraining deeper institutional learning and long-term resilience in addressing threats on food security.

Consequently, the many different understandings and meanings mentioned by the informants clearly depicted the foreignness of this term to Malaysia and its people considering we have never experienced food terrorism incidents if we were to follow the general definition of FT from the United Nations. Hypothetically, the knowledge on FT differs from one informant to another based on their exposure and awareness on FT. A study conducted by Khairatun (2022) opined that any type of threats and sabotage on food or food source could be regarded as FT whilst Joenperä et al. (2022) and Rizzuti (2022) put focus on FT as part of a food crime. Meanwhile, others such as Wiśniewska (2023) emphasised FT as another branch of terrorism in agriculture. As such, it is acceptable to embrace the diverse understandings of FT as long as these meanings centres around crime and terrorist activities involving food.

b) Vigilance on Food Terrorism

When it came to the being vigilant of FT, H1 mentioned that the awareness is there but very minimal and effort has been previously made by some entities in the government to discuss FT but it still remains unfamiliar generally. H1 said,

“....in fact, there was a conference on this back in 2017 and organised in Malaysia. However, food terrorism was not an issue that is being openly discussed or acknowledged not only in MARDI but I assume all other relevant ministries and government agencies too...” (H1)

H2 added that people were better aware of FT with COVID-19 becoming a pandemic which caused some sort of food insecurity and further brought thoughts of events worse than food insecurity. H2 said,

“If we were to demand the government to develop policies on food terrorism I do not think that the government would take that into consideration because it has not become a problem for us yet....”
(H2)

H3 humbly replied that just like most Malaysians, H3 could be regarded as unaware of FT until agreeing to be a part of this study although has heard of terrorism before and regarded food terrorism as a form of terror on food and food crop. In terms of occurrences especially in Malaysia, H3 further stated,

“I think I will fall into the statistic of those who are not aware of food terrorism if we speak on the context of Malaysia. When we have unrest or people not in agreement with the state government or the federal government or perhaps something lacking with regards to the quality of life, that is when you open doors of opportunity for radicalism which may escalate to terrorism.” (H3)

H4 on the other hand stated that the state of awareness of people especially in the country is quite low because they still associate terrorism as events and threats that will only affect developed countries such as the United States and there is also assumption to generalize terrorism as a whole without the knowledge that terrorism can be classified into many forms and food terrorism is one of them. H4 said,

“But if you mention food terrorism, Malaysians cannot seem to comprehend that as terrorism was firstly recognised from the 9/11 incident in the US.” (H4)

Both H5 and H6 also felt that the awareness on FT was low in this country and mentioned,

“We have never heard of food terrorism amongst ourselves.” (H5)

as well as,

“To assess the current level of awareness of Malaysians on food terrorism, it is quite obvious that the people are not very aware of food terrorism as much as food security. There are not many studies or research done on food terrorism especially in Malaysia.” respectively. (H6)

As the informants from the media category, both H7 and H8 also displayed similar reaction when FT’s awareness is mentioned by stating,

“The awareness of food terrorism amongst the public in Malaysia is still very low because we have never encountered instances where we are exposed to such threats.” (H7)

and

“So far awareness is still low. To deal with food terrorism so far we have not come across such incident...” (H8)

Moving on, H11 commented on the threat as being unseen and unheard of, deeming that to be the reason why many are unaware of FT. H11 said,

“The threats of food terrorism is usually intangible and something that we cannot see and foresee as it has never happened to us...” (H11)

while H12 mentioned,

“Just like I mentioned above, there is no evident awareness on food terrorism amongst Malaysians and we must remember that we felt the same way with food security before too...” (H12)

The code–document analysis of Food Terrorism (FT) Vigilance, as presented in Table 4.15, shows that vigilance is expressed through a single dominant dimension: observation. A total of 21 coded references were identified, with media practitioners contributing 11 quotations and public service personnel contributing 10. The near-even distribution across both actor groups suggests a broadly shared emphasis on monitoring and recognising potential threats on food security. This pattern indicates that vigilance

is understood less as an active intervention and more as a consistent process of attentiveness to emerging risks within the food system.

Table 4.15
Vigilance on Food Terrorism

	Media 6 247	Public Service 6 156	Totals
FT Vigilance: Observation 21	11	10	21
Totals	11	10	21

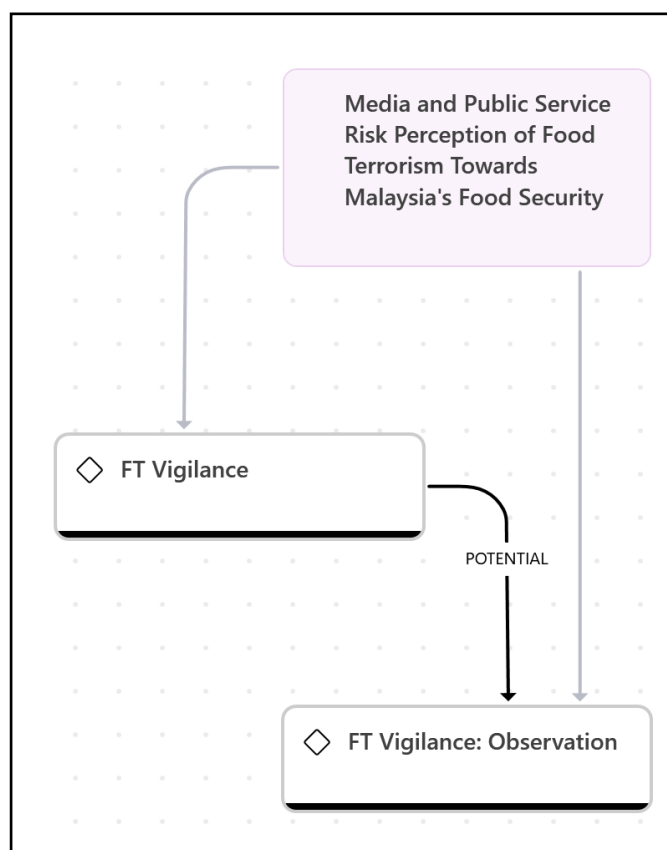


Figure 4.15 Network Diagram for Vigilance on Food Terrorism

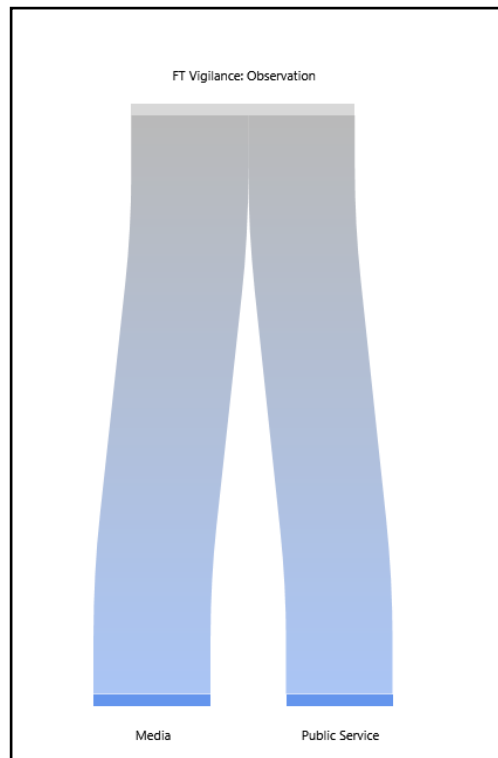


Figure 4.16 Sankey Diagram for Vigilance on Food Terrorism

Figure 4.15 further clarifies how observation functions within the broader structure of FT vigilance. FT Vigilance highlights observation as a foundational step in threat recognition. Observation carries a preventive mode in nature, where vigilance is oriented towards the anticipation of possible threats rather than immediate response. This positioning reflects an understanding of vigilance as a preparatory and preventive stance within food security governance.

The Sankey diagram as depicted on Figure 4.16 shows strong and evenly balanced flows from both media and public service actors towards observation. The comparable thickness of the flows suggests that neither informant group dominates the vigilance discourse, but rather that both contribute similarly to the surveillance and monitoring of food related risks. Media practitioners appear to support vigilance through reporting and situational awareness, while public service personnel contribute through monitoring and assessment mechanisms carried out by government agencies under MAFS. Together, these patterns indicate that FT vigilance is anchored in shared observational practices, serving as a common baseline for identifying food threats before they escalate into more visible or disruptive events.

The findings suggest that FT vigilance is framed as a collective responsibility grounded in attentiveness and early detection rather than in overt action or intervention.

While this shared emphasis on observation strengthens early awareness of food threats, it also raises questions about how observational vigilance is translated into preventive measures or policy responses. This underscores the importance of linking vigilance more explicitly to decision-making and response frameworks in order to enhance resilience within the food security system.

Concisely, all of the informants from both groups concluded that the mass is unaware of FT simply because there has never been any event involving FT and thus making the public not keen to learn or be aware of this threat. This coincided with Khairatun (2022) whose study found that the awareness pertaining to food terrorism amongst Malaysians is still low to average. Moreover, FDA (2021) published a report as well as a manual on the link between food terrorism being a threat towards food security. Being vigilant is key as we cannot afford to wait until an occurrence befalls on us for us to react but instead, the government and the public must be proactive in preparing for FT incidents.

c) Perception on Threats of Food Terrorism

All of the informants were asked about their perception on threats involving FT. As the research second research objective dealt with exploration of the FT subject and its threats towards Malaysia's national food security policy during a pandemic akin to COVID-19, the researcher felt that it was customary to ask the informants on how they perceived threats of FT. For the first group consisting of public service personnel, H1 thought that since this subject appeared very foreign to Malaysia, it is then safe to say that anything unfamiliar should be deemed as under control and governable. H1 said,

"Regarding food terrorism, we may not be able to ascertain its impacts yet since we do not face any threats that can cause the government to take measures of prevention.." (H1)

Additionally, H2 felt that just like FS, people will only be mindful of such threat when events relating to FT were to occur,

“If we were to demand the government to develop policies on food terrorism I do not think that the government would take that into consideration because it has not become a problem for us yet. But for food contamination or halal food polemic that would be a yes..” (H2)

Just like H2, H3 also thought that the nature, governance and administration of Malaysia have all made this country being perceived as a non-threat when it comes to FT, by saying that,

“My guess is Malaysia is not in the radar if food terrorism is concerned and hopefully the situation remains as it is. Being a very moderate country with very clear principle of not aligning to any heavy movement gives us the advantage of not posing any threats and hopefully our neutrality remains the same so that such threats will not happen in our country....” (H3)

H3 continued by stating that,

“If we look at the current outlook and the commitment being shown by the current ruling government and ministry, it is difficult for food terrorism to cause problem to our food security.” (H3)

Furthermore, H4 opined that while there already is a concrete theoretical definition of FT as devised by the UN, the literal definition can provide an array of events that can and may be depicted as FT and there must be a common agreed ground by all governments. H4 said,

“Heinous food terrorism crime does not happen with a single plate of food – that is rare. It usually takes place within mass food production with large quantity. Therefore, I must say the United States’ warehouses, factory facilities and restaurants are breeding ground since the quantity of food produced and bought are very massive..” (H4)

H5 on the other hand, felt that threats pertaining to FT do not really concern her business as there are bigger threats that would concern her more and they are the weather as well as pests. This goes to show how people especially Malaysians perceive FT threat not as serious as other environmental threats. According to H5,

"I don't think so because it has never happened before. The biggest threat to paddy production, as I've mentioned before, is the changes in environment, weather and pests, never on food terrorism.." (H5)

Finally for the first group of informants, H6 explained that FT is very intricate in the sense that if there are FT occurrences in other countries than there is always a potential for such threat to befall Malaysia.

"Food terrorism is a complex and multifaceted threat that can potentially pose risks to any country, including Malaysia..." (H6)

H6 was also the only informant who felt the connection of FT with FS, whereby if a country's food security measures are poorly coordinated, threats involving FT will emerge, by stating that,

"The severity of the threat depends on various factors, including the country's geopolitical context, its food security measures and its vulnerability to such attacks...." (H6)

For the media group of informants, H7 opined that since the Malaysian government practices neutrality and a sovereign nation, the potential of getting attacked by FT is very low and almost non-existent. H7 alleged,

"Our country maintains its non-alignment and neutrality so much so that we do not pose any threats to other countries or entities...." (H7)

while adding,

"Furthermore, the threat to our country is also very low because in a way Malaysia does not pose risk that will make us a target for these terrorists.." (H7)

Speaking from experience, H11 stated that most FT events reported by his office at Berita Harian took place outside of Malaysia and never incidents reported locally. H11 clarified,

“It is very worrying if we have threats on food and food supply. But most of the food terrorism incidents that we have reported before were foreign and international news and so far it has never happened here..” (H11)

In contrast, H9 perceived the threats of FT as a possibility and must be dealt with vigilantly. According to H9,

“As there hasn’t been any widespread or serious cases, then we are not able to see the threats...” (H9)

signalling that although there has never been a confirmed and reported case of FT in Malaysia, that would not justify that such event would not occur at all. Hence, it is crucial to always be prepared and be ever ready for any possibility.

The code–document analysis of Food Terrorism (FT) Perception on Threats, as presented in Table 4.16, indicates that perceptions of threats against food are consolidated under a single dominant dimension: perception. A total of 23 coded references were identified, with media practitioners contributing 12 quotations and public service personnel contributing 11. The near-equal distribution across both informant groups suggests a broadly shared assessment of food threats, indicating that perceptions are relatively consistent across communicative and institutional contexts. This balance implies that food threats are not framed as highly contentious, but rather as commonly recognised phenomena within both media discourse and public service narratives.

Table 4.16
Perception on Threats of Food Terrorism

	Media 6 247	Public Service 6 156	Totals
◇ FT Perception on Threats: Perception 23	12	11	23
Totals	12	11	23

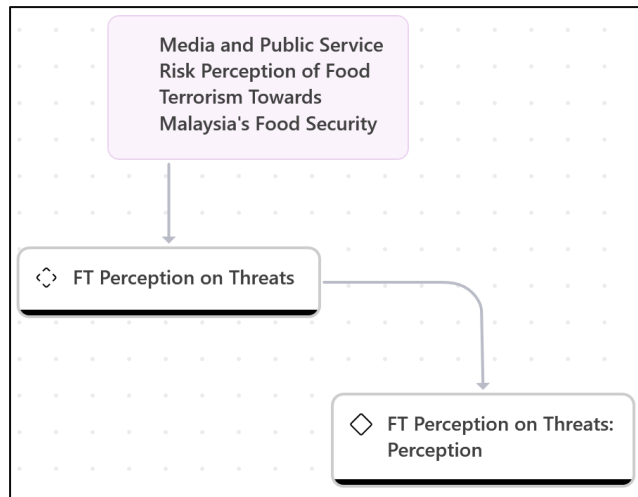


Figure 4.17 Network Diagram for the Perception on Food Terrorism Threats

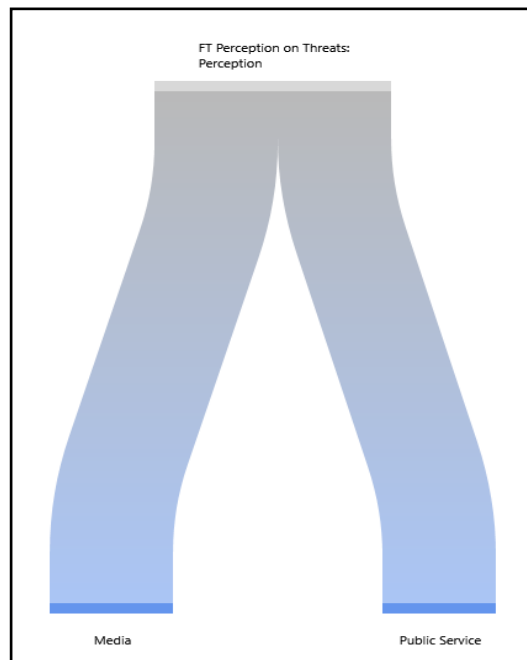


Figure 4.18 Sankey Diagram for the Perception on Food Terrorism Threats

FT Perception on Threats as shown in Figure 4.17 presented the identification of food threats and their associated risks. The perception is shaped by cumulative exposure across various texts rather than by isolated sources. Notably, perceived food threats are associated with a low-risk orientation, implying that while threats are acknowledged, they are not widely framed as immediate or severe. This positioning reflects a tendency to normalise food-related risks, situating them within manageable or familiar boundaries rather than as urgent security concerns.

The Sankey diagram as illustrated by Figure 4.18 show strong and evenly balanced flows from both media and public service actors towards the perception

dimension. The similar thickness of the flows indicates that neither group disproportionately shapes threat perception, but instead contributes in comparable measure in terms of understanding food security threats. This visual symmetry suggests alignment in interpretive framing, where both actors reinforce a shared narrative that recognises food threats without elevating them to high-risk or crisis-level status. Taken together, these findings suggest that FT perception on threats is characterised by stability and consensus rather than alarm or fragmentation. Both informant groups appear to frame food threats as present but contained, reinforcing a perception of relative control and manageability. While this shared framing may help prevent unnecessary public anxiety, it may also limit the salience of food threats as security issues requiring heightened attention or preventive intervention. This pattern highlights the importance of examining how perceptions of risk influence preparedness and response, particularly in instances where threats may evolve gradually rather than emerge suddenly.

d) Impact of Occurrences of Food Terrorism

In this section, the informants were asked on how great of an impact FT would pose towards FS as the researcher felt the need to gauge whether there existed any connection between these two (2) entities. H1 as one of the public service personnel interviewed felt that the impact would not be massive as no present threat is detected by the government as H1 opined,

“I believe that the same measures will be taken by the government concerning food terrorism incident, it’s just that we haven’t encountered any threats or incidents yet..” (H1)

H2 added that currently the impact is non-existent and difficult to measure the connection of FT and FS by stating that,

“....not for massive consumption but usually for own personal consumption. So ESSCOMM so far has not detected any food terrorism threats here..” (H2)

Furthermore, H3 explained that impact of FT threats towards food security could be regarded as very minimal considering the efforts being done by the government.

Although Malaysia has had several changes in leadership and government, FS and its policies still remain the main focus of the government of the day. According to H3,

“If we look at the current outlook and the commitment being shown by the current ruling government and ministry, it is difficult for food terrorism to cause problem to our food security, given that our policy which includes enforcement and laws and regulations are all in place...” (H3)

H3 also elaborated,

“You can see that with the change of governments three times, the commitment to protect and heightened our food security policy is increased each time the government is changed. The subsequent governments chose to continue the work of the previous governments and strengthen the policies even further and this is different than other ministries for example when new governments chose to change policies or work of previous governments.” (H3)

When asked about the impact of FT on FS and its policies, H4 said that most FT incidents that have occurred overseas targeted the consumers and very rarely on the governments. Based on observation, H4 shared that it was much easier for FT terrorists to launch attacks on physical stores, warehouses where food is stored and not on government buildings or FS policies. H4 clarified,

“Food terrorism threats and incidents will always occur at the consumer level and seldom carried out directly towards the government. It is impossible for these terrorists to attack policies, normally they’ll launch attack on physical and tangible items – packing stock/stores/warehouses and etc.” (H4)

Meanwhile, H5 also remained hopeful about the low impact of FT threats by looking at the current trends involving our FS and food crop by mentioning that,

“It’s hard to talk about food terrorism on food security, because we cannot predict the future. It might happen or it might not. It helps to be ready.” (H5)

Finally, from the first group of informants, H6 agreed that the impact for FT on Malaysia’s FS remained an all-time low, although again the government must always

be vigilant and ensure that the FS policies being formulated would be able to withstand any external threats in the forms of FT. H6 stated that,

“There haven't been widely reported instances of food terrorism specifically targeting Malaysia. However, the potential for food terrorism exists in any country, including Malaysia. The country's diverse food supply chain, population density and economic significance make it a possible target for such activities.” (H6)

For the second group of informants, H7 explained that the impact will only be felt if it is reported and clarified. Hence, this is where the role of the media will be apparent, to highlight and assist the government. H7 said,

“...you might have a point regarding the threats because the media have reported on food terrorism activities before albeit the news were all from other countries and elsewhere, so even if we maintain our inclusion from being a target, threats are always there. We do not really focus on food terrorism is simply because we do not want to cause unnecessary widespread panic and unrest to the citizens...” (H7)

Both H11 and H12 mutually approved that the impact of FT towards FS is there, again signalling the fact that there is a significant association between FS and FT whereby a strong FS policy may assist countries in controlling threats of FT. H11 said,

“Personally, the thought of food insecurity and threats in the form of food terrorism is quite worrisome as there is always a possibility of these to happen, especially after the pandemic....” (H11)

Moreover, H12 reminded the researcher about the 9/11 terrorist incident and further explained that any impact would pave the way to a possibility of FT incidents, especially when the FS policies are not comprehensive to cover threats in the form of FT. H12 explained,

“There is a possibility that without the guarantee of food security we are all exposed to various kinds of threats, the most daunting one being terrorism especially after 9/11...” (H12)

Concisely, the informants were divided when inquired regarding the risk of FT on FS whereby some informants did not feel that the impact would be broad while others

again prompted the relevant authorities to always be mindful and attentive to make sure that the policies of FS are comprehensive to cover the future threats or occurrences of FT. Wiśniewska (2023) elaborated that FT activities which target the food chain will deliberately affect firstly a country's food safety and ultimately food security. As previously mentioned, scholars like Balan et. al (2020) as well as Munirah and Hanoon (2022) have elaborated on the differences between food security and food safety, whereby the latter is another entity in the relationship between FS and FT but will not be specifically studied in this research.

Table 4.17 depicts the Food Terrorism (FT) Impact of Occurrences category whereby impact is articulated through a single dominant dimension: risk. A total of 14 coded references were identified, with public service personnel contributing slightly more quotations (n = 8) than media practitioners (n = 6). This distribution suggests that assessments of impact are more strongly emphasised within institutional contexts, where evaluating risk forms a core component of threat management and policy planning. Media references, while fewer, indicate engagement with risk primarily through reported consequences rather than formal assessment.

Table 4.17
Impact of Occurrences of Food Terrorism

	Media 6 227	Public Service 6 156	Totals
◇ FT Impact of Occurrences: Risk 22 14	6	8	14
Totals	6	8	14

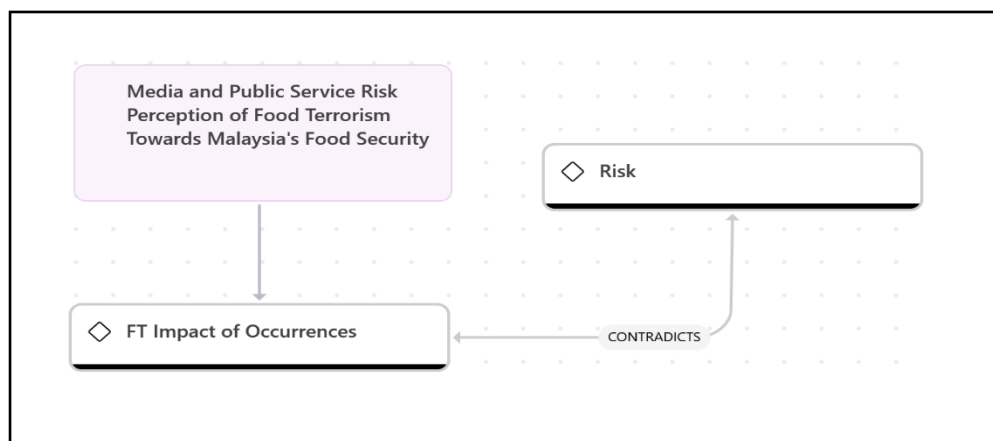


Figure 4.19 Network Diagram for Impact of Occurrences of Food Terrorism

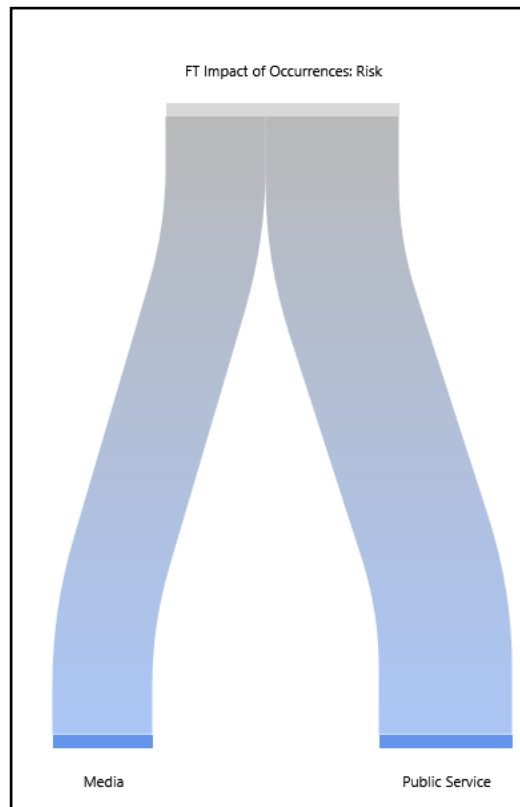


Figure 4.20 Sankey Diagram for Impact of Occurrences of Food Terrorism

The network diagram as presented by Figure 4.19 provides the positioning of risk within the broader FT framework. Perceptions of impact are shaped through cumulative observations across multiple cases rather than isolated narratives. Notably, the network reveals a contradictory relationship within the impact dimension, suggesting the presence of differing interpretations regarding the risk or impact. This tension reflects variation in how informants interpret the consequences of food-related crisis occurrences, with some framing them as manageable disruptions and others as indicators of vulnerability.

The Sankey diagram on the other hand illustrates a balanced yet slightly stronger flows from public service actors towards the risk dimension. The relative thickness of public service flows reflects their institutional responsibility for evaluating and responding to risk, while media flows indicate a supportive but less dominant role in shaping impact narratives. The overall symmetry of the diagram suggests that, despite differing emphases, both informant groups contribute to constructing an understanding of food threat impact, particularly in relation to risk assessment.

Taken together, these findings indicate that FT impact is primarily understood through the lens of risk rather than through broader social, economic or systemic

consequences. While this risk-focused framing enables structured assessment and response planning, it may also narrow attention to measurable threats at the expense of longer-term or indirect impacts. This pattern aligns with earlier FT findings, where food threats are acknowledged and monitored, but not consistently elevated to high-salience security concerns, underscoring the importance of integrating risk assessment with wider resilience and preparedness considerations.

e) Food Terrorism Prevention Measures by Adopting Food Security Policies

The informants were then asked on the measures to prevent FT threats via FS policies with the intention of assessing the preparedness of the country to deal with FT threats. H1 was confident in the framework of the Ministry of Agriculture and Food Security (MAFS) given that the current policies are constantly evaluated although there has been change in the government including its Minister. The many changes did not deter the objective of the government of protecting the country's food security and we get to see how the legacy from the previous government is carried on. H1 mentioned,

"...we can see the proactiveness of our government following incidents of contamination and the ministry responsible for this is MAFI....the ministry and its agencies will take stern actions, followed by reforming current policy, control and enforcement. I believe that the same measures will be taken by the government concerning food terrorism incident, it's just that we haven't encountered any threats or incidents yet.." (H1)

H3 also resonated with H1 in the fact that all these policies further showed how the government is serious in championing any forms of threats towards FS by mentioning that,

"You can see that with the change of governments three times, the commitment to protect and heightened our food security policy is increased each time the government is changed. The subsequent governments chose to continue the work of the previous governments and strengthen the policies even further..." (H3)

For H4, one of the ways to use FS policies to prevent FT is to ensure that SOPs are iron-clad and no room for discrepancies, as H4 said,

“You’ll see SOPs being implemented and for things to be impactful they have to go viral..” (H4)

Furthermore, H5 arose the thought that such prevention of FT threats is already in the works when the government announced a hefty allocation from the Nation’s Budget to the ministry and elaborated,

“Even in the budget, we hear about food security. The government’s plan on food security seems a lot, so I hope it’s towards the greater good and makes our job easier...” (H5)

Finally, the last informant in the public service group, H6 felt that the approaches to prevent FT by using FS policies can be done via a lot of measures, namely,

“To mitigate the risks of food terrorism and other threats to food security, Malaysia has implemented various measures, such as regulations on food and supply chain. For international businesses like us, this is important to ensure security and maintain confidence in our clients...” (H6)

Moving on to the media informants, H7 echoed the same sentiment as It is also worth to mention here that the ministry even had its name changed from the Ministry of Agriculture and Food Industry to Ministry of Agriculture and Food Security or MAFS, signalling the seriousness of the government to protect the nation’s FS from diseases and harm such as FT threats. H7 further elaborated,

“We always liaise with the NSC and getting input and information from all the relevant agencies. So all of these data will be analysed in order for us to carry out research to better our policies now and in the future..” (H7)

Then again, H11 warned about the execution phase of these FS policies as Malaysia has stirred quite an impression for being very excellent in planning and formulating policies but often times found itself in trouble and difficult to execute the policies as planned. H11 said,

“On paper I feel that the policy is comprehensive but as usual the real hurdle with our government will be during the implementation phase...” (H11)

Finally, H12 opined that the aftermath of 9/11 has caused most countries to be wary of terrorism activities and even more policies including framework pertaining to terrorism have been formed ever since, including policies on FT. Hence, H9 said,

“There is a possibility that without the guarantee of food security we are all exposed to various kinds of threats, the most daunting one being terrorism especially after 9/11...all in all, it is definitely a possibility for any threats of terrorism, including food terrorism to happen and further disrupt our food security..” (H12)

The informants suggested using FS policies as one of the approaches to prevent FT threats and activities. This can be carried out by way of observing FT activities in other countries as well as adopting FT risks and threats. Intrinsically, Jurica et al. (2019) have also discussed on addressing FT using the food defence system ingrained in FS policies.

The analysis of Food Terrorism (FT) Prevention, as presented in Table 4.18, indicates that preventive approaches are articulated through three interrelated codes: enforcement, protocol and legislation as well as government administration. A total of 28 coded references were identified, with public service personnel contributing a higher number of quotations (n = 16) compared to media practitioners (n = 12). FT Prevention: Enforcement emerged as the most prominent dimension overall (n = 12), followed closely by Protocol and Legislation (n = 10), while Government Administration appeared less frequently (n = 6). This distribution suggests that prevention is most strongly associated with formal rules and laws, rather than just internal government coordination.

Public service informants were particularly prominent in references to enforcement, reflecting their institutional responsibility for regulations and compliance. Media practitioners, by contrast, engaged more strongly with protocol and legislation, indicating a focus on the visibility of formal rules governing food security and threat prevention. References to government administration were comparatively limited across both groups, suggesting that government processes are not widely noticed or highlighted in public discussion and media reporting.

Table 4.18
Food Terrorism Preventive Measures

		Media 6 22 247	Public Service 6 22 156	Totals
◇ FT Prevention: Enforcement 22 12		4	8	12
◇ FT Prevention: Gov Administration 22 6		2	4	6
◇ FT Prevention: Protocol & Legislation 22 10		6	4	10
Totals		12	16	28

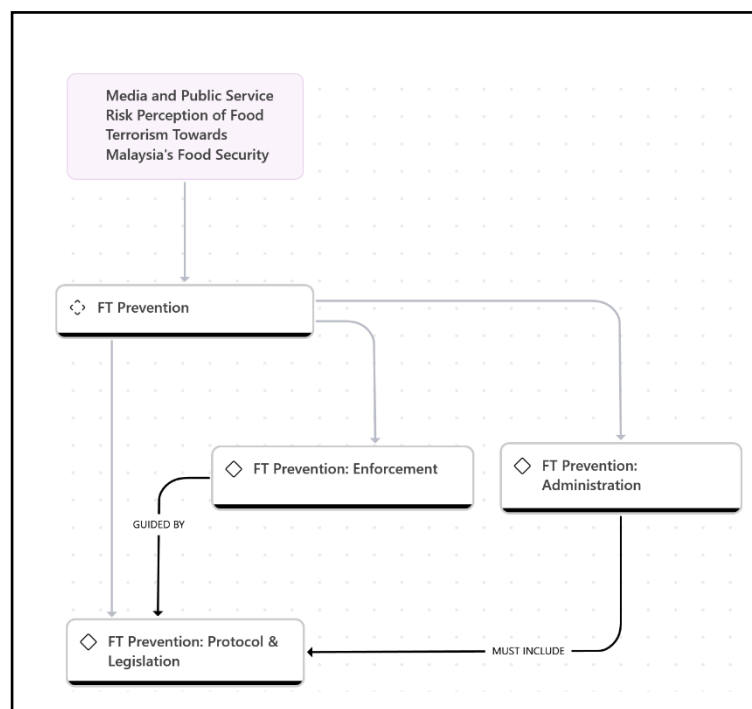


Figure 4.21 Network Diagram for Food Terrorism Preventive Measures

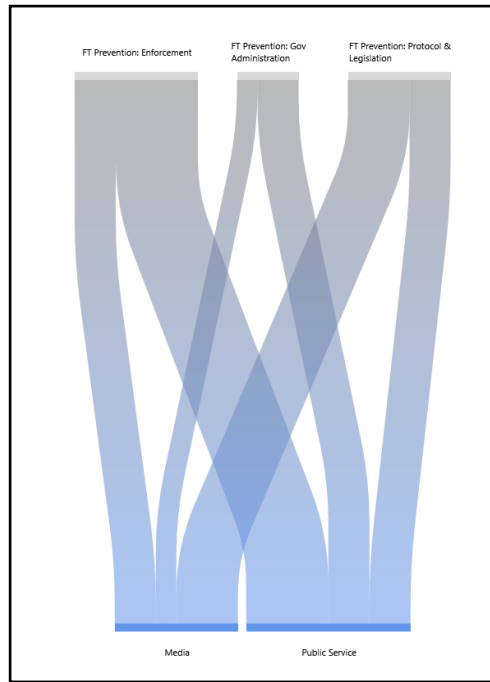


Figure 4.22 Sankey Diagram for Food Terrorism Preventive Measures

Figure 4.21 clarifies the conceptual relationships among the prevention dimensions. The FT Prevention category is directly linked to broader perceptions of food terrorism risk towards Malaysia's food security. Within this structure, enforcement is shown to be guided by protocol and legislation, highlighting the foundational role of legal frameworks in shaping preventive action. At the same time, government administration is positioned as a necessary component that must incorporate protocol and legislative elements, suggesting that effective prevention requires alignment between government rules and legislations. This relational structure reflects a layered understanding of prevention, where law, enforcement and administration operate in tandem rather than independently.

The Sankey diagram presented by Figure 4.22 shows strong flows from both media and public service actors towards enforcement and protocol-related dimensions, with comparatively thinner flows towards government administration. Public service flows are particularly pronounced in enforcement-related pathways, underscoring their central role in implementing preventive measures. Media flows, while more evenly distributed, contribute substantially to protocol and legislative framing, reflecting their role in shaping public understanding of preventive readiness and regulatory adequacy. The overlapping flows between actor groups suggest a shared emphasis on formal preventive mechanisms, even as each group engages with these mechanisms from different vantage points.

Taken together, these findings indicate that FT prevention is predominantly framed through institutional and regulatory lenses, with strong emphasis on enforcement. While this focus reinforces the importance of formal preventive capabilities, the comparatively limited attention to government administration suggests that coordination and governance amongst inter-agency integration needs consistent improvement. This pattern aligns with earlier FT findings, where prevention is understood primarily as a matter of control and compliance rather than as a holistic governance, highlighting opportunities to strengthen preventive discourse by integrating administrative capacity and coordination more explicitly.

4.4.3 Interpretation of Media Reporting on Food Security & Food Terrorism During COVID-19 (RQ3)

After exploring the subjects of Food Security (FS) policies and network as well as Food Terrorism (FT) and its threats, the researcher then seek to discuss the impact and relevance of media reporting on FS and FT in Malaysia to achieve the third research objective of this study. It is therefore pertinent for the researcher to inquire matters pertaining to the informants' observation on change of media landscape before and during the pandemic on top of the role of media reporting on FS and FT. The interviews generated a better grasp for the researcher in matters involving the media, FS and FT.

Table 4.19
Categories and Themes Derived from In-Depth Interviews on Interpretation of Media Reporting on Food Security & Food Terrorism During COVID-19 (RQ3)

Categories	Sub-themes	Themes
Changes	Observation on Change of	Media Practitioners and Public Service framing and comparative interpretations of Food Security and Food Terrorism reporting.
Inclusivity	Media Landscape	
New vs Old Media	Role of Media Reporting	
Social Media		
Technology Usage		
Transparency		
Crisis & Incidents		
Role of Media		

4.4.3.1 Observation on Change of Media Landscape

The informants were asked on their individual observation on whether any crisis posed any changes on media landscape. As the duration of this study took place during the pandemic, the researcher and the informants were already accustomed to the regulations of Movement Control Order or MCO where people were required to stay at home and media had to find alternatives to reach out to the masses. Government and essentially everyone had to adapt to the MCO environment where daily tasks were done online and remotely. With that in mind, when inquired on this observation, H1 mentioned about the various interpretation of information by people and countries in this era of Information Technology. The spill over effect from this has caused the whole world now to become a Global Village where information is easily accessible and this scenario has existed even before the outbreak of COVID-19. With that in mind, the change in media landscape has been consistent and heightened during the pandemic. H1 said,

“We have reached the era where information cannot be defined like before. When we say information, what can we conclude from it? It is basically open sky...”

and

“As we are now connected online and the whole world is now a global village, any news uploaded on the internet will be accessible to everyone around the world...” (H1)

Contrarywise, H2 felt the change brought by the COVID-19 pandemic and noticed a larger transition as well as consumption online. According to H2,

“During the COVID-19 era, we definitely increased the consumption on digital media as we did not have other options or the right and verified means to access information from the government except from the mass media and official social media accounts...” (H2)

H3 also echoed the same observation as H2 whereby H3 mentioned that,

“I can see that COVID-19 changed the media landscape in the form of the platform of media. We see a change or shift to social media and the heavy use of digital platform since people including media people were not allowed to go out of the house during MCO...”

also,

“We can see the media put their focus on things that the public wanted to know about, the press conferences and mostly done on social media rather than printed media.” (H3)

H4 on the other hand felt that the change was imminent and rightly so as during the pandemic the people relied heavily on digital media as availability of printed media was scarce. H4 opined,

“I believe that the COVID-19 pandemic has changed all the media landscape in Malaysia. Robust..” (H4)

As a direct consumer of digital media, H5 no longer referred to the traditional printed media for news and information, as both are readily available via social media whereby H5 stated,

“Personally, I only use social media because everything’s there including the news. There is no need for newspapers anymore..”

additionally, H5 stated,

“Is it okay to say that I only use social media exclusively, as far as changes in the media landscape go. COVID-19 could be the reason for this...” (H5)

H6 being the last informant in the public service personnel informant group elaborated how the change in media landscape due to COVID-19 affected many avenues as according to H6,

“The pandemic likely accelerated the shift towards online and digital media consumption. With lockdowns and movement restrictions in place, more people turned to digital platforms for news, entertainment and communication. The demand for reliable and up-to-date information surged during the pandemic. (H6)

For the media informants, although the pandemic has somewhat changed the media landscape but from his observation the change has not been obvious as the relationship with the media has always been the same as before the pandemic. H7 clarified,

“It is still the same. The only stark difference is that we must also make a point to not only scrutinize the mainstream media, but also social media where we have to face the netizens...” (H7)

H7 further added,

“It was previously with printed media, now we also have digital media which presents a greater challenge in terms of relaying the right information and policy.” (H7)

both H9 and H10 also presented the same sentiment where H9 agreed that there was more reliance on new media and a shift from the older, traditional media. H9 said,

“The printed media industry is getting old now and newspapers are considered as old school. However, we must be thankful to digital platforms such as tik tok, facebook and Instagram as we reach our target audience better....” (H9)

while H10 stated,

“Yes, it still is. Transparency is required for news reporting, to write everything that we saw. Therefore, there is no problem for us to write as everybody is cooperating...” (H10)

Correspondingly, another informant with a background in media, H11 shared how a directive was given to shift to digital media during the MCO phase of COVID-19 pandemic. H11 elaborated further by saying,

“There’s currently a directive at Berita Harian to shift digitally aside from the existing publishing of physical newspapers. But we find ease of use when we go digital as we get to put in more control of postings. We are able to delete or edit our posts and future posts which is highly advantageous..” (H11)

Table 4.20 shows that observations on changes in the media landscape are widely shared by both media practitioners (n= 41) and public service personnel (n= 39), indicating strong cross-sector awareness. The most salient code is overall media landscape changes (n= 19), followed closely by technology usage (n= 16) and social media (n= 15), suggesting that shifts in platforms and digital tools are central to how food security and food terrorism are now communicated. Inclusivity and transparency register at moderate but comparable levels (n= 11), pointing to growing expectations for broader participation and clearer information flows. In contrast, new versus old media appears less prominent (n= 8), implying that the distinction between traditional and digital media is now less contested than the practical effects of technological change.

Table 4.20
Observation on Change of Media Landscape

		Media 6 12 247	Public Service 6 12 156	Totals
◇ FSFT Observation on Media Landscape Change: Inclusivity 11	11	6	5	11
◇ FSFT Observation on Media Landscape Change: New vs Old Media 8	8	4	4	8
◇ FSFT Observation on Media Landscape Change: Social Media 15	15	8	7	15
◇ FSFT Observation on Media Landscape Change: Technology Usage 16	16	7	9	16
◇ FSFT Observation on Media Landscape Change: Transparency 11	11	6	5	11
◇ FSFT Observation on Media Landscape: Changes 19	19	10	9	19
Totals		41	39	80

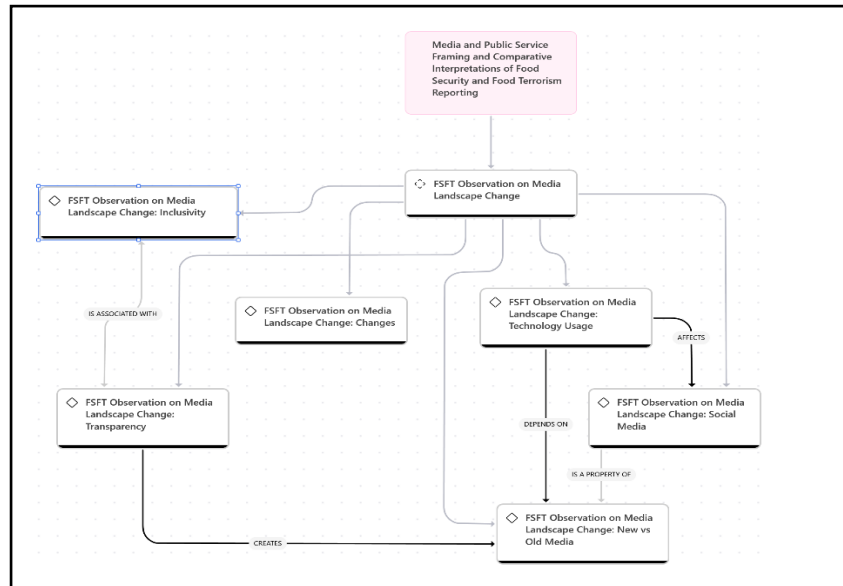


Figure 4.23 Observation on Change of Media Landscape

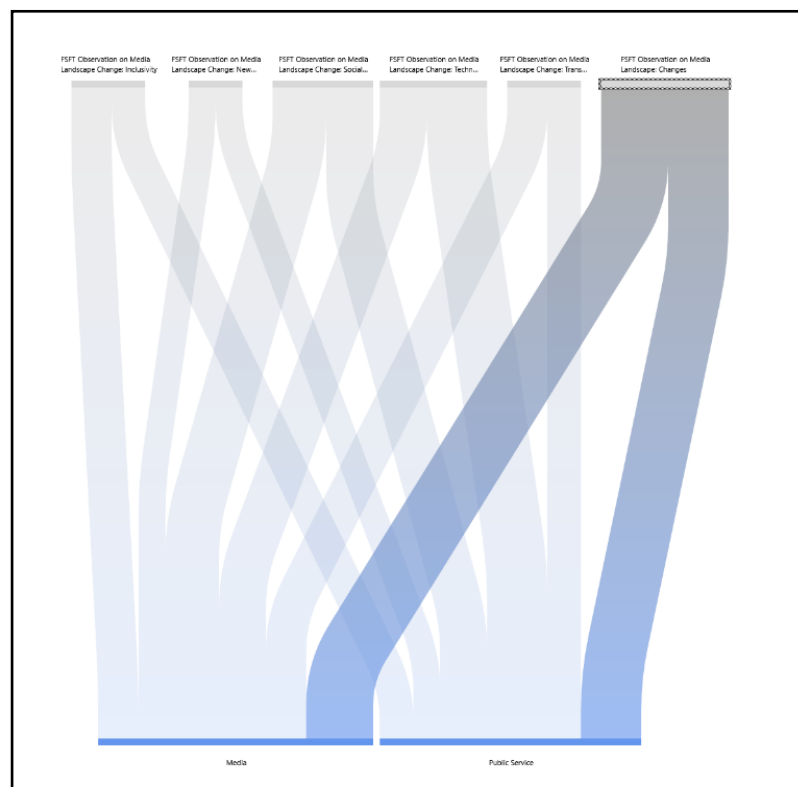


Figure 4.24 Sankey Diagram of Observation on Change of Media Landscape

Figure 4.23 highlights observation on media landscape change as the central organising node, with strong linkages to technology usage, social media and overall changes. Technology usage emerges as a pivotal catalyst, shaping the operations of social media and influencing the shift between new and old media forms. Inclusivity and transparency are shown as associated outcomes rather than standalone concerns,

indicating that they tend to arise as by-products of broader technological and structural transformations. This relational structure suggests that actors understand media change as an interconnected process, where tools, platforms, and practices evolve together rather than in isolation.

The Sankey visual reinforces these patterns by showing dense and balanced flows from both media and public service actors towards the dominant categories of overall change, technology usage, and social media. The relatively even thickness of flows across actors indicates shared recognition of these shifts, while thinner streams towards inclusivity, transparency, and new versus old media suggest secondary emphasis. Notably, public service flows appear slightly stronger towards technology usage, reflecting institutional adaptation to digital systems, while media flows spread more evenly across categories, consistent with their role in navigating and shaping multiple aspects of the changing media environment. Overall, the diagrams collectively show that perceptions of media landscape change are largely aligned across actors and are driven primarily by digitalisation rather than by legacy media distinctions.

To sum up, all informants observed changes of media landscape especially during the time period of the pandemic. All these changes prove to be beneficial for the informants specifically and the public at large. Notable changes include inclusivity, transparency, more rampant technology usage as well as focus on new media, that is, social media. This concurs with the studies done by Joo and Teng (2024), Ritchart et al. (2024) and Tabak and Dubovi (2021).

4.4.3.2 Role of Media Reporting on Food Security and Food Terrorism

This section deals with the reporting and media coverage on both FS and FT during the COVID-19 pandemic. This is purely done to understand and measure the impact of media towards FS and FT in the duration of a crisis like that of COVID-19 outbreak. With that in mind, the researcher employed the Media Framing Theory into the inquiry to deduce the informants' opinion on this matter.

First in line, H1 mentioned that the connection between the government and media has always been there, with government agencies dedicating specialised designations for personnel for the media to consult with. This practice is normal for all government and business entities and have been proven to yield improved results in terms of image and branding. The more coverage and reporting on the media pertaining

to pressing issues the better hence and even more fruitful when government policies are published by the media as H1 elaborated,

“...and we established very good relationship with the media, mass media to promote our research and our work. We once had 2 to 3 reporters/journalists from Utusan Malaysia and NST in contact to disseminate information regarding agriculture and the agency..”.

whilst adding,

“The ministry (MAFI) also engages with the media via a special team that holds weekly discussions on pressing issues and current trends/problems in agriculture. There are always discussions on food security, food supply and price hikes..” (H1)

H2 reminisced on the MCO phase of the pandemic where people were very eager to wait for the government’s daily press conference and have never failed to tune in to the news by the prime media. To further supplement the information, the people then relied very heavily to the social media platforms also moderated by the same mass media and government agencies. Similarly, when it comes to reporting on FS and FT, the media was given the priority to report on FS especially and ever since the pandemic, news and information regarding FS have been pretty consistent and reported on a daily basis. According to H2,

“We mainly relied on mass media and not so much on social media because the fear of fake news and such thing made the people to demand more reliability and accuracy on media outlets as they became more aware of obtaining the officially right and reliable news and information.” (H2)

The same sentiment was also shared by H3 who mentioned,

“... and the public relied very heavily on the media during this time to report on things or issues of covid numbers and hospitalisation statistics, about food shortage and security. For food terrorism in Malaysia I did not come across reporting on that or I am not aware of it. It was mostly about government making sure that food security did not escalate to food insecurity and reports if there was any shortage of food supply. But threats towards food or food supply did not cross my feed or my knowledge.” (H3)

For H4 and H5, both observed more coverage and reporting on FS especially during and after COVID-19. H4 discussed the invisible chain that connects the government, its policy makers and agencies as well as the media all played their part in highlighting more news and information on FS. As FT incidents have yet to occur, the both government and media did not pursue FT as much as FS until a potential risk is discovered. Most of the threats concerning food in our country are limited to contamination, accidental and incidental without proven intentional sabotage and all hoped that it remained so for years to come. H4 said,

“The policy makers – government, agencies and all the enforcement to local media and then consumers are all linked in one set of chain..” (H4)

while H5 further mentioned,

“Like I mentioned before, the media coverage on food security is increasing....” (H5)

H6 gave a lengthy explanation on the reporting of media on FS and FT, focusing on these reporting as a form of creating awareness to the masses and such effort is very much obliged. H6 elaborated,

“Media outlets may focus adding awareness on the importance of food supply, agricultural practices and the impact of global events such as a pandemic on supply chain/food availability. Media reporting on food terrorism should focus on potential threats, highlighting any measures taken and educating the public on recognising suspicious activities..” (H6)

Moving on, H7 whom is working as a media and corporate communication liaison with the government i.e. MAFS itself, also agreed that long-withstanding good relationship with the media managed to ease the government in terms of publishing news and latest policies of the ministry to the people via the media. With or without the pandemic, it is business as usual, as H7 said,

“Yes, we are very open towards everyone especially the media. We need the media to relay information on our policy and current news..” (H7)

As media practitioners and journalists, H9, H10, H11 and H12 possessed vast experience in media reporting of issues, news and government policies. To start with, all four (4) felt that the relationship between the government and media have never been better ever since the pandemic struck. The positive affiliation is very much welcomed as it has proved to be very productive on the side of the media. The informants agreed that the reporting on FS were very abundant during the pandemic and the media was given room and space to conduct reporting in a non-biased nature which they very much appreciated. H9 said,

“Any reporting and articles published are usually within our control and we do not face the pressure to get special instructions from the government on what to report and so on...” (H9)

while H10 mentioned,

“For food security reporting is more consistent now. We even have specialised individual to report on this, liaise with the government and ministry which regularly update us with press releases. So far no reporting on food terrorism here...” (H10)

H11 whom is currently working at the Food Security desk admitted that reporting on FS could be challenging sometimes considering the people are more aware of the issues surrounding it and demand the government as well as the media to feed them more information on the current status, stand and policies of the government. H11 commented,

“If I were to cover on food security, I will firstly identify the angle and frame of the issue, with options of whether wanting to make the story meaningful or serious. Finding the right and specific angle has always been a challenge for us here..” (H11)

H12 brought up the word efficiency when asked about the reporting of media on FS and FT during the pandemic, stressing that the adoption to digital media has also boosted productivity on reporting. H12 explained,

“Once we went digital, we found that the effectiveness of working online is just the same or even more efficient compared to working on in our respective offices or on the ground. Everyone also adapted and adjusted pretty well with the shift. The only cons that we had was the amount of fake and unverified news making rounds in social media..” (H12)

Table 4.21 indicates that FSFT Media Reporting is primarily framed around the role of the media rather than around specific crisis or incident coverage. Of the 26 coded references, FSFT Media Reporting: Role of Media accounts for 25 quotations, with stronger representation among media practitioners (n= 15) than public service personnel (n= 10). In contrast, FSFT Media Reporting: Crisis & Incidents appears only once and is referenced solely by media actors. This pattern suggests that food security and food terrorism reporting is not predominantly constructed through incidents, but rather through sustained reflection on the media’s communicative responsibilities. From an agenda-setting perspective, this dominance of role-based discourse indicates that both informant groups prioritise how food terrorism should be communicated over when or in response to which event it should be reported. By foregrounding the media’s role rather than specific incidents, the discourse elevates food terrorism as a structural issue within the public agenda rather than a sporadic crisis topic.

Table 4.21
Role of Media Reporting on Food Security and Food Terrorism

	Media 6 11 247	Public Service 6 11 156	Totals
◇ FSFT Media Reporting: Crisis & Incidents 11 1	1	0	1
◇ FSFT Media Reporting: Role of Media 11 25	15	10	25
Totals	16	10	26

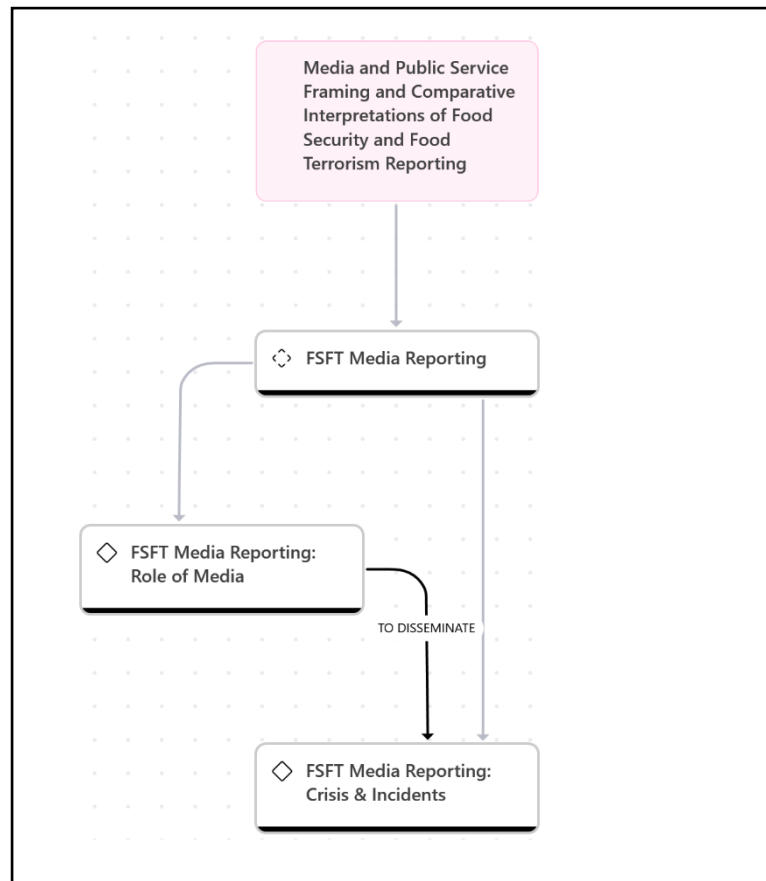


Figure 4.25 Network Diagram for Role of Media Reporting on Food Security and Food Terrorism

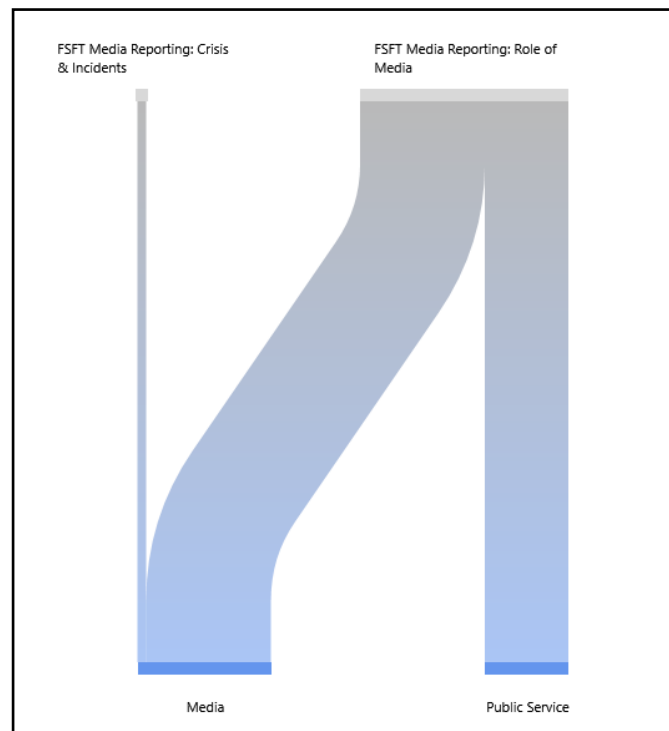


Figure 4.26 Sankey Diagram for Role of Media Reporting on Food Security and Food Terrorism

Figure 4.25 positions FSFT Media Reporting as the central organising node, with Role of Media and Crisis & Incidents linked hierarchically beneath it. The relationship indicates that crisis and incident reporting is conceptually secondary to the broader media role, suggesting that incident reporting must be carried out within how information is shared and explained. This coincides with framing viewpoint, where the meaning of food terrorism is shaped less by isolated events and more by the interpretive frameworks through which such events would be presented and explained. The limited connectivity of the crisis code suggests that framing choices emphasise responsibility, credibility and narrative restraint over sensationalism. As a result, food terrorism is framed as a complex and managed risk rather than an immediate or high impact threat.

The Sankey diagram presented by Figure 4.26 shows a dominant and continuous flow from both media and public service actors towards FSFT Media Reporting: Role of Media, while only a minimal flow appears for Crisis & Incidents. The relative absence of crisis-driven flows suggests that repeated exposure to food terrorism discourse is unlikely to prime audiences to associate the issue with sudden shocks or emergencies. Instead, from a priming perspective, audiences are more likely to evaluate food security and food terrorism from the information disseminated directly from the government and the media. Media practitioners show slightly stronger engagement with role-based reporting, reflecting professional self-awareness in shaping public understanding, while public service personnel similarly recognise the media as the intermediary in managing perception and trust.

To conclude, all informants agreed upon the crucial role of the media when it comes to reporting on both food security and food terrorism. The informants gave lengthy feedback on how the role developed with the advent of crisis and incidents during the pandemic period. There exists a timeframe and future studies may consider researching this timeline to observe the changes of media role during a crisis. Just as discussed by Ritchart et al. (2024), with public relying heavily on media especially during the MCO, the role of the media proved to be at an all-time important and significant.

4.4.4 Evolving Food Security Challenges and Possibilities of Using Food Security Policies to Counter Future Food Terrorism Threats (RQ4)

For this unit, the researcher strategised the inquiries to ensure that the fourth and final objective is achieved and that is to propose recommendation on eradicating Food Terrorism (FT) threats with the reassurance of Food Security (FS) framework and policies. To do this, the researcher set to explore the influence of media reporting on Food Security (FS) and Food Terrorism (FT) whilst also pursuing the informants' opinions on whether the role of the media could be utilised to further disseminate policies on FS that would include prevention of FT threats. Before arriving at this section, the researcher has already acquired more knowledge on FS, FT and the change in media landscape as well as the role of the media on these two (2) entities. The researcher felt obliged to then gain more insights on the any recommendations by the informants such as utilisation of the media on FS and FT including seeking opinions on the challenges of the media in FS and FT with its challenges as well.

Table 4.22

Categories and Themes Derived from In-Depth Interviews on Evolving Food Security Challenges and Possibilities of Using Food Security Policies to Counter Future Food Terrorism Threats (RQ4)

Categories	Sub-themes	Themes
Challenges	Opportunities and Challenges of Using Media Reporting	Best Practices and Strategic Framework for reporting on Food Security and Food Terrorism by Media Practitioners and Public Service Personnel.
Gov Policy		
Impact	Opinion on Integration of Media and Government	
Real-time		
Relationship		
Connection		
Recommendation		
Strategy		

4.4.4.1 Challenges and Opportunities of Media Reporting on Food Security and Food Terrorism

For this part of the research, the researcher wanted to explore the prospects of media's influence on FS and FT thus the informants were asked on how huge of an impact does media have on issues concerning these two entities. H1 said,

“..within this team, you will also have PIC to answer inquiries from the mass media and the public while also briefing the Minister on current issues. But all these information are verified and refined to ensure that what the public read on newspapers is authentic and true...” (H1)

H2 agreed that the media has always been able to secure great influence on any issues thus FS and FT were not an exception too. H2 regarded media as the best medium to reach out and government must seize the availability of media to its full interest. H2 said,

“I truly hope that media reporting on food security will be continuous as we can only view the impact in the near future...” (H2)

According to H3, the opportunities to employ the media are endless, as H3 said on media and FS,

“Yes, as government agencies and ministries all have divisions or units that handle media. Handle here means we engage the media and media people to report on news and disseminate them. Media is still relevant and the pandemic justified that when public heavily relied on the media for information. Of course, whenever there is policy changes or plans on reviewing or making new policies, we always alert the media to assist us in spreading the information..” (H3)

For FT meanwhile,

“In terms of food terrorism, I feel that more exposure needs to be done by the government and ministry so that we are always ever ready with threats of food terrorism. The key here is to always prepare ourselves for any crisis to come.” (H3)

H4 also discussed on the relationship between the government and media, stating that the government must make full use of the media when it comes to reporting of FS and FT. While FS is reported heavily in current times especially during and after the pandemic, no awareness has been brought on FT yet. For the reporting of FS, H5 hoped that the media may be able to have full grasp of its definition, elements and fundamentals of FT to better ensure public understanding. H4 said,

“Previously without social media, the government would resort to organising press conferences and the people would tune in to the television to know what the PC was all about. As we enter the social media era, the government has no choice but to also join in the wagon to where everyone spends most of their time with. But the government has to also realize and understand that not all government and governance related issues is attractive and this is where we need the media to intervene and help..” (H4)

H5 gave the connotation that both the government and media need each other to ensure that matters on FS and FT can yield more productivity. The long withstanding relationship can be further improved especially in times of crises and this relationship must be manifested with some form of understanding. H5 added,

“The government can use the media as a messenger between the government and the people and must act swiftly, which should not be a problem in this fast and efficient internet era..” (H5)

H6 reiterated the important role of the media that must be utilised appropriately by the government as a platform to connect with the people by stressing that,

“The media plays a crucial role in exposing threats to food security and safety. It serves as a powerful platform for raising awareness, informing the public and holding relevant stakeholders accountable.” (H6)

H7 continued the discussion on opportunities of the media to strategically carry out reporting on FS and FT and stated,

“There is a difference in terms of reporting of news and information. For our ministry, we must always make sure that every press release is refined word by word before distributing them to the press. But at the end of the day the ministry is still unable to control the angle or the perception of the news reporting by the media..” (H7)

H10 still believed in the influence of newspapers and opined that the hardcopy newspapers are still relevant despite the adoption of digital media. According to H9, newspapers represent the official and the credible, also trustworthy as compared to news and information found on digital media which could not filter fake news and misinformation. H10 further elaborated,

“Newspaper is an official media outlet. Anything that comes out on paper is deemed as true and legit, not just hearsay or gossip. That’s all there is. Their credibility is upheld by the people. I am talking about mainstream newspapers. People tend to not believe things on social media but if it is printed news, people become more convinced. The mainstream media still acts as a check and balance for the government and other agencies..” (H10)

H11, too,

“The public may not be familiar with our working condition and environment, some may perceive that our news quality will be affected by working at home but it is actually the opposite. You can publish good and newsworthy reports by working on your desk at home.” (H11)

H12 on the other hand, discussed on the challenges of finding further information on FS and FT initially. Although there is a dedicated unit on FS at the workplace, these reporters might need assistance and consultation from the government with respect to the policies, elements, approaches and much more. H12 said,

“Yes, both entities need each other as the government needs a medium to convey the latest news and information and policies to the people which the media will gladly do...” (H12)

H12 also mentioned about the relevance of media within the news reporting of FS and any other information thus far. H12 stated that there have been instances where a media scoop proves to be very valuable and newsworthy that it caused the government to review its legislations and SOP. H12 said,

“With one scoop by the media, we could now see changes in terms of policy, enforcements and legislations to eradicate this type of food crime..” (H12)

Table 4.23 shows that the FSFT media challenges and opportunities in policy utilisation are referenced more frequently by media practitioners (21 quotations) than by public service personnel (12 quotations). This indicates that media practitioners play a more active role in articulating how policies are interpreted and communicated to the public. Among the codes, relationship emerges as the most dominant code (n=16), followed by challenges (n=11), while references to government policy (n=2), real-time communication (n=1) and impact (n=3) are comparatively limited. This pattern suggests

that policy utilisation is not primarily discussed in technical terms, but rather through relational conditions of whether policy information can be meaningfully conveyed. From a Social Capital Theory perspective, this highlights the importance of trust, institutional ties and reciprocal relationships between media and public service actors in enabling policy-related communication. At the same time, this relational emphasis intersects with agenda-setting processes, whereby media actors, through repeated focus on relational challenges and cooperation gaps, elevate these issues as salient concerns in policy discourse. Media attention prioritises the conditions under which policy is effective or otherwise.

Table 4.23
Challenges and Opportunities of Media Reporting on Food Security and Food Terrorism

	Media 6 11 247	Public Service 6 11 156	Totals
◇ FSFT Media Challenges & Opportunities on Policy Utilisation: Challe... 11	7	4	11
◇ FSFT Media Challenges & Opportunities on Policy Utilisation: Gov Po... 2	2	0	2
◇ FSFT Media Challenges & Opportunities on Policy Utilisation: Impact 3	2	1	3
◇ FSFT Media Challenges & Opportunities on Policy Utilisation: Real Ti... 1	1	0	1
◇ FSFT Media Challenges & Opportunities on Policy Utilisation: Relatio... 16	9	7	16
Totals	21	12	33

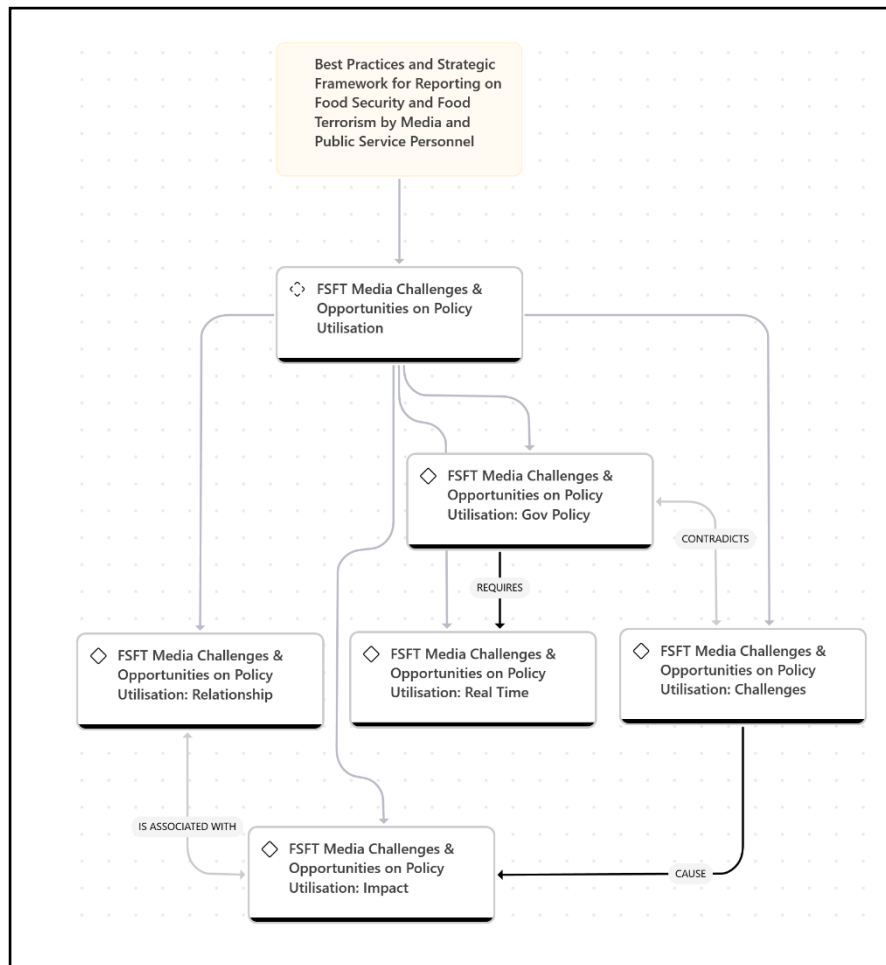


Figure 4.27 Network Diagram for Challenges and Opportunities of Media Reporting on Food Security and Food Terrorism

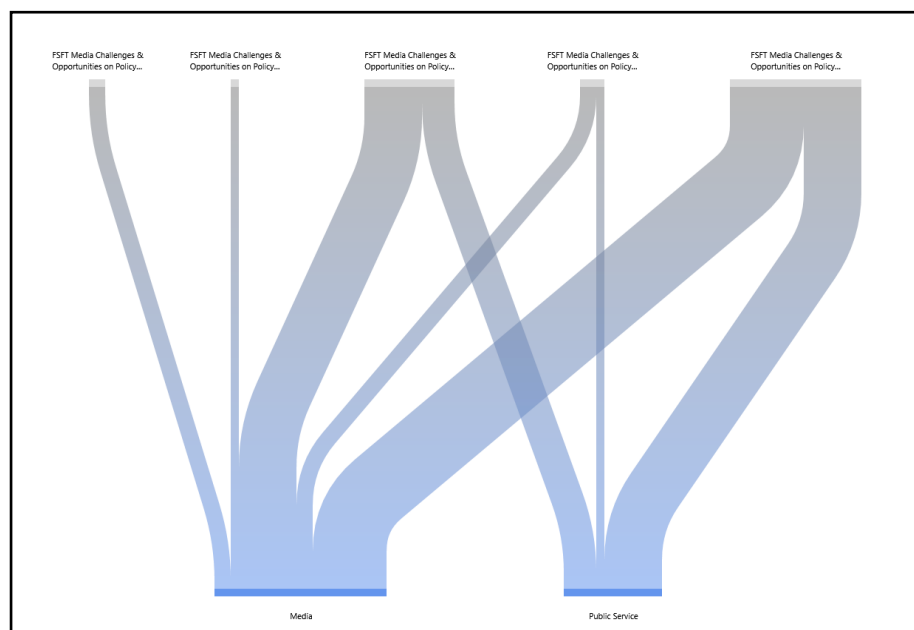


Figure 4.28 Sankey Diagram for Challenges and Opportunities of Media Reporting on Food Security and Food Terrorism

The network diagram as shown in Figure 4.27 positions FSFT Media Challenges & Opportunities on Policy Utilisation as the central node, linking relationship, challenges, government policy, real-time reporting and impact. The strongest connections are observed between relationship and impact, suggesting that perceived policy effectiveness is closely tied to the quality of interaction between media and government. The diagram also shows that government policy requires real-time communication, while simultaneously contradicting challenges, reflecting tension between formal policy expectations and practical communication constraints. This illustrates how policy utilisation is shaped not only by policy design but by the relationship surrounding it.

From a Social Capital standpoint, the network reflects levels of bridging social capital across institutions. Where trust and cooperation are limited, policy messages struggle to circulate effectively. In parallel, framing theory is evident in how policy utilisation is conceptually organised. Policy is framed less as a standalone instrument and more as something dependent on relationships, responsiveness and coordination.

The Sankey diagram depicted in Figure 4.28 further highlights these findings by showing thicker flows from both media and public service actors towards relationship and challenges, while flows towards government policy, real-time reporting and impact remain comparatively thinner. Media flows are particularly pronounced towards challenges, indicating a stronger tendency to highlight relational barriers in policy utilisation.

Essentially, the findings show that the utilisation of policies depends heavily on communication and relationships between institutions. Social Capital Theory helps explain this by showing that trust, working relationships and cooperation are essential for sharing policy information and putting it into practice. Agenda-setting further explains how media attention brings relationship-related issues to the forefront of public and institutional discussion. Rather than simply passing on policy information, the media play an active role in shaping how policies are reported, disseminated and understood. They influence not only which policy issues receive attention, but also how the public judges whether a policy is impactful. Weak social capital amplifies challenges in policy utilisation. In contrast, robust social capital makes policy messages clearer, more credible and more meaningful in reporting.

With that, it can be concluded that the challenges faced by the media in terms of the reporting of FS and FT will bring forth opportunities to utilise the FS policies in

order to prevent any future FT threats. The informants elaborated on the symbiotic relationship of media and the Malaysian government, how media reporting is impactful in disseminating government policies in real time despite having to sometimes champion challenges during the pandemic in the form authenticating information and government framing of news reporting which plays a crucial role in shaping public responses to global health crises, concurring with Chen and Stoecker (2020).

4.4.4.2 Opinion on Integration of Media Role in Disseminating Food Security Policies and Preventing Food Terrorism Threats

The informants were finally asked on integrating media role in terms of dissemination Food Security (FS) policies and preventing Food Terrorism (FT) threats. The intention of this section was to understand and justify the recommendations of all the informants interviewed in order for the researcher to reach the fourth and final objective of this research, that is to propose recommendation policies on eradicating FT with the reassurance of FS policies.

H1 brought up the how the government can benefit from the Sustainable Development Goals (SDGs) by the United Nations (UN) to assist in strengthening the FS policies. Reaching the SDGs will in turn yield better result in FS and its policies which might assist in preparing for any FT threats. H1 said,

“.....the government of Malaysia is very committed with fulfilling the UN's SDGs and this is not only limited to MAFI, but all other ministries are doing the same practice. SDGs have become an important point of reference for the government and all ministries and agencies are being told to perform and work on policies to essentially fulfill the SDGs..” (H1)

H2 in contrast, reminded the researcher on the different roles of the government and the media whereby there is a fine line that separated these two (2) entities. While the government tends to contain and shield some situation from the public, the media in general prefer to spread the news to an even greater audience. Bearing that in mind, integrating these two require mutual understanding that stems from desiring to provide the best to the public at large. H2 said,

“The role of the media is indeed important especially when it comes to media’s relationship with the members of public. This symbiotic relationship is imperative as the former acts like a medium/channel for the government to disseminate current and latest information..”
(H2)

H3 felt that the integration has already taken place but room for improvement is always welcomed. H3 clarified,

“The role of the media has already been integrated with the government when it comes to disseminating information or policies or news. To improve it will be an added advantage. In terms of food security, I am sure that by now since the ministry related to food security has already shown its commitment to champion the subject, the media too must already develop food security desk or PIC to cover news on food security...” (H3)

H4 proposed the government to have constant media presence on both FS and FT from now on. Being an FT specialist, H4 felt that the Malaysian government still lacked the framework and knowledge on FT as well as its threats; but H4 nevertheless applauded the government’s effort on making FS an important agenda of the country post pandemic. That being said, H4 anticipated for a separate administration in the form of committee as such, to start efforts on recognising and preventing FT. H4 stressed,

“Since everything is related to policy and policy comes from the government so we must do something on threats concerning food terrorism since so far there is no specific legislation on food terrorism. There is even little to no mention of terrorism under food security. If it can stand on its own than it would be better..” (H4)

H5 echoed the use of digital media and social media by the government to reach the people and committed to making sure that the media act as a link to connect to the citizens. H5 said,

“Both the media and the government is important and relevant because the government is in charge of the policies and the media is entrusted to advertise the government’s effort in paddy production.”
(H5)

To conclude the public service personnel group category, H6 discussed on effective communication by the government which can be assisted by the media. H6 said,

“Media outlets often cover government policies and initiatives, especially those related to critical issues like food security. These announcements serve as a starting point for media coverage. Integrating the role of the media in disseminating policies on food security and preventing food terrorism threats involves collaborative efforts between government agencies, media outlets and other stakeholders. Effective communication is key to ensuring that accurate and timely information reaches the public.”(H6)

Moving on to the media group category, H7 reiterated on government’s seriousness to protect the nation’s FS and as of the time of the interview, there was no threats on FT as confirmed by H7,

“Yes our focus will always be the future of food security. We’ve even incorporated that in our hashtags as well as numerous programs to enhance food security. We have also launched a committee within the cabinet to focus solely on food security with involvement from various ministries and industry players including relevant government agencies to review and oversee matters pertaining to food security..” (H7)

As a media practitioner, H10 agreed that the media has done their part and most of the time it is up to the government to play theirs by stating that,

“As a reporter, I need to find answers. The government does not have any rights to control our writings. They can only give us feedback. In this case, for instance, it involves the Minister of Agriculture, MACC, Homeland Ministry and other alleged parties. That is when the government has to give a solution to solve this issue. In this case, all the agencies such as MAQIS, PDRM and local NGO’s were cooperating, therefore there was nothing to hide. Everybody was committed to solve this issue following the heat on their respective agencies. So far, there is good cooperation from all parties. They have to handle and eradicate the problems.. ..” (H10)

Being recently designated to the FS new desk, H11 stressed that it is high time that the government to be willing to allocate some amount from the National Budget for media to disseminate news and policies, including hiring influencers to gain traction and trust of the people. H11 elaborated,

“First things first, from the business sense, I feel that the role of the media can only be impactful if the government is willing to spend and allocate funds for ads with us where we can arrange for more coverage and newsworthy writings and reports done on food security..” (H11)

H11 further continued,

“Secondly, as we are very rapidly following the current trends, we can never run away from having to engage with social media.... Government must be willing to put in funds to invest in influencer to help in getting more followers, too. According to my observation, the public finds social media influencers very relatable and relevant...”
(H11)

and H11 ended the interview by saying,

“It is such a loss if the government does not pick up the online movement and the steady momentum that it carries with it. People became aware of certain polemic and other things because of social media and the government should put that into consideration.”
(H11)

Finally, H12 suggested for the government to be transparent with the media in order to be more efficient in FS matters. As the awareness on FS has just increased during the pandemic, government must take this opportunity to properly formulate better policies that would cater to the people while strong enough to prevent any threats. H12 said,

“I believe that the media and the government have long assimilated well in terms of having the same understanding and presence in ensuring that government policies are reported and disseminated to the public....perhaps what the media actually requires more from the government is transparency.” (H12)

H12 continued,

“Another way of assimilating the government and the media would be in terms of social media and digital adoption. Whether we like it or not, we must realize that most of our readers prefer to get their news online and the media I think have successfully adopted social media and going digital has given us a lot of ease in terms of fast and reliable reporting. So in that case, the government must also be willing to go digital and increase their online presence to get the public interested with what they are doing and what policies that they are formulation. Media will always be there to assist the government in their transition to social media....” (H12)

The coding distribution as shown in Table 4.24 indicates strong emphasis on recommendations (n=31) and strategic integration (n=27), followed by connection

(n=19). Both media practitioners and public service personnel contribute substantially across all three (3) codes, with the media marginally more prominent overall. This pattern suggests that discussions of FSFT integration are not limited to abstract coordination but are oriented toward actionable guidance, forward planning and sustained collaboration.

Table 4.24
Opinion on Integrating Media Role in Disseminating Food Security Policies and Preventing Food Terrorism Threats

	Media 6 ① 247	Public Service 6 ① 156	Totals
◇ FSFT Opinion on Media & Public Service Integration: Connection ① 19	10	9	19
◇ FSFT Opinion on Media & Public Service Integration: Recommendation ① 31	18	13	31
◇ FSFT Opinion on Media & Public Service Integration: Strategy ① 27	14	13	27
Totals	42	35	77

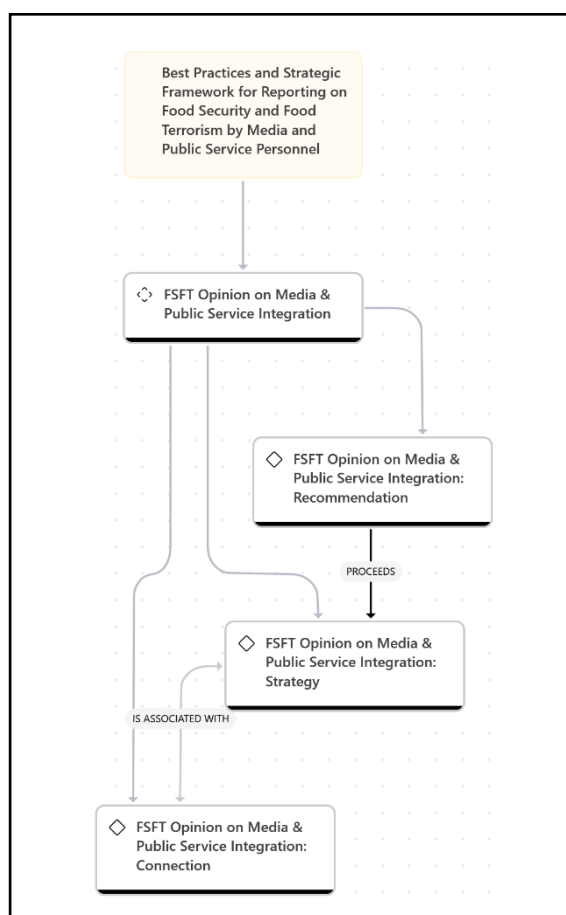


Figure 4.29 Network Diagram for Opinion on Integrating Media Role in Disseminating Food Security Policies and Preventing Food Terrorism Threats

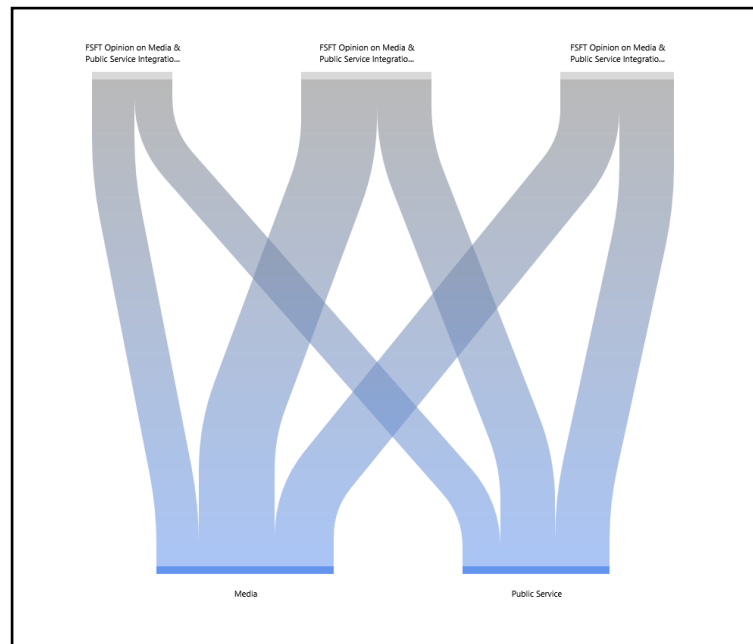


Figure 4.30 Sankey Diagram for Opinion on Integrating Media Role in Disseminating Food Security Policies and Preventing Food Terrorism Threats

The network diagram as illustrated in Figure 4.29 shows a clear progression from connection to recommendation and onward to strategy, highlighting integration as a relational and process-driven construct rather than a static condition. Connection operates as a foundational element, closely associated with strategy development, while recommendations function as a bridge translating relational ties into strategic directions. The structure of the network reinforces the idea that effective integration depends on continuous interaction, shared understanding and alignment between media practitioners and public service personnel.

The Sankey diagram further reinforces this interpretation by illustrating strong and balanced flows between the two (2) informant groups across connection, recommendation and strategy. The symmetry of the flows suggests a shared recognition that integration requires mutual engagement rather than unilateral coordination. Media practitioners appear particularly prominent in shaping recommendations, while public service personnel show strong engagement in strategic orientation, indicating complementary roles within the integration process.

From a Social Capital Theory perspective, these findings underscore the importance of trust, relational ties and cooperative norms in enabling effective FSFT integration. Strong connections between media and public service actors facilitate information sharing, improve mutual credibility and support coordinated action. Where social capital is robust, recommendations are more likely to be translated into coherent

strategies; where it is weak, integration risks remaining fragmented or symbolic. At the same time, Agenda-Setting Theory helps explain why integration itself emerges as a salient concern. By repeatedly highlighting the need for connection, recommendations and strategic coordination, media reporting elevates integration as a priority issue within both public and institutional discourse.

The findings suggest that FSFT integration is socially embedded and communicatively driven. It is shaped by the strength of relationships between actors (social capital) and reinforced by media attention that frames integration as a necessary condition for effective policy communication and implementation. Essentially, the informants all agreed on the need of media and government integration when it comes to disseminating FS policies to prevent FT threats in the future whereby suggestions on strategy and recommendations on how the connection can be carried out were addressed. The suggestions included embracing United Nations' Sustainable Development Goals or SDGs as well as vast adoption of new media particularly social media including considerations on hiring highly networked individuals and figures. All informants are in agreement that in times of crises or otherwise, media in the form of social media can be regarded as a bridge to link and connect the government with its people. This concurred with Graham et al. (2015) which stated that social media serves as a vital bridge for information exchange between the government and the public.

4.5 Thematic Analysis Matrix

Table 4.25

Thematic Analysis Matrix for “The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID-19”

Research Objectives	Categories	Sub-themes	Themes
To explore the Malaysian government's policies, elements and strategic approaches to food security as understood by media practitioners and public service personnel;	Commitment	Knowledge	Media Practitioners and Public Service communication and insights on Food Security
	Proficiency	Awareness	
	Concept	Relevance	
	Understanding	Importance	
	Economy	Effectiveness	
	Individual Sustenance	Involvement and Participation	
	Media Role		
	Sovereignty		
Acknowledgement			

Research Objectives	Categories	Sub-themes	Themes
To analyse how media and public service personnel conceptualise food terrorism as a potential threat to Malaysia's food security;	Crisis		
	Price Hike		
	Inflation		
	Purpose		
	Significance of FS		
	Rebranding		
	Implementation		
	Value Chain		
	Government Policy		
	Discourse		
	Engagement		
	Aid		
	Understanding	Knowledge of Occurrences	Media Practitioners and Public Service risk perception of Food Terrorism towards Malaysia's Food Security
	Isolated Incidents	Vigilance	
	Significance	Perception on Threats	
	Participation	Impact of	
	Awareness	Occurrences	
	Observation	Preventive Measures	
	Perception		
	Risk		
	Enforcement		
	Gov Administration		
	Protocol & Legislation		
To discuss how food security and food terrorism are interpreted and communicated by media and public service personnel in their reporting;	Changes	Observation on Change of Media Landscape	Media Practitioners and Public Service framing and comparative interpretations of Food Security and Food Terrorism reporting
	Inclusivity		
	New vs Old Media	Role of Media Reporting	
	Social Media		
	Technology Usage		
	Transparency		
	Crisis & Incidents		
	Role of Media		
To propose a comprehensive framework to guide media practitioners and public service personnel in effectively communicating food security and food terrorism issues to the public.	Challenges	Opportunities and Challenges of Using Media Reporting	Best Practices and Strategic Framework for reporting on Food Security and Food Terrorism by Media Practitioners and Public Service Personnel
	Gov Policy		
	Impact	Opinion on Integration of Media and Government	
	Real-time		
	Relationship		
	Connection		
	Recommendation		
	Strategy		

4.6 Final Thematic Map

In qualitative research, a final thematic map serves as a visual representation of the key themes and patterns that emerge from the systematic analysis of qualitative data. Typically constructed at the culmination of the data analysis process, the thematic map organises findings into coherent and meaningful categories, allowing complex qualitative material to be synthesised in a transparent and structured manner (Braun & Clarke, 2021). By illustrating relationships between themes, categories and underlying codes, a thematic map enables researchers to visualise how different aspects of the data interact or overlap, thereby enhancing analytical clarity (Fereday & Muir-Cochrane, 2006).

In this study, the final thematic map reflects a two-phase qualitative analytical design. Phase 1 involved qualitative document analysis of national and international policy and security documents related to food security and food terrorism. This phase established the institutional and policy context by identifying dominant policy orientations, key elements and strategic approaches articulated within texts. The findings from Phase 1 provided an essential analytical foundation by outlining the prioritisation and preparedness of food security and food terrorism at governance and policy levels. These findings informed the analytical lens for Phase 2 and functioned as a reference framework against which participants' perceptions were later examined.

Phase 2 consisted of in-depth, semi-structured interviews with media practitioners and public service personnel, conducted using the interview protocol outlined in Table 3.5. Semi-structured interviewing, supported by probing techniques, allowed participants to articulate their knowledge, perceptions and interpretations of food security and food terrorism in their own terms, while ensuring alignment with the research objectives (Kallio et al., 2016). Upon completion of all interviews, the researcher undertook an initial coding process, followed by iterative categorisation and refinement of codes into categories and overarching themes, consistent with thematic analysis procedures (Braun & Clarke, 2022).

In total, 403 quotations were identified from the interview transcripts, generating 179 initial keywords. Through successive stages of coding and consolidation, these were refined into 62 focused keywords, which were subsequently analysed and organised into 15 analytical codes. These codes were then further synthesised into four overarching themes, representing the final thematic structure of

the in-depth interview findings. The development of these themes was guided not only by patterns within the interview data, but also by their conceptual alignment with the policy and governance frames identified in Phase 1 document analysis.

The final thematic map presented on the following page visually represents the outcome of this analytical process. It illustrates the interconnections among the interview-derived themes and their collective contribution to addressing the research objectives, particularly by highlighting media practitioners' and public service personnel's understanding of food security policy, their interpretation of food terrorism as a threat, and their engagement with policy and governance frameworks. Beyond serving as a summary of the qualitative findings, the thematic map functions as an analytical and interpretive tool, supporting theory engagement and the integration of empirical findings with the study's theoretical framework (Bazeley, 2013). As such, the final thematic map bridges Phase 1 and Phase 2 of the analysis, providing a coherent visual synthesis of the intersection between institutional policy discourses and individual professional perceptions within this research.

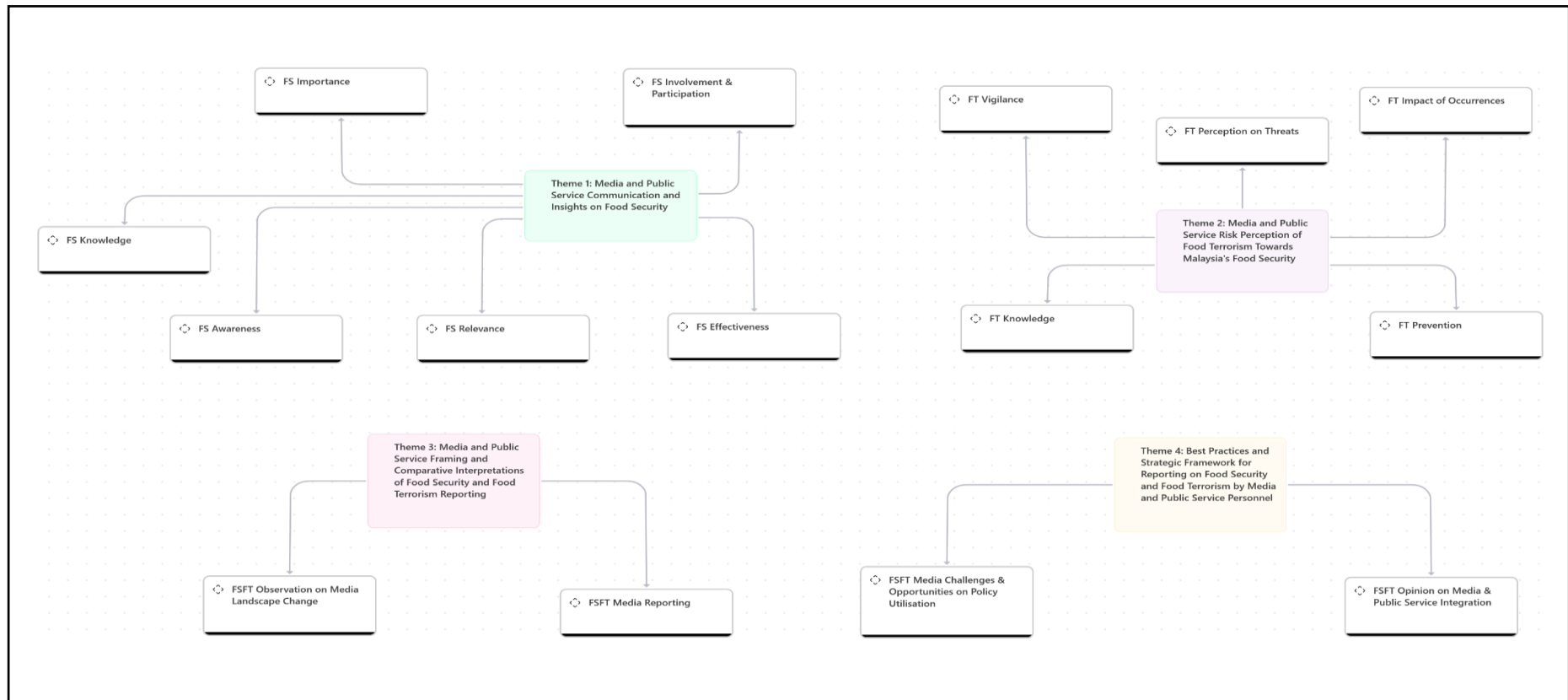


Figure 4.31 Final Thematic Map for “The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID-19”

4.7 Discussions on Research Objectives

The findings from the interview sessions will be deliberated further in this section to reach the research objectives via thematic analysis. The research objectives are (i) to explore the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel; (ii) to analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security; (iii) to understand the interpretations and communication of food security and food terrorism by media practitioners and public service personnel in their reporting; (iv) to recommend a model to guide media practitioners and public service personnel in effectively addressing reports on food security and food terrorism. Therefore, even though a prior comprehension of the study issue statement has been examined, the focus of this section is on comprehending and interpreting the importance of the findings.

4.7.1 Food Security Communication and Insights

The first research objective delved with the exploration of the government's policy, element and approach of food security (FS) in accordance to the comprehension of both categories of media and public personnel. The current and past policies were analysed via document analysis and further synthesised with the feedbacks from the selected informants. From the document analysis it was found that food security is consistently positioned as a high salience issue through formal policy instruments and alignment with long-term national and global frameworks. The existence of a dedicated national policy (DSMN), a sectoral policy focused on agriculture and food transformation (NAP 2.0) as well as a global benchmarking report (SOFI 2022) together reinforce the importance of food security as an issue requiring ongoing attention. This repeated emphasis across policy documents strengthens agenda-setting effects by clearly signalling to institutions, media organisations, and public service personnel that food security is a legitimate and enduring policy concern, rather than a short-term or occasional issue. As a result, media practitioners and public service personnel are more likely to view food security as a significant topic that warrants continued coverage, monitoring and policy action.

The in-depth interviews held found that most informants possessed adequate understanding on food security, including the policies and policy change made by the Malaysian government. The informants expressed their understanding by discussing on their knowledge and awareness of FS and the country's FS policy. The core pillars of FS were accurately mentioned, namely availability, accessibility, utilisation and stability. Having these pillars standardised by the UN via the FAO in the early 80's helped in assessing the informants' knowledge on FS and essentially allowed this study to gauge on the awareness as well as the relevance of our FS policy. The informants were in unison in mentioning the past and current FS policy of Malaysia, all aware of the relevance and effectiveness of our FS policy albeit a little division of opinion when discussing about the effectiveness, mainly during the execution phase of policies. All agreed that there was commitment from the Malaysian government, especially the relevant ministry responsible for food security, one of which was the rebranding of the ministry itself, from the Ministry of Agriculture and Food Industry (MAFI) to the Ministry of Agriculture and Food Security (MAFS). Many agreed that the name change and rebranding during the pandemic exhibited the significance of FS in Malaysia so much so that it has become a national agenda to protect FS and any threats towards FS can be deemed as undermining and threatening the national sovereignty.

Furthermore, the informants also brought up their involvement and participation whereby most if not all have had keen involvement with FS in the country either during policy formulation or dissemination via media reports and press releases, indicating that both categories of informants carry the same weight of importance in this study. The involvement and participation were the result of the Malaysian government's policy which put importance on engagement and discourse with relevant stakeholders, along with assistance and aid to those in need. For the record, during the pandemic, relevant stakeholders related to Malaysia's FS were given ample financial assistance and training by MAFS to ensure that these people could survive the MCO phase. For both media and public service personnel interviewed, all expressed their contentment with the communication flow of the information pertaining to FS during the pandemic as they were put in the loop and well informed although there was some struggle at the beginning of the pandemic to control the news on food shortages and threats of food insecurity. The beginning of the pandemic saw people stockpiling on food and resorting to panic buying after getting incorrect news and half-truth information on food shortages from social media. During this time, the mainstream media was then utilised

to help the government disseminate the right reporting and information pertaining to FS, gaining trust from the public and saw an increase of viewership of the mainstream media.

All in all, the findings for this specific research objective can be summarised and themed as the communication and insights of food security by media and public service personnel with which the knowledge, awareness, relevance, effectiveness as well as involvement and participation of these two groups with respect to food security are the sub-themes. All of the informants had experiences with the communication and insights of FS in various ways during the pandemic and as such their perspective of FS proved to be very valuable for this study.

4.7.2 Food Terrorism Risk Perception Towards Malaysia's Food Security

For the second research objective, which was to analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security, the findings derived from the document analysis of WHO's Terrorist Threats to Food document (FT1) and the IFST Food Defence information statement (FT 2) provide important insights into the conceptualisation of food terrorism as a threat to food security. These documents provide an authoritative reference point that shapes the construction of food terrorism. Together, they present food terrorism not as a distant or unlikely risk, but as a real and system-wide threat that requires attention from authorities, preparedness measures and coordinated responses. By formally including food terrorism in international health guidelines and professional food governance frameworks, these documents signal to governments, regulators, and information intermediaries, including the media, that food terrorism should be taken seriously alongside other food security issues. This agenda-setting effect is strengthened by the repeated use of threat-related language across both documents, making it more likely that media practitioners and public service personnel view food terrorism as a credible concern rather than a distant or unlikely possibility. For the in-depth interview sessions, the researcher managed to interview personnel from the Ministry of Agriculture and Food Security (MAFS) as well as the Malaysian Quarantine and Inspection Services or MAQIS. These informants explained that the government of Malaysia has taken a proactive action to control any form of threats against food from the country's borders with the establishment of MAQIS, an agency that receives

directives from MAFS. MAQIS was established to protect the nation's agricultural sector, playing a crucial role in maintaining Malaysia's immunity from pests and diseases that could jeopardise local agriculture and food security. The agency is tasked with enforcing rigorous quarantine protocols, performing inspections and upholding regulations concerning the import and export of agricultural products, animals and plants (MAQIS, 2011).

In essence, MAQIS is entrusted with numerous duties such as inspections for quarantines, certification of veterinary and phytosanitary grants, education and awareness in the form of trainings, monitoring and surveillance to identify and control any possible risks to food security and policy development by assisting MAFS create regulations pertaining to the trade in agricultural products and food safety. According to the findings, MAQIS is regarded as the first form of defence mechanism of FS against any harm and threats including FT. Nevertheless, the findings from the interview also found that MAQIS is bound to counter challenges in the form of insufficient manpower and funding which may impede the agency's capacity to perform thorough inspections at all ports and entry points. Additionally, insufficient awareness among stakeholders regarding the significance of compliance may result in violations and heightened risks. All of these issues and challenges must be resolved by the government considering that the existing mechanism is already present to counter any FT threats.

When asked about FT, most informants concurred that they have not actually heard of FT, at least in Malaysian soil although overseas especially in the United States post 9/11 the government has taken initiatives to acknowledge FT, then termed as agroterrorism, as a form of dire threats against humans (Olson, 2012). According to Olson (2012), agroterrorism is not something new as historical evidences have shown how as early as 6th Century B.C., the Assyrians poisoned enemy wells with rye ergot along with many other incidents during the World War 1 and more. WHO (2002) proactively released a comprehensive report namely "Terrorist Threat to Food", indicating how vigilant the world is with FT. In Malaysian context, MAQIS as the preventive and pre-emptive measure is indeed a good start to counter measure threats against FS.

As discussed earlier, any intentional threats towards food or food source and produce can be deemed as FT. Thus, government must take the initiative to properly define FT and its description as well as specific activities that can be considered as FT. Only then will the public be aware of such threats towards our FS. Although most

countries around the globe comply to the United Nations' definition of FT, many are still grappling with defining which activities constitute to FT. In the United States for example, any intentional crime against food whether in massive scale or otherwise, is considered as FT and will be charged according to the stipulated law. Contrarily, Malaysia has yet to formulate the right framework of legislation to acknowledge whether intentional crimes against food will be considered as FT or otherwise.

The findings also exhibited that FT posed low threats towards the country's FS, reason being that no confirmed activities relating to FT are being carried out in Malaysia thus far. Furthermore, the possibility and probability of FT activities in this country is small considering that all of the previous reported incidents regarding food produce and food source were mostly isolated and incidental instead of intentional. Even so, the informants all agreed that in times of crises, the possibility of FT is still there, thus Malaysia needs to be vigilant of these threats. One of the suggestions from the findings of this study proposed that in order to counter threats of FT, Malaysia can consider following the United States' guidelines of food safety and security from every checkpoint up to the consumers. The feedback from the informants yielded themes pertaining to their knowledge of FT in terms of occurrences, vigilance and perception on threats of FT, the impact of these occurrences, preventive measures and call of protocol and legislation. All in all, these sub-themes make up an overarching theme of FT risk perception towards Malaysia's FS.

4.7.3 Comparative Interpretations of Food Security and Food Terrorism Reporting

The third research objective dealt with understanding the interpretations of the informants relating to FS and FT reporting in Malaysia hitherto. With that in mind, the findings generated feedback on observation of the change of media landscape during the pandemic whereby inclusivity was among the change. With this inclusivity, both the public service and media were given flexibility to carry out their duties, whether on reporting or acquiring information on FS especially. The informants also touched on the technology usage such as new and old media whereby social media was heavily adopted as a form of communication between the government and the public.

During the course of the pandemic, the government has formulated policies on FS whereby transparency was also one of the changes observed. Krawczyk et al. (2021)

noted that the role of the media became more apparent in the dissemination of news and policies on FS including threats on FS. Reporting on crises and incidents were now made in real time and the public got access to the news faster than before. The findings also noted the heavy reliance on both new and old media during the pandemic as asserted by Gürkan and Serttas (2024). As such, there was a sense of responsibility in their part to ensure the deliverance of credible news and information. The traditional media was perceived as holding more credibility by the public however the government also had to keep up with the uncontrolled news and misinformation delivered via social media. It was during the pandemic that governments all over the world adopted social media and resorted to utilise the many platforms of social media to deliver the same information reported by the traditional ones (Pang et al., 2021).

Afrin et al. (2022) discussed about how the framing in agenda setting theory is very much evident during the pandemic and similarly in this study as well. The informants explained that news and information pertaining to FS especially during the pandemic were scrutinised, revised and validated prior to being disseminated and circulated to the public. These tasks are carried out by the public service personnel designated by the respective ministry/ministries before being reverted to the media for disbursement. The relationship between the public service and the media in food security is multifaceted and symbiotic. While public service agencies provide the essential information, data and policies that address FS and potential threats such as FT, the media plays a vital role in communicating these efforts to the public, shaping public opinion, ensuring accountability and advocating for those in need. Together, they help create an informed and engaged public that can drive positive change in food security practices and policies. The framing of food security in news media during the COVID-19 pandemic significantly influenced public perception, guided government responses and underscored vulnerabilities in global food systems. Malaysian media news framing of FS in various ways, characterising it as a crisis that would dampen the economy and global supply chain, a challenge for vulnerable populations as well as a matter of global concern, all of which required government intervention in the form of a comprehensive policy formulation focusing on creating awareness and public engagement.

All of the feedback by the informants generated the key theme of comparative interpretations and framing of both FS and FT. Comparative interpretation and framing amongst the informants can be divided into differences and shared similarities. While food security and food terrorism share a focus on food systems, they differ significantly

in how they are viewed and articulated in public discourse. Food security addresses the larger, systemic issues of availability and sustainability, whereas food terrorism focusses on specific, acute risks to public health and national security. The opposing tones of two frames, one optimistic and solution-oriented, the other fear-driven and risk-focused, influence public perceptions and policy decisions on a local and global scale.

4.7.4 Best Practices and Strategic Framework on Food Security and Food Terrorism

The fourth and final research objective sought for the best practices to build a strategic framework on integrating both media and public service in FS and FT. The findings firstly highlighted the opportunities and challenges of public service utilising the media and its reporting and coverage of FS and FT. In addition, the findings also generated opinions on the integration of the media and public service on both subjects as well.

For this section, this study took into consideration of the flow from the first to the final research objectives to offer the suggestions made from the findings after all of the interviews are successfully carried out. Generally, the findings from the first research objective proposed the Malaysian government to have an all-inclusive FS policy to also cover threats against FS, FT included. A study done by Le et al. (2024) found that to date, the DSMN 2021-2025 offers the best policy in terms of FS preparedness. DSMN 2021-2025 lacks strategies to countermeasure threats towards FS such as FT. This coincided with the second research objective on FT whereby the informants were very intrigued by FT and realised that the vigilance and awareness on FT is still below par, hence the need to review or address the issue of FT more strategically and proactively via a conclusive policy that covers FS guarantee, preparedness as well as threats against FS. In conjunction with an all-inclusive FS policy, one of the findings from this study also proposed for the consideration of utilising Food Sovereignty in Malaysia.

According to La Via Campesina (2007), food sovereignty is the right of people to define their own food and agriculture systems, prioritising local production and consumption. Wittman et al. (2010) explained further that food sovereignty emphasizes the control of food systems by those who produce, distribute and consume food, rather than by large corporations or global markets. Just as food security, food sovereignty

also possesses key principles which include local control, sustainability, self-sufficiency, social justice and cultural relevance (Patel, 2009). Jarosz (2014) elaborated the differences of both terms by stating that if food security emphasizes in ensuring that people have enough food to meet their needs, regardless of where or how it is produced and often measured at the household, national or global level; food sovereignty on the other hand is more political and rights-based, focusing on who controls the food system and how it is governed. It advocates for a shift away from industrialised, globalised food systems toward localised, community-driven approaches.

The findings also called for the hybrid use of both traditional and new media, with more emphasis on the utilisation of social media and new normal reporting. The media informants all found social media to be a powerful and useful tool to disseminate information and policy to the general public. Additionally, they are also more comfortable carrying out reporting duties with more flexibility without the need to be at the desk as per regular office setting. Furthermore, there were also suggestions from the informants for the government to appoint Key Opinion Leaders (KOLs) and social media influencers to heighten awareness on both FS and FT. Wang et al. (2024) also elaborated on KOLs whereby these individuals serve a crucial intermediary function in enhancing the effectiveness of mass communication by disseminating information to the public and facilitating a two-tiered information distribution process. Opinion leaders in digital contexts are notably influential and can, to a degree, shape societal perspectives. This information is quickly and extensively spread across social media platforms in a viral manner, significantly expanding the reach and reception of the content. As a result, the impact and influence of KOLs are amplified and reinforced (Wang et al., 2024). Aside from the traditional reporting and news publishing, KOLs will add greater advantage in terms of penetration within the younger generations whom seek news and information via the various online and digital platforms. All in all, the Malaysian government needs to understand the preferences of all different target groups in terms of news penetration whereby the shift or rather the assimilation of new media will add value to the existing reporting by the media.

Moreover, the findings yielded the adoption of Social Capital Theory by both media and public service, offering a framework for enhancing public resilience, cultivating trust and enabling collaborative action to prevent or alleviate challenges to FS. Aside from the Agenda-Setting Theory, the utilisation of Social Capital Theory in FS, particularly in addressing FT, highlights the significance of media and public

service towards effective community networks, trust and collaboration. By promoting collaboration at the local level, communities may both avert and alleviate the effects of FT while simultaneously constructing more resilient FS. Social capital establishes a basis for a more responsive, aware and proactive society capable of protecting its food supply from intentional disruptions and interruptions, hence sustaining FS despite such obstacles. The linking, bonding and bridging elements in the Social Capital Theory instigate a coordinated approach between FS and FT. This is essential to counteract FT threats and ensure that communities remain safe, informed and vigilant. FS and the mitigation of FT require a collaborative and integrated approach between media and public service. By adopting best practices and implementing a strategic framework that emphasizes trust, transparency, preparedness and collaboration, both groups can strengthen FS and reduce the risks posed by FT. Through timely reporting, proactive crisis management and effective public engagement, the media and public service can protect communities and build more resilient and secure FS.

The findings of this study coincided with long withstanding relation between the media and public service. Aside from the interviews held, according to past literatures and both Agenda-Setting and Social Capital theories employed in this study, media and public service go hand in hand in terms of ensuring that the country's FS remain resilient and robust despite undergoing crises in multifaceted forms, one such example being the COVID-19 pandemic.

4.8 Discussion of Research Findings

This study has managed to mitigate the gap of research findings related to the existing research in the study of food security (FS) and food terrorism (FT) from the points of view of the media and public service, particularly the policies and threats concerning the subjects in Malaysia. The four research objectives focused are: RO1) To explore the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel; RO2) To analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security; RO3) To understand the interpretation and communication of food security and food terrorism by media practitioners and public service personnel in their reporting; and RO4) To recommend a model to guide media

practitioners and public service personnel in effectively addressing reports on food security and food terrorism.

4.8.1 Assessing the Food Security Situation Post Pandemic

As soon as the Malaysian government confirmed and announced the date for the endemic phase which was on the 1st of April 2022, the decision was met with mixed reactions (Gani et al., 2023; Sapiai et. al., 2024). Since the research is limited to the events from the pandemic phase leading up to the endemic phase, the policies pertaining to food security (FS) were still being discussed and formulated. The framework of DSMN has begun to take shape despite the country seeing the change in government administration thrice (Bernama, 2022).

Amongst the significant changes post COVID-19 has got to be the seriousness of the Malaysian government in ensuring that FS efforts are well taken care of. That said, the ministry responsible for food security, previously known as the Ministry of Agriculture and Food Industry (MAFI) has had its name changed to the Ministry of Agriculture and Food Security (MAFS) as reported by BusinessToday (2022). Overseeing matters relating to FS, MAFS is also responsible for engaging media as one of its efforts to create awareness and reduce the threats of food insecurity, a situation very prone to happen during crises. Post COVID-19, the government took serious stance on enhancing its food security and measures are being taken, which will be deliberated in the following paragraphs.

The most crucial aspect of FS during a crisis like that of COVID-19 is to assess how the government responded to such a crisis (Chang et al., 2023). As soon as the pandemic hit the globe, most governments faced the challenge of not knowing the scale of the crisis and the impact that it would unleash in terms of politics, economics as well as social implications. This is when governments including Malaysia took the necessary measures to evaluate or rather reevaluate effectiveness of government policies and interventions in ensuring food security (Dardak, 2020). As such, we could see how the Malaysian government made the conscious decision of formulating new and comprehensive policies i.e., DSMN where the implementation of social safety nets and support for vulnerable populations were all being considered (AstroAwani, 2021; Bernama, 2021).

Aside from that, according to all of the informants interviewed, the main crisis concerning FS that occurred during COVID-19 was the supply chain disruption as well as a halt in food crop and food production due to the MCO. These two incidents caused the government to construct better actions in terms of ensuring that supply chain and food production is always on a steady stream and on surplus. Maintaining supply chain has been one of the utmost priorities onwards which include transportation, logistics and distribution networks. Moving forward, the government has started to evaluate the status of agricultural production and the resilience of the food supply chain post COVID-19.

Moreover, economic implications and those measures involving international trades are also to be given thorough evaluation especially the economic impact of COVID-19 on the livelihoods of individuals, especially those involved in the food sector including to examine inflation rates and their impact on food prices, to assess the impact of global disruptions on Malaysia's food imports and exports as well as to consider trade agreements and partnerships that may influence food security. Aside from that, external factors such as the environment especially climate changes must be taken into consideration too as all these may affect agricultural productivity. There should also be a focus on technological innovations to enhance agricultural practices and ensuring food security.

4.8.2 Food Terrorism - An Almost Forgotten and Non-Existent Sphere in Malaysia

As asserted earlier in the beginning of this research, food terrorism (FT) remains highly unfamiliar to most Malaysians with exception to those who have been exposed to such incidents or are doing research on it. Throughout this research, this study managed to connect and developed a network with few of this country's FT experts and enthusiasts. Although this country may not have experienced FT incidents or exposed to the threats unlike other nations, prevention measures must be taken along with the formulation of new food security policies. It is pertinent to insert measures to protect the country's food security not only during crises like the COVID-19 pandemic, but also from FT threats that may occur if our policies are not comprehensive enough. Highlighting the threats of food terrorism requires cooperation from all levels, as such,

this study adopted the utilisation of the Social Capital Theory to assist in creating awareness and preventing its threats.

Amongst the actions that can be implied is firstly by adopting security measures in the form of evaluating the security measures in place to safeguard food production, processing and distribution facilities. With that, there should also be risk assessment so that the potential vulnerabilities in the food supply chain that could be exploited for malicious purposes can be analysed further. To do this the government may require some form of intelligence and surveillance system in monitoring and preventing potential food terrorism threats.

Moreover, the prevention of FT threats is a collective effort that will yield better results with international cooperation. The Malaysian government may consider collaborations with international institutions and neighboring countries to address and mitigate food terrorism risks. Only with such collaboration that these countries can form a mutual understanding via standardised legislation and regulations whereby the same legal framework and jurisdictions are put in place to prevent and respond to acts of food terrorism in all participating countries. Aside from that, the informants interviewed also expressed the need to have more enforcement on health and safety standards along with research and development (R&D) on FT by the government. According to one of the informants, to date, there has only been one (1) academic conference on FT in Malaysia, held in 2017 and to date, no other follow-up research or study done on the topic except for two (2) academic papers only. This is certainly alarming considering the threats of food insecurity that we faced during the pandemic that might make us susceptible to the threats of FT. That said, these governments must also then be responsible in measuring and counter-measuring the long-term socioeconomic impact of the pandemic on both FS and potential implications for FT.

Finally, efforts to raise public awareness about FS, safety and the potential threats of FT must also be properly examined and be carried out by the assistance of the media. This is where the media can play its vital role in disseminating the threats of food terrorism to the public. At the end of the day, the government and public must both strive for community resilience whereby local communities are advised on ensuring access to food during crises. This will be explained further in the following section of this chapter as part of the final research objective i.e., to propose best practices on eradicating FT with the reassurance of FS.

4.8.3 Media Reporting and its Limitations on Food Security and Food Terrorism

Several studies have demonstrated that media is a potent tool that has been utilised to bring about societal transformation (McLuhan & Lapham, 1995; Castells, 2013) and researchers are to analyse the structure, perspective and formal and technical features of media reporting to understand it effectively (Hall, 1980; Lull, 2000). This is a noteworthy observation as the media possesses the authority to select which content can be aired and from which standpoint. As the media exerts impact on the public's perceptions, research on media reporting has a long tradition of being the topic of discussions in academic. For many years, a widely accepted concept in media literature is that information should be pertinent and precise for its intended use and comprehensive and trustworthy for the topic at hand, particularly when it comes to public health matters.

According to Harcup and O'Neill (2016), a potential pandemic fulfills almost all the criteria for news value. These criteria include unexpectedness (the sudden outbreak), consonance with expectations (the prediction of a new pandemic), intensity increase (the rising number of patients and fatalities), negativity (the possibility of a catastrophe), relevance (the actual risks involved), meaningfulness (the fear of an epidemic and personal risks), unambiguity (the flu is well-known), continuity (daily updates) and unpredictability (the severity of the epidemic).

The level of public concern for specific topics is influenced by the extent of media coverage they receive (Behr and Iyengar, 1985). The media exerts a significant impact on the audience where the agenda has a crucial role in shaping citizens' priorities and significantly influences their perspectives. This is accomplished through the regulation of the determination of which news possesses informative relevance and the allocation of appropriate resources for its broadcast. Moreover, if the framing theory proves to be successful in this instance, the public's perspective will be influenced by the media's subjective interpretation. Recent theoretical advancements have demonstrated that media coverage might be regarded as a potent means to mitigate the transmission of COVID-19 (Zhou et al., 2020). Nevertheless, certain media portrayals of COVID-19 have exerted an adverse impact (Lyu et al., 2020). The outbreak elicited widespread global media coverage and as expected the new flu remained a prominent subject on the front pages for approximately two (2) years before normalcy returned.

The function of media reporting is crucial in influencing public perception and comprehension of various matters, particularly those pertaining to food security and food terrorism. Nevertheless, it is crucial to acknowledge that media coverage possesses both advantages and constraints in these domains. Media outlets are important venues for conveying information to a wide audience. They have the ability to promote consciousness regarding matters of food security, emphasize worldwide and regional challenges and enlighten the general population about the need of a stable food supply chain. Media coverage can highlight policy deficiencies and inadequacies in handling issues of food security and terrorism. This focus has the potential to result in heightened advocacy endeavors, alterations in policies and governmental initiatives aimed at bolstering food security measures. It is essential for the media to play a significant role in disseminating information that is both timely and accurate during times of food-related emergencies or outbreaks of foodborne illnesses. In addition to being vital for coordinating responses across authorities, this can also assist the general public in making judgments based on accurate information. Reporting in the media has the potential to encourage public participation by fostering conversations and debates on topics such as terrorism and food security. Participation in this activity has the potential to result in increased community involvement, support for projects and a need for transparency from higher authorities.

Adversely, media outlets frequently prioritise the dramatic or sensational elements of a story in order to attract attention. Such a situation might result in distorting facts, magnifying hazards and distorting the true level of threat posed by FT or food insecurity. In the interest of brevity and simplicity, the coverage provided by the media may lack the depth that is necessary to fully comprehend the complicated challenges that are associated with FS. This can lead to an oversimplification, which makes it difficult for the general public to understand the factors that are at the root of the problem and the potential solutions. Media coverage often focuses on particular places or situations, which can result in the neglect of difficulties in other areas. This geographical bias can lead to a distorted worldwide outlook on FS and FT, disregarding the challenges experienced by marginalised or underreported regions. There is a strong correlation between commercial interests, such as advertising revenue and the power of media sources. It is possible that this impact will have an effect on the framing and prioritisation of news, which may result in essential concerns dealing with food security and terrorism being pushed to the background. The media operates at a rapid pace and

people have limited attention spans. Enduring problems, like the structural obstacles related to ensuring access to sufficient food, may face difficulties in sustaining public interest and media attention over time. To address these limitations, it is essential for consumers to seek information from diverse sources, critically evaluate media reports and be aware of potential biases. Additionally, journalists and media institutions can play a role in promoting balanced, in-depth reporting to enhance public understanding of food security and food terrorism issues.

4.8.4 Preparing Malaysia's Food Security for the Worst: Pandemic, Post Pandemic and Food Terrorism

Preparing Malaysia's FS for a range of potential threats, including pandemics, post-pandemic challenges and FT, requires a comprehensive and multi-faceted approach. In terms of food security sustainability, the most crucial effort that the government may consider is to establish strategic food reserves to mitigate the impact of supply chain disruptions. These reserves may be regularly updated and managed based on evolving needs. Once these food reserves are up and running, the government has to be supply chain resilient whereby government via its ministries and agencies diversify and strengthen supply chains to reduce vulnerabilities exposed during the pandemic. Not only that, to enhance FS, there must also be diversification of food sources and agriculture along with the implementation measures to ensure the resilience of critical industries.

Le et al. (2024) conducted a study comparing three policies in Malaysia related to FS preparedness and concluded that the National Food Security Policy Action Plan 2021-2025 or DSMN 2021-2025, is the most comprehensive and definitive to date, as it addresses preparedness against potential threats to the nation's food security. The study indicates that FS preparedness encompasses essential elements such as crisis management, readiness, teamwork and agriculture to tackle and alleviate difficulties associated with FS, including FT. As suggested by the informants from MAFS and MARDI, aside from a consistent support towards local farmers by implementing precision agriculture and digital tools for farmers. Incentivising sustainable farming practices together with technological integration will further yield improved efficiency, traceability and resilience. Then again, all these measures require a medium to disseminate all of the information to instill public awareness hence the government must

collaborate with the media to educate the public on the importance of FS and sustainable consumption. Only by having consistent awareness and readily available information that it would better foster community engagement in local food systems. Adapting and refining these strategies based on evolving threats and circumstances will be essential for Malaysia's resilience. Regular drills, scenario planning and ongoing collaboration among government agencies, private sector entities and the public will contribute to a more robust and adaptive preparedness framework.

This will include preparation from different phase i.e. during pandemic along with post pandemic and recovery. For pandemic preparedness and response, there should be a form of health infrastructure strengthening by investing in healthcare infrastructure, including hospitals, testing facilities and medical supplies. The government must also take into consideration a robust public health surveillance system for early detection and response.

In post-pandemic recovery, there has to firstly be economic resilience to kickstart the country's economy after a crisis is diverted. Government is to implement economic stimulus packages to support businesses and individuals affected by the pandemic. Diversification of the economy is also another measure that can be taken to reduce dependence on specific sectors. To enhance the individual economy of the people, the government must also safeguard the people's social safety nets, especially in aiding the vulnerable populations and those facing economic hardships. This may include the implementation of targeted programs for job creation and skills development. For the citizens whom are battling mental health issues, the government must also take into consideration to establish mental health support programs to address the psychological impact of the pandemic on the population.

4.9 Chapter Summary

This chapter presented the findings gathered from document analysis of five (5) policy text and institutional documents as the first phase and subsequently from twelve (12) informants comprising of one media practitioners and public service personnel all of whom have the expertise in handling and being involved in food security and food terrorism. The document analysis as well as the in-depth interview sessions held yielded data which were later analysed using thematic qualitative analysis to achieve the research objectives.

The first objective was to explore the Malaysian government's policy, elements and approach to food security as perceived by media practitioners and public service personnel. Six (6) questions were asked to explore the knowledge of informants on food security, its components including the significance and strengths of these components. Next, in section two (2), the researcher inquired pertaining to food terrorism and its threats towards Malaysia's national food security policy during a pandemic akin to COVID-19. As with the first research objective, five (5) questions were asked in order to achieve the second research objective which was to analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security.

Moving on, the researcher attempted to understand media's interpretation on food security and food terrorism reporting. Informants were asked questions regarding their involvement with the topic of study, the existing initiatives done by the Malaysian government and the possibilities of utilising food security policy to prevent food terrorism threats by using the media. Finally, the last research objectives dealt with recommendations on developing a model to guide media practitioners and public service personnel in effectively addressing reports on food security and food terrorism. Two (2) questions were posed to the informants and findings were then gathered to develop a set of guidelines to further strengthen Malaysia's food security with the aid from the media.

All in all, the findings have facilitated the researcher in firstly understanding the concepts and elements of food security and food terrorism along with the impact and role of the media on these two entities; and secondly in achieving the research objectives of this research. The following chapter will present the conclusion and recommendations of this study to essentially complete and conclude this research.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Chapter Introduction

In this concluding chapter, the analysed data that were collected based on the specific major themes deduced from the research objectives and goals is covered in length. This section provides conclusion, implications, limitations and recommendations of the study. The problem statement, research questions, research objectives, methodology discussion and research findings are reported simultaneously. This chapter focuses on the findings related to the understanding of media practitioners and public service personnel regarding food security and food terrorism. The implications for theory and practice are presented accordingly. The chapter concludes by outlining the research limitations and providing recommendations for future research.

5.2 Conclusion of the Study

To summarize, the study on Malaysian media practitioners and public service personnel understanding on food security and food terrorism dealt with the experience and perception of both the media as well as the government informants on both food security and food terrorism during a crisis like COVID-19. The understanding of these nomenclatures resulted in both groups of informants sharing and expressing their knowledge, awareness, interpretation, challenges and suggestions in improving the current state of Malaysia's food security so that the policies formulated can be leveraged to mitigate the threats of food terrorism, among others.

From this research, the terms and policies concerning food security were comprehended further as well as the investigation of potential threats of food terrorism was better sought. Scholars such as Le et al. (2024) as well as Razak et al. (2020) have time and again highlighted the multifaceted threats towards food security especially in times of crises, whereby one of the threats come in the form of food terrorism. Nevertheless, the clear directive of United Nations' food security description and World

Health Organization's conclusive explanation of food terrorism coupled with the theories employed were indeed helpful in providing distinct focus to prevent the study from disarray.

Albeit divided into two distinct groups, the informants have presented similar interpretations on the subjects, only to be differentiated by the level of proximity and inclusivity of the informants on the subjects being studied. The media informants, having been constantly included in the dissemination and briefing of policies received clearer and better advantage on understanding of food security, however this group performed similar in terms of food terrorism threats as with the public personnel informants. Concurrently, this has resulted in acquiring factors contributing to the lack of awareness and comprehension of both food security and food terrorism.

The outcome of this study yielded a model that may be utilised by the media and the Malaysian government to deal with future crisis or mishaps pertaining to food security and food terrorism reporting and acceptance by the public. Although the study involved two (2) groups of informants, it would be sufficient to have one framework that is modified from the earlier conceptual framework to further illustrate that it is essential for both the media and government to work together to achieve better public awareness and perception. The figure on the following page depicts the key findings of this study.

This study employed a qualitative technique, as it provides interpretative and critical insights into subjects by observing human behaviour and valuing individual experiences. The study adhered to the phenomenological method and is constrained by each stage and procedure that constitutes the entire process. The phenomenon is observed on the perspective and understanding these subjects, which involved 6 media personnel as well as 6 public service personnel, all of whom are Malaysians and have had vast experiences including participation with involvement in food security and food terrorism policy formulation and reporting.

Collectively, the data saturation was achieved at informant 8 out of the 12 informants. The study focused on the intellectual insights and framing of information the informants with regards to food security and food terrorism, in which:

- i. the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel is explored;

- ii. Media practitioners and public service personnel conceptualisation of food terrorism as a threat towards Malaysia's food security is analysed;
- iii. Media practitioners and public service personnel interpretation and communication of food security and food terrorism reporting is understood;
- iv. A model to guide media practitioners and public service personnel in effectively addressing reports on food security and food terrorism is recommended.

Since this study is related to food security and food terrorism, this study approached it with in-depth interview supplemented earlier with document analysis to answer the first two research questions whilst achieving the research objectives. For the subsequent research questions and research objectives, in-depth interviews with probing method were carried out. The subject being studied whom were participated informants of the in-depth interview involved local Malaysians, male and female aged between 30 to 61 years old for both media and public service categories. They were all selected from purposive method and criterion-based sampling. Altogether, there were 12 informants that consisted of 6 media professionals and 6 public service servants. This study systematically stored all collected data following established steps and procedures. In qualitative research, it is standard practice for each interview session to be transcribed verbatim, ensuring that no words or sentences are omitted. All activities were conducted in alignment with the plan, maintaining a consistent emphasis on ensuring smooth execution and the quality of data and findings, grounded in calculated trust and austerity.

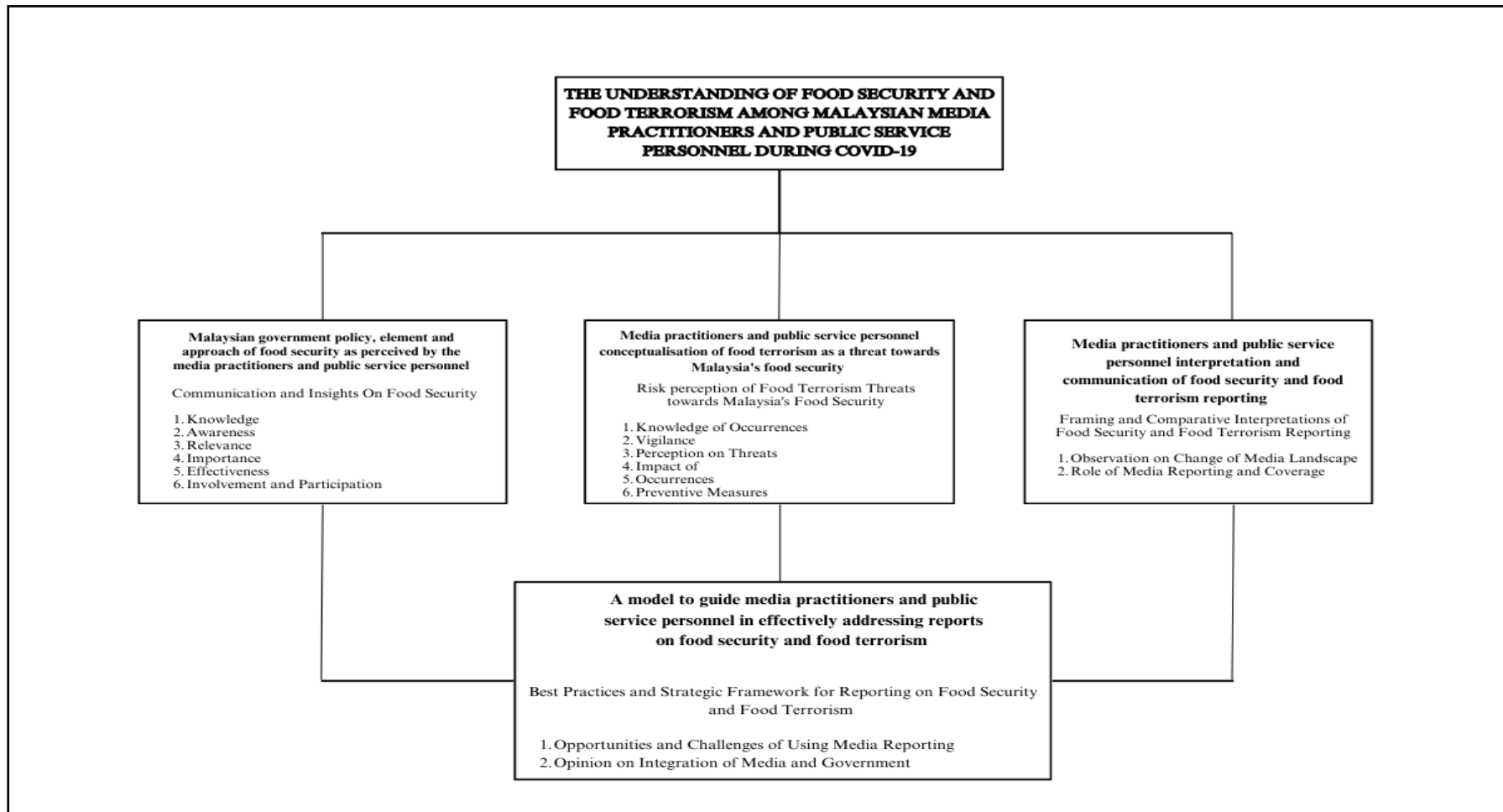


Figure 5.1 Key Findings for “The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID-19

Figure 5.1 presents the key findings of the study, outlining the understanding of food security and food terrorism among Malaysian media practitioners and public service personnel during the COVID-19 pandemic. The findings reflect a progressive analytical structure aligned with the study's research questions and objectives. Specifically, the findings move from perceptions of government policy, to conceptualisation of food terrorism as a threat, to interpretation as well as communication practices and ultimately culminate in the development of a guiding model for effective reporting and governance. The key findings, derived from thematic analysis demonstrate that food security and food terrorism are not merely policy or security issues, but are socially constructed through media practices, institutional communication and crisis contexts.

Firstly, the findings indicate that Malaysian government policies and approaches to food security are primarily perceived through communication dimensions such as knowledge, awareness, relevance, effectiveness and public involvement. Public service personnel generally exhibited stronger familiarity with policy structures, while media practitioners evaluated food security initiatives based on clarity, accessibility and public resonance. This finding reflects the agenda-setting role of the media, whereby sustained coverage of food availability, prices and supply disruptions during COVID-19 elevated food security as a dominant public issue. However, variations in understanding suggest that policy salience is influenced not only by policy design but also by how consistently and effectively it is communicated to the public.

Next, findings also reflect that food terrorism is conceptualised as a potential and anticipatory threat rather than an experienced one. Themes such as vigilance, perception of threats, impact and preventive measures reveal that both media practitioners and public service personnel relied largely on global narratives and hypothetical scenarios in the absence of domestic incidents. This reflects a priming effect, whereby heightened attention to food insecurity during the pandemic sensitised actors to related but less visible risks such as food terrorism. Food terrorism thus remained cognitively present but not prioritised within public discourse, indicating that issue salience alone does not guarantee sustained attention without direct triggering events.

Moreover, the findings demonstrate that the interpretation and communication of food security and food terrorism are shaped by framing practices and changes in the media landscape during crisis conditions. Media reporting prioritised immediate,

tangible concerns such as food supply stability and economic survival, while food terrorism was often subsumed within broader food security narratives. This selective emphasis illustrates the operation of framing theory, where certain aspects of reality are highlighted while others are downplayed. Public service personnel acknowledged that such framing influenced public perceptions and, in some cases, institutional communication strategies, reinforcing the media's role in shaping how risks are understood rather than merely what issues are discussed.

Finally, the findings essentially culminated in the development of a guiding model to support more effective reporting and communication on food security and food terrorism. The model emphasises best practices, strategic reporting, and stronger integration between media and government actors. This outcome aligns with social capital theory, as the findings suggest that trust, cooperation and shared understanding between institutions are critical for effective crisis communication. Fragmented messaging and inconsistent interpretations were found to undermine public confidence, whereas coordinated communication was perceived as enhancing credibility and resilience.

In summary, the key findings demonstrate that during the COVID-19 pandemic, food security emerged as a highly salient issue through agenda-setting processes, while food terrorism remained a secondary concern shaped by framing and priming effects. The study highlights the importance of social capital in fostering effective media and government collaboration ultimately offering a practical model to strengthen communication and governance responses to risks concerning food security in times of crisis.

5.3 Implications of the Study

Based on the interviews done for this research, the informants have all assisted this research to build a framework and suggest propositions all in order to achieve the last and final objective of this research and that is to propose recommendation to aid policies on eradicating food terrorism with the reassurance of food security. As the informants were from various backgrounds, expertise as well as experiences, this study managed to record valuable information in ensuring that this research will well benefit the government and the public once it is completed.

5.3.1 Implications on Theory of Study

Agenda-Setting Theory, Social Capital Theory, food security (FS) and food terrorism (FT) are diverse concepts that can be linked in various ways. These theories and concepts intersect each other and hence became the ultimate reason for a study to be conducted. The exploration process to complete this study has allowed this research to gain very rich and valuable information in order to produce a meaningful thesis.

We shall firstly look at media and public service with both Agenda-Setting and Social Capital theories. The former suggests that the media has the power to influence the public agenda by deciding which issues are more prominent and deserving of attention. In the context of FS and FT, media play a crucial role in shaping public perceptions and policy priorities. They can highlight or downplay the significance of these issues. Social capital theory emphasizes the importance of social networks, trust and shared values in a community. Media can contribute to the formation of social capital by providing information that helps build trust and shared understanding within a community. As such, media can highlight successful community initiatives addressing FS.

When these two theories were analysed with FS and FT, Agenda-Setting Theory suggests that the media's selection of news topics influences the public's perception of the importance of those issues. By framing stories related to FS and FT, the media can influence public opinion and political priorities, potentially leading to increased attention and resources directed toward these issues. Social Capital Theory on the other hand, underscores the role of social networks and community relationships in addressing challenges. Communities with strong social capital may be better equipped to collaboratively address issues related to FS and respond to incidents of FT. Media can contribute to the formation of social capital by disseminating information that fosters community engagement. Reports on successful community initiatives, collaborative efforts and shared values can enhance social capital and contribute to more effective responses to food security challenges and potential acts of food terrorism.

Agenda-Setting Theory explores how media, interest groups, policymakers and other influential actors shape the public and governmental focus on certain issues. The core idea of agenda-setting is that while media or other influential actors may not always dictate how individuals think about an issue, they can significantly influence what people think about. It can influence the perceived importance of specific issues or events

in the public and governmental sphere (McCombs & Shaw, 1972). In the context of food security and food terrorism, agenda-setting theory helps explain how these issues are framed in public discourse and the policy agenda. Both food security and food terrorism involve complex interconnections between policy, media, public perception and crisis management. Agenda-Setting Theory provides insight into how these issues rise to prominence and gain attention or, conversely, how they might be overlooked despite their importance. Agenda-Setting Theory is relevant to understanding how food security is prioritised by governments, the media and other key stakeholders.

The media plays a critical role in determining which issues are placed on the public agenda. Through news coverage and social media campaigns, the media can elevate food insecurity as well as any form of threats towards food security as urgent global or national problem. For instance, media coverage of the impact of environmental crises on food production can shift the public and governmental attention toward food security (McCombs, 2004). By continuously highlighting food shortages issues, media outlets can increase public concern and push governments to allocate resources to food security programs. FS often competes with other issues for political attention. In the absence of media pressure or public demand, FS may remain a low priority. However, when there exist threats on FS such as rising food prices, food shortages or the effects of health crises are framed as urgent by the media, they may prompt governments to prioritise food security in their political agenda.

The way FS is framed in media reports can influence the public's understanding of the problem. For example, framing food insecurity as a humanitarian issue versus an economic or political one can shift the types of interventions that are pursued. The framing of FS as a moral issue may push policymakers to approach it from a human rights perspective, while an economic frame may prioritise policies that increase food production or stabilize food markets (Sheehy & Chen, 2022). When an FT incident occurs, it often generates significant media reporting that amplifies the perceived threat. For instance, if a pathogen is introduced into the food supply, the media may sensationalize the event, leading to heightened public concern. This increased media focus can prompt government agencies and health organisations to respond with public health measures, food safety regulations and legislative actions. As a result, the issue of food terrorism can quickly rise to the top of the political agenda (Perry & Lindell, 2003). Government agencies rely on the media's agenda-setting influence to determine how to respond to food terrorism threats. Following highly publicised food safety scares or

terrorist attacks on the food supply, policymakers may pass new regulations, such as stricter food safety standards or more robust food traceability systems, to prevent similar attacks in the future (Adelaja et al., 2019). The way food terrorism is framed by the media can influence the public's understanding of the threat. If framed as a deliberate attack on national security, food terrorism can trigger a nationalistic response, with government agencies taking swift action to protect citizens. On the other hand, if food terrorism is framed as a preventable health issue, the focus might shift to strengthening food safety measures and improving the overall resilience of the food system. The media framing of food terrorism as an economic issue, such as disruptions to food supply chains, can also lead to policy responses that focus on strengthening market stability and trade security.

Agenda-Setting Theory plays a pivotal role in the way FS and FT are perceived and acted upon by the public, media and policymakers. Media reporting and public framing of food insecurity can shift it from a marginal issue to a policy priority, while food terrorism, through crisis amplification and framing, can elevate food safety to the top of the political agenda. By understanding how issues are framed and brought to the forefront of public concern, stakeholders can better influence policy outcomes related to food security and food terrorism.

Social Capital Theory emphasizes the importance of social networks, trust and norms that enable individuals or communities to collaborate towards mutual goals and is increasingly being applied in contexts such as food security. As explained in the earlier chapter, social capital can be divided into three types: bonding social capital (close, personal networks), bridging social capital (links between distinct groups) and linking social capital (connections to institutions) (Putnam, 2000). These networks and relationships enable communities to work together, share resources and cope with challenges, including those related to food security. High social capital communities may be more resilient to food terrorism for several reasons. First, strong social networks allow for quicker dissemination of accurate information and reduce the spread of fear-driven narratives. Second, cohesive communities are more likely to support each other during disruptions, share resources and organise local responses. Third, trust in institutions enhances compliance with public health advisories and mitigates the spread of disinformation (Aldrich, 2012). Conversely, communities with weak social capital are more vulnerable. During a food terrorism event, mistrust in institutions can lead to public panic, hoarding and even violence. This dynamic was observed in non-terrorist

crises such as the early COVID-19 pandemic, where misinformation and supply chain anxiety led to widespread food insecurity, particularly in socially fragmented regions (Laborde et al., 2020).

Achieving FS involves ensuring food availability, access, utilisation and stability (FAO, 2008). However, in addition to the traditional challenges that threaten food security, food terrorism has emerged as a contemporary threat to food systems (Razak et al., 2020). Food terrorism refers to the deliberate contamination or disruption of the food supply chain with the intent to harm public health, induce fear or disrupt the economy (WHO, 2002). This can range from poisoning food or water supplies to introducing pathogens into food production processes (Jurica et al., 2019). Social capital plays an important role in both preventing food insecurity and responding to crises, including those caused by FT. Social capital, in this context, can offer resilience and coordination in managing both everyday food security and extraordinary disruptions like FT. Strong social capital facilitates resource-sharing networks, especially in vulnerable communities. People in tightly knit communities are more likely to share food and resources, which can be especially valuable during periods of food insecurity. Strong bonding and bridging social capital allow communities to share information about food sources, farming techniques and local market trends, increasing food access and availability (Narayan & Pritchett, 1999). Communities with strong social capital are more capable of organising collective responses to agricultural challenges. For example, farmers might work together to improve agricultural practices or advocate for better infrastructure, which can improve food production and distribution. Collective management of resources, such as water, land and food storage, can increase resilience to shocks like droughts or floods, which are exacerbated by global climate change (Pretty & Smith, 2004). During crises, such as economic downturns, natural disasters or food price hikes, social capital can act as a buffer. Communities with high levels of trust and cooperation are more likely to come together and provide mutual aid, thus helping individuals and families to navigate periods of food insecurity. In some cases, these social networks may also offer a protective response in times of emergency, by organising relief efforts (Dynes, 2006).

FT undermines public trust in food systems. Social capital, specifically trust between consumers, producers and regulators, is essential in mitigating fears related to food safety and terrorism. In communities with high social capital, relationships between stakeholders can help build transparency, making it harder for malicious actors

to disrupt the food supply unnoticed. Governments, producers and consumers can form partnerships that focus on food safety measures, surveillance and early-warning systems, which strengthen the resilience of food systems against sabotage (Jurica et al., 2019). In the event of an FT attack, strong social capital can facilitate rapid response and recovery efforts. Communities that trust each other and have established mechanisms for cooperation are better equipped to coordinate responses, whether through the dissemination of information or the delivery of emergency food supplies. These communities can organise to mitigate the impact of food terrorism by supporting affected populations and restoring food systems to normalcy (Aldrich & Meyer, 2015). Linking social capital, which connects local communities with national and international institutions, can help communities to respond effectively to food terrorism. External organisations, such as food safety authorities, public health institutions and law enforcement agencies, can work alongside local communities to trace the origin of food attacks and prevent further disruptions. The integration of local knowledge and external expertise enhances the overall response to such crises (Grootaert et al., 2004).

The public service or governance structure surrounding FS and the management of FT plays a critical role in the effectiveness of social capital in these domains. Effective governance ensures that social capital is channelled towards FS objectives and safeguards communities from FT threats. Transparent governance policies can build trust in food safety systems, while also empowering communities to take action when needed. Conversely, weak governance or corruption can erode social capital and exacerbate both food insecurity and vulnerability to food terrorism (Fukuyama, 2001). Social capital is a critical element in both food security and the defence against food terrorism. It facilitates resource sharing, resilience and collective action, which are essential for communities to maintain and improve FS. Additionally, social capital helps in responding to and mitigating the impacts of FT, as strong networks of trust and cooperation enable more effective crisis management and recovery. However, for social capital to be fully effective, it must be supported by sound governance that fosters transparency and collaboration between local communities, institutions and external organisations. Social Capital Theory illuminates the often-overlooked human and relational dimensions of food security and food terrorism. While technological safeguards and regulatory frameworks are necessary, they are insufficient without the social glue that holds communities and systems together. In an age where trust is both

a resource and a target, building and maintaining social capital is not a soft asset but rather a strategic imperative.

Media can influence public and political agendas, shaping policy priorities related to FS and FT. Policies influenced by media reporting can either enhance or undermine social capital depending on how well they align with community values and needs. In summary, media, public service, social capital, agenda-setting theory and the subjects of food security and food terrorism are interconnected. The media's role in shaping public discourse and priorities, along with the influence of social capital within communities, can impact how societies respond to and address these critical issues. Understanding these connections can inform strategies for communication, community engagement and policy development. Table 5.1 depicts the joint impact for FS and FT by adopting both Agenda-Setting and Social Capital theories, ultimately assisting in providing best practices on FS and FT for both media and public service institutions while Figure 5.3 on the following page depicts the Conceptual Framework Manifestation for the study of "The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID -19"

Table 5.1
Implication of Agenda-Setting and Social Capital Theories' Adoption on the Study of "The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID -19"

Agenda-Setting	Social Capital	Joint Impact
Media and government set the agenda for food security risks	Communities and networks strengthen awareness and cooperation.	Heightened vigilance against food terrorism.
Authorities provide credible information to the public.	Trust prevents misinformation and panic.	Clear and coordinated crisis communication.
Food security policies are prioritised.	Citizens and businesses participate in food safety efforts	Policies are widely accepted and enforced effectively.

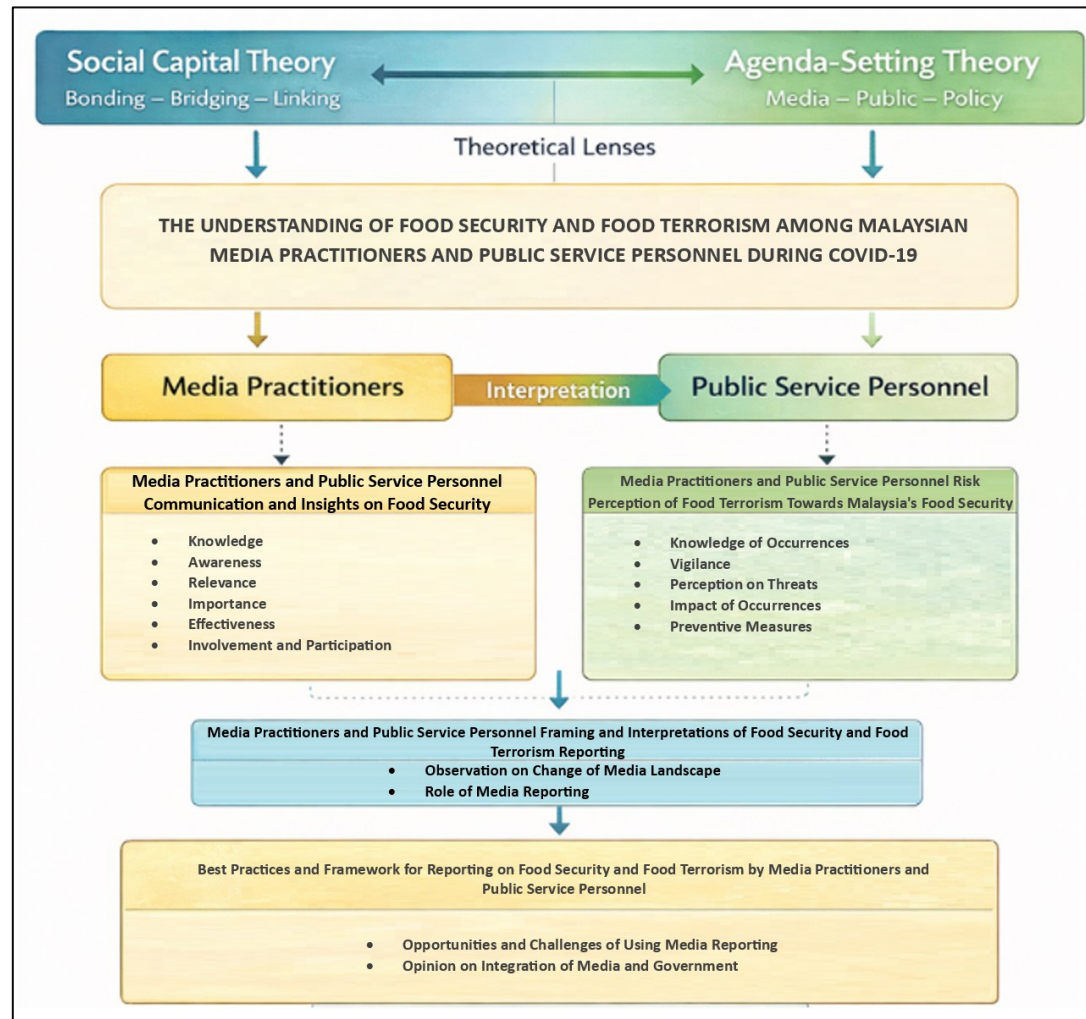


Figure 5.2 Conceptual Framework Manifestation for “The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID-19”

To further exemplify how this study may provide novelty in the fields of media and communication studies, the Food Security Food Terrorism Action Model or FSFTact Model is proposed. This model is adapted from the Social Ecological Model (SEM) by Bronfenbrenner (1977) and offers a useful framework for understanding how different levels of influence from individual behaviour to public policy interact to affect both food security and one of the threats towards it which is food terrorism. According to Kilanowski (2017) the SEM suggests that behaviour is shaped by multiple levels of influence, from firstly the individual level which pertains to personal factors such as knowledge, attitudes, beliefs, skills and behaviours. Next, interpersonal where social networks and support systems such as like family, friends and peers are. The next layer is organisational which consists of institutions and organisations that people interact with, followed by community which concerns relationships among organisations, neighbourhood environments as well as cultural values and finally public policy where state and national laws and policies are regulated to support healthy actions (Kilanowski, 2017).

The strategic application of the Social Ecological Model (SEM) offers a multidimensional framework for understanding and addressing food security and the emerging threat of food terrorism. SEM, traditionally used in public health, conceptualises behaviour and outcomes as being influenced by multiple levels of interaction: individual, interpersonal, organisational, community and policy (Bronfenbrenner, 1977; McLeroy et al., 1988). In the context of food security, this model enables researchers and policymakers to analyse how different layers of society contribute to vulnerabilities or resilience within the food system.

At the individual level, SEM facilitates an understanding of how personal knowledge, attitudes, and behaviours influence food choices and perceptions of food safety. For instance, misinformation or lack of awareness about food contamination risks can exacerbate vulnerability to food terrorism (Khairatun, 2022). At the interpersonal level, social networks including families, communities and media consumers serve as channels for shaping trust in food supply systems and reporting threats.

The organisational level of SEM allows for the examination of the roles of institutions such as the media, public health bodies and food industry stakeholders in preparing for and responding to food-related crises. These actors are pivotal in crisis communication and food safety surveillance (Isernia & Marcolin, 2018; Rusli et al.,

2024). This level also, involves local food systems, markets and the relationships between communities and enforcement agencies. Strengthening these networks can enhance resilience against deliberate contamination or misinformation campaigns. Finally, at the policy level, SEM provides a lens to assess national food security strategies, law enforcement preparedness, and international cooperation in addressing food terrorism. The inclusion of food terrorism in national security discourse is crucial, as it intersects with biological threats and public trust in governance (Razak et al., 2020; Karaman, 2017). SEM promotes the development of coordinated and multilevel interventions; from grassroots education to cross-border policy enforcement, thus offering a holistic and proactive approach to safeguarding the food system.

Strategically, SEM's layered approach aligns well with the complexity of food security and terrorism, where threats may originate from micro-level negligence or macro-level political manipulation. By applying SEM, Malaysia and other nations can identify gaps in surveillance, communication and education, ensuring that policies are not only top-down but supported by engagement and preparedness across all societal levels.

For this study, at the individual level, knowledge about food security and the ability to access reliable food sources are crucial. In the context of food terrorism, individuals may also need to be educated on awareness especially in recognising potential threats of contamination or responding to emergency food recalls. For the interpersonal level, social networks such as families, neighbours and peer groups influence food choices and provide informal food sharing systems. These networks can also serve as communication channels in the case of a food security threat, helping disseminate warnings or best practices quickly. The organisational level is where the institutions like the media to disseminate government policies, news and information, as well as food producers and facilities which play a vital role in maintaining best food security practices. As the latter are also primary targets for food terrorism, developing and implementing food defence plans at this level is critical for reducing vulnerability.

For community level on the other hand, food security affects communities through infrastructure like markets and supply chain systems. Community resilience and coordinated responses to threats especially through local public health networks can greatly influence how well a region responds to a food terrorism incident. Finally, at public policy level, national and international laws, agricultural and trade regulations including food defence policies create the overarching structure for food security.

Relevant ministry (MAFS) and agencies under MAFS develop guidelines and monitoring systems aimed at preventing, detecting and responding to acts of food terrorism.

In a nutshell, by applying the SEM to food security and food terrorism, the government and other relevant stakeholders can design more effective and multi-level interventions. Addressing vulnerabilities at each level of the model ensures a more comprehensive strategy for safeguarding the food supply against both chronic insecurity and acute threats. Figure 5.4 on the following page shows the FSFTact Model adapted from the SEM by to depict and add value as well as novelty to the study of "The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID-19." Anti

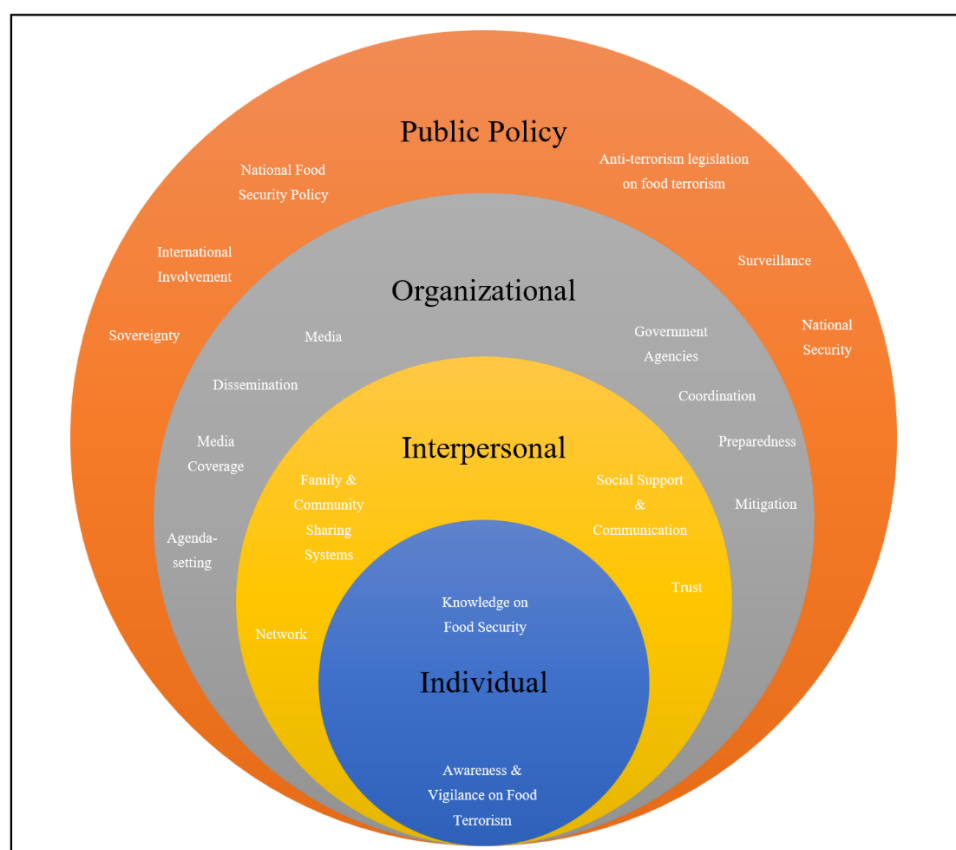


Figure 5.3 Proposed Model Fstfact of "The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID-19"

5.3.2 Implications to the Malaysian Media Practitioners

5.3.2.1 Media as a Bridge Linking Government and People While Enhancing Food Security

Scholars such as Farmer (2022) and Hamzah (2009) have discussed how media, including traditional and digital platforms, serves as a crucial bridge between the government and the people, playing a vital role in enhancing food security. Effective communication through various media channels can help disseminate information, raise awareness and foster collaboration. Media may link the government with its people via information dissemination, crisis communication, public awareness campaign, stakeholder collaboration, interactive platform, crisis simulation and preparedness exercises, multilingual and accessible communication, collaboration with media outlets and education training programs (Arshad & Khurram, 2020).

In government level, media platforms can be used to communicate government policies, programs and initiatives related to food security (Kerins et al., 2023). Detailed information on agricultural subsidies, support for farmers and measures may be provided to ensure a resilient food supply chain. Public health measures related to food safety and hygiene can be communicated through traditional and digital media aside from educating the public on safe food handling practices to prevent contamination. For crisis communication, media can be utilised to provide timely updates on pandemic response measures, vaccination programs and any impact on food supply chains whereby public concerns and information on emergency measures may be addressed and shared. Not only that, media can be used via communication channels to quickly relay information about potential threats to food security, such as disease outbreaks or contamination issues as well as issuing alerts and guidelines for the public during food-related emergencies.

Additionally, the media has been proven to be very useful in public awareness campaigns to highlight nutrition and sustainable practices, media campaigns to promote awareness of balanced nutrition and sustainable agricultural practices including stressing the importance of supporting local farmers and consuming locally produced food (MDIF, 2023). Media platforms can assist in fostering community engagement to encourage active participation in local food systems by means of sharing success stories and initiatives that contribute to food security at the community level. As an effective

mouthpiece, the media can also aid in stakeholder collaboration by featuring stories on industry players, producers and agricultural innovations to highlight their contributions to food security. Moreover, the media can also facilitate dialogue between industry players and consumers through media channels aside from showcasing collaborations between the government and private sector in developing and implementing food security strategies. With relevant partnership, media can also demonstrate how technology and innovation are being utilised to enhance food production and distribution.

Digital media which includes social media and other interactive platforms can become a medium for interactive communication and engagement with the public. This may mean conducting live Q&A sessions, webinars and online forums to address questions and concerns related to food security. Mobile apps and social chat alerts can be developed to deliver targeted information to specific demographic groups. These apps should be able to provide features for reporting food security concerns or participating in community initiatives.

Mainstream media can be used by the government to relay transparent communication to counter misinformation and fact-checking purposes. It is a well-known fact that the government holds accountability to demonstrate transparency and accountability by regularly updating the public on the progress of food security programs. Challenges can be addressed openly and plans for improvement can be communicated further. Media channels may also be used to counter misinformation related to food security and safety aside from initiating fact-checking mechanisms to promote accurate information through credible sources. Media must also be included in crisis simulation and preparedness exercises where media outlets can be involved in crisis simulation exercises to test the effectiveness of communication strategies during emergencies. By doing this, both the government and media may be able to evaluate and improve communication protocols based on lessons learned. As Malaysia consists of multiracial citizens, media must take the opportunity to have language diversity by providing information in multiple languages to reach diverse communities and ensure inclusive communication. Cultural nuances and preferences in communication strategies must be taken into consideration too aside from presenting information in various formats, including text, video and audio, to cater to different learning preferences and accessibility needs.

Media outlets in Malaysia has seen a steady growth and there are many media houses with various niche and expertise. By fostering partnership with these media houses, both traditional and digital, the government will be able to amplify messages related to food security more efficiently. Positive relationships with journalists and media organisations can better ensure accurate and comprehensive coverage. Moreover, these media outlets can also develop and broadcast educational programs on radio, television and online platforms targeting both industry players and consumers where they can provide information on best practices in agriculture, food security and nutrition. By leveraging the power of media in these ways, governments can initiate a direct and effective communication link with the public, nurturing a shared understanding of the importance of food security and encouraging collaborative efforts toward achieving sustainable and resilient food systems.

5.3.2.2 Optimising Social Media to Protect Food Security and Prevent Food Terrorism

Leveraging new media and social media platforms can be instrumental in protecting food security and preventing food terrorism. These technologies offer a dynamic and widely accessible means of communication, information dissemination and public engagement. There are several strategies for optimising new media and social media to enhance food security and that includes firstly, real-time monitoring and reporting where platforms or apps for real-time monitoring of the food supply chain is established. Stakeholders, including farmers, distributors and consumers are encouraged to report any suspicious activities or incidents promptly.

Next, government must fully make use of the social media intelligence as this new media technology offer tools to monitor online conversations and detect potential threats or rumours related to food security and food terrorism threats. By analysing trends and sentiments relevant agencies within ministries will be able to identify emerging issues and threats. Furthermore, social media offers a platform to educate the public about food security, security measures and the potential risks of food terrorism. By launching comprehensive public awareness campaigns on social media platforms and engaging in influencers and celebrities will further amplify the message.

Aside from that, new media in the form of social media has the ability to launch emergency alerts and updates that can reach the public faster than the usual news on

mainstream media or the papers. By implementing automated alert systems on social media, the government will have better engagement and reach to disseminate emergency updates, recalls or safety measures during food security or food terrorism crises. Moreover, social media can also be utilised to engage citizens in monitoring and reporting through crowdsourcing initiatives and citizen engagement. Encourage the public to share information about local food production, distribution and any irregularities they observe. This can be done by creating interactive online platforms where stakeholders, including farmers, suppliers, retailers and government agencies, can collaborate, share information and discuss strategies for enhancing food security. Not only that, the government can also develop and share educational content on social media to train individuals involved in the food industry about best practices in food security. To do this, the government can employ social media-based rapid response teams to address misinformation, rumours or public concerns related to food security by providing accurate information promptly to prevent panic.

The government must also be willing to facilitate open and transparent dialogue between government authorities and the community on social media platforms. The platforms may be used to address concerns, provide updates and seek input to build a collaborative approach. Better yet, the government may consider developing digital platforms that connect farmers with relevant resources, information and support networks. This can enhance their resilience against potential threats to agriculture. Social media as a platform for a global village (McLuhan & Lapham, 1995) can be utilised to foster international collaboration on food security issues. Best practices, lessons learned and emerging trends with the global community may be shared between nations to prevent any crises in the future. Most importantly, keep the public informed about changes in policies, regulations and initiatives related to food security through social media updates and also encourage feedback and participation. Additionally, a robust crisis communication plan can also be developed for social media, outlining roles, responsibilities and key messaging strategies in the event of a food security crisis or terrorism threat. Continuous monitoring, active engagement and strategic use of social media can contribute significantly to building a resilient and informed community, thereby bolstering food security and minimising the risks of food terrorism. Regularly assess the effectiveness of these strategies and adapt them to evolving circumstances and emerging technologies.

5.3.3 Implications to the Malaysian Public Service Personnel

5.3.3.1 Food Security as A Country's Firewall to Prevent Food Terrorism

From this study it can be deduced that food security plays a crucial role as a country's firewall against food terrorism. Ensuring a nation's ability to produce, distribute and access sufficient, safe and nutritious food is not only vital for the well-being of its population but also serves as a defence mechanism against intentional threats to the food supply. There are several ways in which food security functions as a firewall to prevent food terrorism which the government may take into account and consideration.

Firstly, there has to be the diversification of food source, whereby a diverse and resilient food supply chain makes it more challenging for terrorists to target specific points of vulnerability. Multiple sources of food production reduce the risk of widespread disruptions. The main problem that the country faced during the most recent pandemic was the inability to produce crops and food items for local consumption. The country relied heavily on imported goods that when countries closed their borders, we were unable to fulfill the demands of our own people. The inability to diversify our food source may also expose us to food terrorism threats as it will be easier to sabotage and ruin crops grown in scarcity. Supply chain security must be strengthened throughout the food supply chain, from production to distribution to help safeguard against intentional contamination or disruption. Again, this must be followed with adequate surveillance and monitoring systems which will enable authorities to detect and respond promptly to any suspicious activities or anomalies in the food supply chain.

Next, collaboration between ministries, agencies, law enforcement and relevant stakeholders is also essential for sharing information about potential threats and taking preemptive measures. As the government will be the entity responsible for this collaboration, enforcing stringent regulations and legislation related to food security acts is crucial as a deterrent to potential terrorists. It also provides a legal basis for prosecuting those involved in food-related crimes. These collaborations also require international cooperation with other nations on matters of food security and counter-terrorism including facilitating the exchange of information, intelligence and best practices, contributing to a collective defence against global threats. The government must also be ready to invest in technology as utilising advanced technologies, such as

blockchain for supply chain transparency or sensor technologies for early contamination detection, enhances the ability to secure the food supply chain against potential terrorist activities. Investing in research and innovation in agriculture, food production and security technologies will also contribute to the development of more resilient and secure food systems.

Educating the public about food security and encouraging vigilance fosters a sense of shared responsibility and can contribute to early detection of suspicious activities. As reiterated time and again, public awareness is vastly important to ensure that all levels of the public are included in this collective effort. Primarily, when it comes to the citizens and public at large, there should be a form of support for vulnerable populations and this can be done by addressing issues of poverty and food access to reduce the vulnerability of certain populations to manipulation or coercion by terrorist organisations. As such, building strong community networks and engagement fosters a sense of collective responsibility for food security, encouraging communities to actively participate in safeguarding their local food systems.

All in all, by integrating these strategies, a nation can create a comprehensive and layered defence system against food terrorism, ultimately enhancing its overall food security. It is important for governments to continuously reassess and adapt their strategies in response to emerging threats and changes in the global security landscape.

5.3.3.2 Sensitisation of Food Terrorism in Malaysia

The concept of sensitisation involves the process of creating awareness and making the public more attuned to particular aspects, issues or dimensions of a phenomenon. In the context of this study, heightened awareness of the complexities and nuances of food terrorism is crucial in ensuring that Malaysians are fully aware of its threats notably in times of crises. After conducting this research and having completed the data collection, this study found that generally Malaysia and Malaysians have limited awareness when it comes to understanding and acknowledging food terrorism. While to the public this fact actually proves that our country is not exposed to such threat, but personally this study felt that instead of taking this as a blessing in disguise, the Malaysian government must always be vigilant and proactive to prepare for any future incidents of food terrorism.

Sensitisation of food terrorism can be achieved by the collaboration of the government, the public as well as the media through initiatives involving policy, media coverage, educational campaigns and public participation on the concepts, risks and implications of food terrorism towards food security and safety. It is commendable for Malaysia to begin at some point as conversely, in certain regions of the world, people are progressively becoming desensitised to the numerous news stories concerning terrorism and food terrorism to be exact. The incessant inundation of the news reporting, the internet and the global community's interconnectedness has made acts of terrorism more proximate to the well-being of people. While we do not wish for events of food terrorism to happen, measures must be taken to prevent and sensitise people to food terrorism and according to the informants interviewed, these measures may come in phases in the form of legislations by the government, awareness by the media and ultimately education for the public in general. Although easier said than done, this study aspired that with growing awareness on food terrorism by academicians and researchers will ultimately pave the way to sensitise its threats and prevent unwarranted events towards food security from occurring.

5.3.3.3 Addressing the Elephant in the Room: The Black Swan Event of Food Terrorism

In an increasingly interconnected and vulnerable world, the concept of food terrorism emerges as a chilling yet underexplored example of a potential Black Swan event. As asserted in the previous chapter, a Black Swan is a rare and unpredictable event that carries massive impact and, in hindsight, appears foreseeable (Taleb, 2007). Food terrorism, a deliberate attack on the food supply chain to cause harm or panic (WHO, 2002) fits this definition disturbingly well.

Food systems are deeply complex, globalised and heavily reliant on trust, making them both vital and susceptible. A coordinated contamination whether biological, chemical or cyber-induced could lead to catastrophic outcomes such as widespread illness or death, economic disruption, loss of public confidence and international food shortages (Craft, 2017). Yet, despite this risk, food security frameworks often overlook the possibility of intentional sabotage, focusing instead on natural disasters, economic instability or logistical failures.

Real-world precedents as distinguished by Benguetat (2025) and Khairatun (2022) such as the fish pond poisoning in Indonesia in 2020, the needle scare found on packed strawberries in Australia in 2018 demonstrate the feasibility and reach of such acts, even on a small scale. These incidents hint at the systemic fragility that a more sophisticated or large-scale food terrorism campaign could exploit. Should such an event occur, it would likely be rationalised after the fact as a failure of imagination or preparedness. Experts might point to decades of warning signs including siloed biosecurity measures, fragmented regulation and ignored intelligence and lament that the signals were there all along. To prevent food terrorism from becoming the next Black Swan, governments must shift from reactive to proactive thinking. This includes integrating food systems into national security planning, investing in real-time surveillance technologies and enhancing international cooperation on agroterrorism threats. Food terrorism may be improbable, but it is not impossible. And in a world shaped by Black Swans, the time to address it is now before hindsight becomes regret.

5.4 Limitations of Study

This study as with other research in academia is subjected to several limitations, particularly in relation to food terrorism within the broader realms of media and food security in Malaysia. While these limitations impose certain constraints on the research process and outcomes, they also define the analytical boundaries within which the findings should be interpreted.

One of the primary limitations of this study lies in the scope of document analysis. The inclusion of food terrorism was driven by the need to assess potential threats to food security during periods of crisis, especially amid the disruption of food systems caused by the COVID-19 pandemic. However, information and documented cases of food terrorism in Malaysia remain scarce. No recorded incidents of food terrorism were reported during the pandemic period under review and available sources were largely limited to a small number of academic publications and insights from a single subject-matter expert. This constrained the breadth of materials available for analysis and limited empirical triangulation. Nonetheless, this limitation simultaneously underscores a critical research gap and provides opportunities for future scholarly inquiry into food terrorism within the Malaysian context.

Additionally, conceptual ambiguity surrounding the definition of food terrorism posed another challenge. Countries that have experienced food terrorism incidents tend to adopt definitions aligned with international frameworks, such as those of the United Nations, whereas countries without such exposure often apply narrower or less formalised definitions shaped by domestic legal and institutional contexts. This lack of definitional consistency restricted comparative analysis and necessitated careful interpretation of the findings.

The time frame of the study also constitutes a limitation. The research period was confined to the COVID-19 pandemic in Malaysia, beginning with the implementation of the Movement Control Order (MCO) and concluding with the declaration of the endemic phase on 1 April 2022. During this period, Malaysia underwent three (3) changes in government, resulting in shifts in administrative leadership, ministerial structures and policy priorities related to food security. These transitions may have influenced media discourse and institutional responses, thereby affecting the consistency of the data analysed. Furthermore, the unprecedented conditions of prolonged lockdowns and adjustments to remote working environments posed logistical challenges for both the researcher and informants. Nevertheless, these circumstances also enabled the study to capture first-hand insights during a national crisis, thereby enhancing the richness of the data.

Another limitation of this study relates to the conduct of in-depth interviews. Due to the researcher's relocation to another country during the study period, all interviews were conducted online rather than through face-to-face interactions. While online interviews allowed for continuity of data collection amid mobility restrictions and geographical separation, they may have limited the depth of rapport-building, and contextual immersion typically associated with in-person qualitative interviews. Technical constraints such as connectivity issues and time zone differences may also have influenced the flow and duration of some interviews. Nevertheless, the use of online platforms enabled access to key informants who might otherwise have been unavailable during the pandemic and the interviews still yielded substantive and meaningful insights relevant to the research objectives.

Finally, the findings of this study are subjected to limitations in terms of generalizability. The research is context-specific, focusing on Malaysia's media environment, governance structures and food security experiences during the COVID-19 pandemic. Consequently, the findings may not be directly transferable to countries

with different political systems, media landscapes or exposure to food terrorism. Nevertheless, the study offers analytical insights and conceptual implications that may inform comparative and cross-national research on food security and emerging threats during crises.

5.5 Recommendations for Future Research

Before concluding this study, it is very much obliged to reflect on how its findings may contribute to future research in related fields. A significant finding from this research found that aside from individuals directly involved in the domain of food security, much of the general public remains unfamiliar with the term and with government policies related to it. This lack of awareness is attributed, in part, to how food security issues are communicated by the media. However, a notable increase in public awareness was observed during and after the COVID-19 pandemic, demonstrating that crises can significantly influence media agenda-setting and shift public perception. This presents an opportunity for both the government and the media to capitalise on critical moments to relay concise, timely and solution-oriented information such as reviewing or reforming existing policies.

In addition, the study found that food terrorism remains a relatively unexplored topic within the Malaysian context. This observation sparked interest among several informants, many of whom expressed a desire to further explore the issue following their participation in interviews. As with all academic inquiries, this research leaves room for further exploration, particularly within the under researched area of food terrorism in Malaysia. The current study has contributed to a modest but growing body of literature on the subject, and it is hoped that more researchers will take an interest in this area, specifically in advancing food terrorism research as a means of prevention, public sensitisation and awareness-building.

Given the limitations of this study, future research with respect to media practitioners could look more closely at how media practitioners report on food security crises and emerging risks, especially in situations where no visible incidents, such as food terrorism, have occurred. Comparative studies across different crisis may help explain how framing and issue salience change over time. Research that engages directly with journalists, via case studies of newsrooms or media agencies utilising the data collection methods such as interviews and observation, could also shed light on

how editorial decisions are made when balancing public interest, security sensitivities and ethical responsibilities. In addition, public as audience studies would be useful in understanding how different media frames influence public perceptions and trust during food related crises.

For the public service personnel on the other hand, future studies may explore how public service communication influences public awareness and preparedness in relation to food security threats. Research focusing on communication and coordination among food security agencies, health authorities and security institutions could help identify gaps or inconsistencies in crisis messaging and management. Studies could also examine how public servants interpret and respond to media coverage, particularly in terms of policy implementation and operational decisions. Evaluating training and capacity building initiatives may further inform efforts to strengthen strategic communication within public service institutions.

The government could also focus on how well institutions are prepared to manage food security risks, including rare but potentially severe threats such as food terrorism. Studies examining coordination across larger and multi-ministries responsible for agriculture, health, trade, security and communication may help improve responses. Studies on national communication frameworks may support efforts to maintain public confidence and trust during food security crises. For policymakers, further research is recommended to better understand how media narratives interact with food security policymaking. Studies focusing on policy could examine how media coverage shapes agenda-setting, prioritisation and crisis response strategies. There is also scope for research into how media monitoring can be incorporated into policy processes to support early identification of emerging food system vulnerabilities. Comparative studies across different national contexts may offer useful lessons for strengthening anticipatory governance and regulatory preparedness.

For future researchers, there is clear value in expanding beyond document analysis to include mixed-methods, comparative and participatory approaches involving key stakeholders. Empirical research is particularly needed to clarify food terrorism in countries with no prior incidents, such as Malaysia. Researchers are also encouraged to refine existing concepts and develop frameworks that bring together food security, human security and media perspectives. Studies examining how policies and media practices evolve after the pandemic would further contribute to knowledge building in this interdisciplinary area.

Although Malaysia has transitioned into the endemic phase of the pandemic, this should not lead to complacency as the experience has revealed the fragility of food systems and the need for long term vigilance. This research serves as a reminder that national stability hinges not only on comprehensive policies but also on how effectively those policies are communicated to the public. It is hoped that the findings of this study will inform future strategies, strengthen media-government synergies and contribute meaningfully to the evolving discourse on food security and human security in Malaysia. Ultimately, this study aspires to contribute to that national effort by offering insights that bridge the gap between policy and public understanding, by proposing a media-informed model that may guide future preparedness.

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APPENDICES

APPENDIX 1

Research Ethics Approval for “The Understanding of Food Security and Food Terrorism Amongst Malaysian Media Practitioners and Public Service Personnel During COVID-19”

www.uitm.edu.my	
	Pejabat Timbalan Naib Canselor (Penyelidikan dan Inovasi)
Reference : 600-TNCPI (5/1/6) Our reference : REC/03/2022 (PG/MR/56) Date : 5 April 2022	
Dr Suhaimee Saahar@Saabar (Nadiah Hanum binti Md Nadzri - 2021783653) Faculty of Communications and Media Studies Universiti Teknologi MARA 40450 Shah Alam SELANGOR	
Dear Dr Suhaimee,	
APPROVAL LETTER - UiTM RESEARCH ETHICS COMMITTEE	
Thank you for submitting your research proposal to the Research Ethics Committee (REC). After considering your application, the Committee approved your proposal titled “Malaysia’s Media Coverage on Food Security & Food Terrorism during COVID-19 Pandemic” in the Klang Valley.	
Details of the approval are as follows:	
Ref. number:	REC/03/2022 (PG/MR/56)
Approval Period:	5 April 2022 until 28 th February 2024
Authorised personnel:	1. Dr Suhaimee Saahar@Saabar 2. Dr Khairudin Murad 3. Nadiah Hanum binti Md Nadzri
The UiTM Research Ethics Committee operates in accordance to the ICH Good Clinical Practice Guidelines, Malaysian Good Clinical Practice Guidelines and the Declaration of Helsinki. The approval of this project is conditional upon your continuing compliance with these guidelines and declaration.	
We draw to your attention the requirement that a report on this research, must be submitted every 12 months from the date of the approval or on the completion of the project, whichever occurs first. Failure to submit reports will result in withdrawal of consent for the project to proceed. Amendments, if any, to the study documents are to be submitted to the REC for approval.	
If you require further information, please contact the REC Secretariat at 03-55448069/03-55442794 or email at recsecretariat@uitm.edu.my.	
Yours sincerely,	
	
EMERITUS PROFESSOR DATO' DR RAYMOND AZMAN ALI Chairman UiTM Research Ethics Committee	
c.c.: Dean, Faculty of Communications and Media Studies, UiTM	
Universiti Teknologi MARA Aras 3, Bangunan Wawasan 40450 Shah Alam, Selangor, MALAYSIA Tel: (+603) 5544 2004/2255 Faks: (+603) 5544 2070	
	

APPENDIX 2

Research Protocol for “The Understanding of Food Security and Food Terrorism Among Malaysian Media Practitioners and Public Service Personnel During COVID-19”



UNIVERSITI
TEKNOLOGI
MARA

Fakulti
Komunikasi dan
Pengajian Media



**FACULTY OF COMMUNICATION & MEDIA STUDIES
UNIVERSITI TEKNOLOGI MARA**

**THE UNDERSTANDING OF FOOD SECURITY AND FOOD TERRORISM
AMONG MALAYSIAN MEDIA PRACTITIONERS AND PUBLIC SERVICE
PERSONNEL DURING COVID-19**

**NADIAH HANUM BINTI MD NADZRI
2021783653**

**SUPERVISORS:
DR. SUHAIMEE BIN SAAHAR@SAABAR
DR. KHAIRUDIN MURAD**

1. Research Title:

The Understanding Of Food Security And Food Terrorism Among Malaysian Media Practitioners And Public Service Personnel During COVID-19

Tajuk penyelidikan

PEMAHAMAN SEKURITI MAKANAN DAN ANCAMAN TERDAHAP SEKURITI MAKANAN DI KALANGAN PENGAMAL MEDIA DAN PENJAWAT AWAM SEMASA COVID-19

2. Background:

This research is originally inspired by the growing necessity to analyse the understanding of food security and food terrorism among Malaysian media practitioners and public service personnel during COVID-19. It will deliberate on the key actors' perceptions on the government's policy, elements and approach towards food security and threats of food terrorism. Food security policy in Malaysia is largely about ensuring the availability of rice to the society. Three (3) policy objectives were set since 1970s, namely:

- to ensure high price to paddy farmers to produce rice
- to achieve a certain level of self-sufficiency in rice
- to ensure a stable and high quality of rice to the consumers.

A developing country like Malaysia however, albeit already equipped with its own policy, framework and enforcement on food security, must be flexible and open for necessary reviews especially in times of health crises as well as the threats towards national security, well-being, safety and security of the citizens.

Latar belakang

Kertas penyelidikan dicetuskan oleh keperluan untuk menganalisa impak dan laporan media terhadap polisi semasa sekuriti makanan Malaysia dengan mengambil kira potensi ancaman terhadap makanan ketika negara menghadapi pandemik COVID-19. Penyelidikan ini akan mengkaji polisi sekuriti makanan dan ancaman terhadap makanan serta keberkesanan pelaporan media terhadap kedua-dua isu tersebut. Hasil kajian bakal mencadangkan inisiatif yang sesuai untuk menambah baik polisi, menterjemah ancaman semasa dan usaha mitigasi serta memberi nilai tambah kepada peranan media.

3. Research Objectives:

RO1) To explore the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel.

RO2) To analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security;

RO3) To understand the interpretations and communication of food security and food terrorism by media practitioners and public service personnel in their reporting;

RO4) To recommend a model to guide media practitioners and public service personnel in effectively addressing reports on food security and food terrorism.

Objektif Penyelidikan

RO1) Meneroka dasar, elemen serta pendekatan Kerajaan Malaysia berkaitan keselamatan makanan sebagaimana yang ditanggapi oleh pengamal media dan pegawai perkhidmatan awam.

RO2) Menganalisis konseptualisasi pengamal media dan pegawai perkhidmatan awam terhadap keganasan makanan sebagai suatu ancaman kepada keselamatan makanan negara.

RO3) Memahami pentafsiran serta penyampaian isu keselamatan makanan dan keganasan makanan oleh pengamal media dan pegawai perkhidmatan awam dalam konteks pelaporan mereka.

RO4) Mencadangkan satu model panduan bagi membantu pengamal media dan pegawai perkhidmatan awam menangani pelaporan berkaitan keselamatan makanan dan keganasan makanan secara berkesan.

4. Research Procedure:

This study employs in-depth expert interviews by way of semi-structured questions as well as analysing existing content via library research.

Prosedur penyelidikan

Kajian ini mengguna pakai kaedah kaedah kualitatif yang melibatkan temu bual, pemerhatian dan analisis dokumen.

5. Participation in Research

Your participation in this research is entirely voluntary. You may refuse to take part in the study or you may withdraw yourself from participation in the research at any time without penalty.

Penyertaan dalam penyelidikan

Penyertaan anda di dalam penyelidikan ini adalah secara sukarela. Anda berhak menolak tawaran penyertaan ini atau menarik diri daripada penyelidikan ini pada bila-bila masa tanpa sebarang penalti.

6. Benefit of Research

Information obtained from this research will benefit the individuals, researchers, institution and community for the advancement of knowledge and future practice.

Manfaat penyelidikan

Maklumat yang didapati dari penyelidikan ini akan memanfaatkan individu, penyelidik, institusi dan komuniti dalam kemajuan pengetahuan dan amalan pada masa hadapan.

7. Confidentiality

Your information will be kept confidential by the investigators and will not be made public unless disclosure is required by law.

By signing this consent form, you will authorize the review of records, analysis and use of the data arising from this research.

If you have any question about this research or your rights, please contact Nadiah Hanum binti Md. Nadzri at 014-966 8213/+91 900 490 3268.

Kerahsiaan

Maklumat anda akan dirahsiakan oleh penyelidik dan tidak akan didedahkan melainkan jika ia dikehendaki oleh undang-undang.

Dengan menandatangani borang persetujuan ini anda membenarkan penelitian rekod, penganalisan dan penggunaan data hasil daripada penyelidikan ini.

Sekiranya anda mempunyai sebarang pertanyaan mengenai penyelidikan ini atau hak-hak anda, sila hubungi Nadiah Hanum binti Md. Nadzri di talian +6011-62939458/+91 900 490 3268.

Consent Form¹

To become a participant in the research, you or your legal guardian are required to sign this Consent Form.

I herewith confirm that I have met the requirement of age and am capable of acting on behalf of myself / as² a legal guardian as follows:

1. I understand the nature and scope of the research being undertaken.
2. I have read and understood all the terms and conditions of my participation in the research.
3. All my questions relating to this research and my participation therein have been answered to my satisfaction.
4. I voluntarily agree to take part in this research, to follow the study procedures and to provide all necessary information to the investigators as requested.
5. I may at any time choose to withdraw from this research without giving any reason.
6. I have received a copy of the Participant Information Sheet and Consent Form.
7. Except for damages resulting from negligent or malicious conduct of the researcher(s), I hereby release and discharge UiTM and all participating researchers from all liability associated with, arising out of or related to my participation. I agree to hold them harmless from any harm or loss that may be incurred by me due to my participation in the research.

Name of Participant/Legally authorised representative (LAR)	Signature

I.C No

Date

Name of Witness³

Signature

I.C No

Date

Name of Consent Taker

Signature

Nadiah Hanum binti Md. Nadzri

I.C No

Date

Borang Izin¹

Untuk menyertai penyelidikan ini anda atau penjaga sah perlu menandatangani Borang Izin ini.

Saya dengan ini mengesahkan bahawa saya telah memenuhi syarat umur dan berupaya bertindak bagi pihak saya sendiri/ sebagai² penjaga yang sah dalam perkara-perkara berikut:

1. Saya memahami ciri-ciri dan skop penyelidikan ini.
2. Saya telah membaca dan memahami semua syarat penyertaan penyelidikan ini.
3. Saya berpuas hati dengan jawapan pada kemusykilan saya tentang penyelidikan ini.
4. Saya secara sukarela bersetuju menyertai penyelidikan ini dan mengikuti segala atur cara dan memberi maklumat yang diperlukan kepada penyelidik seperti yang dikehendaki.
5. Saya boleh menarik diri daripada penyelidikan ini pada bila-bila masa tanpa memberi sebab.
6. Saya telah pun menerima satu salinan Borang Maklumat Peserta dan Borang Izin.
7. Selain daripada kecederaan yang disebabkan oleh kelalaian dan kecuaiian penyelidik, saya dengan ini melepaskan dan menggugurkan UiTM dan semua penyelidik dari semua liabiliti berhubung dengan, wujud dari atau berkaitan dengan penyertaan saya. Saya bersetuju untuk menjadikan mereka tidak bertanggungjawab terhadap apa-apa kemudaratan atau kerugian yang mungkin akan saya tanggung disebabkan oleh penyertaan saya.

Nama Peserta/ Wakil Sah yang berkuatkuasa	Tandatangan

No. Kad Pengenalan	Tarikh

Nama Saksi ³	Tandatangan

No. Kad Pengenalan	Tarikh

Nama Penyelidik/Pengambil Izin	Tandatangan

Nadiah Hanum binti Md. Nadzri

No. Kad Pengenalan	Tarikh

8. About the Researcher

Latar Belakang Penyelidik



PhD Candidate
UITM Shah Alam
Malaysia

NADIAH NADZRI

I am a highly motivated PhD Candidate and a Post Graduate Researcher seeking to contribute my expertise towards achieving the organization's mission and vision. A staunch believer in the ability of assimilating big data analytics, diplomacy and human security to improve the lives of society and the world at large.

AREAS OF EXPERTISE

I have worked with various types of projects involving social media and big data analytics. I have completed my Post Graduate studies in Media and Information Warfare Studies specialising in Public Diplomacy and Intelligence. I am currently pursuing my PhD in Media relating to Food Security, a dimension under UN's Human Security as well as Food Terrorism.

PROFESSIONAL HISTORY

POST GRADUATE TEACHING ASSISTANT

UITM | 2019

- Involved in research works and development
- Prepared teaching materials and academic tutorials

SOCIAL MEDIA STRATEGIST

IKON BENUA SDN BHD | 2012

- Managed the company's social media and big data analysis
- Ensured major projects follow established timeline
- Communicated team needs to other departments

EXECUTIVE, NEW MEDIA DIVISION

MEDIA PRIMA BHD | 2011

- Managed various social media platforms
- Assisted team with various aspects of projects

EDUCATIONAL HISTORY

UNIVERSITI TEKNOLOGI MARA (UITM)

PHD IN MASS COMMUNICATION (2021 - ONGOING)

- Working title: "Malaysia' Media Coverage on Food Security & Food Terrorism During COVID-19"

MA MEDIA AND INFORMATION WARFARE STUDIES (2020)

- CGPA 3.95
- Thesis: "Halal Diplomacy: Engaging Gastro Diplomacy in Halal Context Towards Promoting Nation Brand"

INTERNATIONAL ISLAMIC UNIVERSITY (IIUM)

B.IT, INFORMATION AND COMMUNICATION TECHNOLOGY (2009)

- CGPA 3.23
- Final Year Project: "Yaqeen Halal Terminal: Detecting Halal Products via Barcode Scanning"

9. Questions

Soalan-soalan

1. What is food security and how effective is its application/policy in Malaysia?

Apakah sekuriti makanan dan keberkesanan polisi sekuriti makanan di Malaysia?

2. How is the awareness of food security amongst Malaysians? How are we able to increase such awareness?

*Apakah tahap kesedaran rakyat Malaysia tentang sekuriti makanan?
Bagaimanakah kerajaan boleh meningkatkan tahap kesedaran rakyat?*

3. Is UN's food security approach still relevant in Malaysia? Is Malaysia experiencing food insecurity during and after COVID-19?

Adakah pendekatan sekuriti makanan yang digunakan oleh PBB relevan dan berkesan di Malaysia? Adakah negara sedang mengalami kekangan sekuriti makanan terutamanya ketika dilanda pandemik COVID-19?

4. In your opinion, is food security important in terms of providing and fulfilling psychological needs of Malaysians?

Pada pendapat anda, adakah sekuriti makanan penting dalam memenuhi keperluan psikologikal rakyat Malaysia?

5. How has the current policy effective in embracing the COVID-19 pandemic or any other crises?

Bagaimanakah polisi yang sedia ada berkesan dalam mengharungi wabak/pandemik COVID-19 atau apa-apa krisis yang mendatang?

6. Will the DSMN 2021-2025 policy formulation consider active public involvement ie inclusivity of people? How can DSMN allow Malaysia to reach UN's Sustainable Development Goals (SDGs)?

Adakah perangkaan polisi Dasar Sekuriti Makanan Negara (DSMN) 2021-2025 bakal mempertimbangkan input daripada rakyat? Bagaimanakah DSMN mampu membantu negara mencapai SDGs di bawah PBB?

7. What is food terrorism and examples of food terrorism events/activities? How is the awareness of Malaysians on food terrorism ?

Apakah terrorisme makanan/ancaman terhadap makan dan apakah contoh-contoh aktiviti keganasan terhadap sekuriti makanan? Apakah tahap kesedaran rakyat Malaysia terhadap terrorisme makanan/keganasan terhadap makanan?

8. Do you feel that food terrorism poses a great threat to Malaysia and Malaysians?

Adakah anda rasakan terrorisme terhadap makanan ini mengundang ancaman terhadap negara dan rakyat?

9. Is Malaysia's food security at threat of food terrorism?

Adakah sekuriti makanan Malaysia diancam oleh terrorisme terhadap makanan?

10. What is the best approach for Malaysia in terms of guaranteeing food security and championing food terrorism threats in Malaysia?

Apakah pendekatan yang sesuai bagi negara untuk memberi jaminan pada sekuriti makanan dan mengurus ancaman terhadap makanan?

11. How has COVID-19 change the media landscape in Malaysia?
Bagaimanakah COVID-19 mengubah landskap media di Malaysia?

12. What about the media framing and reporting on food security and food terrorism in current times?
Bagaimana pula dengan pelaporan dan liputan media tentang sekuriti makanan dan ancaman terhadap makanan pada masa kini?

13. How impactful is the media when it comes to exposing food terrorism? Do you mind sharing personal experiences with regards to this?
Besar manakah impak dan peranan media dalam membongkar insiden ancaman terhadap makanan? Bolehkah Tuan/Puan berkongsi tentang pengalaman (jika ada) mengendalikan kejadian ancaman terhadap sekuriti makanan?

14. Has the media given plenty information and insight on the Government's plans to review and introduce newer food security policies after COVID-19?

Adakah kerajaan memberikan ruang dan peluang yang secukupnya kepada media dari segi penyediaan kerangka polisi berkenaan sekuriti makanan terutamanya selepas ancaman wabak COVID-19?

15. How can we integrate the role of the media in disseminating policies on food security and preventing food terrorism threats?

Bagaimana untuk mengasimilasikan peranan media dalam menghebahkan polisi untuk sekuriti makanan dan mencegah sebarang ancaman terhadap makanan?

APPENDIX 3

Transcription of H1's Expert Interview

Informant 1: Food Security Expert



UNIVERSITI TEKNOLOGI MARA

FACULTY OF COMMUNICATION & MEDIA STUDIES

PhD IN MASS COMMUNICATION (MC950)

TOPIC:

**THE UNDERSTANDING OF FOOD SECURITY AND FOOD TERRORISM
AMONG MALAYSIAN MEDIA PRACTITIONERS AND PUBLIC SERVICE
PERSONNEL
DURING COVID-19**

Interview Transcript

Researcher : Nadiah Nadzri

Date : 27/10/2022

Venue : Google Meet

Person	Text	Translated Text
RO1	To explore the Malaysian government policy, elements and approach to food security as perceived by media practitioners and public service personnel.	
Interviewer	Kalau boleh nak minta tolong Dr tolong jelaskan tentang apa maksud food security, keberkesanaan pelaksanaan food security di Malaysia, dan juga kesedaran dikalangan rakyat Malaysia tentang kewujudan polisi keselamatan makanan. Macam mana kita nak tingkatkan kesedaran tersebut? Adakah kita perlu tunggu waktu krisis sahaja baru digunapakai? Rakyat Malaysia tak tahu apa tindakan yang perlu diambil bila berhadapan krisis keselamatan makanan.	
H1	Memang seronok bila kita bincang tentang food security ini. Apabila kita bincang berkenaan dengan food security ini kita boleh lihat sekurang-kurangnya dari sudut 3 peringkat lah. Dari aspek antarabangsa, sebab itu WTO concern tentang food security ini. Secara asasnya ia adalah tanggungjawab negara untuk memastikan pasaran, lebih kepada trade & decision, maknanya kalau kita tengok daripada segi teori ekonomi dia dipanggil competitive advantage maknanya negara yang mempunyai sumber dia akan mengeluarkan produk itu dan dia akan eksport ke tempat lain. Tempat	It is indeed exciting to be discussing about the subject of food security. When we discuss/talk about food security, we may segregate it into 3 distinctive levels or phases. From the global or international aspect, food security is very much a subject of interest and is always under the radar of the WTO. Fundamentally, food security is the responsibility of a country to ensure that supply is enough in the market. It is more like a trade and decision, where the correct term of this by viewing it from the economic theory is competitive advantage:

	yang tidak mempunyai produk itu dia akan import untuk mendapatkan bekalannya. Itu adalah asas kepada food security lah ataupun dipanggil competitive advantage. Yang kedua ialah peringkat negara bagaimana keupayaan negara itu untuk menawarkan makanan untuk pasaran domestik. Jadi kalau kita kaitkan dengan antarabangsa, apabila keperluan dalam negara tidak mencukupi maknanya samada dia akan mengeluarkan sendiri atau diimport. Yang ketiga ialah dari aspek perseoranganlah. Bagi seorang pula, ia disebut sebagai food security ataupun sekuriti makanan ialah bagaimana dia boleh mendapat bekalannya makanan itu pada bila-bila masa mana dan dia mampu untuk beli dan yang penting sekali mestilah berkhasiat. Dalam berkhasiat ini pula dalam konteks setempat. Sebagai contoh, bagi orang yang di negara maju mungkin nutritious itu daripada segi keperluan kandungan vitamin dia cukup. Bagi orang yang dari negara kurang membangun nutritious dia asal cukup kenyang sudah memadai. Maknanya konsep food security ini sangat dinamik lah dia berbeza dengan satu tempat dengan satu tempat yang lain. So basically, boleh dikatakan semua negara concern tentang food	a country possesses certain sources/commodities which will then be exported to other countries in need of the commodity simply because they are unable to produce them for consumption. Such activity is the basis of food security and it is called competitive advantage. Secondly is the national or county level where the country has the ability to provide food and food produce for domestic consumption. If we were to compare with the previous level, we will take into consideration the fact that if there isn't enough food for domestic consumption, will the country attempt to produce more of will it import the said products from other countries. Finally, the individual aspect. An individual is deemed food secured when he/she is able to have access to affordable and nutritious food supply anytime anywhere. By nutritious here we mean that the food supply must comply to the local context which differs from another country to the next, from developed countries or otherwise. For example, people in developed countries view nutritious food as those that contain the right amount of vitamins and minerals for the body whilst in underdeveloped countries any type of food available is suffice to provide them energy to live.

	security ini. Dia bermula, concern yang lebih mendalam adalah pada tahun 2008 apabila berlaku food crisis, world food crisis. Pada waktu itulah terutama pada kat Malaysia kalau ingatlah, pada waktu itu kita berlaku krisis makanan di mana Timbalan Perdana Menteri pada waktu itu Tan Sri Muhyiddin Yassin dia terpaksa pergi berjumpa dengan Vietnam untuk merayu untuk membeli beras. Sebab pada ketika itu Vietnam tak nak jual, Thailand tak nak jual, semua negara-negara tak nak jual dan kita berasa tertekan dan terpaksa merayu kepada negara-negara pengeluar beras. Maka bermula daripada itulah semua negara terutamanya Malaysia memberi penekanan kesedaran lah tentang food security itu, bermula apabila berlaku krisis makanan dunia. Krisis makanan dunia tahun 2008 yang terbaru lah. Sebelum itu pun 1972 pun ada krisis makanan juga tetapi itu dah lama, maknanya krisis tahun 2008 itu pencetus kesedaran negara dan juga masyarakat tentang jaminan makanan. Maknanya kita tak boleh bergantung sangat kepada sumber luar untuk bekalan makanan.	We can then conclude that the concept of food security is very dynamic from one place to the other. It is safe to say that all countries are concerned about food security. In Malaysia for instance, we started having concerns about food security back in 2008 during the world food crisis. If you can remember the then Deputy Prime Minister TS Muhyiddin Yassin had to hold meetings with Vietnam to have rice imported to Malaysia. During this period both Vietnam and Thailand being the main exporters of rice declined to have their rice exported to other countries as the intend to focus more on domestic consumption. Eventually because of this crisis our country started having serious thoughts on food security in times of crisis; as the one before that took place in 1972, but 2008 was the one that made the government realize how important food security is to a country and how the country cannot totally rely on imported food for domestic consumption.
Interviewer	Seterusnya Dr, dari segi orang awam, apa pendapat Dr tentang tahap kesedaran mereka terhadap sekuriti makanan? Adakah wujud atau tidak kesedaran dikalangan orang awam?	
H1	Sebenarnya wujud. Sebabnya kalau kita tengok daripada respon masyarakat kita boleh baca daripada segi mereka kata kenaikan harga, inflation, barang semakin susah nak dapat, meluahkan perasaan dia di dalam media sosial. Itu adalah	The awareness is definitely there. This is evident from the responses and reactions of the public when it comes to price hikes, inflation, food shortages that were expressed via social media. That is one indicator of the awareness

	indikator tentang kesedaran tentang food security. Padanya benda ini yang sejak akhir-akhir ini especially selepas pandemic maknanya mereka sangat concern. Mereka associate kan food security dengan harga. Sebab kalau kita faham tentang konsep food security kan ada 4 elemen persediaan makanan, akses makanan, penggunaan makanan dan nutrisi. Elemen accessibility itu menjadi concern kepada masyarakat. Jadi sudah ada kesedaran dikalangan masyarakat.	on food security, what more with the pandemic that we were facing. The people in this country associate food security with the price of food and if we go back to the 4 elements of food security, which are availability, accessibility, utilisation and nutrition the accessibility element is the main concern of our people. To summarize we already have awareness ingrained amongst the people.
Interviewer	Masa kita dilanda wabak covid19 ini, adakah Malaysia mengalami food insecurity?	
H1	Di mardi ada buat kajian, kalau nadia buka google dia ada beberapa paper mardi tentang the impact of covid movement dan sebagainya. Kalau kita tengok daripada kajian, kita nampak in general kita berdepan dengan food insecurity, bekalan kita masih ada, pengguna masih affordable, walaupun kerajaan memberikan subsidi. Basically kita tidak mengalami food security yang parah lah. Di sini kita dapat lihat la betapa pentingnya sekuriti makanan tu, selepas kita melihat beberapa krisis yang menyebabkan food insecurity tu.	We have done a research in MARDI and you may google the papers by MARDI on the impact of COVID-19 movement and etc. From the research we can conclude that generally we did encounter food insecurity despite the supply, affordability of food and subsidies from the government. Nevertheless, our food insecurity was not that serious and this goes to show how important and relevant food security is to countries around the world and the implications of food insecurity caused by crises.
Interviewer	Jika kita tengok kepada teori Maslow. Dari segi food security itu penting atau tak berdasarkan kepada teori Maslow?	
H1	Ok kalau kita tengok kepada teori Maslow itu, itu memang basic need yang semua orang mesti lalui. Yang pertama dari segi keselamatan dia, kemudian ada social need dia, sebab itu orang akan melalui dan ia dah menjadi sebagai salah satu, dia jadi lumrah kerana semua orang daripada dia lahir hingga lah dia bujang dan sampai tua, dia memerlukan fasa-	Ok if we were to relate all of this with the Maslow's theory about basic needs of humans that we can point that security and needs go hand in hand. Firstly the safety then the social needs all of which are relevant to all the phases of the theory. However, again this is applicable towards certain context and needs as in if one is

	fasa itu. Dan kita pun berbeza, contohnya bagi seseorang yang miskin, ia dapat memenuhi apabila dia kenyang, dah cukup tetapi jika lebih banyak pendapatan, keperluan dia meningkat mungkin kalau orang kampung dapat makan telur sebagai sumber protein dah cukup tetapi bagi orang kaya dia nak daging. Bagi orang yang lebih kaya, dia nak daging tetapi mungkin dia nak wagyu beef yang diimport daripada Jepun atau India. Tetapi ada orang yang nak local. So itu adalah level food security daripada seorang dengan seorang yang lain. Basically, kalau kita nak kaji melalui teori Maslow itu, memang semua orang memerlukannya.	destitute than what he needs may differ from people who earn more than him. But the more you earn, the more you need. Same goes to food. If you hail from the village you may get your protein from eggs but if you in suburbs you may be inclined to purchase your protein in the form of meat. And if you have endless income you have no problem acquiring protein by consuming the expensive wagyu beef. What I am saying is that the theory fits everyone but it is still bound towards the level of capabilities of an individual. But Maslow's theory is applicable in all this.
Interviewer	Adakah negara kita masih lagi menggunakan "rice only policy" atau sudah ada perkembangan baru selain daripada polisi tersebut? Apa pandangan Dr.	
H1	Memang pada awalnya tumpuan kepada beras, sebab itulah bila kita nak pastikan bahawa semua beras kita mencukupi. Kalau kita tengok dari aspek SSL (self-sufficient level) maknanya kadar sara diri. Kalau dulu memang kita pengeluaran beras kita tinggi, dulu pernah hingga 90% dan dia semakin menurun dan kita mula bergantung kepada negara luar. Sekarang ini SSL kita lebih kurang dalam 67%. Kini penumpuan kita lebih kepada penumpuan komoditi-komoditi yang lain seperti sayur-sayuran dan buah-buahan. Jadi sekarang ini National Agrifood policy 2.0 sekarang ini, tumpuan bukan sahaja kepada beras, tetapi juga kepada lain-lain makanan dan tumpuannya adalah lebih fokus. Food security kita lebih fokus kepada produk-produk yang kita ada competitive advantage. Sebagai contoh, sekarang ini pun saya tengah buat satu paperwork, jadi saya	We initially focus our food security to rice and because of that we would always ensure that our rice supply is always available for consumption. From the SSL point of view, our country once had a very high level of SSL of up to 90% but we are our SSL is gradually declining as the years went by and that was when we started relying on other countries for imported rice. Our SSL is currently as 67% and we have shifted our focus on growing other commodities such as fruits and vegetables. With the National Agrifood Policy 2.0 (NAP 2.0) our focus will not only be on rice, but also other competitive advantage commodities. To cite an example, I am currently writing a paperwork on goats which is not listed in the NAP 2.0 as its accessibility is only at 11.2% thus no competitive

	tengok, tentang kambing, jadi kita tengok dalam National Agrifood Policy yang baru ini tidak diberikan tumpuan kepada kambing. Sebab kambing, kita punya accessible setakat 11.2%, maknanya kita tidak ada competitive advantage untuk keluarkan daripada kita bagikan banyak sumber kita kepada kambing jadi kita menumpu kepada komoditi yang ada competitive advantage. Contohnya penumpuan kita kepada ayam, ikan dimana kita ada competitive advantage. Macam lembu dia ada 50/50 sebab kita punya SSL sasaran 50% hingga tahun 2030. Maknanya food security kita adalah selain daripada padi tetapi menumpu kepada produk yang ada competitive advantage. Sebagai contoh macam smart agriculture, kita boleh keluarkan sayur menggunakan in plant factory, walaupun kawasan kita terbatas tetapi dengan kaedah itu kita boleh mengeluarkan tanaman lebih banyaklah per unit area. Sebagai contoh kalau secara konvensional kita perlukan 1 hektar tanah untuk keluarkan dalam 10 tan. Tetapi dengan kaedah tadi, mungkin dia perlukan setengah ekar, tetapi dia boleh keluarkan sampai 8 tan. Per unit dia panggil per unit area. Polisi memang akan sentiasa ditambah baik sebab polisi ni penting untuk jadi benteng pada sekuriti makanan negara.	advantage there. We should then focus on chickens and fish where we sort of have the competitive advantage. Cows as commodity will be 50/50 because we project to set 50% of SSL by 2030. In a way our food security aside from rice we must also take into consideration other competitive advantage food produce to further increase our food security. To speed up that process, we must resort to smart agriculture, where we produce food in plants and factories. By practising smart agriculture, our limited agriculture land will be able to yield more produce per unit area. For example 1 acre of land may yield 10 tonnes of produce but with smart agriculture you may only need half of that land area to produce 8 or more tonnes per unit area of production. Policies on food security will always be reviewed whenever necessary as it is may act as a shield towards of food security.
Interviewer	Semasa zaman TSMY sebagai perdana menteri, beliau memperkenalkan Dasar Sekuriti Makanan. Boleh ceritakan sedikit penglibatan Dr. sekiranya ada. Kita tengok banyak area yang di-cover dan terasnya. Macam formulation DSM ini ada penglibatan daripada orang awam semasa merangka DSM ini?	

H1	Saya tidak terlibat yang terbaru ini tetapi saya terlibat dalam ketika merancang Agro makanan yang pertama. Yang terbaru ini saya dah pencek, memang secara umumnya kita memang ada penglibatan daripada masyarakat. Kita panggil sebagai program libat urus, antara kerajaan dengan masyarakat. Tetapi kita tidak buat secara general. Sebagai contoh kita libatkan ketua-ketua unit di kawasan, ketua-ketua kampung, ketua-ketua komuniti. Dan kemudian juga kita buat macam dengan pemain-pemain industri seperti penanam-penanam sayur, penternak-penternak secara dasarnya dengan mereka yang terlibat secara langsung dalam industri. Kita buat focus group discussion. Saya terlibat dalam conduct focus group discussion dengan stakeholders tetapi tidak secara menyeluruh. Penglibatan masyarakat kita buat melalui kajian. MARDI ada membuat survey berkaitan teknologi adoption sebagai contoh, daripada situ kita develop dasar agro makanan.	I was not directly involved with DSMN as I am already a retiree but was one of the panels for our first agro policy construction. Generally, the government does ensure contribution and feedback from the public every time a newer policy is planned. It is however, a closed event, limited to the head of communities in suburban and villages as well. We also include industry players – farmers, producers and growers, people who are directly involved with the agriculture industry. We conduct focus group discussions with these stakeholders but often times found it difficult to carry it out comprehensively. We involve the public via survey and research particularly done by MARDI on technological adoption and from there we develop policy on food and agriculture.
RO2	To analyse media practitioners' and public service personnel's conceptualisation of food terrorism as a threat to Malaysia's food security.	
Interviewer	Dr. pernah dengar berkenaan dengan food terrorism ini atau contoh-contohnya? Kalau boleh saya nak kongsi sedikit dengan Dr tentang food terrorism ini. Sejauh mana Dr. mengetahui tentang food terrorism?	
H1	Saya pernah dengar tetapi secara tidak mendalam. Saya ada membuat sedikit research berkenaan dengan food terrorism ini. Saya pernah menghadiri satu konferens berkenaan dengan food terrorism ini pada tahun 2017 (organised di Malaysia). Tetapi ia tidak menjadi	I have heard of food terrorism although have not delved deep into the subject. I have also done some research pertaining to food terrorism. In fact, there was a conference on this back in 2017 and organised in Malaysia. However, food terrorism was not

	satu isu yang dibincangkan secara mendalam dikalangan pengkaji dan pegawai-pegawai kerajaan, di MARDI pun tidak. Namun cabang yang diberi tumpuan didalam food terrorism ini lebih kepada food contamination itu lebih dibincangkan kerana ia termasuk dalam kawalan kemasukan, bila kita import atau eksport, kebanyakan akan negara, perlu melalui..... Semua produk yang diimport dan eksport mesti melalui saringan yang ditetapkan oleh MAQIS. Kita pentingkan adalah food contamination berbanding food terrorism mungkin kerana tiada threats lagi terhadap sekuriti makanan negara namun food contamination memang ada terjadi kes-kes berkenaan ini.	an issue that is being openly discussed or acknowledged not only in MARDI but I assume all other relevant ministries and government agencies too. Nonetheless, when we mention food terrorism, there is another pressing issue or branch relating to this where the government has been actively pursuing and intervening and that is food contamination particularly from our immigration checkpoints nationwide. The government even established another agency under MAFI called MAQIS stationed in all these checkpoints to control food contamination. Food contamination is given the utmost priority by the government when it comes to food security as thus far there is no threat of food terrorism to Malaysia.
Interviewer	Bermaksud penumpuan lebih kepada food contamination. Adakah ia secara intentional atau unintentional Dr.?	
H1	No, food contamination ini termasuk juga pada kawalan pest and control. Ia adalah contamination by racun.	Food contamination involves control of pest and poison used on food and produce.
Interviewer	Oleh itu adakah ia intentional atau bagaimana?	
H1	Bukan intentional, sebabnya contoh sesetengah negara mereka masih menggunakan racun yang diharamkan oleh Malaysia. So untuk menghasilkan produk berkualiti, untuk mengelakkan daripada buah ia rosak atau serangan serangga dia gunakan racun. Ada jenis racun yang kita benarkan. Apabila produk-produk kita import seperti buah-buahan dan sayur-sayuran kita akan hantar sample kepada pakar kimia untuk periksa berapa banyak kandungan racun. Disebabkan oleh beberapa negara yang mempunyai	Food contamination is not intentional generally as certain countries utilised certain fertilizers which are no longer permissible by Malaysia and considered poison by our country. These fertilizers work wonders on crops and allow them to grow bigger, faster and to produce more food. They may look of high quality on the exterior but when we sent samples of these to the labs, results came back with plenty of chemical substances which are harmful for human

	protocol untuk membenarkan masuk, oleh itu, mereka kawal, begitu juga dengan Malaysia. Bila kita nak eksport itu, kita pastikan ia tidak contaminated dengan bahan-bahan racun.	consumption. We have protocols regarding this and also ensure that anything that gets exported from here do not get contaminated by harmful and poisonous fertilizers.
Interviewer	Food terrorism di Malaysia ini. Mampukah food terrorism atau food contamination ini boleh mengganggu food security di Malaysia?	
H1	Of course, ia akan mengganggu food security. Terutamanya dari segi food contamination itu lah. Kemungkinan sekarang ini food terrorism tidak memberi impak yang besar kepada kerajaan. Kerana itulah kerajaan tidak memberikan fokus kepada isu ini. Kalau sebagai contoh dari segi kementerian pertanian didapati menemui banyak bekalan makanan kita yang telah tercemar dan membahayakan kesihatan mungkin selepas itu mereka akan samada keluaran akta baru, kawalan, penguatkuasaan. Pada masa ini saya lihat ia tidak memberi kesan yang sangat besarlah. Sebab itu kerajaan tidak mengambil langkah-langkah kawalan.	Of course food terrorism or contamination can disrupt our food security especially in terms of food contamination, as we do not have any incidents involving food terrorism. Regarding food terrorism, we may not be able to ascertain its impacts yet since we do not face any threats that can cause the government to take measures of prevention. But for food contamination incidents, we can see the proactiveness of our government following incidents of contamination and the ministry responsible for this is MAFI. Once we detect any food contamination cases, the ministry and its agencies will take stern actions, followed by reforming current policy, control and enforcement. I believe that the same measures will be taken by the government concerning food terrorism incident, it's just that we haven't encountered any threats or incidents yet.
Interviewer	Apa pendapat Dr. berkenaan isu-isu berkaitan food security seperti isu coklat Cadbury tercemar dengan DNA khinzir, pencemaran sungai Kim Kim dan percampuran daging kuda dan daging lembu yang berlaku di Johor dengan tindakan kerajaan? Adakah isu seperti tadi itu belum cukup kuat untuk menghantar signal kepada kerajaan tentang food	

	security ini?	
H1	Itu adalah kes terpencil lah. Kerajaan respon jika ada media coverage lah. Contohnya utusan Malaysia isu halal kambing yang disembelih di Australia. Isu itu diulang-ulang untuk mendapatkan perhatian dari Jakim. Kemudian beberapa hari lepas, saya lihat pihak berkuasa di Australia juga mengambil tindakan. Kita juga boleh melihat dari aspek perdagangan juga, dari aspek kita bekalan makanan tetapi di Australia apabila isu ini dibangkitkan oleh media, ia akan menjejaskan reputasi mereka, menjejaskan peluang perniagaan mereka, orang bukan sahaja Malaysia tetapi impak dia sekarang ini dah jadi global village jadi semua orang boleh baca berita-berita. Jadi apabila media di Malaysia highlight isu ini dan ia dibaca oleh negara-negara lain, impak dia kepada pembekal dari segi bisnes. Itu menyebabkan term food terrorism ini menjadi lebih terkawal.	For me this cases were all isolated incidents which required government intervention when they are reported and given coverage by the media. If a case gets reported then assigned enforcement will be tasked to take action. For example, Utusan Malaysia once reported on the halal issue of goats imported from Australia. The news got JAKIM's attention only after it was given extensive coverage from the media. And with this coverage even the Australian government intervened and took action as well. The international trading is one thing, but media must also be careful and aware of meddling into the bilateral relationship of Malaysia and Australia. As we are now connected online and the whole world is now a global village, any news uploaded on the internet will be accessible to everyone around the world. So when the Malaysian media highlighted this issue time and again, the impact will be borne by the suppliers and industry players. The possibility of food terrorism incident to occur is quite slim in Malaysia and perhaps most parts of the world because of this connection and diplomatic relationship of countries around the world.
RO3	To understand the interpretation and communication of food security and food terrorism by media practitioners and public service personnel in their reporting.	
Interviewer	Adakah dr setuju bahawa media ini membantu kerajaan dan memainkan peranan dalam food security? Atau food terrorism, pendapat dr macam	

	mana?	
H1	Memang sekarang ini kebanyakan polisi kerajaan itu pun apabila hendak formulate dasar itu, lazimnya dia mendengar suara-suara daripada rakuyat pengguna. Selepas itu lah baru dia akan respon, sesuatu tindakan itu sama ada one way atau two way, the best thing is two way lah daripada pengguna. So cuma isunya ketepatan media itu lah. Sekarang ini dengan adanya social media ini, just share ataupun dia create fake news, itu ada menyebabkan kesilapan dalam penerimaan maklumat pada orang awam tanpa diteliti dengan baik.	Yes it is pertinent that most policies developed by the government will only be formulated and agreed upon after engaging with the citizens and consumers. The government never fails to listen to the people's voices and concerns. After which the relevant ministries will be held responsible to ensure that the new policy is inclusive and comprehensive. The main concern here is the accuracy of the media reporting and coverage. With the rise of social media, anything that is shared must be checked and scrutinised the truth from the fake news and reporting. Fake news can travel just as fast as other news and may cause wrong perception and information to people if due diligence is not carries out.
Interviewer	Jadi sekarang cabaran untuk media ini adalah samada disensasikan oleh orang ramai lah kan? Kerajaan perlu pastikan sumber yang dilaporkan adalah sah. Pada pandangan dr, adakah kita patut tumpukan pasal food security dan food terrorism ini semua patut media massa yang sepatutnya memberi pelaporan?	
H1	Sekarang ini apabila kita panggil information kan. Apa term dia itu? Open sky. Kalau dulu mungkin ya, sebelum adanya whatsapp atau twitter mungkin pada waktu itu tumpuan hanya pada national media atau mass media, mungkin boleh. Sekarang dah tak boleh dah. Kadang-kadang orang awam itu dapat maklumat lebih awal daripada mass media. Sebab itu lah. Contohnya kalau ada kemalangan sahaja, dia gunakan handphone atau dashcam, dia boleh terus upload dia punya maklumat. Tetapi kalau mass	We have reached the era where information cannot be defined like before. When we say information, what can we conclude from it? It is basically open sky. Before whatsapp and twitter people would still rely on national media and mass media for information. But nowadays people on the ground will get first hand information first from the government because of social media. Take accidents for example. People now are armed with their smartphones and

	media dia perlu dapatkan info dulu, sekarang ini orang nak cepat. Cuma mungkin, semua maklumat itu perlu diverifikasi apabila ia dikeluarkan oleh mass media.	dashcams in cars where often times with accidents people would rather take photos and videos of the accident, upload them on social media first instead of reporting it to the authority. The same thing cannot be done by the mass media because every piece of information received by them must be verified and authenticated before published for public consumption.
Interviewer	Macam kalau kerajaan, dia dengan mafi dengan mardi adakah satu jaringan antara mafi dan mardi dengan media? Ada tak desk yang tertumpu untuk isu-isu liputan-liputan berkaitan dengan food security?	
RO4	To recommend a model to guide media practitioners and public service personnel in effectively addressing reports on food security and food terrorism.	
H1	Memang ada contoh macam dalam kes di MARDI. Saya pernah jadi pro di mardi. Memang kita ada special contact dengan media. Dari aspek mardi kita perlukan media untuk promote mardi. Kita jaga 2 3 orang wartawan utusan Malaysia nst apa yg mereka mahu kita akan beri lah. First hand information. Pada masa yang sama kita ada beri maklumat-maklumat yang kita fikir sesuai untuk kita promote. Begitu juga dengan kementerian, dia pun ada team media dia, mereka ada tiap-tiap minggu akan ada discussion isu-isu berkaitan dengan kementerian lah, tentang food security, bekalan makanan, bekalan tak cukup ataupun harga naik. Dia akan ada special group yang akan menjawab persoalan-persoalan yang dibangkitkan oleh masyarakat. Kalau nadia tengok, lazimnya apabila ada isu, the next day menteri	Yes, I can give you an example at MARDI where I was worked before. I was once a Public Relations Officer at MARDI and we established very good relationship with the media, mass media to promote our research and our work. We once had 2 to 3 reporters/journalists from Utusan Malaysia and NST in contact to disseminate information regarding agriculture and the agency. The ministry (MAFI) also engages with the media via a special team that holds weekly discussions on pressing issues and current trends/problems in agriculture. There are always discussions on food security, food supply and price hikes. Within this team, you will also have PIC to answer inquiries from the mass media and the public while also briefing the Minister on current

	akan membuat statement itu mesti ada group of people yang akan dapatkan maklumat, study, barulah dia akan respond. Dia tak boleh respond terus. Itulah peranan group ini yang akan liaise dengan media especially media-media yang utama inilah.	issues. But all these information are verified and refined to ensure that what the public read on newspapers is authentic and true.
Interviewer	Berdasarkan pengalaman dr how well inform are the media perkara-perkara berkaitan dengan food security ini? Adakah mereka mempunyai kelayakan berkaitan atau mereka diberikan maklumat dari mardi atau mafi dan mereka membuat research mereka sendiri juga? Ada tak media di Malaysia ini mereka sebenarnya food specialist tetapi bekerja sebagai journalist?	
H1	Setahu saya tidak ada journalist yang specialize bidang. Cuma mereka ini specialist kan dalam penulisan. Lazimnya jika mereka ingin menulis dalam satu isu yang besar itu, dia akan buat special interview. Dapatkan pandangan kemudian lazimnya selepas interview seperti ini dia akan menulis kemudian hantar semula kepada kita supaya kita verify betul tak apa yang dia tulis dengan apa yang kita cakap itu. Kadang-kadang interpretasi masing-masing berbeza kan. So dia akan hantar semula untuk verify. Dan macam itulah gerak kerja atau proses mereka dengan kita sebagai agensi kerajaan ni.	As far as I know journalists do not possess certain specialisations/specifications however they are specialised in writing and very skilled in writing. Usually whenever they are required to carry out scoops or report on an issue, they will carry out research and hold interviews with relevant people and authorities. Once that is done, they would usually go to us for fact checking and verification to ensure that both parties have the same interpretation. That is the normal process between us and the journalists of mass media.
Interviewer	Ada atau tidak usaha Malaysia untuk mencapai matlamat SDG (sustainable development goal) itu?	
H1	Memang ada. Kerajaan Malaysia memang komited tentang sgd itu bukan sahaja kementerian pertanian. Semua kementerian dia akan tengok skop dia masing-masing. Memang berkiblatkan kepada SDG itu. Ia sebagai satu panduan kepada semua	Yes, the government of Malaysia is very committed with fulfilling the UN's SDGs and this is not only limited to MAFI, but all other ministries are doing the same practice. SDGs have become an important point of

	kementerian. Even mardi memang semuanya dikaitkan dengan SDG.	reference for the government and all ministries and agencies are being told to perform and work on policies to essentially fulfill the SDGs.

AUTHOR'S PROFILE



Prior to the completion of this PhD thesis, Nadiah Hanum bt Md Nadzri earned her Master of Arts (MA) degree in Information and Media Warfare Studies from the Faculty of Communication and Media Studies at Universiti Teknologi MARA, Shah Alam. She previously attended the International Islamic University of Malaysia as an undergraduate, earning a Bachelor's degree in Information and Communication Technology in 2009. She has extensive expertise managing social media-related projects for clients ranging from private enterprises to government agencies and ministries. An avid technophile, she is highly interested in what current technology has to offer humanity and has discovered a new passion in the domains of food security, human security, diplomacy, strategic communication and intelligence. She can be reached at nadiah.nadzri@gmail.com with any inquiries pertaining to this research.

LIST OF PUBLICATIONS:

- Md Nadzri, N. H., & Saahar@Saabar, S. (2025). Malaysian Media and Public Service Perspective on Food Security and Food Terrorism During the Pandemic. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 10(2), e003230. <https://doi.org/10.47405/mjssh.v10i2.3230>
- Md Nadzri, N.H., Saahar@Saabar, S. (2025). Leveraging On Food Security Policy as A Countermeasure Against Food Terrorism: A Malaysia Experience. *Quantum Journal of Social Sciences and Humanities*, 6(3), 24-33. <https://doi.org/10.55197/qjssh.v6i3.645>