

# An Overview of Food Security in Japan: Identifying its Nature from an Analysis of its Trends

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## 1. Introduction

As food is an essential resource for sustaining life, food security is a significant security policy for all communities. The concept of food security as a commonly accepted definition in international society originated at the World Food Conference in 1974,<sup>1</sup> with an initial focus on the assurance of food supply, food availability, and price stabilisation. From 1996, as a major transition of the concept of food security, the introduction of the United Nations Development Program (UNDP) Human Development Report placed food security within human security, which is the extended concept of conventional security concepts in non-military contexts. In Japan, food security discussions were initiated by the Strategy of Comprehensive Security: The 5<sup>th</sup> Report on the Policy Research Society of Prime Minister Ohira (*Sougou-Anzen-Hoshou-Senryaku: Ohira-Souri-No-Seisaku-Kenkyukai-Houkokusho5: 総合安全保障戦略: 大平総理の政策研究会報告書 5*) [The Policy Research Society and the Group of the Comprehensive Security Policy Research, 1980; hereafter referred to as “the Strategy of Comprehensive Security”]. These discussions pointed out that international cooperation and the principle of self-help, which are basic concepts of general security, should be applied to the concept of food security in consideration of Japan’s greater dependence on food imports. As with the forming process of the concept of food security in international society, the concept in Japan was also influenced by the expanded concept of traditional

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security, the Strategy of Comprehensive Security. However, the final outcome of this proposal, which is the current basic position of the Japanese government, the Food, Agriculture and Rural Area Basic Act (*Shokuryou, Nougyou, Nouson Kihon Hou*: 食糧・農業・農村基本法; hereafter the Basic Act) [Ministry of Agriculture, Forestry and Fisheries; hereafter MAFF, 1999], does not stress the importance of following international cooperation and self-help but specifically focuses on assuring the domestic food supply, imports, and reserves. Regarding these facts, the following question arises: “How did Japan develop the food security concept and in what way does the Japanese concept correspond to the international standard?”

Researchers in Japan, in general, have attempted to approach this issue from agricultural and economic policy perspectives. This corresponds with two of the four dimensions for achieving food security proposed by the FAO as an international standard; 1) physical availability of food (hereafter availability), 2) economic and physical access to food (hereafter access), 3) food utilisation (hereafter utilisation), and 4) stability of the first three dimensions over time (hereafter stability). However, it is undeniable that researchers in Japan fail to depict the whole image of this issue. This is because the rest of the conditions proposed by the FAO, which are not addressed in Japan’s domestic agenda, were not discussed in the context of food security. This paper aims to examine the existing research under the FAO’s food security scheme of food security and illustrate an overview of this issue by referring to the other dimensions. To achieve this, it is necessary to review the concepts of food security in both international society and Japan.

## **2. The Basic Concepts of Food Security and Food Insecurity**

### **1) Food Security**

Since 1974, the concept of food security has been updated to reflect the world food and political situation, and there have been six major reforms of its definition through international conferences, and over two hundred different definitions suggested by scholars (Maxwell, 1996; Clay, 2002; Simon, 2012). Amongst those definitions, the one proposed at the 1996 World Food Summit gained the most support from international society, and it is referred to as the international standard for the concept of food security.

Table 1. The FAO’s Four Dimensions of Food Security

<b>Dimension</b>	<b>Detailed Description</b>
Physical <b>AVAILABILITY</b> of food	Food availability addresses the “supply side” of food security and is determined by the level of food production, stock levels, and net trade.
Economic and physical <b>ACCESS</b> to food	An adequate supply of food at the national or international level does not in itself guarantee household level food security. Concerns about insufficient food access have resulted in a greater policy focus on incomes, expenditure, markets, and price in achieving food security objectives.
Food <b>UTILISATION</b>	Utilisation is commonly understood as the way the body makes use of the various nutrients in food. Sufficient energy and nutrient intake by individuals are the result of good care and feeding practices, food preparation, diversity of the diet, and intra-household distribution of food. Combined with good biological utilisation of consumed food, this determines the nutritional status of individuals.
<b>STABILITY</b> of the other three dimensions over time	Even if your food intake is adequate today, you are still considered to be food insecure if you have inadequate access to food on a periodical basis, risking a deterioration of your nutritional status. Adverse weather conditions, political instability, or economic factors (unemployment or rising food prices) may have an impact on your food security status.

Source: FAO (2008).

The 1996 definition states that “[f]ood security exists 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” (FAO 1996; cited in FAO 2008). From this definition, the FAO (2008, p1) identified the following four main dimensions of food security, which are required to achieve food security: 1) availability, 2) access, 3) utilisation, and 4) stability [see details in Table 1). These dimensions are useful not only as objectives to realise food security but also as an index to analyse its condition.

As the FAO is an international organisation seeking the achievement of worldwide food security, the definition(s) of food security and related concepts are designed as comprehensive and broad schemes that allow the FAO to meet its goal. In terms of food security policies at the national level, the national government (or a corresponding decision-making body)

restructures the definitions and the dimensions proposed by the FAO as national policy or law. The decision-makers select the suitable FAO concepts or add original concepts through its formation process depending on the obstacles the state faces.

By referring to the FAO's descriptions on the four dimensions, the following four types of policies would produce the intended effect of increasing food security: 1) agricultural policies, 2) economic policies, 3) security policies, and 4) human rights policies. Agricultural policies deal with issues relating to domestic agriculture (e.g., domestic production, growing conditions, and stock levels), imports including food aid (e.g., the international trading environment), food markets (e.g., price stabilization), or food consumption (e.g., food education). In reference to these aims, agricultural policies are effective under the conditions of availability, utilisation, and stability.

Economic policies in the context of food security are designed to overcome the conditions of 1) unemployment, 2) food distribution (logistics), 3) income and expenditure, 4) the growth of agricultural as an industry, or 5) food prices. These policies meet the conditions to realise the dimensions of access (in terms of economic and physical access) and stability.

As it was added to the introduction of the UNDP Human Development Report in 1994, security policies in the food security context are about human security. The report discussed the importance of having an "entitlement" to food because poor purchasing power and public food distribution results in food insecurity (UNDP, 1994, p27). These policies are related to the access (physical and economic) dimension and would be relevant to the stability dimensions when managing political instability.

Finally, human rights policies aim to secure 1) socio-cultural access to food and 2) the right to live free from hunger. Simon (2012, p6) pointed out that a presence of socio-cultural barriers, such as gender or particular cultural values, limits the access to food even when food commodities are physically and financially available. In this way, the conditions of the access (socio-cultural) and stability dimensions would be fulfilled with the enforcement of this policy.

## **2) Food Insecurity**

According to Clay (2002), inadequate physical, social, or economic access to food results in food insecurity. As the FAO (2008, p1) discussed, food insecurity can be classified into two main types based on its duration: 1) chronic food insecurity and 2) transitory food insecurity (see Figure 1).

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	<b>Chronic Food Insecurity</b> 	<b>Transitory Food Insecurity</b> 
<b>is...</b>	long-term or persistent.	short-term and temporary.
<b>occurs when...</b>	people are unable to meet their minimum food requirements over a sustained period of time.	there is a sudden drop in the ability to produce or access enough food to maintain a good nutritional status.
<b>results from...</b>	extended period of poverty, lack of assets and inadequate access to productive or financial resources.	short-term shocks and fluctuations in food availability and food access, including year-to-year variations in domestic food production, food prices and household incomes.
<b>can be overcome with...</b>	typical long-term development measures also used to address poverty, such as education or access to productive resources, such as credit. They may also need more direct access to food to enable them to raise their productive capability.	transitory food insecurity is relatively unpredictable and can emerge suddenly. This makes planning and programming more difficult and requires different capacities and types of intervention, including early warning capacity and safety net programmes.

Figure 1. Types of Food Insecurity

Source: FAO (2008).

An additional type of food insecurity is seasonal food insecurity. As it usually follows a sequence of known events, it is considered to be similar to chronic food insecurity. However, seasonal food insecurity for a limited duration can be caused by seasonal fluctuations in climate, cropping patterns, and disease (FAO, 2008, p1). Thus, this concept is located between chronic and transitory food insecurity. Apart from the 1996 definition, international society has made five more significant changes to these definitions.

### 3. Food Security in international society

At the 1974 World Food Conference, due to the strong influence of the sharp rise in world food prices, the original definition of food security was conceptualised as the “availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady

expansion of food consumption and to offset fluctuations in production and prices” (Maxwell, 1996, p 156). Hence, the outcome of the conference emphasised the need to assure world food supplies and prices and to propose for world food stock systems or import stabilisation schemes.

Nine years after the first proposal, this concept was elaborated by the FAO (1983): “[E]nsuring that all people at all times have both physical and economic access to the basic food that they need.” By introducing this definition, the FAO emphasised the significance of securing vulnerable people’s access to food commodities.

In 1994, the promotion of the UNDP Human Development Report allowed food security to become a construct of human security as a component aspect along with seven others (UNDP, 1994). By the middle of the 1990s, as the product of a convergence of factors at the end of the Cold War, the concept of security shifted from nation-centred ideas to a people-centred and multi-disciplinary understanding of security involving many research fields. This change in the conventional idea of security concepts meant that the food security concept was given a new dimension as a security policy.

The 1996 World Food Summit added a complex nuance to the definition “[f]ood security, at the individual, household, national, regional and global levels [is achieved] when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (FAO, 1996). This definition also identifies the four dimensions of food security that are the objectives for achieving food security: 1) availability, 2) access, 3) utilisation, and 4) stability (FAO, 2008, p1). By the mid-1990s, international society recognised food security as a remarkable concern and a spectrum expanding from the individual to the global level. At the time, the awareness of protein-energy deficiencies due to insufficient access to food increased. Reflecting on this situation, issues about food safety and nutritional balance were included in the definition, to include food consumption and minor dietary requirements for a healthy and active life. Whereas the complexity in its definition was criticised, the 1996 definition received worldwide support as it covered global issues around food at that time. Subsequently, this description is still accepted as the current definition of food security.

In the 2000s, the 1996’s definition was again refined in The State of Food Insecurity 2001. This described food security as “a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO, 2002). This new proposal was based on the concept of entitlement by Amartya Sen. He defined entitlement as

“the set of alternative commodity bundles that a person can command in a society using the totality of rights and opportunities that he or she faces” (Sen, 1984, p497). As this study and new definition implied, the dimension of access was still burdened by serious problems especially about access to food by vulnerable people.

The 2009 World Food Program (2009, p170; cited in Simon, 2012) offers the following simple, yet essential definition: “A condition that exists when all people, at all times, are free from hunger.” According to Clay (2002, p156), the genealogy of food security in international society discussed above can be conceptualised as consisting of three of the following major significant and overlapped paradigm shifts: 1) from the world and nation level to the household and the individual level, 2) from a food first perspective to a livelihood perspective, and 2) from objective indicators to subjective perspectives. In this way, the concept of food security has elaborated to become a multi-dimensional policy that includes agriculture, economy, security, and human rights policies by mirroring food issues in international society. Through these shifts, the concept of food security has developed into a general notion that can create an international society free from hunger.

#### **4. Food Security in Japan**

##### **1) From the Strategy of Comprehensive Security to the Basic Act**

Although similar ideas of food security had existed in Japan,<sup>2</sup> no concrete food security concept was officially introduced until 1980. A food security concept was officially proposed in the Strategy of Comprehensive Security as a component of economic security. At the time, Japan struggled with its national security due to the decreasing economic and military dominance of the U.S. To overcome this, Japan attempted to develop new security policies that were centred on the use of non-military means, and the concept of economic security was listed as one of them. It was postulated to be achieved through three effort levels (see Table 2).

In detail, for the first and second levels of effort, Japan is expected to coexist with an international trade system, to increase food production especially providing agricultural support for developing countries, and to establish an international food stock system. For the third level, the development of a comprehensive stock system, high productive potential, and the distribution system as contingency planning are suggested to tackle unexpected food crises. These proposals exerted a significant degree of influence on the Basic Principles of

Table 2. The Three Levels of Effort

The levels of effort	Policy directions	Details of policy directions
<b>Security Policy</b>		
<b>The first level</b>	The establishment of the peaceful international structures	<ul style="list-style-type: none"> <li>- International cooperation</li> <li>- Confidence-building measures and armed control that allow Japan to cooperate with a potential threat</li> </ul>
<b>The second level</b>	The intermediate-level measures	<ul style="list-style-type: none"> <li>- Alliance or cooperation with states who share political belief or interests</li> </ul>
<b>The third level</b>	Self-help	<ul style="list-style-type: none"> <li>- Development of refusal skills that allow Japan to maintain its value or status quo</li> </ul>
<b>Economic Security Policy</b>		
<b>The first level</b>	The operation or maintenance of a structure of mutual dependence	<ul style="list-style-type: none"> <li>- Maintenance of a free-trade system</li> <li>- Resolution of the North-South issue</li> </ul>
<b>The second level</b>	The intermediate-level measures	<ul style="list-style-type: none"> <li>- Construction of friendly relationships with states that would influence the domestic economy</li> </ul>
<b>The third level</b>	Self-help	<ul style="list-style-type: none"> <li>- Reserves</li> <li>- A certain capacity of self-help</li> <li>- Maintenance of export competitiveness or productivity</li> </ul>

Source: The Policy Research Society and the Group of the Comprehensive Security Policy Research (1980)

Agricultural Policies in the 80s (*80-Nen-No-Nousei-No-Kihon-Houshin: 80年の農政の基本方向*) [Agricultural Policy Council, 1980], which was the basis of the 1999 Basic Act, and was contained in the Basic Act.

Finally, in 1999, Japan instituted the food security policy in Articles 2 and 18 of the Food, Agriculture, and Rural Areas Basic Act (*Shokuryou, nougyou, nouson kihon hou: 食糧・農業・農村基本法*). Article 2 (MAFF, 1999) describes food security in ordinary times that ensures a stable supply of food to the country's population by increasing domestic agricultural production in combination with imports and reserves. The three components of 1) domestic agricultural production, 2) imports, and 3) reserves are the three pillars of food security that affect the food situation in Japan. Article 18 (MAFF, 1999) explains urgent market intervention



by the government in emergencies when the state deems it necessary for securing the minimum food required for Japanese citizens. The current food security policy focuses on increasing domestic agricultural production.

To monitor the degree of attaining an increase in local agricultural production, the Japanese government adopted the idea of a food self-sufficiency ratio as an index for examining the ratio of calorie supply from domestically produced food in the total food supply in Japan. In addition, the government exercises the food self-sufficiency potential from 2015 to express the potential food production capability of Japan.

In regard to the potential for food self-sufficiency and the three components of Article 2 from the Basic act, Hisano (2015, p20) illustrated the Japanese government's attitude toward food security including the response of the Ministry of Foreign Affairs (hereafter MOFA) [See Figure 2]. Accordingly, MOFA views the term of food security as a synonym of the food supply potential, which considers the food import potential and international virtual food reserve system as the supplementary factors of domestic production capability. This position is based on the idea that realising national food security through the promotion of world food security, the formation of stable agricultural markets and trade schemes, and the operation of aid for developing countries with food insecurities allowed Japan to ensure a stable food import supply. In this manner, MOFA stands in stark contrast to MAFF that does not highlight the improvement in domestic agricultural production but instead focuses on the food import potential.

The government also publicised the Food Security Manual in Case of Unforeseeable Events (*Fusokuji no shokuryou anzen hoshou manyuaru*: 不測時の食料安全保障マニュアル), which defined the government's attitude toward further food insecurity, and discussed the scenarios. It initially expected 1) a harvest failure in major food exporting and producing countries, 2) a transport disorder due to harbor strikes in major exporting countries as a short-term condition, 3) reduced imports because of political instability such as international disputes, and 4) food shortages because of a global food supply-demand balance (Ohga, 2014, p20). As the formation process of food security demonstrates, the concept originated from economic policy and developed into agricultural & economic policy. In 2012, responding to the Great East Japan Earthquake, the government restructured its manual and renamed it the Emergency Food Security Guideline (*Kinkyuu jitai shokuryou anzen hoshou shishin*: 緊急事態食料安全保障指針) [Ohga, 2014, p20; Hirasawa, 2017, p25].

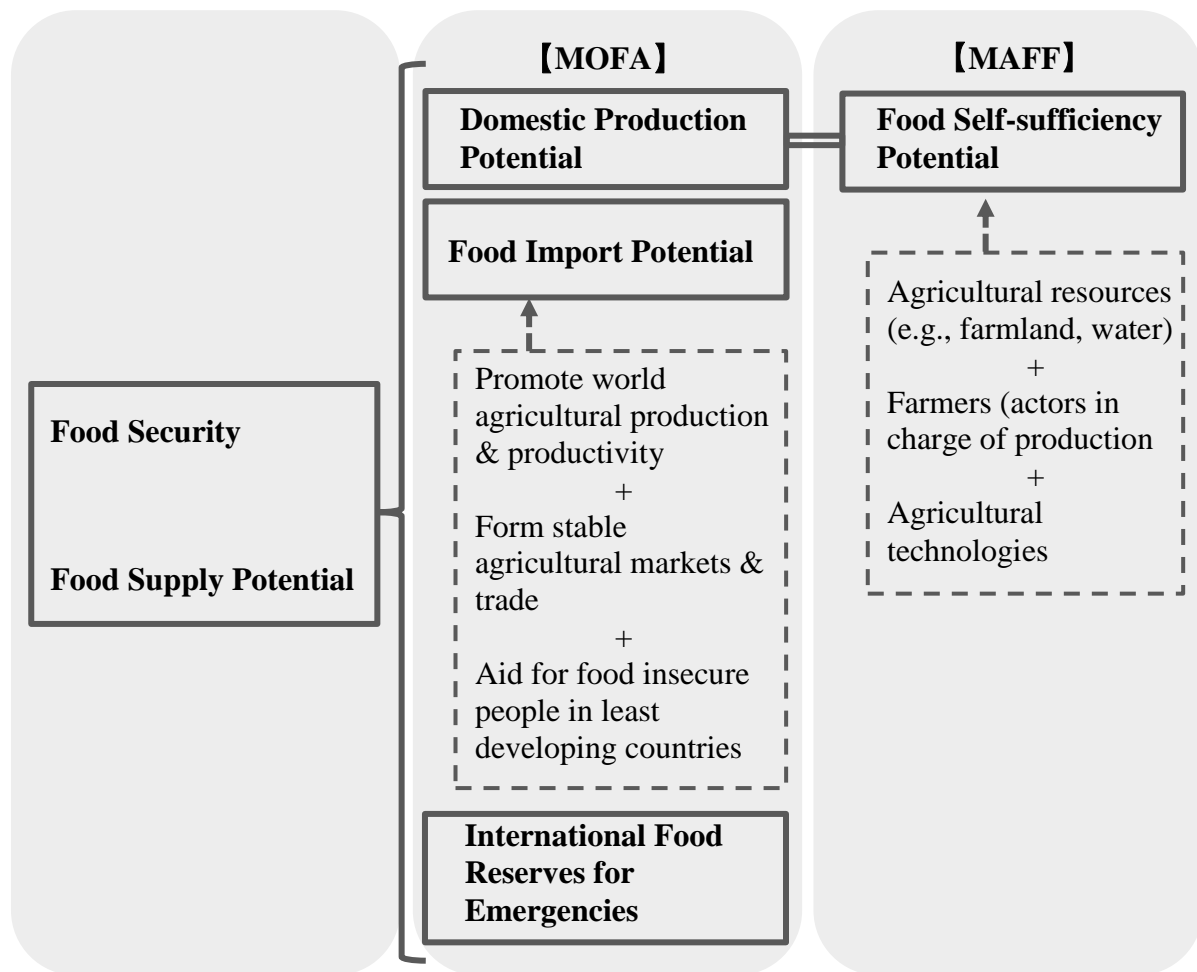


Figure 2. Japanese Government Policy on Food Security

Source: Ministry of Foreign Affairs, and Ministry of Agriculture, Forestry and Fisheries  
(cited in Hisano, 2015) [Revised]

During the last two decades from the enactment of the Basic Act in 1999, many policy efforts have been undertaken by the government. However, these policies have not made much progress. Both the food self-sufficiency potential index and food self-sufficiency ratio demonstrate a decreasing trend in domestic food production (MAFF, 2018, p15). Although many researchers and public sector actors have attempted to determine the reasons for these declines, the absolute decrease in labour force hampers further improvement.

## 2) Preceding Research in Japan

There is abundant existing research on food security of Japan. In reaction to unstable domestic food production or supply, many scholars have attempted to analyse the nature of Japan's food security from agricultural and economic policy perspectives that correspond to

the dimensions of availability and stability. For instance, Kabuta (2012) demonstrated that in addition to the total food supply, household affordability and access, food chain resilience, and availability and access to food imports impact on food risks in terms of sufficiency. He pointed out that the experience of the Great East Japan Earthquake and subsequent food crisis were a reminder of the impact of the severance of the food chain on Japan. For research on food trading, Imakubo (2009) and Suzuki (2012) discuss the way to manage global trading systems. In regard to studies on food education, two main trends can be seen: 1) food education for improved dietary habits, and 2) the recommendation of Japanese dietary patterns that support further improvement of the food self-sufficiency ratio (Adachi, 2008; Kamioka, 2010). As Kamioka (2010, p176-178) discussed, the promotion of Japanese dietary patterns increases the food self-sufficiency ratio because this dietary pattern allows people to consume food that has historically been consumed in Japan. However, it would be hard to control consumers' food preferences.

In the context of food security as a security policy, two types of research trends are significant but somewhat insufficient in depicting the complete picture of food security in Japan. The former trend, demonstrated by Kabuta (2012), Hirasawa (2017), and other researchers, is to trace the policy-making process of the food security concept. These scholars analyse particular events related to security policies such as the introduction of human security concepts due to the diversification of security definitions in the post-Cold War era,<sup>3</sup> or the establishment of the Strategy of Comprehensive Security. These researchers clarify a feature of food security policies that both security and food security policies share as a core objective: to secure people from any existing or potential threats. However, these studies do not provide an analysis of these events from security studies perspectives but mention them as historical facts that significantly impact on the current concept. The latter trend, such as the research by Honma (2012), is to simulate food security issues by applying the major security study concepts of realism, liberalism, globalism, modernism, and post-modernism instead of using the paradigms, which are the conceptual toolkit of security studies and corresponding theories.<sup>4</sup> Thus, although it provides a detailed analysis that implies the relevance of the Strategy of Comprehensive Security, the article fails to depict the big picture of Japan's food security from a security studies perspective.

It seems that the number of previous studies using a human rights perspective is approximately nil in the context of food security. Yet there have been similar studies in the

area of social welfare studies to address the health divide (健康格差) and the disparities in the quality of health across communities due to the different living areas or socioeconomic status.<sup>5</sup> The Ministry of Health, Labour, and Welfare (2015, 2017) categorised households in Japan into three groups depending on the annual income of a household: households with an annual income 1) of more than six million yen, 2) between six million to two million yen, and 3) less than two million yen. This national survey and its associated research based on these categories demonstrated considerable tendencies that households with an annual income between six to two million yen and especially those with less than two million yen have higher obesity rates, higher grain consumption rates, and lower vegetable and meat consumption rates compared to those with an income of more than six million yen.<sup>6</sup> Subsequently, Murayama (2014) argued that economic hardship and inadequate nutritional knowledge, which helps people to choose food to sustain a healthy life, has led to the current nutritional deficiency problems. It is clear that although Japan has sufficient economic power to avoid severe food insecurity that affects the entire country, not all Japanese people enjoy economic affluence. Although this research is not described as food security research, it could become a part of human rights studies as they share the research goal of achieving freedom from hunger.

In this manner, there is abundant research on food security, which could allow Japan to fulfill the conditions of the FAO's four dimensions. However, not every study was in the context of food security. The implication could be that the research trends follow the direction of the domestic policy and Japan's concept of food security does not fully follow all the dimensions apart from availability and stability. This paper does not have the space to demonstrate the reason behind this, but it is likely that an analysis of the policies implemented around 1980 would provide a reason. This is because the concept of food security was drastically altered because of the shift from the Strategy of Comprehensive Security to the Basic Principles of Agricultural Policies in the 80s.

## **5. Conclusion**

Food security, as examined, is a concept that allows humans to live free from hunger. As "food" is a resource to sustain life, since 1974, policymakers at various levels of society have proposed ideas about food security from various perspectives. Within the last four decades, its concept in international society developed from a statement to emphasise the significance of the availability of food commodities to a multi-dimensional policy to root out hunger. In

contrast to international trends, in Japan, the concept of food security was officially publicised in 1980 for the first time as a part of economic security. In order to adjust to Japan's environment, the concept does not follow the same international patterns. Japan has been developing an availability-centred concept and formed corresponding agricultural and economic policies relating to the access and availability dimensions. Research on food security seems biased in the same way that the policies stabilised. There is still room to reconsider the utilisation and stability dimensions in the context of food security.

For future research, the utilisation and stability dimensions should be examined in order to depict a bigger picture of food security in Japan. In addition to an analysis of the dimensions, the policy-making process, especially around 1980, should be researched to determine why Japan developed the concept in such a unique way. From the introduction of this paper, food security is a primary security matter for all communities. Therefore, it is important to examine policies on food security developed not only by the leading ministry(s), such as MAFF in the case of Japan but also by other decision-making bodies to understand the broad perspectives of this issue.

### Endnotes

<sup>1</sup> The World Food Conference was organised by the Food and Agriculture Organisation of the United Nations (hereafter the FAO) in response to the global concern of food supply (Clay, 2002).

<sup>2</sup> On the corresponding concepts of food security in Japan, “*Jikyuu-Jisoku-Ron* [Self-sufficiency-ism],” see Tohbata, S. (1947) “*Nougyo-Saiken-No-Ichi-Kanten, Shokuryou-Jikyuu-Mondai* [A perspective on Reintegration of Agriculture].” “*Nousei-Gakuto-No-Kitoku* [A Document of a Student Who Studies Agricultural Politics],” *Kantoh-Sha*, 36-54.

<sup>3</sup> For the diversification of security means, see Takahashi, S. (1998) “*Anzen-Hosho-Gainen-No-Meikakuka-To-Sono-Saikousei* [The Clarification of the Security Concept and Its Reconstruction],” *NIDS Security Studies*, 1(1), 36-54.

<sup>4</sup> For further details of the paradigms, see Nye, J., & Welch, D. (2013). *Understanding global conflict & cooperation: Intro to theory & history*. Pearson Education.

<sup>5</sup> Ministry of Health, Labour, and Welfare (MHLW). (2012). “*Kenkou-Nippon-21(Dai-2-Ji)* [Health Japan 21(2<sup>nd</sup>)].”

<sup>6</sup> For further details, see MHLW (2015/2017). “*Kokumin-Kenkou-Eiyuu-Chousa* [National Health and Nutrition Survey].” Also Murayama, N. & Nishi, N. (2014; cited in 2014 Murayama et al. 2014).

“*Nihonjin-No-Shokuseikatsu-No-Naiyou-Wo-Kitei-Suru-Syakaikeizaiteki-Youin-Ni-Kansuru-Jisshouteki-Kenkyuu* [The Empirical Research about Socioeconomic Factors Which Define Contents of Dietary Habits of Japanese People],” National Institute of Public Health.

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