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The Pattern of Food Consumption Expenditure and Performance of Household Food Security (*Case at Rural and Urban in West Java Province*)

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Abstract:

Food is one of the basic human needs that the fulfillment as a part of human rights that cannot be postponed and cannot be substituted with other materials. Food is also part of the culture as adaptation between humans and the environment, as a basic component to realize qualified human resources, even food cannot be denied is the main pillar for national development that plays a role in maintaining stabilities of economic, social, and politic.

The objective of this study is to describe the pattern of household food consumption expenditure, and the performance of household food security base on differences characterize of rural and urban region. Survey method was used in this study by determining respondents through the proportionate two-stage cluster random sampling technique with data analysis i.e. description, verification.

The results of this study showed; 1) Proportion of food consumption to total household consumption, for rural area 43,2%, while for urban 40,7%, that indicate in both research area not found household which included condition with vulnerable or food insecure category, with the largest proportion being expenditure household on staple food consumption (rice) with a tendency for rural rice consumption to be greater than urban areas of 88.2 kg per capita per year for rural areas and 83.53 kg per capita per year for urban areas. Overall, food security performance of urban households has relatively better compared to rural households, reflected by households with continuity of food availability in urban areas (53.3 percent) compared to rural household (46.7 percent).

Keywords: Food consumption expenditure, food security, households

1. Preliminary

Food is one of the basic human needs that the fulfillment of a part of human rights that cannot be postponed and cannot be substituted with other materials. Food is also part of the culture of adaptation between humans and the environment, as a basic component to realize qualified human resources, even food cannot be denied is a major pillar for national development that plays a role in maintaining economic, social, and political stability.

Indonesia is the fourth most populous country in the world (251.16 million people) or 4% of the total world population (World Factbook Year 2013) on the one hand, but on the other hand is known as the "biggest biodiversity in the world" cannot consider easy policy efforts toward increasing food self-sufficiency. Development that ignores self-sufficiency in the basic needs of its population, will become highly dependent on other countries, and that means becoming a non-sovereign state.

One of the provinces in Indonesia as a national food barn that is West Java Province, as the province with the largest population in Indonesia, with population growth rate (PGT) ranged from 1.83% - 2.0%, in the next 25 years ie 2040, is expected to experience a population surge of 86 million people, food security is a strategic issue in the future, especially the problem of staple food (rice) which continues to increase from year to year, although per capita rice consumption per year in recent years (2007 - 2013) tend to decrease (Figure 1). The existence of this rice dominance causes the supply of food in West Java is still not balanced.

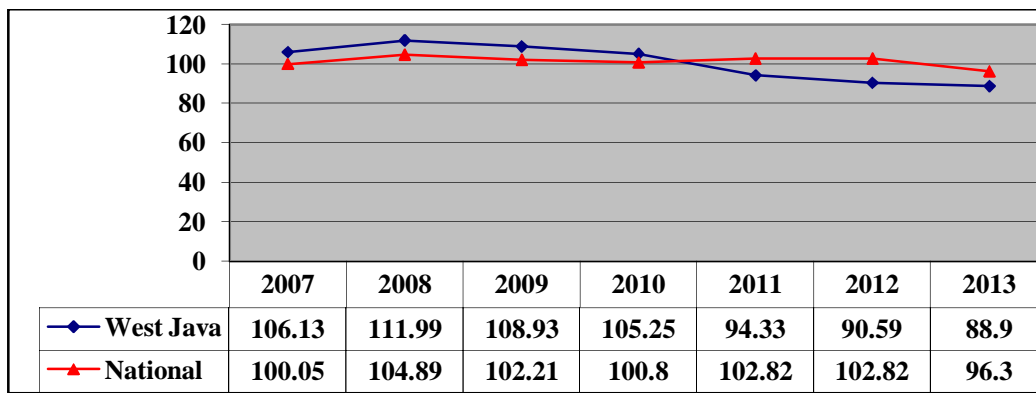


Figure 1: Graph of Consumption of Rice per Capita per Year Population West Java and National Provinces Year 2007-2013

Source: Regional Food Security Agency, West Java Province, 2015

West Java by prioritizing the region's economic development in the development of agribusiness, especially food products in accordance with the comparative advantage of the region, it has contributed to the national food supply, but still found conditions in some areas both in urban and rural areas where the condition of the house is less food (food insecurity). There are 4 sub-districts including the category of food insecurity, 2 districts of food insecurity category, and 3 sub-districts of food-prone category (Regional Food Security Agency, West Java Province, 2015). From the 5,240 villages in West Java, 813 of them are categorized as potential food insecurity, with an indicator of consumption below 2,100 kilo calories per person per day, because the area is included in the category of poor high (PPLS West Java Province, 2011).

Food security is a pillar of regional development, even food is a determinant of welfare, both for people in rural and urban areas (Welirang in Azahari, 2008). The structure of the regional economy is the basic factor that distinguishes one region from another, the difference in regional characteristics (rural and urban readings), which is reflected in the differences in ecological, demographic, social and economic features is closely related to the condition and potential of a region in terms of physical environmental, social, economic and institutional, so that it can have implications on the difference of social acceptability patterns and the suitability (adequate) on the norms of nutritional needs, hygiene and taste (preference) food consumption. Based on the description, the main issues are interesting to examine how the pattern of consumption expenditure and household food security in rural and urban areas.

2. Framework Analysis

2.1. Food Security System and Food Policy

One of the strategic issues in developing a developing country is food security, because it has multiple roles as one of the main goals of development and one of the main instruments (intermediate goals) of economic development (Simatupang, 1999). The first role is a function of food security as a prerequisite for ensuring access to food for all citizens of the country in quantity and quality sufficient for the existence of life, healthy and productive. Access to "adequate" food is a human right that must always be guaranteed by the state with the community (FAO, 1998; Byron 1988). The second role is an implication of the food security function as a requirement for the development of creative and productive human resources which is the main determinant of scientific innovation, technology and productive work as well as the function of food security as one of the determinants of stable and conducive economic environment for development (Timmer, 2000, 2004).

Referring to Falcon and Timmer's opinion, 1991; "The proximate definition, of food security always revolved around the price, stability especially for the price of rice, the country's primary food staple. Food security and price stability are synonymous, the strategy pursued by the government especially in the past is in the short term in the form of price stabilization (rice); and long-term food self-sufficiency (rice) (Dawe, 2001) Policy-oriented food self-sufficiency including food availability approach paradigm category.

The concept of food security widely embraced until the mid-1980s, is the paradigm "National Food Availability Paradigm". Based on this paradigm, food security is defined as "the ability of a country to ensure adequate food availability for all its inhabitants". This concept, looking at the aggregate food security at the national level (country), which is fulfilled through domestic procurement (domestic production) and foreign procurement (import). Simatupang (2007) shows some empirical evidence of the failure of the approach, namely (1) hard-earned self-sufficiency of rice and its long-lasting process is unsustainable, lasting less than 5 years; (2) The incidence of acute food insecurity occurs sporadically and locally, which even leads to death-starvation cases; (3) Millions of farmers in rural areas still live in poverty and threats of food insecurity; and (4) The food security system was unable to reduce the impact of the economic crisis resulting in an acute food crisis in 1998.

After the mid-1980s there was a new discourse on food security, with a final indicator of food security not national food sufficiency (national food security), but adequate food access for all individuals in a country, the new discourse known as the food acquisition paradigm (food entitlement paradigm) formulated and popularized by the recipient of the 2002 Nobel Prize in Economics (Sen, 1981).

Based on the food acquisition paradigm, there are three main points of thought, namely (1) The final indicator of food security is the acquisition of adequate food for each individual (individual food security); (2) The availability of food is a condition of necessity but not sufficient to guarantee individual food acquisition, (3) Food security must be viewed as a hierarchical system; national, provincial (district, local) food security, households and individuals. (Alamgir and Arora, 1991; Simatupang, 1999). Referring to the food acquisition paradigm, food security is determined by two key determinants, namely food availability and food accessibility. As time passes the food acquisition paradigm continues to expand and adjust along with the development of science and the changing issues of contemporary development (Maxwell, 1996; Watts and Bohle, 1993) by incorporating the element of food insecurity (*vulnerability*) as one of the determinants of food security. The availability and access of food vulnerable to certain risks of risks such as natural disasters, economic, social and political turmoil should be classified as a condition of unstable food security. Furthermore, Chambers (1988) added the element of sustainability as an additional determinant of food security. Basically, the element of vulnerability and sustainability leads to the idea that time is one of the main dimensions of food security. The availability and access of food must be guaranteed for the most sustainability of the popular sustainability (*food sustainability*) in the 1990s (Swaminathan, 1995; Simatupang, 1999).

The results study of Simatupang and Fleming (2001) showed that adequate food access was not able to guarantee adequate intake of nutrients, even in the extreme form, not rarely found "paradox of nutrient abundance", i.e. families or individuals who have access to abundant food suffering from syndrome prone to mild nutrition/depression (Halavatau and Halavatau, 2001; Foraete, 2001, Wellegtabit, 2001). In other words, food security is not enough to ensure nutritional security. It can be ascertained, families or individuals suffering from food insecurity must be suffering from malnutrition. Food security is a necessary condition but not sufficient to ensure nutritional endurance (Simatupang and Fleming, 2001) that led to the emergence of the concept of nutritional endurance in the 1990s. The main difference between food security and nutrition resilience lies in the aspect of food utilization. If the food that has been obtained in sufficient quantities (*food security*) is processed and consumed properly then the need for nutrition will be balanced adequately (*nutritional defenses*). Thus, if the food utilization element (*nutrient*) is included as an additional requirement then food security will be identical with the nutritional endurance. In the current concept, food utilization is one of the criteria of food security requirements, so the nutritional requirements have been met.

Based on the description, the definition of food security was changed contemporary and widely accepted, namely: "*Secure access by all people at all times to adequate, safe and nutritious foods which meets dietary and preferences for an active and healthy life*" (FAO, 1998, Maxwell, 1996; Van Braun et al., 1993), which can be mean as "guaranteed to everyone at all times of access to nutritious, safe, appropriate food and meet nutritional needs for an active and healthy life." Thus, food security is sustained by food stability triad (Chung et al., 1997), namely (1) food availability; (2) access to food (food accessibility), and (3) food utilization. Based on the description, sustainable food security is determined by the adequacy, vulnerability, and sustainability of the availability, access, and utilization of food. Sufficiency, vulnerability and sustainability are indicators of performance; while availability, access, and utilization are the determinants of sustainable food security.

Thus, in general, food security includes 4 aspects, namely sufficiency, access, security, and time (Baliwaty, 2004). With this aspect, food security is seen as a system, which is a series of three main components, namely food availability and stability, food accessibility and food utilization. These four indicators are the main indicators for achieving food security. Measures of food security at the household level are calculated in stages by inflating the four components of the food security indicator, to obtain a food security performance.

2.2. Regional Characteristics and Differences in Economic Resources

Future approaches to food security development need to prioritize household/individual food security with decentralized management pattern as a consequence of the implementation of regional autonomy policy. In this case the participation of local governments and communities is key to strategies to increase and strengthen household and regional food security. Meanwhile, the government (central and regional) plays more role as facilitator and creates climate to create conducive situation for society and private sector to participate in food security development at individual, family, local, regional and national level. One of the forms of community participation in the development of food security is through the empowerment of local institutions such as food and food sectors and the increasing role of the community in the provision of food. This needs to be considered as one of the efforts to achieve food security in Indonesia (Noer 1995, Sapuan and A. Soepanto, 1995; and A. Azis, 1995 in Rahman and Ariani, 2002).

3. Research Methodology

3.1. Research Methods Used

Based on the research objectives, the research method used by *mixed method* is a research method that combines qualitative and quantitative approaches in all stages of the research process, according to Creswell (2009), mix-methods is a research approach that combines or associates forms qualitative and quantitative. Using the survey method with the research object is a household with a child under five years old with the consideration of that household it is possible to indicate the level of food insecurity (susceptible to malnutrition) located in the local (local) region i.e. the district/city and can represent the condition/characteristics of rural areas and urban areas of West Java Province.

3.2. Determination Technique of Respondents

The sampling technique used is *two stage cluster random sampling* that is the District/City, Sub District and Village target population is *Primary Unit Sampling (PUS)*, which in this case only district/city, sub district, and village that have children under five years old (toddlers). The household is the smallest unit as *Secondary Unit Sampling (SUS)*. List of households is a sampling frame obtained by direct data collection. Sample unit determination by means of *two stage clusters*, if the clusters are homogeneous and the cluster is heterogeneous, it takes a small number of clusters and many sample units in each selected cluster. Sampling allocation is *proportionally allocated* from Target Household i.e. 30 rural households and 30 urban households are obtained.

3.3. Design of Data Processing and Analysis Techniques

The pattern of household food consumption in rural areas and urban areas of West Java Province is analyzed quantitatively with ratio scale, table, graphic and descriptive. The performance of household food security in rural areas and urban areas of West Java province covers aspects; availability of food, food access and food utilization, analyzed qualitatively with nominal scale, further comparative analysis. The analysis of Food Security Performance (KKP) is as follows:

$$KKP = Kp + Sp + Ap + Np + Up$$

Description: KKP = Food Security Performance

Kp = Food availability adequacy

Sp = Stability of food availability

Ap = Food accessibility

Np = Continuity of food availability

Up = Food quality

3.4. Location and Time of Study

The study was conducted in West Java Province by taking cases in two selected districts/cities, in accordance with the research objectives to illustrate the two different regional characteristics of Rural and Urban. The selected location representing rural area is Ciamis District, and the selected location representing urban area is Bandung City. The study was conducted for 18 months.

4. Expenditure Pattern of Household Food Consumption

4.1. Rural and Urban Areas

Based on the results of research on the pattern of household consumption expenditure, especially food consumption, there is a tendency of different consumption expenditure patterns between households in rural (Ciamis District) and urban (Bandung), although overall, the proportion of food consumption expenditure pattern both in rural and urban is at less than 60% of the total household consumption expenditure, i.e. for rural areas the proportion of food consumption expenditure is 43.2% and urban 40.7%. Referring to Milifpk's opinion, 2007 that households are vulnerable to food i.e. when the proportion of food expenditure is high (more than 60 percent) of total household expenditures, and in line with Maxwell's opinion, 1996; Watts and Bohle, 1993) by incorporating vulnerability as one of the determinants of food security as a condition of unsteady food security, hence based on the results of research indicates that in both research areas not found households that included conditions with categories vulnerable/vulnerable to food, with urban household tendencies having more robust food security than rural households.

In line with the results of the study, based on the average level of household income in rural areas (Rp 3,260,700 per month) and average urban household income (Rp 4,300,800 per month), it appears that urban household income is higher than rural areas. When income is linked to household expenditure it is understandable as described in Ernest Engel, known as *Engel's Law* with a backward curve approach that the share of income used for food expenditure tends to decrease, if income increases, in an increase in certain income of normal goods into goods inferior (Pyndyck, 2007). This shift in household expenditure patterns occurs because the demand elasticity of food is generally high. Food expenditure in a household is one indicator of the prosperity of the community, so that if the expenditure for food is getting smaller, then the level of prosperity of society is getting better.

When viewed from the pattern of food consumption expenditure in more detail, it turns out that in both research areas the largest proportion is the expenditure for consumption of staple food (rice) with the tendency of rice consumption in rural areas is greater than the urban areas. This is in line with the results of research by Tri Bastuti Purwantini and Mewa Ariani (2008) on the pattern of consumption of staple food of rice farmers in Java that rice has become the dominant main food pattern and tends to be single, even there has been a very significant change in the basic food pattern, households rarely consume local food other than rice in its staple food pattern, which is filled from its own production ranges from 38-63 percent. Based on the result of Yunita (2015) research, the factors that influence the consumption pattern of staple food in Pamekasan Madura regency is more determined by factors; conditions, preferences (preferences), community culture, socioeconomic status, and health.

Assuming rice price in rural area is Rp 9,000 per kg, rice consumption for rural area is 88.2 kg per capita per year, while urban area with rice price assumption is Rp 10,000 per kg, then rice consumption for urban area is 83.53 kg per capita per year. It appears that rice consumption for urban areas is lower when compared to rural areas. The lower consumption of rice in urban areas (Bandung City), among others, is one of the impact of the successful program launched by Bandung local government known as *"One day No Rice"*, which launched a campaign of public awareness of per capita rice consumption per year is still high, by encouraging citizens to care about reducing rice consumption. When compared with the average national rice consumption, it appears that in both research

areas, it is still lower than the national average consumption of 96.20 kg per capita year (BPS, 2015), while compared to the average consumption per capita rice per year West Java Province, for rural areas is still relatively higher, while for urban areas is lower than the average consumption of West Java Province's population of 86.23 kg per capita per year (Regional Food Security Agency, West Java Province, 2015).

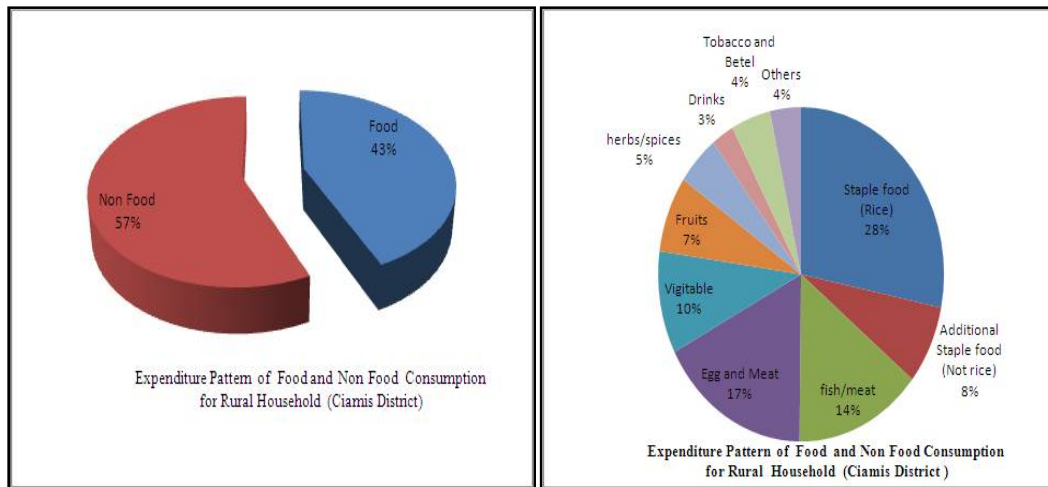


Figure 1a: The Pattern of Food Consumption Expenditure for Rural Household

Non-rice primary food consumption expenditures appear both in rural and urban areas relatively similar to urban tendencies slightly higher. It shows that the diversification of food consumption of carbohydrate source is still not developed, the main food (non-rice) of household is more dominated by food made from wheat flour (including instant noodle), whereas the source of food comes from tubers in rural (Ciamis District) among others *ganyong (canna indica)* commodities that have not been developed optimally. Food consumption expenditures with raw material sources of protein, vitamins and minerals are reflected in the level of consumption of fish/meat, eggs/milk, vegetables and fruits, the consumption of households in urban areas is relatively greater than in rural areas.

The shifting pattern of public consumption expenditure needs to get attention, including the decline in rice consumption, despite the decline, rice consumption tends to remain high, so in the future the need for rice will still be large. Some of the things that must be observed from this phenomenon are food security and high flow of imports of finished food and beverage products or ready to eat food. This reflects the shift in culture and relatively better understanding of nutrition in urban households. The proportion of household food consumption expenditure patterns for rural and urban areas per type of food consumption expenditure is presented in Figure 1a and Figure 1b.

Food diversification program that has been implemented, it has not produced the expected results. Substitution of staple food occurs not toward the utilization of local food, but to imported food (wheat). The declining trend of rice consumption on the one hand, is inversely related to the increase of flour consumption (based on imported food). This is confirmed by data from West Java Provincial Food Agency (2015) stated that there is a tendency to decrease rice consumption from 88.9 kg per capita per year (2013) to 86.2 kg per capita per year (2014) but there is a tendency of food consumption (wheat flour) which remained high in the same year that is in the range of 12.6 - 12.7 kg per capita per year.

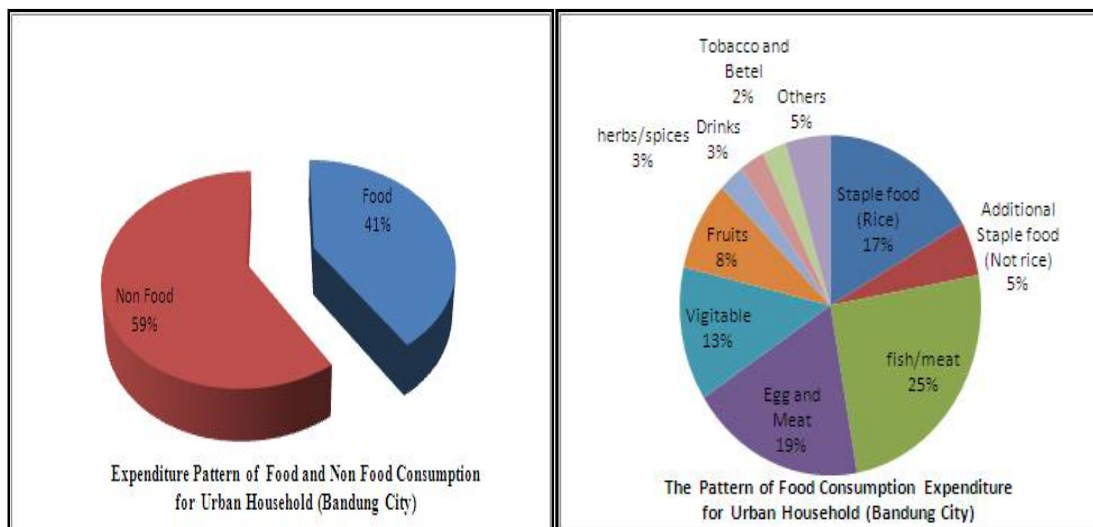


Figure 1b: The Pattern of Food Consumption Expenditure for Urban Household

4.2. Household Food Security Performance

4.2.1. Adequacy of Food Availability

Based on the results of the research, it appears that in urban households, the adequacy of food availability is relatively higher than in rural areas, this is understandable considering that even in rural areas it has a bigger chance of availability of food given the dominant source of livelihood in agriculture especially food (paddy), however, often for poor households in rural areas, the food (rice) they produce will soon be sold to meet the urgent needs of families in non-food consumption (e.g., children's education, fees etc.), while household food availability throughout the year more dependent on the ability of purchasing power because the fulfillment of food is still obtained by buying. As for urban households, more income comes from formal sector livelihoods, for most households prioritizing the fulfillment of adequate food availability prior to the fulfillment of other consumption outside of food. They feel calmer (seft), when food (rice) is available throughout the earning cycle of the next period. More details of the data on the adequacy of food availability at household level in urban and rural areas in Table 1.

Food Availability	>240 days (Enough) (person)	Cutting Point				
		%	1-239 hari (less Enough) (person)	%	No Availability (Not enough) (person)	%
Rural	20	66,60	5	16,70	5	16,70
Urban	21	70,00	5	16,70	4	13,30

Table 1: Number of Rural and Urban Households Based on the Adequacy of Food Availability

4.2.2. Stability of Food Availability

Stability of food availability at the household level is measured based on the adequacy of food availability and the frequency of feeding of household members in a day. One household is said to have food stability if it has a food supply above the *cutting point* (240 days for rice producing areas) and household members can eat 3 (three) times a day according to the eating habits of the people in the area. The frequency of eating can illustrate the sustainability of food availability in the household. In one household, one way to maintain food availability over a period of time is to reduce the frequency of eating or combining staple food (e.g. rice with cassava). Research conducted by KDP-LIPI, 2004 in several areas in West Java also found that reducing the frequency of eating is one of household strategies to extend their food security (Raharto, 1999; Romdiati, 1999).

Based on the results of the study, in rural households that have sufficient food availability throughout the year with frequent feeding 3 times a day or in categories have a strong food availability stability there are only 53.4 percent of households, however in rural households with insufficient availability food does not even have food availability throughout the year although there are households who feed three times a day at 16.7 percent each (in insufficient household food supplies), and 6.7 percent (in households no stock sufficient), it occurs primarily in households in the informal sector who have a relatively secure daily income or there is a certainty of work that has been established throughout the year although with income levels that are only sufficient to meet daily needs.

In rural households, visible even in categorized as having sufficient food supplies throughout the year, their frequency of eating only twice a day, it occurs in response to conditions to maintain food availability throughout the year, is found in those households at any time diversify staple foods with other filling substitutes

Food Availability	Frequency of Eating for Household Members					
	> 3 times	%	2 times	%	1 time	%
> 240 days	Stable (16 person)	53,4	Less Stable (4person)	13,3	Unstable (0person)	0,0
1 -239 days	Less Stable (5person)	16,7	Less Stable (1 person)	3,3	Unstable (0 person)	0.0
No Food Supply	Unstable (2person)	6,7	Unstable (1 person)	3,3	Unstable (1 person)	3,3
Amount	(23person)	76,8	(6 person)	19,9	(1 person)	3,3

Table 2: Number of Households Based on Stability of Food Availability in the Rural Area

(among others: cassava, banana, etc.). However, it is not found in households that have sufficient supply of food throughout the year that the frequency of eating only 1 time. Overall there are still households in rural areas where food availability is categorized as less stable (30 percent), and household categories with unstable availability (16.6 percent). The condition of households with unstable categories needs to be given special attention because it is a threat to the possibility of food insecurity in rural areas, which at any time can occur during famine season.

Food Availability	Frequency of Eating for Household Members					
	> 3 times	%	2 times	%	1 time	%
> 240 days	Stable (17 person)	56,7	Less Stable (4 person)	13,3	Unstable (0 person)	0
1 -239 days	Less Stable (3 person)	10,0	Less Stable (1 person)	3,3	Unstable (1 person)	3,3
No Food Supply	Unstable (2 person)	6,7	Unstable (2person)	6,7	Unstable (0 person)	0
Amount	(22 person)	73,4	(7 person)	23,3	(1 person)	3,3

Table 3: Number of Households Based on Stability of Food Availability in the City

for urban households, it is seen from the level of stability of household food availability consisting of; 56.7 percent (stable category), 23.3 percent (less stable category, and 20 percent (unstable category). When compared between rural households and urban households, there appears to be relatively no significant difference in stability but in particular, urban households are relatively more stable in food availability than in rural households. The data on the number of households based on the stability of food availability in rural and urban areas is presented in Table 2 and Table 3.

4.2.3. Accessibility/Affordability and Continuity of Food Availability

Based on accessibility/affordability of food at the household level with respect to ownership/land tenure of paddy fields/dry land as indicators for having direct and indirect access, in accordance with the support of natural resource characteristics and local typology, it appears that rural households have greater direct access to food than households in urban areas respectively rural household's 83.3 percent, while urban household's 36.7 percent. This makes it possible for rural households to optimize their land resources (paddy fields/dry land) owned/land tenure for the fulfillment of their food needs by diversifying the production of food commodities. It compared to urban households who should be more secure for the fulfillment of their food needs from access to resources other livelihoods outside of agricultural activities to support purchasing power in an effort to reach the fulfillment of food needs. More detailed data are presented in Table 4.

Naturally, based on field monitoring results, rural households have always utilized their yard and farm dry land by diversifying the cultivation of food products, both with food commodities; sweet potato, cassava, corn etc., Vegetable (kale, spinach etc.) medicinal plants (ginger, turmeric, etc.), fruits (bananas, mangoes, etc.), fish (catfish, gold fish, etc.), as well as livestock (chicken, sheep, etc.), whereas in urban areas, very limited land is devoted to the fulfillment of food needs with the use for cultivation, even if there is very limited. However, based on the results of there are still open land and abandoned land that is owned by individuals or companies, while the land owner is not a resident who live in the local area. If it is used for the cultivation of food for the local population, especially for lower-income households (as well as potentially functioning as green food reserves), it will be very useful to open employment and livelihoods, in turn, to help household food security.

Area	Accessibility Lan Ownership/Tenure of Land			
	have direct access (person)	%	Not have direct access (person)	%
Rural	25	83,3	5	16,7
Urban	11	36,7	19	63,3
Average		60,0		40,0

Table 4: Number of Households by Accessibility/Affordability Food at Household Level

Judging from the continuity of food availability at the household level with respect to the stability of food availability and the level of ownership of access to food supplies (both direct and indirect), it appears that households with food stability are households that maintain the continuity of food availability throughout the year. However, from households that are included in the continuous category of food availability, in rural areas more determined by direct access ownership 43.3 percent greater than in urban only 36.7 percent.

The stability of food supply for urban households is less determined by the direct access it has, which is reflected in land ownership to produce food, but more determined by household purchasing power (income). Likewise, urban households that are not continuous food availability are entirely located in households that do not have direct access (land), although even rural households have direct access (owning land), not necessarily ensuring the continuity or stability of food availability for the home ladder. Based on the results of Handewi P.S. Rachman (2010), that the accessibility of households to food is a key factor for the achievement of food security, even empirically in food-resistant areas and still found the proportion of households with high food insecurity (20-30 per cent). For details, detailed data on the continuity of food availability at the household level for both rural and urban areas is presented in Table 5.

Access Stability	Rural				Urban			
	Have direct access (person)	%	Not have direct access (person)	%	Have direct access (orang)	%	Not have direct access(person)	%
Stable	13 Continuous	43,3	3 Continuous	10,0	11 Continuous	36,7	6 Continuous	20,0
Less Stable	7 Less Continuous	23,3	1 Less Continuous	3,3	0 Less Continuous	0	7 Less Continuous	23,3
Unstable	5 Not Continuous	16,8	1 Not Continuous	3,3	0 Not Continuous	0	6 Not Continuous	20,0
Amount	25	83,4	5	16,6	11	36,7	19	63,3

Table 5: Number of Households Based on Availability Continuity Food in Rural and Urban

4.2.4. Food Quality

Based on the results of the study, the quality and safety of household food shows that urban households are relatively better compared to rural households with comparison of food quality categories for rural household's 63.3 percent while urban households are 76.7 percent, with poor food quality for urban households (6.7 percent) is still better than for rural areas (13.3 percent). It is understandable that urban households are relatively more aware (have a higher nutritional awareness) of the nutritional knowledge required by household members so that the presentation of urban household food is more varied with animal protein content, more so in urban households more toddler family members are more disciplined to get family health monitoring in POSYANDU (*Integrated Service Post*) compared to rural households. The existence of Posyandu becomes very useful as part of *early warning system mechanism for food security condition*, if there is condition of household member (especially household that have children under five) experiencing food insecurity indication, so that can be anticipated or overcome early. Even in urban still exist households with poor food quality (6.7 percent) are more likely to be caused by the inability of low-income households with limited income/income sources.

For rural households, it appears that although natural resources make it possible to support the fulfillment of family food quality needs, but due to the relatively lower level of awareness/knowledge about the importance of food quality (nutritious food), households do not take much care, which is important to meet their basic food needs. The results of this study are in line with the results of Simatupang and Fleming research, 2001, that adequate food access is not uncommon to find "paradox of abundance of nutrition", i.e. families or individuals who have access to abundant food suffer from mild/depressed nutritional syndrome (Halavatau and Halavatau; Foraete, 2001, Wellegtabit, 2001). More detailed data on household food quality/safety fulfillment in both rural and urban areas is presented in Table 6..

Food Quality Area	Food Quality Good	%	Food Quality Less Good	%	Food Quality Not Good	%
Rural	19	63,3	7	23,3	4	13,3
Urban	23	76,7	5	16,7	2	6,7
Average		70,0		18,3		11,7

Table 6 :Number of Households Based on Quality/Food Safety in Rural and Urban

4.2.5. Food Security Performance

The food security performance is calculated by combining the four indicators of food security (availability of food, stability of food availability, access and continuity and quality/food security). The combination between the adequacy of food availability and the frequency of eating provides an indicator of the stability of food availability. Furthermore, the combination of food availability stability with access to food provides an indicator of the continuity of food availability. The food security performance is measured based on a combination of indicators of continuity of food availability with quality and food safety.

Based on the results of the analysis of predetermined indicators, food security as presented data and discussed in the previous section, it is envisaged that in rural households belonging to the category have a good food resilience 46,7percent, the rest is 30,0 percent included in the category less resistant, while 23.3 percent included in the category cannot stand. It shows that in rural area still have possibility level of potency of food insecurity which is relatively big that is in household which not have level of continuity of food availability, beside that also less able to fulfill good nutrition requirement in fulfill its food consumption.

Households that enter into the category of non-food security, it only comes from households that are less continuous and not continuous in the supply of food, whereas in households with continuous category in food supply not found households with food insecurity category. More details of data of rural household food security performances are presented in Table 7.

In urban households, there is relatively no significant difference in food security compared to rural households, but overall urban households have relatively better food resilience compared to rural households, with indicators of better quality of food consumption (83.3 percent) than rural households (80 percent). Similarly, households that have continuity of urban food availability, preferably in terms of food security (53.3 percent) compared to endurance resilience.

Continuity of Food Availability	Animal Protein and Vegetable/only animal protein	%	Only Vegetable Protein	%	No protein consumption	%
Continuous	Secure 14	46,7	Less Secure 2	6,7	Not Secure 0	0,0
Less continuous	Less Secure 7	23,3	Not Secure 1	3,3	Not Secure 0	0,0
Not Continuous	Not Secure 3	10,0	Not Secure 3	10,0	Not Secure 0	0,0
Amount	24	80,0	7	20,0	0	0,0

Table 7: Number of Households Based on Food Security Performance in the Rural Area

food for rural households (46.7 percent). This is in line with the results of research by Godwin Anjeinu Abu (2016), which examines rural and urban households in Benue State Nigeria shows that household food security in urban areas is higher than rural households using 62.2% of calorie absorption method for home urban staircases and 53.3% of rural households. Based on the food security, households can be divided into three categories of food resistant households, households are less food resistant and households are not food resistant. Data for the resilience of urban household food security are presented in Table 8

Continuity of Food Availability	Animal Protein and Vegetable /Only Animal Protein	%	Only Vegetable Protein	%	No Protein Consumption	%
Continuous	Secure 16	53,3	Less Secure 1	3,3	Not Secure 0	0,0
Less Continuous	Less Secure 5	16,7	Not Secure 2	6,7	Not Secure 0	0,0
Not Continuous	Not Secure 4	13,3	Not Secure 2	6,7	Not Secure 0	0,0
Amount	25	83,3	5	16,7	0	0,0

Table 8: Number of Households Based on Food Security Performance in the Urban Area

5. Conclusions and Suggestions

5.1. Conclusion

1. Household consumption patterns, both for rural households (Ciamis District) and urban households (Bandung City) are relatively different. The proportion of food consumption expenditure on total household consumption expenditure, for rural areas 43.2%, while for urban 40.7%. In both areas, the proportion of food consumption to total household consumption has a value of less than 60%, it gives an indication that in both research areas not found households that included conditions with the category of vulnerable / food insecurity. The largest food consumption expenditure is for the consumption of staple food (rice) with the tendency of rice consumption in rural areas greater than the urban areas of 88.2 kg per capita per year for rural areas and 83.53 kg per capita per year for urban areas.
2. The performance of urban household food security is relatively better compared to rural households. This is reflected in the continuity of food availability in urban households, higher in terms of food security (53.3 percent) compared to rural household food security (46.7 percent), and better food consumption (83.3 percent) than rural households (80 percent).

5.2. Suggestion

1. Household consumption declining (rice) program needs to be continuously pursued as has been done by the Government of Bandung City by launching the program "One Day No Rice" and simultaneously need to continuously improve the program of food consumption diversification by encouraging the consumption preference of local food based on tubers whose potential is large especially in rural areas (but the value of Expected Food Pattern/PPH source tubers in West Java province is lowest). Introduction of food processing technology (downstream agro industry) is strategically grown in rural areas, among others, to produce various types of locally sourced food flour based on tubers that are also expected to reduce the growing trend of household dependence to imported food (wheat flour).
2. Need for institutionalization of land for food, among others through local government regulations (Governor or regent) to control the conversion of productive land outside agriculture, especially for rural areas. For urban areas of live food reserves (yard, village land, urban land). is still potential and large enough, even in urban areas can be grown food management through urban farming policy (*urban farming*), namely the city as one source of supply food security system, one of productive activities to take advantage of open space and urban waste, and one source of income and employment opportunities and urban household enterprises, with the development of a non-land-based agricultural development approach.

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