



ISSN: 0976-3376

Available Online at <http://www.journalajst.com>

ASIAN JOURNAL OF
SCIENCE AND TECHNOLOGY

Asian Journal of Science and Technology
Vol. 08, Issue, 07, pp.5059-5064, July, 2017

RESEARCH ARTICLE

ROLE OF FUNCTIONING FOOD SECURITY CHANNEL IN ACHIEVING HOUSEHOLD FOOD SECURITY IN SOUTH SULAWESI

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ARTICLE INFO

Article History:

Received 26th April, 2017
Received in revised form
12th May, 2017
Accepted 28th June 2017
Published online 24th July, 2017

Key words:

Food Security,
Functionality,
Household.

ABSTRACT

The provision of food as one of food security subsystem has five basic character namely (1) Capacity; (2) equity; (3) independence; (4) reliability (5) sustainability. The availability of food in a community can be met from two source alternatives. First, food sourced from domestic production. Second, food obtained from other sources ie from imports. Food security at household level is the result of influence of two sources, so it is necessary to increase production of sustainable production. In the fulfillment of food a number of household members have limitations that make formation of poor households in different positions with rich households. In response to this, existence of institution of food security becomes very important considering as a channel to anticipate shortcomings and advantages between seasons and between regions. This study Administratively conducted in district Makasar which is one of 14 sub-districts within city of Makassar is a combination of qualitative and quantitative approaches. The functioning of food endurance channel varies in different location forms. (a) at a surplus location in functioning of government agencies showing a functional phenomenon with low and medium category categories. (b) at surplus locations in market functioning of market institutions show that high and low category functional phenomena are occurring in urban minus households.

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INTRODUCTION

The problem of food faced today is not only caused by insufficient production of food in absolute terms. However, the main problem lies in the unequal production of food. If viewed from the main food source in Indonesia is not closed the possibility there are some areas, regions or households experiencing food shortages that result in social stability National, regional or household level becomes disrupted. The provision of food as one of the food security subsystem has five basic character namely (1) Capacity; (2) equity; (3) independence; (4) reliability (5) sustainability. The State of Food and Agriculture (1996) defines food security as a guarantee to every citizen to be able to access food to meet their needs, in order to live healthy and prosperous. Meanwhile, according Suryana (2004) states that household food security is the ability of households to meet the adequacy of food of its members from time to time in order to live healthy and able to perform daily activities. The availability of food in a community can be met from two source alternatives. First, food sourced from domestic production. Second, food obtained from other sources ie from imports. Food security at the household level is the result of the influence of the two

sources, so it is necessary to increase the production of sustainable production. Sustainable food security can be achieved through the stability of household food with the assurance that there is food availability at all times and can be accessed in the long term. FAO (1996) reveals that food security is a reflection of household conditions that can access food both physically and economically, so that each family will not be at risk of malnutrition. But the reality of the household has no freedom to fulfill its basic needs. In an effort to produce household needs Friedman (1992) states in the fulfillment of a number of its members, it turns out that households have limitations that make poor households in different positions with rich households. On the other hand, at the stage of providing food for its members, households depend heavily on the availability of food in an area that is influenced by the region's ability to produce food. To achieve sustainable food security, households need food aid sourced from food security institutions (1) government institutions, (2) market institutions and (3) community institutions. Food security in a region, production imbalances between surplus areas and deficit areas, and between seasonal seasonal surpluses with seasonal deficits need to be balanced. The achievement of food balance according to Soetanto (2001) in surplus areas with deficit areas and surplus period with deficit period can be done through process (1) market mechanism, (2) government interference or both, and (3) role of society itself

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with aim To ensure a free food channel from the surplus area to the deficit area and from the surplus to the deficit period so as to ensure access to every region and every time. The higher the access of a household to food the higher the access of a household to food the higher the household food security. From this it is found that the ability of households to have access to food is reflected in the share of expenditure to buy food (food). If connected with the existence of three food security institutions ie government, market and society with the level of achievement of household food security then it should be fulfilled if the three sub-system of food security (availability, affordability and stability) food is running as it should. The existence of food security institution becomes very important considering its function as a function of precaution or can anticipate the shortage / excess food between seasons and between regions. Nationally, the availability of food has been sufficient to meet the level of food needs. Even so, there are still some areas and even households experiencing consumption imbalances due to uneven distribution of food both in urban and rural areas. Based on the above description, the purpose of this study is to see how the functioning of food security channels consisting of government institutions, markets and communities in urban and rural areas in South Sulawesi.

CHAPTER II

MATERIALS AND METHODS

This research was conducted in Januari – Mei 2016 at South Sulawesi Administratively, this research is conducted in Kecamatan Makassar which is one of 14 sub-districts within Makassar city with an area of 2.52 square kilometers or (0.7) percent of Makassar city area of 175.77 kilo meters square. This is a combination of qualitative and quantitative approaches. The qualitative approach is dominant, because the focus of this study is to describe the comparisons between urban and rural communities in the fulfillment of food and the achievement of household food security through the functioning of food security channels, namely government institutions, markets and society. Quantitative methods are used to analyze the relationship of food channel functionality in achieving household food security in the locations of surplus and minus of food. Determination of research location is determined by purposive that is urban village that is kelurahan Maricaya as surplus location and kelurahan of Barabaraya Timur as location of minus of food. In rural areas, Bontotanga village was designated as surplus village and East Tonrokassi village as a minus village. Determination of this village refers to MOH report (2014); CPM (2015); Makassar in the numbers (2015). Furthermore, the determination of each location of surplus and minus of food based on (1) the monograph of the village of 2014 and the village monograph 2014; (2) guidance on village and village officials and (3) direct observation results through preliminary survey to understand the condition of urban and rural area location.

Household sampling is selected in two groups of households in urban and rural areas ie; The first group that has the criteria; (1) households experiencing minus food conditions ie households belonging to pre-prosperous families and second group are households with criteria ie households that are in food surplus conditions and (2) households belonging to families as wealthy III plus . Data collection techniques in this

study were conducted by in-depth interviews, involving several questionnaires and collection of several documents.

Data Analysis

In conducting first-stage data analysis conducted is a data reduction process that focuses on the selection, simplification, information abstraction and rough data from field notes. Then the stage of data presentation is the preparation of a collection of information into a statement that allows the conclusion with the presentation of data in the form of narrative text and then classified according to the theme and needs analysis. Quantitative data collection is used to discuss a sub-chapter about the phenomenon of functioning relationships of government agencies, markets and communities. Quantitative analysis of this case using descriptive method through the analysis of scores of a number of numbers obtained by 3 categories of variable phenomenon functioning food security channels namely; (1) high, if > 85 percent; (2) moderate if 60 percent - 85 percent and (3) are low, if <60 percent.

CHAPTER III

RESULTS AND DISCUSSION

Household Food Security

Household food security is the whole of individual access to adequate food throughout the ages in order to live a healthy life. There are three things contained in food security namely; (1) availability of adequate amount of food (effective supply); (2) affordability that is defined as the ability of the individual to meet his food (effective demand); And (3) a combination of effective supply and effective demand. Food availability is defined as a condition of fulfillment of pangan through domestic production and through trade (import). Food availability can be affected by planting area, harvested area, pest, climate and other attacks that can be useful in predicting food availability.

Channel functioning of Food Security

Food channel functionality can be analyzed by functional structural theory constructed by Parson (1951) which assumes that society as a social system is seen in total. If the social system is seen as a partial system, then the community can be a number of many small systems, such as family systems, educational systems and religious institutions. Functional food channel can be analyzed with functional structural theory developed by Merton by considering the phenomenon of manifest function and latency as well as functional phenomenon and dysfunction itself. With the sustainability of household food security in a sustainable manner, the community becomes a central point in the realization of this, in line with the linkage to sustainable household food security.

Functioning of Government Institution in Food Security

The functioning of the government institution in question is the participation of government institutions, such as Bulog, Dolog, BPKP or various institutions in performing their roles and functions based on existing programs in overcoming food problems or providing food for individuals, groups, communities in need to achieve household food security

Sustainable. According to Ohama (2001), the government system in the fulfillment of household food needs is associated with two important points; (1) in relation to aspects of access of external resources / facilities from outside the community; (2) related to the mechanism of the organizational structure in access to external resources / facilities. Of the two points contain a fundamental meaning that in addition to providing equal opportunities to various groups of people in accessing these external resources by taking into account various activities initiated by the community itself. While the second point implies that there is involvement in the improvement of organizational mechanisms between the agency (agency) development with the community system for the effectiveness of resource delivery.

The above definition states that the functioning of government institutions has become the needs of the community, as set forth in Law No. 7 of 1996 on food, State Policy Outline 1999 - 2004 and government regulation no; 68 of 2002 which obliges the government together with the community in realizing the resilience of panagn. On the other hand food security has become a commitment almost all the nations in the world incorporated in the Food and Agriculture Organization (Amang, 1995).

Functioning of Market Institution in Food Security

The functioning of market institutions is the involvement of market participants in anticipating the needs of individuals or groups and communities in meeting the additional needs of household food through the exchange process either directly or indirectly. (Ohama 2001) states that market presence in society together with the government is an external system that can serve as a channel for households to gain additional opportunities from outside the community in order to obtain resources and services or provide surplus out of the community in exchange.

aspect, these three institutions facilitate households to access food availability through food distribution programs (government), food selling (market) or toling mechanism (community) in the process of food procurement.

Economic Social Conditions

The number of family members in a household unit determines the size of the household. For households in urban areas can be seen based on two locations namely the village of Maricaya as a food surplus location has a number of household members with a range (4-7) with an average of 5 people. Administratively, Makassar District is one of 14 sub-districts within the city of Makassar. Kecamatan Makasar has an area of 2.52 square kilometers or (0.7) of Makassar city area of 175.77 square kilometers. Socioeconomic conditions can be observed based on social infrastructure, economic infrastructure, educational conditions, ethnic and linguistic conditions. The social target of this research can be shown by the availability of a number of facilities and infrastructure of road, electricity, drinking water and other public facilities such as education, telecommunication house of worship and health facilities covering puskesmas, specialist doctors practice. Economic infrastructure in urban and rural areas can be demonstrated through the use of available land in the agricultural sector such as paddy fields, pastoral ponds, swamps and unemployed land use. The rural areas of age (KRT) and (IRT) are respectively in the range (18-69) and (14-68) with average age (42.0) and (33.2) years. So it is assumed that the age of head of household and housewife are categorized in productive age in doing a job. In line with the opinion (Soekirman 2001) someone who does the job will be productive if he is 15 years and above and able to complete his work. Economic infrastructure in urban and rural areas can be demonstrated through the use of available land in the agricultural sector such as paddy fields, ponds, pasture fields that have not yet been used for use in addition to land for

Table 1. Distribution of Households by Big Category of Households in Urban and Rural Areas

No	Household Areas (people)	Urban		Rural					
		Surplus		Minus		Surplus		Minus	
		N	%	N	%	N	%	N	%
1.	<5	9	21,5	30	60	2	6,6	2	4,7
2.	5 – 7	30	71,4	14	28	22	88,4	32	76,1
3.	> 7	3	7,1	6	12	6	5	8	19,2
	Balance	42	100	50	100	30	100	42	100
	Overall	5	-	6	-	5	-	7	-

Functioning of Community Institution in Food Security

In this functioning social organization is manifested under the terms of the enforcement of existing norms to achieve shared ideals, together with the authority to mobilize individual resources into internalized interests among members of the community and this becomes the basis that leads to their behavior. Such types in Indonesia can be found in the Banja incidence in Bali or Nagari in West Sumatra. The functioning of institutions interacting in their activities because of the disintegration factor in it, the sustainability of food security will be disrupted. The functioning of the three food security channel institutions takes place on the aspects of food production and distribution. In production aspects, government agencies, markets and communities facilitate households in producing food production or generating revenues for procurement through food purchases. In the distribution

settlements such as housing. According to the findings of data in the field based on the report of the Food and Urban Crops Office of South Sulawesi Province (2015) shows a number of rice fields in beberpa district, Panakukang Subdistrict, Manggala and others have changed function into residential areas and experienced 65% of the land depreciation during the last five years in Urban areas. These findings provide the assumption that the decline in food crop productivity in urban areas has a large impact on food fulfillment and household food availability, particularly in urban poor households that lead to a situation of household food insecurity. The occurrence of this condition is relatively similar to the condition of Java Island main diwilyaha main food producers (rice) in Indonesia which throughout the year always experienced food deficit due to the conversion of agricultural land (land conversion function)

Functioning Food Security Channel

By performing differential analysis of function functional diversity functional food channel functionality can be run by three institutional spaces namely government, market and community and is a very important system in analyzing household food security. The functioning of government institutions in household food security can be seen from the dimensions of government regulation and program based on two things: (1) basic food price (rice) which is a function of government regulation through bulog in maintaining national food supply, Urban and rural areas; (2) Raskin program which is an indirect program of government program that aims to overcome domestic and inter-season food shortages. The results showed that rice distribution program in urban area was 76%, but 76% of households did not feel the function of raskin because they were more concerned about rice quality in the market compared to the quality of raskin, and the rest expected the presence of the cheap rice program.

high category and moderate category at minus location in countryside. Likewise, the functioning of government agencies at minus locations in urban areas shows relatively similar conditions to households in rural surplus locations.

Functioning of Market Institution in Achieving Household Food Security

This functionality is seen from two aspects: (1) physical affordability, in terms of market distance and (2) economic affordability regarding household income conditions that can determine the quantity and quality of food as needed. At food surplus locations in urban areas, 89% of households utilize the presence of market institutions as the main channel in their household food procurement process. While 11% of urban households are not fully able to reach the market due to the very limited ability of households to buy food on the market. Meanwhile, in urban food minus locations, 20% of households utilize the existence of market institutions in the procurement

Table 2. Functioning of Government Institution on Food Security

No	Aspects of Food Security	The functioning of government institutions			
		Urban		Rural	
		Surplus	Minus	Surplus	Minus
1	Food availability	Low	Height	Height	Medium
2	Affordability of Food	Low	Medium	Medium	Medium
3	Food Stability	Medium	Medium	Medium	Medium
4	Average score	Low	Height	Medium	Medium

Table 3. The functioning of market institutions in food security in households

No	Aspects of Food Security	The functioning of government institutions			
		Urban		Rural	
		Surplus	Minus	Surplus	Minus
1	Food availability	Height	Medium	Medium	Low
2	Affordability of Food	Height	Medium	Low	Low
3	Food Stability	Height	Medium	Medium	Low
4	Average score	Height	Medium	Medium	Low

Table 4. Functioning of Food Resilience channel through Community Institution in Achieving Food Security

No	Aspects of Food Security	The functioning of government institutions			
		Urban		Rural	
		Surplus	Minus	Surplus	Minus
1	Food availability	Medium	Medium	Height	Medium
2	Affordability of Food	Medium	Medium	Medium	Low
3	Food Stability	Height	Medium	Height	Low
4	Average score	Medium	Medium	Height	Low

Based on the above findings it can be concluded that the presence of government institutions in achieving household food security at the urban surplus location shows significant function in 24% of households and not functioning for 76% of households. Thus the government's institutional function in the urban surplus area is included in the low category. In terms of cheap rice distribution, there are 30% of households that are highly dependent on the existence of the program, considering the purchasing power of fishermen households for food (rice) is very low to buy food from other sources. While 70% of households try to fulfill their household food through various sources through the process of buying and selling mechanism of food with traders or middlemen of the village with a relatively high price. In the above table it was concluded that the functionality of the pagan endurance channel contributed by government agencies showed a low-functional functional phenomenon at urban surplus locations and high category in urban minus locations. While rural surplus households show

of household food. This happens because households have a relatively sufficient ability to reach food both physically and economically. While 80% of other households are limited in exploiting market institutions due to low purchasing power. If connected with the physical reach of the household food at the location of minus the food does not have obstacles to the distance due to the presence of traditional markets not too far that is about 2 km in addition to several food stalls scattered around the residential location of the population. The functioning of market institutions in food security at households in surplus and minus urban locations and beyond in meeting household food security can be considered in table 3 below:

The above table states that the market institution is comprehensively giving a high contribution to households in the urban food surplus location. This can be seen from the three aspects of food security namely availability, affordability

and stability of food with each high score. This means that the existence of market institutions shows a significant influence in the procurement of household food in urban areas. The market contribution to minus households in rural areas shows a comprehensive low score of the three aspects of food security. This means that households are less utilize market institutions due to limited household capabilities in reaching the market both physically and economically. Based on the above description it can be concluded that the functionality of market institutions is very significant at the location of the urban surplus and vice versa in the minus locations in the countryside which shows a less significant market institution to the three aspects of household food security. The functioning of market institutions at minus urban locations shows relatively similar conditions to households in rural surplus locations. This means that the functioning of market institutions for urban surplus households is inversely proportional to households in rural areas and on the other hand minus urban households is directly proportional to rural surplus households. This is similar to the emphasis Ohama (2002) states that the functioning of an institution is also determined by the characteristics of households that access the function of institutions in the environment

shown in the following table. For further explanation of the condition of procurement of food through community institutions can be considered in the following table. The table above shows a comprehensive community agency contributing with a moderate score in the three aspects of food security for households in surplus and minus food in urban areas. This happens because generally households do not have the time and full opportunity in the process of cooperation in every activity takes place because households do more activities outside the home. Generally, households have their own way of utilizing non-formally and familiarly formed community institutions. Through a hereditary way and habit an agreement is formed based on the results of the deliberations of all layers of society and taking decisions and established usually in a non-formal institutional form. In rural households the achievement of household food security through the functioning of community institutions can take place through; (1) cooperation pattern; And (2) patterns of interaction. From the discussion to three food security institutions namely government, market and society through three aspects of food security namely availability, affordability and stability of food can be summarized into one concept as shown in the following Table 5.

Table 5 Summary of Functional Functioning of Food Resilience Channels through Institutions, Markets and Communities

Food security	Aspects of Food Security			
	Urban		Rural	
	Surplus	Minus	Surplus	Minus
Government	Functional (Low)	Functional (Medium)	Functional (Medium)	Functional (Medium)
Market	Functional (Height)	Functional (Medium)	Functional (Medium)	Functional (Low)
Society	Functional (Medium)	Functional (Medium)	Functional (Height)	Functional (Low)
Average Score	Medium	Medium	Medium	Low

Functioning Community Institution

The functioning of the mass institution is seen from two aspects: (1) please help between households in the procurement of food and (2) organizing parties or activities related to customs in accordance with the customs that occur in a community. In urban surplus locations 35% of households make community institutions an alternative to food procurement, both rich and poor. In households minus food in urban 60% of households make community institutions as a means of cooperation in the procurement of household food because in addition to fulfilling household food itself also helps households who are experiencing food shortages in a community. In households minus food in urban 60% of households make community institutions as a place of cooperation in the procurement of household food because in addition to fulfilling household food itself also helps households that are experiencing food shortages in a community.

While 40% of other households are less utilize the existence of community institutions as a container of cooperation in household food procurement due to the limited ability of households in conducting cooperation continuously.

At the location of food surplus in rural households make use of community institutions as a container of food security. If it is linked to the aspect of helping, the entire farm household is very responsive to other household food shortage conditions without recognizing the status or bonds of brotherhood and continuing on a continuous basis. The condition of the procurement of food through community institutions can be

Trend of Relationship Between Food Channel Functionality with the achievement of Household Food Security

The result of this research is to understand the tendency of relationship between functioning of food security channel with the achievement of household food security shown by result of analysis of three food security institutions namely government institution, market and society (table ...). Then to see the achievement of household food security is shown based on the analysis of the three aspects of food security, namely the aspects of availability, affordability and stability of food as a concept. Both of these concepts serve as a reference in analyzing the trend of food functionality channel relationship that is contributed by government agencies, Markets and communities with the achievement of household food security through the three aspects of food security.

Conclusion

The attainment of food security in this study included households in urban surplus locations being high, while urban and urban surplus locations showed moderate conditions. The functioning of the food endurance channel varies in different location forms. (A) at a surplus location in the functioning of government agencies showing a functional phenomenon with low and medium category categories. (B) at the surplus locations in the market functioning of market institutions show high and low category functional phenomena occurring in urban minus households, (c) at urban surplus locations, functioning of community institutions showing functional

phenomena with moderate and medium-sized categories also occurring in Location minus urban. On the other hand, the tendency of the relationship between food channel functionality with household food security achievement shows that market institution is the most functional channel compared to government institution and society. Further research is needed on the functioning of food security institutions in other social communities since the function of the institution is more functional than the market institutions and government institutions.

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