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Food Security among Orang Kintak in Pengkalan Hulu, Perak

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Abstract
Orang Asli Kintak settlements are vulnerable to logging and mining, which also affect the food security. Based on these problems, the objective of this paper is to measure the level of food security among Aboriginal Kintak. This paper uses a questionnaire of 42 Orang Asli villages Kintak in Bukit Asu, Perak. Food security level is measured based on four main components of food security by FAO, namely food availability, food accessibility, food utilization and stability of food. The results showed Kintak dealing with a low level of food security, namely 54.3% (23 family), of which 40.5% level of food availability, food accessibility levels are very low at 73.8%, 40.5% of food consumption levels and stability of food supply level of 49.5%. Accessibility factor/(access), are the main factors threatening food insecurity among Aboriginal Kintak. Formerly, Aboriginal Kintak live in settlements that are surrounded by forests rich source of food and medicines. However, a variety of land-clearing activities that occurred have reduced the availability of food sources, causing more restricted/difficult access to them. A balanced and an adequate diet plays an important role in maintaining health and preventing disease and improving quality of life and the human capital of a community.
Keywords: Food Security, Aboriginal Kintak, Logging, Mining, Food Accessibility

Introduction

Food and Agriculture Organization (FAO, 1996), defines food security as a situation in which all people at all times, have access economically and physically to sufficient, nutritious and safe food to meet the needs and tastes of nutrition for an active and healthy life. According to Arshad, Jani, and Yusop (2010), lack of nutrition is the key to food security. As a net importer of food, Malaysia emphasizes the importance of ensuring food security as one of the key strategies in its food policy. In Malaysia, the Ministry of Agriculture and Agro-based Industry (MOA) is the body responsible for the development of the agricultural sector. It is comprised of various policies and programs to increase food production or food security in the country. It is articulated in the draft document Malaya / Malaysia every five years (since 1956), the National Agricultural Policy (I to III), the Food Security Policy (2008) and Malaysia's New Economic Model

(Agriculture). Strategies that have been implemented to achieve this goal include a broad spectrum of government intervention in the market to provide a safety net to the public.

Arshad, Jani, and Yusop (2010) also stated that the world today faces a food crisis that threatens food security position as it did in 1973, 1981 and 2008. Symptoms of the symptoms occurs that requires a transformation in a country's food security policy. Some of these symptoms include food crisis that hit the world in 2008, the financial crisis in 2009, the uncertainty of the weather, lack of arable land and water, food poisoning, competition over resources for agricultural production materials (biofuels) and the continuous improvement of demand for food. In other words, the world's food supply sector will face serious constraints as compared with the increase in demand for food due to population growth and economic growth. In addition, food prices are expected to continue to rise as supply decreases due to the constraints of input factors, climate, labor and technology.

The issue of food security concerns all parties at all levels, including in Malaysia, especially when the prices of food, especially rice rose sharply in 2008. The increase in food prices can be seen through the increase in the Consumer Price Index, food from 100 in 2005 to 124.1 in 2010 (MOA 2011). This issue is expected to become more challenging as a result of climate change, limited production, rising input prices, and the competitive use of food ingredients for the production of bio fuels, food poisoning and lack of arable land and water (MOA, 2011). Moreover, according to FAO (2005), climate change is not just a change in temperature and precipitation alone, but alter food production in most countries of the world. While FAO (2008), said the effects of climate change caused the damage in infrastructure and housing, affecting food prices and increasing dependence on food aid and imports.

Food insecurity also affects human health. According to FAO (2015), the latest estimates show that about 795 million people worldwide, including 780 million in developing countries suffer from hunger. This means that one out of nine people suffer from lack of food security and malnutrition. FAO (2004), this situation has caused many negative effects such as an increased number of patients and mortality rates, limited growth and neurological development of low productivity among current and future generations. In addition, the problem of food security is a major constraint on the ability of countries to develop economically, socially and politically. Food shortages, hunger, poverty and disease are interlinked with each other. In fact, the World Health Organization (WHO, 2002) reported that a person is not getting enough food is a major threat to health.

Phua (2015) indicated food insecurity and unhealthy diet was causing health problems and malnutrition among indigenous peoples. Among the health problems that are often faced by Aboriginal due to malnutrition is anemia, iodine deficiency and vitamin A deficiency unhealthy eating practices also lead to overweight or obesity among Aboriginal patients that can lead to diseases such as diabetes.

Mukhari and Yasin (2010), a balanced diet is important for every individual. With a balanced and adequate diet, individuals can prevent from diseases, enabling them to perform any physical and mental activity easily. Therefore, the aim of this study was to measure the level of food security and describe the key factors that led to the threat of food security among Aboriginal Kintak based on four main domains of food security, namely food availability, food

accessibility, food utilization and stability of food supplies. All four of these components is a guide in measuring the level of food security by FAO that have an impact on human life.

Literature Review

The Concept of Food Security

The issue of food security in the 1970s was more focused on the adequacy of the supply side, while on the demand side (the ability to access) furthermore, the case is given less attention. In the wake of the food crisis that hit the world in the early 1980s, it began to receive attention from various groups, including FAO, which has redefined the concept of food security. This concept is divided into three components which include adequacy of food production, stability of food supplies and physical and economic access by groups in need (FAO, 1983). This concept then detailed further comprising four components of food security, namely food availability, food accessibility, food utilization and stability of food supplies (FAO, 2006).

The availability of food is the ability of households to obtain adequate quantities of food supplies in an appropriate quality. The resulting food needs through domestic production, imports and food aid (FAO, 2006). Food security issues are also closely linked to the availability of food through the process of production, distribution and exchange. Food production is determined by many factors, including land ownership, land use and management, selection and management of crops and livestock and harvest (FAO, 2009). In this study, researchers used the term food availability to refer to the presence of food in the house (safe food supply at home) and their sources of food supplies sufficient natural that can be obtained either from the forest or in the village.

Accessibility to food refers to the ability of individuals, households and communities to obtain adequate food, safe and nutritious food to meet the needs of their diet. Adequacy of food is produced through a combination of production and stocks in households, purchase, gift, loan or through food aid (FAO, 2006). There are two types of access to food, the first one is direct access, ie households that produce food using human and material resources such as farming land around the house or garden. The second one is economic access, namely through the purchase of food. However, there are various factors that cause the absence of food security and malnutrition as the inability to access food due to poverty, limited land available for agriculture, placement locations distant from the sources of food and lack of vehicle ownership (FAO, 2009).

Food utilization refers to the ability of households to obtain adequate nutrients through food intake, the ability to have clean water and health care level and to meet good nutrition in achieving the purposes of physiology. In addition, knowledge in the management of household and food processing techniques (non-food purposes) is also important (FAO, 2006). Once the food has been obtained by households, various factors which affect the quantity and quality of the food are up to the members of the household. In order to achieve food security, food must be safe, nutritious and sufficient to meet the physiological needs of each individual. Food security affects the nutritional benefits and can be affected by the provision, processing and cooking food in communities and households. The nutritional values of household food choices that will determine whether the food meets the taste of culture and social welfare (FAO, 2009).

The stability of food supply refers to the ability to obtain sufficient food at all times. To ensure the stability of household food security, contingent risks that can threaten food security such as the economic crisis, climate change and so must be dealt with effectively (FAO, 2006). There are three levels of food security, namely the absence of temporary, seasonal and chronic. At the level of food production, events such as natural disasters, drought, flooding and crop failure due to pests or diseases may reduce the availability of food. This situation, if prolonged will lead to instability in food supplies to household and community food security in the absence of the occurrence of a temporary or seasonal level. Stage chronic or permanent absence of the occurrence of food security is defined as a long-term and persistent lack of resources of sufficient and nutritious food (FAO, 2009).

Aborigines

According to Jabatan Hal Ehwal Orang Asli (JHEOA, 2002), there are three main groups of indigenous people in Peninsular Malaysia, the Negrito, Proto-Malay and Senoi are differentiated by language, culture, way of life and physical characteristics. Of the three main groups are divided about the small tribe. Senoi tribe is the largest tribes in Peninsular Malaysia comprising Temiar, Semai, Che Wong, Jahut, Semoq Beri and Mah Meri. Proto-Malay group, (Semelai, Jakun, Orang Kanaq, Orang Orang and Orang Kuala). They are second group to migrate after Negrito tribes. Next the Negrito group including (Kintak, Kensiu, Jahai, Mendriq, Batek and Lanoh).

Jabatan Kemajuan Orang Asli (JAKOA, 2013) show the total aborigines in Malaysia stood at 178.197 persons while the total Aboriginal population in the State is a total of 53.299 ie 50.281 people Senoi, 605 and 2,413 gross Malay Negritos. There are 255 Orang Asli villages in Perak, with 53.299 inhabitants Aboriginal consisting of 27.716 men and 25.583 women.

Orang Kintak

According JHEOA (2002), Orang Kintak is one of the Negrito tribes. Originally they were known as the Semang by some previous authors. Kintak also known as Tak, Kentok and Kintok. They are especially divided into several sub-groups, which are identified and Kintak Bong and Kintak Kil. Given their life too much territory to territory in southern Thailand Chaiya, the researchers believe that people Kintak related to the Negritos of the Andaman Islands, the Aetas of the Philippines. This statement is further strengthened on the basis of their physical form and dialect.

Physically men and women Kintak too low stature (approximately 150 cm men and women 140 cm) and a small but stocky. Dark brown-skinned and dark-skinned sometimes there or reddish-brown, but there is a glossy black. Curly hair smooth, short (no more than 3 inches in men and women between 9 inches to 1 foot) and dark or reddish-brown. Low forehead and round. Short nosed, flat and flowers. Bony cheeks quite spacious with its dark brown eyes or black. Chinned small and round. Mouthed relatively wide and thick-lipped simple (Figure 1).

Their eating habits are a source of food that can be obtained in the vicinity of settlements and forests such as potato tubers (*ubi pandang, ubi kepala gajah, ubi tanjung, ubi garam, ubi kapur*) and some other types of potatoes as a source of daily food. Protein source

derived from wild game and fish. They also get fruit and vegetables for vitamin sources. In addition, they also consume certain herbal medicines to improve health and energy sources.

Traditionally, Orang Kintak well as other national groups in the Negrito tribes. They were hunters and gatherers of the forest. Their life is highly dependent on forest produce such as fruit, wild yams, taro, vegetables, game and fish as a food source. In addition they also collect forest products such as rattan, sandalwood, herbal medicines, traditional and partly for sale. Only a small number of them cultivate the land for agricultural activities (JHEOA, 2002).

Figure 1: Men, women and children of Orang Kintak
Source: Field Work 2016

Research Methodology

Study Approach

This study used a qualitative approach in collecting information through the distribution of a structured questionnaire which covers five main sections a) demographic information household, b) indicators of food security, c) factors affecting food security, d) adaptation strategies at the local level and policy government and e) guidance to health. Data were collected from 42 respondents consisting of 25 men (59%) and 17 women (41%). However, in this paper only focus on part (b), food security indicators in measuring the level of food security to Orang Kintak. Data were analyzed using SPSS computer software and data are presented using percentage.

Study location

The study was conducted at the Orang Kintak settlement in Bukit Asu, Pengkalan Hulu, Perak, (Figure 2). The village is located 29km from the town of Pengkalan Hulu and 35km from Gerik. Bukit Asu village can be visited with four-wheel drive vehicle that takes 40 minutes to get into. However, the narrow streets and hillside endanger the safety of the driver, especially when the

odds with another vehicle. The village is equipped with various facilities such as electricity, badminton, home, community hall, surau and kindergarten can be seen in the sketch map of the Aboriginal Kintak, Pengkalan Hulu, Perak (Figure 3).

The indigenous villages of Kintak have been selected as the study area because this area has undergone many environmental changes that render them difficult to access to food resources of the forest and the area around the settlements. A condition that occurs on an ongoing basis is threatening food security and is likely to cause health problems. Their life is getting harder and threatened to have access to sufficient resources of nutritious food due to a variety of activities such as logging, plantations and mining which have led to their roaming area becomes smaller. Moreover, these activities are also leading forests which are their food and income sources to dwindling and extinction. Besides that, these events also contaminate rivers and cause loss of Aboriginal Kintak clean water and aquatic resources that are the source of their protein food. This situation has threatened their food security coupled with low economic status among Aboriginal Kintak.

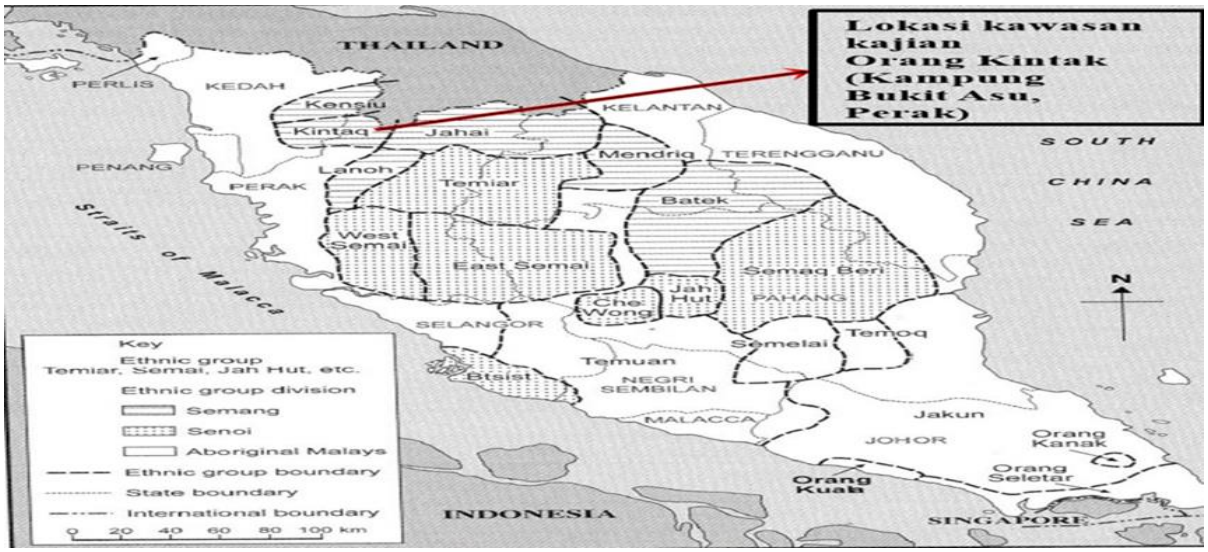

Figure 2. Map of the study area Orang Asli Kintak settlement.
Source: The distribution of the Aboriginal population in Peninsular Malaysia (Endicott, 2016)

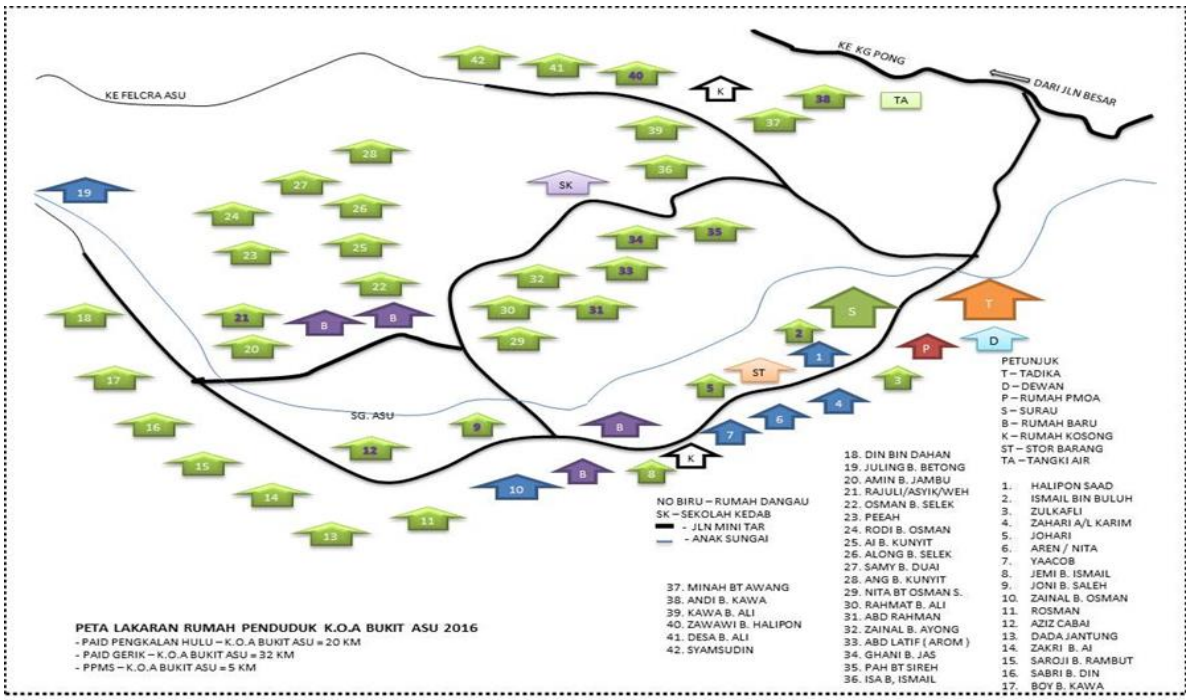

Figure 3. Map of sketches house Kintak Aboriginal population, Pengkalan Hulu
Source: Fieldwork 2016

Population, sample and sample size

The sample focused on the head of the household (husband/wife) Kintak Orang Asli living in the village of Bukit Asu. This study takes all household heads of Aboriginal Kintak of 42 people. The only placement of Kintak in Malaysia is in the Suburbs area of Gerik, Hulu Perak, Perak. Their population is increasingly threatened which is why the researchers chose this community as a sample. According JAKOA (2010), the Kintak is among the six smallest Aboriginal social group in the country (Table 1). Five other Aboriginal tribes which also showed slowing growth in population (ethnic minorities among Aboriginal nowadays) are Lanoh in quarter Hulu Perak, Perak; Kensiu in Kg. Lubuk Legong, Baling, Kedah; Mendriq tribes in remote areas of Gua Musang, Kelantan; Che Wong tribe lived in Lanchang, Pahang, and the Orang Kanaq in Kg. Mawai Kota Tinggi, Johor. Over the past few decades, their number is much smaller than in other quarters and trend in growth rate is relatively slow.

Table 1: Distribution of Minority Ethnicity in Aboriginal

Ethnic group	Number of households	Population
Kintak	49	208
Kensiu	58	221
Lanoh	74	360
Mendriq	62	307
Orang Kanaq	29	139

Che Wong	145	579
Jumlah	417	1814

Source: JAKOA (2010). eDamak report, the Department of Orang Asli (Unpublished).

Results and Discussion

The level of food security Kintak

The overall level of food security of Orang Kintak is at a low level (23 family), which is measured based on four components, namely food availability, food accessibility, food utilization and stability of food.

Food availability

The results in Table 1 and 2 show that the Orang Kintak face problems in terms of lack of availability of food. The study found that only 14 families who have a high level of food availability and the rest is moderate (11 families) and the most at low level (17 families). Lack of food causes them to limit the quality and quantity of their diet in everyday life. Usually, they get food from the forest or surrounding area positioning such as spinach, cassava leaves, fern shoots, taro and banana ladle to make dishes.

However, now the availability of their food sources are depleting and exposing Kintak people to the food insecurity threats caused by environmental factors that have undergone many changes due to logging forests on a large scale by RISDA for rubber cultivation and mining activities. This activity has resulted in the destruction of forests and pollution of rivers that lead to food resources (flora/fauna) and natural medicines as well as aquatic life such as fish, shrimp, snail and turtle dwindling. A condition that occurs continuously has affected the life and threatens their food supply. Activities deforestation that occurred resulted Orang Kintak threatened economic poverty and environmental habitat (settlement) which no longer provide a space that allows them to strengthen customs, cultures and beliefs as well as the opportunity to increase revenue and get the source of nutritious food and sufficient to ensure the life better and more sustainable.

Table 1: Availability of food The Kintak (n = 42)

	Availability food	Yes	(%)
1	Households have limited food intake to ensure children get enough to eat	18	42.9
2	Getting food assistance	7	16.7
3	A family often eat less food variety	8	19.0
4	Adequate food source around	28	66.7
5	Households often quarrel because of a shortage / lack of food	34	81.0
6	There are family members who suffer health problems due to lack of food.	21	50.0
7	Households do not cook because of the lack of food	14	33.3
8	Sleeping in a state of hunger because there is no food	19	45.2

Table 2: The level of food availability

	The level of food availability	Number	%
1	Low level	17	40.5
2	Moderate	11	26.2
3	High / good	14	33.3

Food accessibility

The study found that the main factors threatening food security of Orang Kintak is accessibility /low access to sufficient resources nutritious food to ensure a more sustainable survival. Table 4, shows as 31 families having a low level and 11 families at a moderate level and no family that has good accessibility for food. Formerly, Orang Kintak lived in the settlements surrounded by forests with rich source of food and medicines. However, logging and mining activities that occur now has reduced the availability of food resources, making them increasingly difficult to obtain. They had to go into the forest beyond that takes longer and requires more energy to get the forest resources to survive and get food.

Next, other constraints that limit the accessibility of Kintak in having access to sufficient resources of nutritious food is a low-income rate of 37 families (88.1%) earn less than RM700 a month. The low income and cost of living increases have affected their purchasing power to meet basic needs and survive with more assurance. Changes to the cash economy burden them to fullfill their basic needs which include buying food and health services/transportation/ education also needed money before it can be obtained.

In addition, the lack of vehicle ownership of 28 families have no vehicles (65.9%), and 14 families (34.1%) only have a motorcycle as their transportation and no families in the village have a car. For those who have no vehicle ownership, the situation is more difficult and complicated because they are forced to hire others to take them to the town to buy food and essentials. The fee charged is RM 20 per person for a round trip in a van while public transport such as buses can only be accessed at the junction of the road before entering the village of Kintak which took more than an hour to walk to the event. The settlements are far from town (29km to the town of Pengkalan Hulu) and difficulty to exit the village has been limiting their

accessibility to food sources. In addition, the absence of a provision shop in the village Kintak also makes it difficult for people to access food sources. However, for the supply of clean water (92.9%) of respondents agreed to have easy access to clean water for cooking, cleaning and washing.

These results are in contrast to studies conducted by zubir and Firdaus (2014), which examines the valuation access food and determinants of expenditure on food among young farmers in irrigated areas young found in general farmers in this area do not have problems to access adequate food because of the distribution of various food sources within the neighborhood. The presence of fish seller who comes to the village is also easier for them to get food supplies continuously with minimal transportation costs. At the same time, there was a total of 85.3 per cent or 192 rice farmers use motorbikes as a main transportation option to get food as the cost of the operation is easy and cheap.

Therefore, the result is different with the Orang Kintak, the factor of the placement away from sources of food (grocery store/market/supermarket) and surroundings dwindling food sources, the rate of low income and constraints of transportation more revealing Orang Kintak to threat of food insecurity.

Table 3: Food accessibility

	Food accessibility	Yes	%
1	Households have had to buy food in large quantities.	37	88.1
2	Households cannot afford to buy food for good health.	37	88.1
3	Households have no choice but to take / eat foods that are low-priced.	41	97.6
4	Households have no choice forced into a restricted area to get food.	14	33.3
5	Households forced to move to find food.	9	21.4
6	Households do not have access (the ability to get) enough food.	39	92.9
7	Households do not have access (the ability to get) safe food (food that is nutritious and healthy).	37	88.1
8	Households have access (the ability to get) a source of clean water	39	92.9
9	Households are forced to sell / pawn their valuables to buy / get food.	2	4.8
10	Households do not have the financial resources / income for meeting the needs of a family meal.	34	81
11	Households act borrow food from relatives / friends.	30	71.4
12	Households act borrow money to get / buy food.	18	42.9

Table 4: Level of food accessibility

	Level of food accessibility	Number	%
1	Low level	31	73.8
2	Moderate	11	26.2
3	High / good		

Food consumption

Table 6 shows only 14 families (33.3%) who experienced a high level/good in food consumption. For Orang Kintak, frequency of family meals is the most volatile and they do not have to schedule regular meals. Many families simply drink coffee or tea for breakfast. While lunch or evening meal will be provided if they have a food source or as a result of the search of revenue on that day. Most of them only eat twice a day and there are also those who did not eat all day because there is no food. This is caused by the lack of availability of food in the environment and food supply at home and that little difficulty in access to food causing them to limit the frequency and food intake.

Next, the results of the study also found that most households of Kintak are eating unhealthily and practicing an unbalanced diet and not as recommended by the Malaysian Food Pyramid. The study found that they are less oriented to the intake of protein, vitamins and calcium (dairy) which are good for the growth and development of the body. According to the Nutrition Month Malaysia (2014), food sources such as fish, eggs and meat provide high protein, vitamin B, iron and zinc, which are essential for growth and recovery of the body. In addition, protein is also needed to produce enzymes and hormones, repair and forming blood cells and strengthens the immune system. As for dairy products, they are important to supply a source of calcium, protein, vitamins and minerals to build bones and teeth and maintain bone mass.

Their source of protein is obtained from fishing in the river or hunting in the woods. But now, this protein source is decreasing and difficult to obtain due to the effects of logging activities that cause pollution and the extinction of hunted food source. The less fortunate also very rarely buy fish or chicken as they are expensive. Many families will only buy fish or chicken if they earn extra revenue. Normally, they get their source of protein from eggs, sardines and anchovies because they are cheaper.

Orang Kintak prefer/frequent eating of carbohydrates like potatoes and rice in the diet to produce energy as they are easier to obtain and more filling for a long time. Foods like potatoes can be found around the edge of the forest and the trees around the house. The food intake which is commonly practiced is rice and vegetables without fish. This kind of food intake is carbohydrates and vitamin oriented and fiber and no protein intake. Frequency of eating like this will cause an imbalance diet that can affect health and interfere with a person's physical and mental growth.

Dairy sources are only practiced by pregnant women derived from the provision of health clinics. Should not contain them are not drinking milk because it was expensive and not affordable. During field studies conducted there were also a handful of families who give their

babies to drink sweetened condensed milk instead of milk powder due to financial constraints. This condition if sustained will affect the growth and health of their babies.

However, there are the government's efforts to help children who suffer from severe underweight. The program has provided food baskets to help reduce morbidity and mortality among Aboriginal children under the age of 6 years. Interviews with doctors who come to care for indigenous people in this village there are 6 children from 5 families which received the food baskets. Food aid will be provided every month until the child reaches the ideal weight. Each food basket contains food items such as rice, powdered milk, sardines, cooking oil, sugar and anchovies. The purpose of the food basket is to help improve children's weight, but it is difficult to achieve, because the meal was shared and eaten along with other family members. This resulted in fast food run outs and the children still suffer from lack of balanced diet and nutritious which affects growth.

Therefore, to improve the food consumption patterns of Kintak, nutrition and nutrition-related knowledge must be disclosed and explained especially to women/mothers as they play a bigger role in household food preparation. For example, by organizing the Healthy Food and Cooking Program conducted by the JAKOA in collaboration with the Health Department. This situation could indirectly give some exposure and knowledge on the importance of eating a healthy and balanced.

This is because, according to a study conducted by Ahmad Zubir (2012) found that 36 percent of farmers do not have any knowledge of the nutrients in the food supply. The study also showed that farmers had poor knowledge regarding nutrient and food provision and what about the Aboriginal indeed have a lower level of education. Diet a person is closely linked to their knowledge of nutrition. Generally the standard of knowledge and socio-economic status was higher have a more positive attitude and natural causes better nutrition.

Table 5: Consumption of food

	Consumption of food	Yes	%
1	Household ever eat less than what is necessary.	35	83.3
2	Households have the skills and knowledge of nutrition.	27	64.3
3	Households often eat less desirable / non-selection.	33	78.6
4	Households were underweight due to lack of food.	17	40.5
5	Households often eat nutritious foods (foods good for your health).	22	52.4
6	Households diversify the types of food (eg, mashed bananas, cakes, cookies or made vegetable in cooking	23	54.8

Jadual6: The level of food consumption

	The level of food consumption	Number	%
1	Low level	17	40.5
2	Moderate	11	26.1
3	High / good	14	33.3

Stability of Food

Results showed that only 3 families experiencing food stability at high level / good. This situation shows the Kintak have a problem of food instability. Although they have the accessibility to get food from the forest resources, plant and purchase, but the pickings were still inadequate and does not meet the requirements of nutrients needed by the human body. Among the factors that affect the occurrence of instability of food supply Kintak is the lack of availability of food due to logging and mining that is causing the destruction of forest resources for a long period. In addition, the lack of accessibility of food due to low income, no transportation and the distance from food sources (forest and store) cause it to be more difficult for them to get food. Therefore, these factors if not controlled can cause constant problems on the stability of food supply that led to the absence of food security threat.

Table 7: Stability of food supply

	Stability of food supply	Yes	%
1	Households worry if you happen to run out of food.	36	85.7
2	Household skip meals because there is not enough food / no meals (eat 1-2 times a day).	31	73.8
3	Eating / drinking family members often ignored because there was no food.	9	21.4
4	Households are faced with the problem of deteriorating food storage / decrease.	34	81.0
5	The output of food / crop pests often attack	27	64.3
6	Households have no land ownership / possession of sufficient land to produce food.	19	45.2
7	Total food / crop produced is not sufficient because the soil is not fertile.	14	33.3
8	Households capable of producing / providing nutritious meals.	20	47.6
9	Forest resources as a source of food is decreasing and difficult to obtain.	41	97.6
10	A reduction in the quality of food in the last 3 months	27	64.3
11	A reduction in the quantity of food in the last 3 months	28	66.7

Table 8: Level stability of food supply

	Level stability of food supply	Number	%
1	Low level	18	42.9
2	Moderate	21	50.0
3	High / good	3	7.1

The conclusion is based on four factors indicators of food security, namely food availability, accessibility of food, feed utilization and stability of food shows Kintak facing the threat of food security at a low level of 23 families (54.3%) and 2 families (4.8%) had stage food security high/good and the remaining 17 families (40.9%) had moderate levels of food security

(Table 9). Overall, this shows that the Kintak community is facing the problem of a low level of food security threat, because of the lack of availability of food and the ability to find sources of sufficient, safe and nutritious food to meet the needs and patterns of a balanced diet for an active and healthy life.

These results are consistent with the FAO (2009), namely the absence of the occurrence of food security and malnutrition is caused by the inability to access food due to poverty, limited land available for agriculture, placement locations distant from the sources of food and lack of vehicle ownership. While Wood (2001), people are considered at risk of facing a lack of food security when they have limited access to economic, physical and social. In fact, the difficulty of distance makes it difficult for individuals who have limitations in terms of its physical, economic and health to get enough food (Muamba et al., 2010).

Table 9: Level of food security Kintak

	Level of food security Kintak	Number	%
1	Low level	23	54.3
2	Moderate	17	40.9
3	High / good	2	4.8

Conclusion

The area surrounding the village of Bukit Asu for Orang Kintak has undergone many changes caused by logging activities on a large scale (130 hectares) for the purpose of opening rubber plantation and mining activities by the said agency. The logging activities carried out in the placement and Aboriginal roaming area, resulting to the destruction of the forest areas that had been providing food sources rich in flora and fauna, herbal medicines, clean water sources and recreation area. This situation has indirectly pose a threat to the life of Orang Kintak who rely on forests as a source of food and income. The destruction of forests has led to their roaming area into a small and dwindling availability of food sources and disturbed. For food, they had to enter further into the forest which takes longer, requires more labor and a threat to the security of having entered the forest deeper and broader for food and medicines.

The lack of food due to the constraints of accessibility and various other factors such as low income have affected the purchasing power coupled with rising prices of food items and more onerous to meet their basic needs and food quality and nutritious food for the family. Furthermore, the absence of vehicle ownership, the lack of public transport facilities, no grocery business in the village as well as a location distant settlements from town and shop make it more difficult for people to get out and buy food. Finally, even if they are able to get food from the forest resources, plant and purchase, but the food was still not enough to guarantee a healthy and active life. This situation will persist even if the threat to life and reveal Orang Kintak to the risk of a lack of food security threat is worse and affect the health and quality of life.

For the Orang Asli, the development process and changes made can provide positive and negative effects. Its positive effect is Aborigines can change and adapt towards a better life and sustainable even if takes a long time. While its negative impact is causing threatened

traditional knowledge and skills and culture that goes back a long time. Inability to change and adapt to the changing environment and the prevailing cause of indigenous peoples will continue to lag behind and not able to improve their quality of life to the better.

Therefore, in the context of this study, the main threat of food security in Kintak is lack of accessibility to food sources. The absence of a grocery in the village of Kintak, distance to shops, transport constraints and a low income of them make difficult to access the food. Recognizing the problems facing this, the researchers suggested that the JAKOA can provide assistance to Orang Kintak to open a grocery store in their village. The opening of the grocery store will make it easier for people Kintak to source sufficient and nutritious food for a balanced diet.

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