Characterizing Population and Food Security in Rural Uganda

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Abstract:-The study was carried out to characterize population and food security in rural households of Uganda in terms food availability, accessibility, and food utilization. The data was collected from 206 respondents in rural households of Western and Northern Uganda. Quantitative and Qualitative data collection methods were used to deduct critical information for this study. Statistical Package of Social Scientists (SPSS) version sixteen was used in data analysis. Qualitative data was analyzed using general content analysis to derive at major themes. The study revealed that 68% do not have enough food, 78% cannot access quality and quantity of food and 49% cannot eat nutritious food to live a healthy life. The study concluded that in Uganda there is a cute hunger, malnutrition and famine. The study recommended that there is need for Ugandan government to come up with deliberate food security policy.

Key words: population, food security, food availability, food accessibility, and food utilization.

I. INTRODUCTION

Uganda is an agrarian country. The country is well endowed with fertile soil, reliable rain fall and sunshine (Byarugaba 1987). These conditions make it possible to grow crops and rear animals (Mpuga, 2007) all around the year (National Advisory Services Report, 2012).Despite these conditions, people are grappling with severe hunger which has caused death and many people are suffering from acute malnutrition (Oxfam, 2016) and it is among the countries in Africa with the highest population growth rate of over 3.5% per annum (UBOS 2015). It was therefore necessary to carry out this study and find of how food is produced, accessed, and utilized food and then come up with appropriate measure to ensure food security in Uganda.

II. METHODOLOGY

The study used mixed method research design. A total of 240 respondents from rural households were selected using systematic sampling and purposive sampling procedures. Content validity index and pilot test were used for validity and reliability of the research instruments. Descriptive analysis and general content analysis were used to analyze the data.

III. FINDINGS AND DISCUSSION

Food crops grown at household level

The study revealed that 29.3% of the households cultivate maize, 15.4% cultivated millet, 9.0% cultivated potatoes, 8.5% cultivated cassava, 3.7% cultivated banana, 1.1%

cultivated sorghum, 0.5% cultivated rice, 0.5% cultivated yams and 31.9% cultivated (beans and its soup is used as the main source for posho). It was also found out that those who grow maize at a large scale most of the harvest is exported to DRC Congo and Sudan meaning there is shortage of food. During an interview with one of Sub-county Chiefs in Kasese District on 22/07/2016 he said:

"Even when many farmers grow maize at large scale, the biggest percent is exported leaving little or nothing to store".

These research findings implied that the majority of household members are not availed with enough food and if at all there is, it is not sustainable. Meaning, most Ugandan households have little food which leads to low dietary diversity that reflects a poor food utilization and food insecurity among household members. Research findings agree with Food Security Vulnerability Analysis report 2013 that nationally over a third of Ugandans had low dietary diversity rising to 55%.

The research findings showed that during time when household heads are without food in store, 45.9% of the household engage in other activities away from the farm to earn additional income to meet their food requirements, 24.6% use crop sales money, 10.9% use dry season crops, 9.8% sell livestock and buy food for their families, 4.9% brew and sell alcohol, while 3.3% use informal sector money to buy food for their household members.

Such findings meant that although households depend entirely on agricultural food this food cannot sustain them. In an interview with village leaders of northern selected districts on 13/7/2016 they said:

Many of us here in this village because food cannot last long, we work rija-rija (causal work) for 3000/= Ugandan Shillings per day sometimes 2000/= which is very little to meet all basic necessities of life.

The above statement agree with the Plan for Modernization of Agriculture report (2011) that: although the majority of rural households engage in subsistence agriculture, many poor households cannot produce enough food to feed their families. Many cannot generate enough income to meet the household's basic requirements. In addition, on average in poor rural households who are net buyers of food, the purchase of food accounts for 60% of monthly expenditure. This situation may lead to the forced sale of assets in order to meet household needs.

Frequency of meals by rural households

The research findings showed 47.3% of the household members eat once, 41.4% eat twice, and 11.3% of the household eat thrice. These research findings implied that the majority of the respondents eat one meal a day.

"As our lunch, we only take porridge . I have 10 children if we are to eat two or three times a day we can finish all the food we have kept or bought in a short time. I have sent three of my sons to Arua town to go and work because i do not have food to sustain all of them and I hope God will bring men to marry my daughters and I remain with few children that i will feed two times a day."

(One village leader in Rigbo village, in Arua district (Nothern Uganda) interviewed on 21/06/2016).

This means the majority of the household are not only food insecure but they are likely to be malnourished and if nothing

is done, the end result people will die of hunger. Such findings agree with Food Agricultural Organization report (2016) that, all most all parts of the country has got acute food insecurity and the majority are depending on one meal a day others sleep without any food.

Duration of harvests in food stores

The research findings showed that 68.0% of households' food does not last until they produce more while 32.0% of households' food last until they produce more. Such research findings indicated that the majority of households live in constant food shortage and cannot consume recommended calorie content because they produce very little that cannot sustain the family members all through. This is in line with FAO (2013) that, the minimum daily energy requirement is about 1800 kilocalories and in Uganda because they do not have enough food stored to meet the required calorie content, it is 22kcrol. It further implies that if foods do not last up to next season, there is persistent shortage of food and this indicated the magnitude through which Ugandan households are food insecure in terms of food availability, accessibility, and utilization which has resulted into hunger, malnutrition, and famine.

| Awareness of the importance of consuming nutritious food * District Cr | ross tabulation (Food Utilization) |
|--|------------------------------------|
|--|------------------------------------|

| Are you aware of the importance of consuming nutritious food | | District | | | | | Total | |
|--|--|----------|---------|--------|--------|-------|-------|--------|
| | | Arua | Buhweju | Ibanda | Kasese | Lira | Nwoya | Total |
| Yes | Count | 27 | 5 | 21 | 12 | 22 | 22 | 109 |
| | % of Total | 14.5% | 2.7% | 11.3% | 6.5% | 11.8% | 11.8% | 58.6% |
| No | Count | 6 | 20 | 8 | 21 | 11 | 11 | 77 |
| | % of Total | 3.2% | 10.8% | 4.3% | 11.3% | 5.9% | 5.9% | 41.4% |
| Total | Count | 33 | 25 | 29 | 33 | 33 | 33 | 186 |
| | % of Total | 17.7% | 13.4% | 15.6% | 17.7% | 17.7% | 17.7% | 100.0% |
| Do you kn | ow which foods provide nutrients | | • | | • | | • | |
| | Count | 28 | 8 | 19 | 11 | 23 | 23 | 112 |
| Yes | % of Total | 15.3% | 4.4% | 10.4% | 6.0% | 12.6% | 12.6% | 61.2% |
| No | Count | 5 | 17 | 10 | 21 | 9 | 9 | 71 |
| | % of Total | 2.7% | 9.3% | 5.5% | 11.5% | 4.9% | 4.9% | 38.8% |
| Total | Count | 33 | 25 | 29 | 32 | 32 | 32 | 183 |
| | % of Total | 18.0% | 13.7% | 15.8% | 17.5% | 17.5% | 17.5% | 100.0% |
| an you choose | between different foods to identify the healthiest ones? | | | | | | | |
| Yes | Count | 27 | 5 | 20 | 11 | 20 | 20 | 103 |
| res | % of Total | 14.9% | 2.8% | 11.0% | 6.1% | 11.0% | 11.0% | 56.9% |
| No | Count | 6 | 20 | 8 | 20 | 12 | 12 | 78 |
| | % of Total | 3.3% | 11.0% | 4.4% | 11.0% | 6.6% | 6.6% | 43.1% |
| Total - | Count | 33 | 25 | 28 | 31 | 32 | 32 | 181 |
| | % of Total | 18.2% | 13.8% | 15.5% | 17.1% | 17.7% | 17.7% | 100.0% |

| Yes | Count | 25 | 5 | 17 | 9 | 18 | 18 | 92 |
|-------|------------|-------|-------|-------|-------|-------|-------|--------|
| | % of Total | 14.1% | 2.8% | 9.6% | 5.1% | 10.2% | 10.2% | 48.0% |
| No | Count | 8 | 19 | 11 | 21 | 13 | 13 | 85 |
| | % of Total | 4.5% | 10.7% | 6.2% | 11.9% | 7.3% | 7.3% | 52.0% |
| Total | Count | 33 | 24 | 28 | 30 | 31 | 31 | 177 |
| | % of Total | 18.6% | 13.6% | 15.8% | 16.9% | 17.5% | 17.5% | 100.0% |

Source: Primary data

The research findings showed 58.6% of the respondents were aware of the importance of consuming nutritious foods while 41.4% were not, 61.2% knew the foods that provide nutrients while 38.3% did not, 56.9% could choose between different foods to identify the health ones while 43.1% could not, 52.0% of the respondents knew the implication of eating nutritious foods while 48.8% the respondents did not know the implication of eating nutritious foods. The results implied, household heads knew which foods to consume and why but they do not have the alternative because there is food shortage. Such findings agree with FAO (2016) report that in Uganda especially in north 50% have got a poor food consumption, 14% are living in a compromising food situation and with serious food malnutrition, and other recommendable people die of hunger. This report (FAO 2016) gives an example that thorough the entire country, 65-80% of Uganda's population is below poverty line, 50-80% spend most of their income on food consurption,15-40% have got a poor consumption score, 50-80% of children do not eat minimal food frequency,35-45% are stunted, and 70-80% of the population do not eat a diet of food adequate diversity because some of them are not aware.

Reduction of food for the children because of not having enough

The research finding revealed that 66.7% of household heads reduce food for the children because they do not have enough.41.2 % reduce food for the children once, 38.7% twice, 10.1 thrice and 10.1% reduce food for the children more than three times a week. 36.0% of the household heads agreed that their children skip food because they do not have enough while 64.0% their children do not skip food. 42.0% of the household heads their children skip food once a week, 47.8% twice, 7.2 thrice while 2.9 household heads their children skip food more than three times week. This means the majority of the children are malnourished and there is high prevalence of anemia because of poor feeding in Uganda. These findings agree with World Food Programme (WFP) 2012; FAO, 2014 and Kipp (2014) that the prevalence of stunting among children under five years of age is nearly 40% across the country, and is higher in Northern and the southwest, where it exceeds 50%.

Household heads or adults who reduce meals because of not having enough food

The research finding revealed 62.0% of household heads and adults reduce food because they do not have enough while

38.0% do not reduce food. 38.5 % reduce food once, 25.7% twice, 22% thrice and 13.8% reduce food more than three times a week. 42.4% of the household heads agreed that they fail to eat food because they do not have enough while 57.6% do not fail to eat food. 35.0% of the household heads and adults fail to eat food once a week, 41.2% twice, 16.2% thrice while 7.5% household heads and adults fail to eat food thrice week. Findings imply that even those who are responsible for food provision at household level the majority fail to eat or reduce meals because they do not have enough food. This agrees with Uganda Food Security Outlook (2011) report that over 42.3% households in Uganda are food insecure, 50.3% are moderately food insecure and the situation is persistently increasing. It also implies that the majority of bread winners at household level a weak because they do not required calorie content which is in agreement with FAO (2011) that, it is estimated that average consumption of calorie of adults in Uganda is only between 75 and 90 of the recommended requirements. The average levels of protein and fats in take in Uganda today is 33 and 20% below the recommended levels, respectively which means the life expectancy is also low.

IV. CONCLUSIONS AND RECOMMENDATIONS

Generally it is clear that the majority of the rural households are food insecure. There is food shortage in Uganda which takes place in three forms: hunger, malnutrition, and famine. The majority of Ugandans fail to eat because they do not have enough food others skip eating food especially children and old people. Majority of the Ugandans do not know how to distinguish foods that are rich in protein and calories because the majority depends on one type of meal which is posho and beans.

The study recommended that there is need for Ugandan government to come up with deliberate food security policy to promote food crops more than cash crops (famine crops),establishing a crop seed multiplication unit to every district and sub-county, manufacturing low cost farm inputs especially agricultural tools and inputs, any government land which is underutilized should be identified and utilized for food production, establishment of research centers at lower local governments, law to ensure every household possess a food store/granary as well establishment of national food reserves, serious trainings through seminars, workshops and conferences on food utilization, food processing plants to produce processed food, infrastructure development, legalizing a number of children to be produced.

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