The Relationship between Community Social Life and Food Security of the People in Adjumani: A Case Study of Ciforo Sub County

Abstract: This study was conducted to understand the relationship between community social life habits and practices and the food security of the people in Adjumani district. The study covered a sample of 150 respondents who are farmers and the data were collected through a questionnaire and personal interview using both probability and non probability sampling technique. Designing field data recording sheets was done before data collection and data collection was done with appropriate quality control. Data analysis was done using Statistical Package for Social Scientists. The study found general social life habits and practices of the people like domestic violence, cultural practices and lack of planning for production as the cause of cyclical food insecurity especially from April to June every year. The study recommended that sensitization and counseling of the community about social life factors affecting food security and enactment of by law to control the bad social life practices.

Keywords: Alcoholism, social life, Food security, people, domestic violence and farmers.

INTRODUCTION

Nearly 240 million people in sub-Saharan Africa or one person in every four, lack adequate food for a healthy and active life, and record food prices and drought are pushing more people into poverty and hunger (Jason, 2012). The variability of food production in Africa suggests the continuing vulnerability of agriculture sector, particularly food production to infestation by insect pests, diseases and the tragic destruction caused by war and civil strife. In high rainfall, high productivity zones food insecurity is associated with extreme and increasing pressure on land, fragmentation of holdings and declining soil fertility. In low rainfall and drought prone areas overgrazing and shifting cultivation on increasingly marginal lands continue to undermine an already fragile ecological balance.

The share of Ugandans suffering from food insecurity measured in terms of caloric intake is alarmingly high with low rates of income poverty (Ssewanyana and Ibrahim, 2010). Household food security also varies across regions, agro-ecological zones and districts. Many of the factors underlying food insecurity are most severe in northern Uganda. Majority of the population is poor. These people cannot access enough nutritious food to live a healthy and active life and are continually forced to skip meals and cut portion sizes (World Food Programme and Uganda Bureau of Statistic, 2013). Despite the challenges mentioned in the previous paragraph that is being faced generally in Uganda, especially in northern Uganda, there is adequate food that is being produced in Adjumani district. There is variation in utilization of the food that is produced from one household to another depending on the social life of the people in a household or family.
This research particularly aims to tackle community social life issue of culture, health, education and social structure which affect food security and the findings can add value to tackling the social life challenge associated with securing food and nutrition security for the farmers. These social life challenges like alcoholism, domestic violence, extravagancy in spending and overpopulation are global, but play out differently in different regions across the world. Research in the community’s social life of the people of Adjumani has significant role to play to address household food security through enacting bylaw and sensitization of the community by Government in Adjumani and Uganda as whole. This research should stimulate discussion with stakeholders and the general public during the policy or community bylaw formulation in Adjumani. It suggests a strategy to address the social life challenges relating to the production of, access to, and consumption of food by the farmers. This research makes recommendations for policy and prompt discussion of where research and innovation can contribute most to solving the community’s social life issues, including providing underpinning evidence for sub county bylaw, district ordinance or policy development in Ciforo Sub-county, Adjumani district or in Uganda as a whole respectively.

A lot of work has been done in the area of food security although the conceptualization of food security has developed in recent decades. The concept has been traced from food availability notion to issues of entitlements to yet another paradigm on political failure as the cause of food insecurity. Initially the focus was mainly on food availability at national or international level, faulting agricultural underproduction and other supply side factors. This focused mainly on promoting national self-sufficiency which produced a marked response in increased global cereal production. Attention then shifted to the household and individual level, more so after the food crises that characterized Africa in the 1980s (Wairamu, 2014). The determinants of household food availability depends on many other variables that includes net food production, land, labor, capital, knowledge and technology, food produce, food supply in market, cash flow from rent income, wages, profits from sale of enterprises or sale of assets, debts and other liabilities, net stock, net receipt in kind, gifts, credits and transfers from Government and other internal and external donors. Any adverse movement in any one or more of these variables will adversely affect the food security of a house hold (Mohiuddin and Poonam, 1991). This research however will focus only on the community social life and how it relates to household food levels. The research intends to determine whether the social life practices of the people have positive, negative or no relationship at all to food levels in Ciforo Sub-county, Adjumani district.

RESEARCH APPROACH

Research Design

This is a case study where sample of the household in Ciforo Sub-county, Adjumani district was studied intensively by conducting personal interview using questionnaire and structured interview to collect primary data from household heads or their spouses to provide a numeric explanation of the relationship between social life, storage and timing of sale of food produced and food security of the people (Creswell, 2003). Concurrent procedures of converged quantitative and qualitative data was used in the study in order to provide a comprehensive analysis of the research problem (Creswell, 2003). The case study was not generalized but used to determine the present situation and make practical improvement on food security in Ciforo Sub-county, Adjumani district.

Area of study

The survey was carried out in Ciforo Sub-county, Adjumani district. Adjumani district planning unit, (2000) reported that the district has nine Sub-counties and a town council and there are fifty four parishes and two hundred and fourteen villages. The district is located in North Western Uganda lying between latitude 32° 4’ and 39°37’ north and longitude 31°21’and 32° east. The district is bordered by South Sudan in the North East, the Nile in the West and Amuru in the South East. The district covers an area of 3128km², 28% of which is covered by water that includes river Nile and many streams. Other geographical feature includes highlands, undulating land, rocks and forests. Savannah woodlands and grasslands of 0.5-2 meters height cover the remaining part of the district. Overall the district has moderate climatic condition. The district receives between 750-1500mm of rainfall annually. Rainfall season is described as unreliable and occurs between April- June and August- November with peak rainfall in May. Dry and windy conditions are experienced between December and March. The annual mean temperature ranges from 19°c to 36°c (Mamawi, 2006).

The district lies in a livelihood zone of cassava, sorghum, Simsim, livestock and fishing zone. The main economic activities in the region are agriculture (crop farming and livestock keeping), fishing and trading in various commodities. The Land is available for both crop and livestock farming. Households obtain a bigger fractions of food they need from own production. The Road access is poor with 99 percent murrum. Every village is served with a small scale markets that operates daily, weekly or monthly. Adjumani soils were formed as a result of geological and weathering processes. They are mainly hydromorphic soils characterized by undifferentiated river alluvium.
Sample Size

A total of 150 farmers were interviewed for the study. The questionnaires were administered over a period of two weeks. The sample 150 farmers were determined assuming that the social life and economic aspect of time frame for sale of food produce of the farmers were normally distributed.

The number 150 farmers was determined based on the standard formulae

\[
n = \frac{4pq}{l^2}
\]

Where, \(n\) = sample size

\(P\) = prevalence of model market oriented farmers, food security farmers and farmers who have not received any support (farmers).

\(q = 1 - p\)

\(l = \text{error}\)

Since prevalence of farmers is not known it will be set at 50%. The allowable error or precision will be put at 8.16% for the farmers (Martin et al., 1987).

\[
\text{Farmers} = \frac{4 \times 0.5 \times 0.5}{0.0816 \times 0.0816} = 150
\]

Sampling Technique

Both probability and non-probability sampling techniques were used. One hundred fifty farmers in total were studied in the Sub County. The one hundred and fifty farmers were equally distributed in the five parishes of the Sub County. Thirty farmers were interviewed per parish. All the five parishes were selected using non-probability sampling method because the sub county has five parishes and all were selected without chance and studied (Kothari, 2004). Three villages were selected per parish by simple random probability sampling method were each village in the parish had an equal chance of inclusion in the sample and in each village ten farmers were interviewed. To make representative sample all the names of the villages were written on a piece of paper rolled and put in a box and shaken and it was picked with replacement, if same name was picked twice the other was ignored (Kothari, 2004). Non-probability sampling method of accidental/convenience method was used to select the names of farmers interviewed at the village level. This technique raised questions of representativeness but the technique was deemed most fitting where chances presented themselves to gather data from a convenience sample in an opportunity too good to be lost.

Data Collection methods and instruments

Questionnaire and interview of key informants

The instruments used for data collection was questionnaire and personal interview of key informants administered by the researcher and research assistants. Questionnaires were used as instrument for data collection because it covered a large number of the respondents and was relatively cheap. Personal interview of key informants using structured interview was also used as respondents gave accurate information with good response rate and was completed immediately (Kothari, 2004) The 150 questionnaire was designed for market-oriented model farmers and other farmers who have not received any support from any organization. All the farmers were visited in their farms or homes. On each visit a formal introduction was presented and the purpose of visit explained to respondents before interviewing them using open and closed ended questions. Questionnaires were administered in Madi (local language) and English. The questions were read and interpreted in Madi language for the respondents who did not know English language and those who knew English language answered the questions under the supervision of the researcher. The structured interview was conducted for 15 local council one chairpersons who were part of the 150 respondents. The duration of administering questionnaire was 2 weeks.

Data management, processing and analysis

In this study, we consider a farmer as food secure in a given time if it always has enough food to provide to its
members in a day for the entire period. Otherwise, the farmer is considered as food insecure. Designing field data recording sheets was done before data collection and data collection was done with appropriate quality control (Kothari, 2004). Data was stored by the researcher during the period of data collection and then transported for analysis by the researcher. Completed questionnaire was edited to correct all possible errors during data collection. The data was converted to suitable formats, merging data originally entered in different files and producing various summaries and conversions from raw field measurements for example information on quantities of food items were recorded in local measures then converted to standard measures of shillings, kilograms and liters before analysis. Checking of raw data was done for accuracy. Coding of open ended responses was also done (Kothari, 2004). The cleaned raw data was parsed, recoded and reformatted for analysis. The final dataset was copied from the Interim Data worksheet to the Final Data worksheet. The data was entered in statistical package for social scientists and summarized into frequency distribution and percentages tables, graphs and pie chart diagrams and organization of computer files was done and data files were backed up.

Ethical considerations

The information given in the questionnaire was confidential that is the name of respondent did not appear on the questionnaire and the rights of the respondents were respected and were not forced to give information for the purpose of this research? Their consent was sought first for their right to decide free of pressure and in fully informed manner and they were first explained the social aspect of the research project. The risk and benefits of participating in this research was explained to the respondents. The research team was fully disclosed to the respondents and maintained high integrity to ensure that the research process and the researcher’s findings are trustworthy and valid (Deborah, 2003).

Limitations of the study

This research was designed as a survey study. It involved 150 participants and was conducted within a tight timeframe. In particular, it was beyond the scope of the research to discuss the full breadth of issues relating to food security in depth. It only concentrated on social life issues and period of sale of food affecting household food security. In this context, findings should be viewed as indicative rather than providing definitive answers (Deborah, 2003). The survey study provides a starting point for future dialogue in this area of relationship of social life to household food security, rather than a blueprint.

The thematic and methodological challenges identified during the research exemplify multi-dimensional nature of food security issues. However, the range of social life issues identified and the recommendations to household food insecurity are not intended to be exhaustive and may not address all the situations that may arise in the different regional, national and local contexts.

While a great deal of attention was directed during the research to the multiple strategies of the communities social life affecting household and individual food insecurity the research have not sought to address crisis situations, such as climate disasters or war-provoked famines despite their importance, soil degradation poor quality inputs and technology. They do not appear due to the limited time frame of the research.

RESULTS AND DISCUSSION

Overconsumption of alcohol

Three farmers in a household in Ciforo Sub-county, Adjumani district responded to alcohol consumption as follows:

A respondent said that “alcohol consumption is one of the social life habit and practices that is affecting food security situation in the community. People barter exchange food with alcohol and also sell of food stuff to buy and pay debts of alcohol” (Onigo village, 7th June 2016, Ambayo Inyasio). Another respondent added that “the produce are sold in bits both by women and men in the household and the money is usually used to buy alcohol” (Marila village, 7th June 2016, Dramoyo Henry) and finally a respondent concluded that “food in the house is usually not eaten but reduces in size as both men and women sell the food in the house secretly and use the money to buy alcohol” (Okangali village, 7th June, 2016, Eriga Geoffrey Kwenia) The farmers take a lot of alcohol and this affects their health condition which also subsequently affects their productivity in the community or the family. Alcohol also disorganizes the reasoning of people and hence this makes them not to plan well especially for the farming activities and spending the available agriculture produce. Alcohol is sold anywhere at any time in the sub county as there are no gazetted places to sale more especially the locally brewed alcohol (Enguli). This makes farmers to access and drink the alcohol from anywhere at any time making them food insecure from April to June which agrees with Kilian (2015) that existing work suggests that some male household heads may trade food reserve and farm labour for alcohol, reducing household food reserve and increasing household food insecurity leading to cyclical food insecurity. Luginaah and Dakubo (2003) noted that heads of food insecure household for example in upper West Region of Ghana use alcohol consumption to dampen anxiety and depression, and overcome social stigma of being food insecure.

<table>
<thead>
<tr>
<th>Valid</th>
<th>Parents</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>one</td>
<td>40</td>
<td>26.7</td>
<td>26.8</td>
</tr>
</tbody>
</table>
The table above shows that majority of the households 72% have both parents of children and dependants alive. This is good for food security because they plan together on how to spend the food reserve and having all parents alive is ideal to bring harmony in the household although social factors like alcoholism and domestic violence can make it a necessary evil in the family as those parents that drink alcohol sell food reserve to pay debts of alcohol and some barter trade food for alcohol.

**High cost of living**

Two farmers in Ciforo Sub-county, Adjumani district responded to high cost of living as follows:

A respondent commented that “due to high school fees, food is divided into two for paying tuition fee and little is left in the house as food stock reserve. He further said that farmers do not grow cash crop which they can sell to pay school fee but they sell farm produce meant for food” (Kabaoli village, 8th June 2016, Wale Jacob Lebu)

There are a number of private schools with high school fee and the students pass well in this schools and the Government schools have little or no fee but the students do not pass well so parents are forced to sell the little food reserve to send their children to the private schools where tuition is expensive and this cause cyclical food insecurity in the household. The regional cash crop for Northern Uganda that is cotton is not grown in large scale due to poor Government support to growing of cotton in Northern Uganda as a result farmers sell food reserve meant for eating by family members to earn money for paying tuition fee making the household vulnerable to cyclical food insecurity.

Another respondent said “food reserve in the house is sold to pay for medical bills which are expensive in private health centers and Government health centers frequently run out of drugs” (Toloro village, 8th June 2016, Adibaku Charles).There are many causes of health problems which among others includes poor food utilization, poor hygiene and sanitation at homes. Some people do not have toilets and are forced to defecate in the bush and these cause problems of infection of the people making them to become sick and affect their production activities and nutrition security as the nutrients are sucked by worms after consumption by humans. The poor health also increases medical bills and the money for paying the medical expenses comes from the sale of food reserve in the house which is meant for eating. This causes cyclical food insecurity in the household for example (Ssewanyana and Fredoun, (1999) noted that AIDS victims, notably a head of the household practice excessive sale of food, and to some extent other household assets, to meet medical bill. This obviously affects household food accessibility Muller (2010) concluded that continued high prevalence of diseases like HIV, especially in many countries of sub-Saharan Africa challenges food and nutrition security at multiple levels.

**Domestic violence**

In domestic violence, two people responded and gave their views as follows:

A respondent commented that “domestic violence cause food insecurity as men and women who are involved in the domestic violence do not see eye to eye and yet they are supposed to plan together to utilize the farm produce to ensure better utilization” (Onigo village, 7th June 2016, Ambayo Inyasio). However, another respondent said that “food insecurity from April to June cause domestic violence as well, when women ask their men for food during the period the men becomes arrogant as there is nothing to present to the family and this causes fight in the household” (Loa village, 7th June 2016 Alule Joseph.)

When there is a fight between partners in the household it affects working condition as well as planning for resource utilization in the household. There will be anger and household members will not be in the mood of working together. The women when going to the parent’s home go with household items like food, cooking utensils. There will also be no body to cook food for other household members who may be left behind affecting energy for production. Some of the women carry the food reserve with them plus the younger child, claiming that the food they have carried will be used to feed the child. All this leads to inadequacy of food in the household and hence cyclical food insecurity as the household food reserve is carried away by the women. MoH/UNICEF/WFP, Nutrition Assessment, (February 2008) reported that the prevailing hunger situation (food insecurity) has caused family breakages and is solely responsible for the increasing cyclic population movements of Karamoja children, youth and women within and outside Karamoja meaning food insecurity can as well cause domestic violence in the household.

**Over population in the household**

A farmer responded to overpopulation within household as follows:

A respondent said that “the extended family (overpopulation) affects food security in the household as demands of food for eating and also other necessity like health all rely on selling of food reserve meant for
The high number of people in the household (see cylinder graph 1 below and table 4 above) leads to food reserve being eaten and finished before the harvest of the subsequent season and this cause seasonal food shortage in the household from April to June every year. The high population increase occurs at the expense of food reserve which decreases in size as many household members eat more food than when

There are few household members hence affecting food security situation in the households. Tsediso (2013) noted that the marital status of the household head is negatively associated with spending on food. This might be due to an increased household size due to a spouse in households were the head is married. Elijah (2010) concluded that households with unmarried heads were more food secure than the married, possibly as a result of limited number of people that such have to feed.

A respondent commented that “theft of farm produce for example simsim from the gardens and by house wife for the best reasons known to them is rampant. Farm produce especially simsim are stolen from the garden as the farmer is drying the stacked simsim for harvesting the seed. Other crops like cassava and maize are also stolen when mature in the garden”. (Marila village, Dramoyo Henry, 8 June 2016). The theft comes when the husbands is not supporting the family financially. The stolen food items are the food reserve to prevent food insecurity therefore it leads to inadequacy of food from April to June every year within the household. Theft of food reserve occurs when both partners in the household are drunks and they steal food reserve to buy alcohol or pay for alcohol debt and this cause cyclical food insecurity within such household.

During period of cyclical food insecurity cassava and maize are stolen from the gardens a

The majority of the households 72% have both parents of children alive (see table 4) and majority of the respondents 49.3% have 4-6 biological children and 54.7% have 1-3 dependants in the house hold. On average each house hold have 4+6/2=5 biological children and 1+3/2=2 dependant people. On average each house hold has a total of 5+2=7/2=3.5 biological children and dependant family members. Total household members 2 parents (see table 2) + 3.5 children (cylinder graph 1) =5.5 people.

The theft comes when the husbands is not supporting the family financially. The stolen food items are the food reserve to prevent food insecurity therefore it leads to inadequacy of food from April to June every year within the household. Theft of food reserve occurs when both partners in the household are drunks and they steal food reserve to buy alcohol or pay for alcohol debt and this cause cyclical food insecurity within such household.

During period of cyclical food insecurity cassava and maize are stolen from the gardens as the demands and price for these food security crops go up and people resort to stealing cassava and maize from gardens. This leads to cyclical household food insecurity in those households whose food reserves are stolen.

### Fig. 1 Cylinder graph showing percentage of range of number of biological children and dependants of the respondents (household population)

![Cylinder graph showing percentage of range of number of biological children and dependants of the respondents (household population)](image)

**Source: Researcher**

The cylinder graph above shows that majority of the respondents 49.3% have 4-6 biological children and 54.7% have 1-3 dependants in the house hold. On average each house hold have 4+6/2=5 biological children and 1+3/2=2 dependant people. On average each house hold has a total of 5+2=7/2=3.5 biological children and dependant family members. Total household members 2 parents (see table 2) + 3.5 children (cylinder graph 1) =5.5 people.

The majority of the households 72% have both parents of children alive (see table 4) and majority of the respondents 49.3% have 4-6 biological children and 54.7% have 1-3 dependants in the household (cylinder graph 1 above). On average each household have 5.5 members yet the majority78.33% of the farmers (see pie chart 2 below) have annual savings of less than one million shillings a year besides they overspend in activities like traditional marriage where the majority, 38% of the farmers spend between 1,000, 000-5,000, 000 shillings on each traditional marriage, 93.33% of the farmers spend less than one million shillings on leisure and 48% of the farmers spend 5,000,000-10,000,000 shillings on each church marriage (see line graph 1 below). This gives annual savings of about two hundred thousand shillings on each family member a year and is not enough to cater for food, health, education, clothing and leisure needs of each of the family members. This extended family problem and overpopulation in a family causes food insecurity within the households and agrees with Jason (2012) that rapid population growth in Sub-Saharan Africa makes talking hunger more challenging. Larger household sizes are associated with a negative food security status. Larger household sizes require increase food expenditure and competition for limited

resources. The negative parameter could be as a result of an increase in the dependency ratio in larger households. Larger household sizes are more likely to be food insecure than smaller size households (Tsediso, 2013). Aidoo et al (2013) concluded that Household size had a negative and significant relationship with food security at the 1% significant level, implying that the probability of food security decreases with increase in household size.

### Theft of food stock meant for food security

In theft of food stock meant for eating, the farmer responded as follows:

A respondent commented that “theft of farm produce for example simsim from the gardens and by house wife for the best reasons known to them is rampant. Farm produce especially simsim are stolen from the garden as the farmer is drying the stacked simsim for harvesting the seed. Other crops like cassava and maize are also stolen when mature in the garden”.

(Marila village, Dramoyo Henry, 8 June 2016). The theft comes when the husbands is not supporting the family financially. The stolen food items are the food reserve to prevent food insecurity therefore it leads to inadequacy of food from April to June every year within the household. Theft of food reserve occurs when both partners in the household are drunks and they steal food reserve to buy alcohol or pay for alcohol debt and this cause cyclical food insecurity within such household.
National events like general elections
Under National events like general elections a farmer gave his view as follows:
A respondent said “people sold food and contributed food physically to candidates to support them in the elections of February 2016 and this left them with deficient food in the household during the planting season of April to June 2016 (Agali village, 9th June 2016, Akuku Simon). Too many farmers are recruited and lured into campaigns, mobilization and soliciting for votes for different candidates though it is their constitutional right, this has made the farmers not to concentrate in the farming activities and during campaign rallies farmers supported their favorite candidates with food items like cassava, maize flour, and animals like goats, sheep, and chicken hoping that they will be paid back when the candidates pass the elections. Most of the supported candidates have failed and refunding such support to the households became difficult as the candidates who were supported by the households but failed had no money to refund the households. These food items have been eaten during rallies and campaigns and have caused cyclical food insecurity after the elections from April to June 2016 in Ciforo Sub-county, Adjumani district.

Extravagancy in spending by the people
Three farmers responded to extravagancy in spending of food reserve as follows:
A respondent said that “food is cooked plenty at harvest time and a lot of leftover is thrown away. Some are sold cheaply to buy good food like fish and meat which are expensive” (Okangali village, Eriga Geoffrey Kwenia, 2016). Another respondent added that “men and women sell the farm produce cheaply and use livestock without plan” (Toloro village, 10th June 2016, Andaku Simon) and finally another respondent concluded that “farmers sell food reserve at harvest point whether the price is low or high” (Loa village, Alule Joseph, 11th June 2016). Majority 57.34% of the farmers (see table 5 below) sell agriculture produce without plan but mostly on emergency demands, during period of harvest, Christmas and Easter season and between October to February every year as it is the period when students go to school, festivities are done and also during the dry season a number of traditional and cultural activities are organized which are expensive in terms of money. This agreed with FA0, (2011) report that consumption of higher valued food categories tends to respond much more, especially in low-income countries than developed countries. Thus, given that consumer reactions to income and price changes differ across food types, rising income or variations in prices will change the composition of food demand and these changes will be more pronounced in developing countries and, at least initially, will tend to improve diets of the poor but reduce the food reserve of the household causing food insecurity in the long run within the household.

Middle men take advantage of buying the farm produce cheaply during this period when farmers sell cheaply to buy clothes to celebrate festivity and pay school fee and sell expensively the stocked farm produce in April to June when the farmers have exhausted their food reserve stock and this agrees with Abraham et., al (2013) who noted that although most households have land and try to grow crops and harvest reasonable amounts, most of this food is sold cheaply during harvest season to middlemen who take it to the neighboring countries including Kenya and South Sudan. The period and attitude of selling farm produce by the farmers in Ciforo Sub-county, Adjumani district is shown in the percentage table 5 below.

| Table 2 shows percentage of priority of selling of farm produce by the farmers n=150 |

<table>
<thead>
<tr>
<th>Value statement of period of selling farm produce</th>
<th>Priorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period of selling</td>
<td>1</td>
</tr>
<tr>
<td>Store and sell when prices have gone up</td>
<td>26.00</td>
</tr>
<tr>
<td>Sell without priority but on emergency demands</td>
<td>44.67</td>
</tr>
<tr>
<td>Sell during festive season like Christmas and Easter season</td>
<td>6.67</td>
</tr>
<tr>
<td>Traditional or cultural ceremonies like funeral, marriage</td>
<td>14.00</td>
</tr>
</tbody>
</table>

1 First choice, 2 second choice, TFC Total first choice, 3/MC Medium choice 4 Fourth choice, 5 Fifth choice and TLC Total Least Choice
Source: Researcher

In the percentage table above the majority 57.33% of the farmers have prioritized as their total first choice, 12.67% have prioritized as their 3rd or medium choice and 30% as their total least choice to store and sell of farm produce when prices of the farm products have gone up.

In value statement of sell of produce without priority but on emergency demands, majority of the farmers 57.34% prioritized as their total first choice, 22% as their 3rd or medium choice and 26.67% as their total least choice to sell their agriculture produce on emergency. Note the common majority 44.67% of the
maturity are a particular problem for small scale farmers whose inadequate storage facilities force the people either to sell the crop when prices are low or assume the risk of high storage loss. Harvest season are from October to January every year and this is the period when there is festive season, school fees payment and usually dry season when most of the cultural activities take place and this cause the farmers to sell off the farm produce during this period on emergency demands of paying school fee, buying clothes and good food for celebration of festivities and meeting of cultural demands.

The implication is that it causes cyclical food insecurity between April and June every year as the food reserves would have been extravagantly exhausted between October to February. The different aspect of social life of the people affect food security situation and yet Bahiigwa, (1999) noted that at national level there is no specific buffer stock program that would release food onto the markets during times of shortage to stabilize retail food prices during periods of low supplies. The farmers also spend a lot of livestock during traditional and cultural activities and funerals by the farmers in Ciforo Sub-county, Adjumani district (Table 3).

Table 3 shows percentage distribution of range of livestock used during traditional ceremonies n=150

<table>
<thead>
<tr>
<th>Item</th>
<th>Range</th>
<th>1-4</th>
<th>5-9</th>
<th>10-14</th>
<th>15-19</th>
<th>20-25</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Traditional Marriage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle</td>
<td></td>
<td>34.00</td>
<td>35.33</td>
<td>13.33</td>
<td>2.00</td>
<td>0.67</td>
<td>14.67</td>
</tr>
<tr>
<td>Goats</td>
<td></td>
<td>21.33</td>
<td>17.33</td>
<td>22.67</td>
<td>13.33</td>
<td>8.67</td>
<td>16.67</td>
</tr>
<tr>
<td>Chicken</td>
<td></td>
<td>39.33</td>
<td>10.67</td>
<td>11.33</td>
<td>8.67</td>
<td>2.00</td>
<td>26.25</td>
</tr>
<tr>
<td>Sheep</td>
<td></td>
<td>31.33</td>
<td>6.00</td>
<td>0.67</td>
<td>0.67</td>
<td>0.00</td>
<td>61.33</td>
</tr>
<tr>
<td>Pigs</td>
<td></td>
<td>2.00</td>
<td>1.33</td>
<td>0.67</td>
<td>0.67</td>
<td>4.67</td>
<td>95.33</td>
</tr>
<tr>
<td>2. Funerals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1-2)</td>
<td>(3-4)</td>
<td>(5-7)</td>
<td>(8-9)</td>
<td>(10-12)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle</td>
<td></td>
<td>69.33</td>
<td>11.33</td>
<td>2</td>
<td>1.33</td>
<td>0.67</td>
<td>15.33</td>
</tr>
<tr>
<td>Goats</td>
<td></td>
<td>12.67</td>
<td>21.33</td>
<td>10.67</td>
<td>8.67</td>
<td>37.33</td>
<td>9.33</td>
</tr>
<tr>
<td>Chicken</td>
<td></td>
<td>27.33</td>
<td>12.00</td>
<td>9.33</td>
<td>1.33</td>
<td>11.33</td>
<td>38.67</td>
</tr>
<tr>
<td>Sheep</td>
<td></td>
<td>47.33</td>
<td>2.00</td>
<td>1.33</td>
<td>1.33</td>
<td>0.00</td>
<td>48</td>
</tr>
<tr>
<td>Pigs</td>
<td></td>
<td>8.67</td>
<td>1.33</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>90</td>
</tr>
</tbody>
</table>

Source: Researcher

Cultural practices

Traditional activities (Marriage and funerals)

**Cattle:** The majority of the respondents 53/150*100=35.33% said they use 5-9 cattle during traditional marriage and 51/150*100=34.00% and 13.33% said they use 1-4 cattle and 10-14 cattle respectively during traditional marriage and the majority of the respondents 104/150*100=69.33% said they use between 1-2 cattle during funerals.

**Goats:** The majority of the respondents 34/150*100=22.67% said they use between 10-14 goats during traditional marriage ceremonies however 32/150*100=21.33% of the respondents said they use only1-4 goats during traditional marriage ceremonies. The majority of the respondents 56/150*100=37.33% also said they use between 10-12 goats during funerals.

**Chicken:** The majority of the respondents 59/150*100=39.33% said they use 1-4 chicken during traditional marriage ceremonies and the 27.33% of the respondents said they use between 1-2 chicken during funeral ceremonies. The majority 38.67% of the respondents are missing for funerals as chicken are expensive and culturally not commonly used during such traditional funeral ceremonies.
Sheep: The 47/150*100=31.33% of the people said they use between 1-4 sheep during traditional marriage ceremonies and 43.77% said they use 1-2 sheep during funeral ceremonies. The sheep usage specific majority 58/150*100= 61.33% and 48% of the respondents are missing for traditional marriage and funerals respectively because sheep are not traditionally commonly used in marriage and funeral ceremonies.

Pigs: The pig usage specific majority of the respondents 143/150*100=95.33% and 90% for pigs are missing because pigs are not used in traditional marriage and funeral ceremonies respectively of Madi culture where the studies was conducted.

Much as the average majority 50.66% of the farmers prioritized as their total least choice to sell farm produce for traditional marriage and cultural activities (see table 5), the livestock specific majority 35.33% of the farmers use 5-9 heads of cattle, 22.67% use between 10-14 goats, 39.33% use 1-4 chicken during traditional wedding ceremonies which is expensive and can cause food insecurity. However the sheep and pig specific majority of the farmers 61.33% and 95.33% are missing for sheep and pigs respectively because sheep and pigs are not commonly used for traditional ceremonies due to religious and traditional beliefs about the animals and therefore can act as food reserve for the people to enhance food security.

The same implication applies for funerals where the livestock specific majority of the respondents 58/150*100=38.7% for chicken, 72/150*100=48.00% for sheep and 135/150*100=90.00% for pigs are missing because these livestock are not commonly used for traditional ceremonies like funerals because of availability, cultural and religious beliefs towards the animals.

Since these items are contributed by the bereaved families it makes these cultural functions expensive and usually causes food insecurity on bereaved families.

Boniface et al, (2014) noted that some cultural practices can directly or indirectly influence the food security of a given society as culture prescribes the interactions between people, between people and land, and between people and food. These beliefs and practices revolve around desirability of the local crop and animal varieties, food habits, drinking of illicit brews and control of household property, wealth and food produce for solving traditional and church marriage problems and funerals. This affects the food security of the households.

A lot of money is also spend during the traditional and cultural activities, church marriage and leisure by the community in Ciforo Sub-county, Adjumani district and this is indicated in the line graph below.

**Fig. 2 Line graph shows amount of money and areas of spending money by farmers in a year**

**Source: Researcher**

The line graph above shows that in traditional marriage the majority of the people 57/150*100 =38% spend between 1,000,000-5,000,000 Ugandan shilllings and 52/150*100=34.67% spend between 5,000,000-10,000,000 Ugandan shilllings during traditional marriages.

In church marriage the majority 72/150*100 =48% of the people spend between 5,000,000-10,000,000 Ugandan shilllings during church marriage however 44/150*100 =29.33% of the respondents spend between 1,000,000-5,000,000 Ugandan shilllings during church marriage.

In leisure the majority of the respondents 140/150*100=93.33% spend less than one million Ugandan shilllings for leisure and only 8/150*100=5.3% spend between 1,000,000-5,000,000 shilllings for leisure activities in a year.

Although majority 78.3% of the people save less than a million shilllings a year (see pie chart 2 below), the amount of money spend in traditional and church marriage and leisure activities is 5 to10 times the amount of money saved by the people meaning they overspent more than their income on school fee, medical bills, alcohol, clothes, protein food which are expensive and other cultural and traditional demands and most of this spending occur during dry season from October to February every year. As incomes rise, poor households spend more on food (although proportionately less than the increase in income), purchase a more diverse variety of foods, and shift to higher quality foods with greater nutritional value. A
household’s livelihood activities, moreover, enable it to manage risks, cope with stresses and shocks, and build or replenish assets, all important determinants of household food security (Gary et al., 2009). This cause cyclical food insecurity in Ciforo Sub-county households from April to June every year.

Poor saving culture of the people in Ciforo Sub-county, Adjumani district

The people spend money as it comes and saves only little amount, this is shown in the below pie chart diagrams

The pie chart above shows that majority of the farmers 81.3% save their money and only 17.3% do not save their money. This is important to farmers during planting season of April to June when there is observed cyclical food insecurity every year and agrees with Gary et al., (2009 pg. 4) who noted that “Individuals saved incomes helps to produce, purchase, or barter to obtain levels of appropriate foods needed to maintain consumption of an adequate diet/nutrition level”. The income they save is usually from sell of food reserve as there are no cash crops grown in Ciforo Sub-county, Adjumani district. As the food reserve is sold cheaply the amount reduces for consumption and little amount of money is earned from the sale of the farm produce. The money saved is used to solve many problems ranging from school fee payment to cultural activities and sometimes spend on leisure activities like drinking alcohol.

The majority 81.3% of the farmers( See pie chart 1 above) save their small money before spending and they keep the money in different places and the below cylinder graph 2 shows where the farmers in Ciforo Sub-county keep their money.
The cylinder graph above shows that majority of the farmers 95% save their money in the village banks and 15% save their money in SACCO, 7% save their money in commercial banks, 5% keep their money at home and the 22% don’t save their money in any of the above options or don’t save it all.

The majority of the farmers 95% save their money in the village bank (cylinder graph 2) which are usually located within the village and are near and accessible to members. These banks also give loans to the members at a low interest rate compared to the commercial banks which have high interest rate but the problem is the banks require collaterals from the farmers before they can borrow money from the banks and yet agriculture production and food insecurity are cyclical. The farmer’s savings itself is small in these banks. These cause them to have inadequate money for investment in agriculture and buying of food from April to June immediately after the heavy spending season from October to February every year.

Unbalance power dynamics in household social structure

Household members have different power dynamic within the household which affects food security and this is shown in the line graph below.

The line graph above shows 71.3 % of men are decision makers and participate more in other household activities compared to 22% of the women who are decision makers and only 1.3% of children contribute to decision making and other household activities in Ciforo Sub- county, Adjumani district and this agreed with Jason (2012) who reported that in many countries women and children are only half as likely as men because they lack decision making power especially on reproductive health, and spending in the household. Gary et al., (2009) reported that maternal income or control of food reserve by women effects on
food security and family health (particularly for the women and children in the household) significantly than paternal income effects or control of food reserve by men. This is one of the reasons why there is cyclical food insecurity in Ciforo Sub-county, Adjumani district from April to June every year as men control the food reserve in the household and are not as careful as women in planning and budgeting for the food in the whole year.

**CONCLUSION**

- Poor planning in selling food reserve and extravagancy in spending earned money, the farmers sell the farm produce cheaply on emergency demands like traditional marriage and leisure without planning between October to February every year.

- Over population within households, increased household population. Large household sizes are associated with a negative food security status.

- Domestic violence, women carry the food reserve with them plus the younger child when going to their parent’s home during domestic violence claiming that the food will be used to feed the child. This leaves the other household members with inadequate or no food reserve to feed on. This cause transitory food insecurity within the household. Food insecurity also cause domestic violence for example when there is no food for men to present to their women especially during April to June of a year.

- Overconsumption of alcohol, the farmers take a lot of alcohol and this affects their health condition which also subsequently affects their productivity in the community or the family. Alcohol also disorganizes the reasoning of people and hence this makes them not to plan well especially for the farming activities and spending the available agriculture produce. They use the income from sale of food reserve to pay alcohol debts and buy alcohol. Some farmers barter trade alcohol for food items

- Lack of agriculture cooperatives, there are no farmers cooperatives to organize the farmers to bulk, store and sell the farm produce when the prices of agriculture produce have gone up. The problem of lack of cooperative is due to poor Government policy on cooperatives making it difficult for the farmers to market the farm produce and end up being cheated by the middlemen.

- Poor saving culture of the farmers, the farmers save small amount of money in a year that is less than one million shillings in village banks. They overspend in areas of tuition, leisure, cultural activities and church marriage. This cause them to have inadequate amount of money to buy food or reinvest back to agriculture production.

**Acknowledgement**

My greatest thanks are also extended to the National Farmer’s Leadership Center, Adjumani district and Ciforo Sub county Local Government which granted me a study leave and also allowed me to carry out this study in Ciforo Sub County, Local Government.

I also thank Sr. Dr. Najjuka Solome for her untiring support while preparing this work. Special thanks also go to Professor Hakyo Lee for encouraging me and offering me financial assistance during the course. Special thanks to my family members, my wife Adibaa Patricia, children Emmanuel Anzo, Jude Thaddeus Drichi and Jerome Ekusi who endured my period of absence.

**REFERENCE**


4. Bahiigwa B A G 1999. Household food security in Uganda: An empirical analysis. Economic Policy Research Center P.O Box 7841 Kampala, Uganda. Tel. 256-41-540141/541024, Fax. 256-41-541022. Email: bahiigwa@eprc.or.ug or eprcl@imul.com

5. Boniface N W, Kennedy J O, and Telesia M M 2014. Effects of Socio-Economic Factors on Food Security Situation in Kenyan Dry lands Ecosystem Asian Journal of Agriculture and Food Science (ISSN: 2321 – 1571) Volume 02 – Issue 01, February 2014 Asian Online Journals (www.ajouronline.com) Department of Geography & Environmental Studies, University of Nairobi, Department of Geography & Environmental Studies, University of Nairobi, Postgraduate Programme in environmental planning and management, Department of Geography & Environmental Studies, University of Nairobi

https://psu10.wordpress.com
8. FAO 2011. The state of food insecurity in the world. How international price volatility affect
domestic economies and food security.
http://www.fao.org/3/i2330e/i2330e00.htm
9. FAO, 2005. The right to Food-Voluntary guideline to support the progressive realization
of the right to adequate food in the context of national food security. http://www.fao.org/3/a-
a0096e.pdf
http://www.fao.org/3/a-i1683e.pdf
11. FAO, 2014. The state of food security in the world. Strengthening enabling environment for
12. FAO, 2015. The state of food insecurity in the world. Meeting the 2015 international hunger
work. Livelihood and food security technical assistance. https://theliftproject.org/wp-
content/uploads/2013/03
fish resources by a traditional riverine community in the Brazilian Amazon. Ecology
and Society 20(3): 18.
http://dx.doi.org/10.5751/ES-07483-200318
17. Martin S W, Allan H M, Preben W 1987. Veterinary Epidemiology Principles and Methods. Iowa State University Press, Ames, Iowa. 50010. All rights reserved. Printed in the United States of America from microcomputer diskettes provided by the authors.
https://scholar.valpo.edu/cgi/viewcontent
22. Tshediso Joseph Sekhampu, 2013 Determinants of the Food Security Status of Households Receiving Government Grants in Kwakwatsi, South Africa North-West University, South Africa E-mail: joseph.sekhampu@nwu.ac.za
24. World food program (WFP) and Uganda Bureau of Statistics (UBOS), 2013. Comprehensive food security and vulnerability analysis Uganda.