Baseline report on

Food distribution, skill development, and financial services: An evaluation of BRAC South Sudan's FFTIG program

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Executive summary

Livelihood development is critical in a post-conflict situation as in Southern Sudan. Returning from camps, a good portion of these internally displaced people are facing lack of employment opportunities along with acute shortage of basic services. In an effort to design an effective approach the extreme poor population of southern Sudan, BRAC Southern Sudan has collaborated with World Food Program (WFP) to experiment its development program known as Food for Training and Income Generation (FFTIG), which aims to offer an integrated package of food distribution, skill development and savings & credit opportunities to support resettlement of displaced poor of south Sudan.

A baseline survey was conducted to record benchmark information regarding key livelihood pattern of the beneficiary and non-beneficiary and help program to craft an intervention which can successfully create sustainable livelihood for the vulnerable women in southern Sudan.

BRAC field staffs determine a list of 1058 potential beneficiaries in and around juba. A four item household poverty scoring criteria (female headship, housing structure, ownership of a house, and dependency) were utilized to select eligible beneficiaries. Randomization was done at individual level, where 500 households were randomly selected to be treatment and the rest 558 to be control households.

The result reveals the sampled households suffer very low living and health conditions compared to the general population in Juba. This reveals effective targeting by the program. On the other hand, there is no major difference between the treatment and control groups. Randomization apparently meets the balancing requirement. Ninety nine percent of the samples were female headed household while average household size and dependency ratio were 5.3 and 60% respectively. About 67% of the households had at least one primary graduate while 35% of the household head never enrolled in school. Sixty percent of households lived in the house made from straw roof and wall made of mud and 90% of households used *tadooba* or gas lantern for source of lighting. Almost all are lacking decent access to clean drinking water. Hygiene and sanitation among the sampled households are 'uniformly poor'. As a result high level of vulnerability and low health conditions observed. Sixty two percent of sampled households had members suffering from prolonged illness while 80% households had at least one deceased male member in the past 5 years and 40% households have at least one deceased member in the last one year. The majority of the households based their earning on self employing small trading. Regarding access to financial asset and services only 3% of the households surveyed saved with any kind of formal institutions and only 4% have accessed financial services. One-third of the households possessed some kind of productive assets.

Overall there is poor living standard among study households. Thus, BRAC Southern Sudan FFTIG's early commitment in providing financial services, skill development, and promoting income generating activities should be encouraged. However, BRAC Southern Sudan should also focus its activities in promoting usage of safe water and good hygiene practice.

INTRODUCTION

Since the independence of Sudan in 1956, southern Sudan has been a battleground of two civil wars (1955-1972, 1982-now) that resulted in egregious suffering, loss of life and opportunities, widespread poverty and food insecurity (NSCSE 2004). It is estimated that around half a million people were killed in the first conflict, and as many as two million in the second war. Approximately 20 percent of the region's population is internally displaced or have taken refuge in neighboring countries (South Sudan 2004).

In an effort to reach the extreme poor population of southern Sudan that consists mostly of war-affected returnees, BRAC Southern Sudan has collaborated with World Food Program (WFP) to implement its development programs in Juba area. The idea is to use the food ration provided to these returnees as a strategic entry point during in which BRAC Southern Sudan had been involved in electing program participant, providing skill development training on income generating activities (IGA), organizing participants into groups, mobilizing weekly individual savings and this saving system will be individual savings and introducing small loans, which the participants invested on their IGAs based on the training they received. This will give these poor Sudanese a source of regular income and thus an opportunity to improve their livelihoods in the community. Since, BRAC Southern Sudan started its work in and around Juba area the beneficiaries had easier access to the markets and had greater market opportunities.

Appropriate training will be given to the participants based on their individual skills and capabilities. As south Sudan is an agro-based country training on poultry rearing, vegetable cultivation, entrepreneurship skill development were given priority. Poultry rearing and vegetable cultivation will help them to consume a certain portion and sell the remaining in the market. After sanctioning the first loan to the participants by BRAC Southern Sudan, they were closely supervised and observed if the loan amount was utilized efficiently.

Potential list of members are collected from each cell/community where BRAC microfinance groups are located. Selection was done through discussion with MF group members, local chairman (LC-I) and elderly people. Members were selected based on scores from four criteria i.e. female headship, housing structure, ownership of house and dependency. Scores were assigned based on the following guidelines:

1. <u>Female headship:</u> If the household is headed by a female, the household will get a score of 2, otherwise 0.
2. <u>Housing structure:</u> If the wall of their residence is constructed of hey/stick, the score will be '1'. In case of mud or brick built house, it will be '0'.
3. <u>Ownership of house:</u> The third information is about ownership of house. If the house is neither rented nor owned, (i.e. provided by relatives or someone else as charity), the score will be '1'. For rented or owned houses it will be '0'.
4. <u>Dependency:</u> If there are at least 3 dependents per regular earner in the household, it will be 1. To collect this information, the CO will divide the number of non-earning members by earners.

One household can have a maximum score of 5 and if the score totals <u>at least 3</u>, then a female member from that household will be selected for the program.

Objectives

The general objective of this baseline is to record credible benchmark information regarding key social and financial issues concerning vulnerable poor women in the study area (i.e. Juba county) for impact evaluation and help program.

More specifically,

- To investigate their current situation with respect to education, income, employment, expenditure, and savings.
- To elicit the food intake, water and sanitation, shelter, vulnerability of participant and non-participant groups.
- To explore the migration of the participants and non-participants in the near future.

METHODS

Study design

Initially BRAC Southern Sudan started its activities in six branches in Juba. These are Bulok, Munuki, Haigabat, Jebelkujur, Atlabara and Kator from where beneficiary were selected. Difference in Difference (DID) method will eventually be used to measure the impact of the program. This method will compare between the control and treatment groups before and after participation in the program. So, the study will be conducted in two phases. The baseline survey before the implementation of the program will give us baseline information on treatment and control group and differences between two groups as well. On the other hand, a longitudinal survey will be done after one year to follow up the progress made by the beneficiaries compared to non-beneficiaries.

Sampling strategy

Based on the selection criteria mentioned above in the introduction section 1058 eligible households were identified from six branches for survey. Five hundred households were picked through randomization process as per program target for intervention and the rest were assigned as control households.

Intervention

The most vulnerable women, female headed households with high dependency ratio, are living in harsh conditions due to their inability to get access to main economic activities. Food support (i.e. cereal, pulses, iodized salt, vegetable oil, sugar) for one year from WFP will enable them to attend training courses, organize them into groups, and help them to understand their own development, allow them to start income earning activities and access to savings for future investment and above all insure better nutrition at the family level. During this period, the program participants will be able to set up their own projects, start generating incomes, help them to get access to financial

institutions for borrowing and accumulate capital base for further investment which will allow them to have income return every month equivalent to the value of food aid they got from WFP. BRAC Southern Sudan gave training to 500 poor widows from 500 families selected through randomization process. The program offered an integrated package of food distribution, skill development, and savings & credit opportunities to support the resettlement of displaced poor Sudanese population. There is no statistics on how many widows are in southern Sudan but it is worth noting to mention that due to civil war there are huge numbers of widows in southern Sudan most of them coming to settle down in and around Juba to find a living. As they do not have skill on income earning activities, lack of confidence and capital and opportunities to get access to financial institutions for borrowing, these widows face tremendous pressures in maintaining families and the children and the families lacking daily meals, access to schools and get health care.

Main study variables

The comparison has been done between the control and the treatment groups based on the domain of income i.e. comparisons will be done between the income of the beneficiaries after they have graduated and the income of the non-beneficiaries who did not take part in the program, income earning activities, nutrition status and food intake, sanitation, asset holdings i.e. if the beneficiaries posses any business assets like livestock or any machineries or tools; and non-business assets includes clothing, mosquito nets etc.

Data collection instrument and procedures

The information were collected through a structured questionnaire (annex 1). The enumerators were given a list of households to be surveyed that included name of household head, name of father/husband, name of village, and name of branch so that they could locate the household for survey. Before that interviewers were given week long training on baseline survey module. Two supervisors were deployed to follow up interviewers and to ensure the quality of data.

Data collection and response rate

Of 1058 households 94 households could not be surveyed mainly for two reasons. The first one is the respondent i.e. main female of the household was absent at home during survey from 4 March to 25 March 2008. The second one is to identify right household complying with the given household list to them. It was very was a bit hard for the enumerators to find the household through snowballing since neighborhood did not know each other as all were temporary residents in Juba from country side. Of 964 surveyed household 808 households were kept for analysis when beneficiary name and either father or husband's name matched with the given list so that they can be traced in future for panel survey. Of 808 households 388 and 420 were treatment and control households respectively.

RESULTS AND DISCUSSION

A priori there are reasons to assume that the households targeted by the program are different from the general households in Juba, where the program is being implemented.
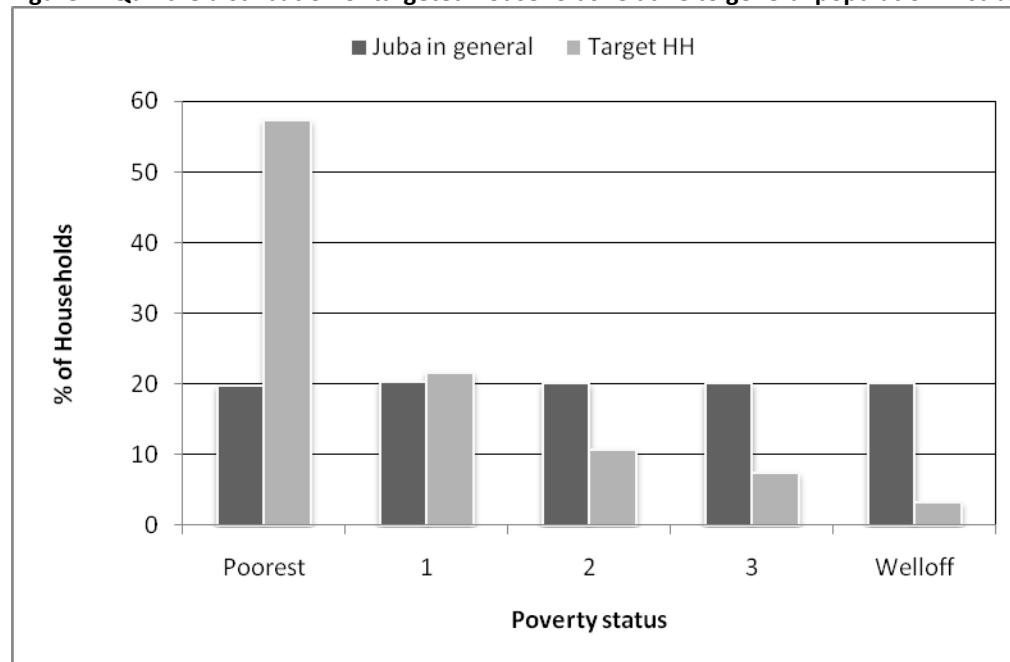
Since the particular program is targeted towards the ultra poor, a comparison of the targeted households with general population in Juba is required to be done to understand targeting. Secondly, there should not be any significant difference between the treatment and control groups since that was done randomly. Such balancing test has also been presented.

Table 1: Comparing targeted households with general households in Juba

Variables	Targeted HH	General population in Juba*	t-statistics
Household size (Average)	5.29	5.69	3.263
Share of working age male (%)	1	71	42.393
Female headed household (%)	99	15	63.900
School enrolment (%)	12	18	9.499
Completed HH head secondary education (%)	17	39	10.091
HH with at least one primary graduate (%)	27	94	66.254
Widowed, separated women (%)	50	13	21.045
Radio ownership (%)	40	54	5.516
Television ownership (%)	11	12	0.417
Bicycle ownership (%)	15	42	11.884
Motorcycle ownership (%)	6	3	2.185
Cattle ownership (%)	3	2	1.916
Goat/sheep ownership (%)	5	14	6.600
Cultivable land ownership (%)	12	21	4.402
Access to safe water (%)	65	90	12.078
HH owns no latrine (%)	54	48	2.575
Access to electricity (%)	2	3	16.269
HH usage firewood/charcoal (%)	91	98	6.310
No. of living room (Average)	1.81	1.98	3.213
HH having floor with cement (%)	5	19	8.296
Average wealth index	-0.79	6.48	17.634

* Derived from MICS data, 2000

Figure 1: Quintile distribution of targeted households relative to general population in Juba

Overall the targeted households were poorer than general households in Juba (Table 1). Female headed headship, widowed or separated women were significantly higher in sampled households due to program targeting. Majority of the targeted households were in poorest quintile while it was least in the fifth or well-off quintile (Fig.1).

Household characteristics

The baseline survey collected information on personal characteristics of household members including information on age, sex, relationship to the respondent, disability, NGO participation and migration among others. The proportion of population below fifteen was found 36% while this figure was 49% in national level (NSCSE 2004). The proportion of population above 64 years was found (1.5%) which was close to national figure (1.6%). The working population 15-64 years was 64% in the study area which was 49% in Southern Sudan (NSCSE 2004). The results reveal a dependency ratio had been decreased over the years.

Table 2: Household characteristics

Characteristics	Treatment	Control	t-statistics
Female headed household (%)	98	99	0.758
Age of household head (Average)	44.4	44.6	0.961
% of respondent are widow	69	72	0.913
Sex ratio* (%)	127	116	-
Household size (Average)	5.3	5.2	0.453
Ever participated NGO (%)	6	5	1.026
At least one disable member (%)	9	12	1.678
At least one migrant member (%)	6	4	1.273
Dependency ratio** (%)	57	61	-
Major clans (%)			
Bari	35	37	0.656
Pojulo	9	8	0.589
Mundari	9	7	0.843
Muru	7	9	1.004
Kuku	7	7	0.295
Kakwa	5	7	1.079
Others	28	26	0.823
Religion (%)			
Catholic	58	61	0.788
Protestant	37	35	0.643
Others	5	4	0.378

*The proportion of males to females in a given population, usually expressed as the number of males per 100 females.

**The age dependency ratio represents the ratio of the combined child population (0-14) and aged population (65+) to the population of intermediate age (15-64).

There was no significant difference found between control and intervention households in terms of household characteristics that representing uniqueness of the randomization process. Exclusive female headed household in the study area was not surprising due to targeting policy of the program though 19% of the household were headed by female in Sudan (SHHS 2006). The mean age of household head was close to national figure of Southern Sudan i.e. 40 years (SENAC 2007). In the conflict affected regions on Southern Sudan, people die younger, households are smaller, household head are younger and more likely to be female. In Southern Sudan household size was found to be 5.6 which was close to our estimate (Table 2). In Southern Sudan, there are over 500 different ethnicities while the present study found 31 different ethnicities in Juba. Over 80% of households came from up country to Juba what could be reason of mixed ethnic groups. More common ethnic group was Bari in the study area. The majority of the household practiced Christianity while Catholic was dominant. Only one percent of household belonged to Muslim.

Education

Education has been recognized as one of the key components of poverty eradication. Achieving universal primary education is the second goal of millennium development. This study collected information on education status of the household members to figure out literacy and enrolment. UNICEF estimates that only about 22% of an estimated 2.2 million school-age children are enrolled in primary school while this figure was about

29% in our study (Table 3). The UNICEF-backed "Go to school" campaign played a significant role in education sector of Southern Sudan which launched in 2006.

Table 3: Education Status

Characteristics	Treatment	Control	t-statistics
Household with at least one primary graduate (%)	69	66	0.873
Degree achieved by household head (%)			
No education	34	36	0.516
Less than primary	13	11	0.920
Primary	35	31	1.142
Secondary and above	18	23	1.447
Adult (age 15 and over) literacy: read, write (%)[2]	37	37	-
Net primary enrollment* (%)[2]	33	25	-
School in Juba who enrolled (%)	90	90	0.404
Ownership of school who enrolled (%)			
Private	46	55	2.643
Government	48	36	3.353
Others (religious, NGO, community etc.)	6	8	1.272

[2]Based on total, *The ratio of children of official school age (7-14 in Southern Sudan) who are enrolled in school to the population of the corresponding age group.

A massive "Go to school" campaign aimed to more than double the number of children in primary school during the course of the school year since Southern Sudan's education system was ruined by the civil war. Adult literacy rate also increased which was 24% in 2000 (NSCSE 2004). Locations of school were not surprising since the present study confined in Juba county. It is interesting to note here that private initiative was working along with government of Southern Sudan for the betterment of education sector.

Water and sanitation

Goal 7 of the MDGs aims among others at halving the proportion of the population without sustainable access to safe drinking water. Water and sanitation plays an important role to prevent morbidity as well as reducing social cost. Several endemic diseases (diarrhea, guinea warm, trachoma) can be prevented or controlled by access to safe water and adoption of good hygiene and sanitation practices Conflict left many water points destroyed or non-functional. UN Children's Fund (UNICEF) and Solidarités, a French non-governmental organization, Save the Children (UK) had been working in raising awareness as well as improving water and sanitation facilities by drilling boreholes and repairing existing water points across the Southern Sudan.

Table 4: Water and sanitation

Characteristics	Treatment	Control	t-statistics
Main source of drinking water (%)			
Bore-hole	54	57	0.842
River, lake, pond	32	33	0.377
Others	14	10	1.821
Type of toilet used (%)			
Bush/open space	56	51	1.399
Covered pit latrine private	12	14	0.796
Covered pit latrine shared	19	19	0.071
Others	13	16	1.144

Household having mosquito net (%)	54	52	0.422
Household having insecticide treated net (%)	27	34	1.641

As a result access to improved water source and usage of safe water was increased (Table 4) which was 27% and 21% respectively in 2000 (NSCSE 2004, UNICEF 2004). Over 50% of the households did not have sanitary latrine though access to improved sanitation increased overtime. It was only 15% in 2000 (NSCSE 2004).

Housing

Construction materials not only indicate the durability and permanency of a dwelling unit but also denote the economic status of the household. There was no significant difference found between control and intervention households regarding construction materials (Table 5). Over 60% of households that resided in dwellings roofed with thatch and straw while over 85% of households used earth for floor construction. Most dwellings in Juba (58%) had mud and pole walls.

Table 5: Housing

Characteristics	Treatment	Control	t-statistics
Construction material of roof (%)			
Thatch/straw	61	61	0.018
Wood/planks	23	24	0.499
Others	16	15	0.611
Construction material of walls (%)			
Mud and poles	59	57	0.467
Unburned bricks	27	30	0.911
Others	14	12	0.541
Construction material of floor			
Earth	93	86	3.143
Others	7	14	3.144

Equatorial climatic conditions prevail in southern Sudan. In this region the average annual temperature is about 29.4 C and the humidity is excessive. So, traditional dwelling system keeps cool inside of the house. For example thick grass thatched roof and mud wall protect the sun heat. The types of energy and technology used for domestic cooking and lighting purposes have an impact on the health of household members and the environment around them. The lack of clean fuels has a direct impact on households which depend on wood and charcoal for cooking. While the entire population of Southern Sudan used solid fuels, the carbon dioxide emission was zero (NSCSE 2004) which corresponded to our findings (Table 6).

Table 6: Fuel and lighting

Characteristics	Treatment	Control	t-statistics
Main source of lighting (%)			
Tadooba	52	49	0.879
Paraffin, kerosene or gas lantern	38	40	0.571
Others	10	11	0.526
Type of fuel used for cooking (%)			
Charcoal	67	52	4.416
Firewood	28	41	3.690

Others	4	7	1.173

The technology that is used in cooking impacts on both indoor and environmental pollution. Traditional 3-stone stove and charcoal stove (83%) was more common cooking technology among the households surveyed. One of the targets of Millennium Development Goal 7 is to integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources such as forests and trees.

Income of household members

The livelihood activity was dominated by agriculture sector in South Sudan though our study found majority of households involved in small trading since the present study confined in Juba (Table 7). The small trading included selling alcohol, selling charcoal and firewood, selling vegetables etc. The service included community health worker, teacher, professionals, private and NGO officer, politician and priest. The labour included both agriculture and non-agriculture, skilled and un-skilled labour. The overall average monthly per household income was SDG. 193 while the highest monthly income came from services followed by labours and small trading respectively. Over 50% of the household surveyed fell in lower category of income while only 14% of households earned more than 500 SGD per month. It is important to note that in most African societies, men and women engage in different economic activities, with different implications on their income. Social roles and norms dictate the segregation of activities by gender where women mostly concentrate on farm activities and care labour while men undertake income-earning activities because those are largely the roles that society prescribes for them (Appleton, 2001a; 2001b). It was found that overall; the average monthly income of male-headed households (SGD. 520) was higher than that in female headed households (SGD. 229) though only 10% of households were male headed. Investment in education contributes to the accumulation of human capital, which is essential for higher incomes and sustained income growth. Considering how education significantly enhances the earnings potential of individuals, it is not surprising that per household income rose as the educational attainment increased.

Table 7: Major sources of household earning, monthly income by household characteristics

Characteristics	Treatment	Control	t-statistics
Livelihood of the households (%)			
Small trading	51	49	0.317
Services	18	15	0.661
Labor	17	16	0.141
Agriculture	7	9	0.732
Others	7	11	0.911
Average monthly income by sources (SGD)			
Small trading	135	151	0.447
Services	373	576	1.465
Labor	236	188	0.454
Agriculture	63	119	1.377
Others	90	98	0.158
Average monthly household income in SP (%)			
0-100	53	61	2.477
101-500	33	27	2.045

501 and above	14	12	0.854
Monthly income by sex of household head			
Male headed	520	520	0.001
Female headed	240	220	0.623
Monthly income by education of household head			
Completed primary	272	263	0.124
Completed secondary and above	289	369	0.728

Households headed by individuals with secondary and post secondary education had the highest average per household monthly income (SGD. 336) while this figure was SGD. 267 individuals with primary education.

Table 8: Self employment

Characteristics	Treatment	Control	t-statistics
Self employment (%)	70	64	1.648
Main enterprises among self employed (%)			
Petty trading	28	30	0.546
Brewing alcohol	28	20	1.980
Charcoal and firewood selling	14	19	1.403
Selling food stuff	17	16	0.356
Others	14	16	0.596
Monthly gross sale in SGD.			
Petty trading	1029	460	2.179
Brewing alcohol	2195	1017	1.624
Charcoal and firewood selling	1485	936	1.063
Selling food stuff	2349	1004	1.241
Others	1095	896	0.259

It was found that around 67% of the households involved in self employment. Traditional brewing alcohol and petty trading were common in Juba (Table 8). It was found that overall; the average monthly gross sale was the highest (SGD. 1716) for selling food stuff followed by selling brewed alcohol (SGD. 1702) and fuel selling (SGD. 1184).

Expenditure

Collection of consumption and non-consumption expenditure data remains a key component to look at the living standards of people of Southern Sudan. Different recall periods were used to capture information on different subcomponents of household expenditures. While a 3-day recall period was used for expenditure on food, beverages and tobacco, a 30-day recall period was used in the case of household consumption expenditure on nondurable goods and frequently purchased services. For the semi-durable and durable goods and services, and non-consumption expenditures, a 365-day recall period was used. Food consumption includes food consumed from own production, purchases and free collection/gifts. The estimated mean consumption per capita was DGS. 6.33 per person per day while this figure was less than one (SGD. 0.38) for non-food consumption expenditure (Table 9). Source of food was purchase (71%), own production (7%), and received as kind (22%).

Table 9: Food and non-food expenditure in SGD.

Characteristics	Treatment	Control	t-statistics

Per capita daily food expenditure	8	6	2.148
Per capita daily non-food expenditure	0.49	0.27	1.898
Per capita yearly expenditure on footwear and cloth	1.41	1.33	0.405
Share of food expenditure by item group (%)			
Cereals	30	30	0.450
Oil and spices	20	18	1.676
Fish and animal product	23	24	0.358
Fruits and vegetables	13	14	2.124
Others (alcohol, sugar etc.)	14	14	0.696

The overall yearly expenditure on footwear and clothes was SGD. 1.37 per person per year. The above analysis is extended further to examine the trends in the share of each item group in the total household expenditure on food. The share of expenditure on cereal (30% i.e. rice, wheat, maize, pulses) got the highest followed by fish and animal product (24%), and oil and spices food (20%).

Household asset

Asset ownership is one of the proxy indicators for welfare measurement. In this study, the ownership referred to is by any usual member of the household and is presumed to mean that all members can access the asset. A bicycle or motor cycle is an asset to the household as well as a means of transport. The most valuable non-financial asset for most households was houses which were owned by 43% of the households (Table 10).

Table 10: Ownership of selected household asset

Characteristics	Treatment	Control	t-statistics
House (%)	44	42	0.493
Any productive asset (%)	32	34	0.701
Any electronic equipment (%)	50	43	1.973
Any transport equipment (%)	22	19	1.268
Furniture: Bed, sofa (%)	76	72	1.258
Savings with any formal institution (%)	2	4	1.390

Overall, 33% of the households owned at least one productive asset like cultivable land, livestock, and poultry birds. Overall 20% of the households owned any transport equipments while 47% of the households owned electronic equipment as a means of access to information. Ownership of furniture (74%) was not surprising since any sleeping bed and chair or sitting arrangement was considered as furniture. Information on whether any member(s) of the household possessed a savings account with a formal institution was also collected. This is an indicator of the households' saving ability. The results show that overall, three percent of households had at least a member possessing a savings account with a formal institution i.e. bank, post office, NGO.

Vulnerability

In this study, vulnerability is defined as the risk or exposure of an individual or group of individuals to events that threaten or seriously damage one or more aspects of well being. Vulnerability relates to lack of security, susceptibility to risk and/or exploitation. It is a measure of resilience of individuals, households and communities to withstand any shock that might result in increased poverty. Since South Sudan was battle ground for

long time many people died. For example, 67% of the households reported that they lost at least one member last five years where as 38% of households lost at least one member last one year (Table 11). The major causes of death was illness (61%), sudden death (15%), murder(13%), and accident(9%).

Overall, 20% of the households lost more than one family member during five year span. The reason may the lower life expectancy (42 years) of people of southern Sudan (NSCSE 2004). Over 60% of households reported about prolonged illness of the family member that implies deteriorating wellbeing of households.

Table 11. Shock and vulnerability

Characteristics	Treatment	Control	t-statistics
Expired any household member last 5 years	67	67	0.088
Number of death per household (%)			
One	45	48	0.992
Two	13	12	0.636
Three and above	9	7	0.979
Household with at least one male expired (%)	80	74	0.971
Household with at least one female expired (%)	22	21	0.266
Household with at least one male and one female expired (%)	10	10	0.373
Average age at death	38	42	1.999
Prolonged illness of household members (%)	61	63	0.469
Death of household member(s) last 1 year (%)	35	42	2.349
Theft/robbery (%)	16	21	1.290
Death of livestock (%)	4	2	1.027

REFERENCES

NSCSE (2004). New Sudan Centre for Statistics and Evaluation, 2004, Towards a baseline, Best Estimates of Social Indicators for Southern Sudan.

Appleton, S. (2001 a). "Changes in Poverty in Uganda, 1992-1997", Chapter in P. Collier and R. Reinnikka (eds) "Firms, households and Government in Uganda's recovery", World Bank: Washington DC

Appleton, S. (2001 b). "Poverty in Uganda, 1999/00: Preliminary estimates from UNHS", mimeo, School of Economics, University of Nottingham: Nottingham.

MICS (2000). Multiple-Indicator Cluster Survey (MICS), 2000, UNICEF, World Bank