

STRATEGIC OPTIONS FOR SUSTAINABLE AGRICULTURAL PRODUCTION IN POST CONFLICT PERIOD 2006 TO 2013 IN GREATER GULU DISTRICT, UGANDA

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Abstract: The paper evaluates the strategic options for sustainable agricultural production in post conflict period 2006 to 2013 in Greater Gulu District, Uganda. The Agricultural sector has been confirmed by numerous studies to be the backbone of almost all the economies in the sub-Saharan region. The area of study is the Greater Gulu, Uganda which has for the last two decades experienced violent conflicts and insurgency. Through purposive sampling the Focused Group Discussions respondents and Key Informants were selected and responded to questionnaires and interview schedules. The study utilized the Longitudinal Survey Research Design and Evaluation Research Design based on spearman's rank order. The target population is former Internally Displaced Persons and selected key informants. Questionnaires, interviews and Focused Group Discussions, observation and document content analysis were used in collecting data. SPSS program was used to analyze data using percentages and presented in tables and statistical diagrams. The research findings indicated that the impact of conflict, low levels in disaster risk reduction and lack of knowledge in sustainable agricultural production contributed to the poverty and suffering of the people in post conflict Greater Gulu. The findings of the study are deemed to contribute to the scientific knowledge based on sustainable agricultural production in post conflict era in Greater Gulu, Uganda, for academic purposes as well as, national and regional planning. The study recommends a comprehensive risk reduction management framework formulated.

Keywords: Agriculture, Development, Disaster, Preparedness, Risks

I. INTRODUCTION

Over the last five decades, most Sub-Saharan Countries have witnessed civil conflicts, often of a protracted nature (UNAIDS 2007). These conflicts have been with the consequence of foiling development, at personal, community, national and regional level in the Sub-Saharan. According to FAO & CGIAR (2012) Agriculture is a sector that has been confirmed, by numerous studies, to be the backbone of almost all the economies in the region but which is not performing up to its full potential. FOWODE (2012) confirms that Agriculture is also the

main occupation of women. In Uganda, 80% of the population depends on agricultural production while in the rural areas more than 85% of the total population depends on agriculture as the main source of livelihood either as pure subsistence or with little commercial farming. Northern Uganda, remains significantly behind the rest of the country in terms of development indicators: according to the Government of Uganda's Peace Recovery and Development Plan for Northern Uganda (Mangano & Lambrosch, 2013). Gulu is a town in Northern Uganda Region, the commercial and administrative centre of Greater Gulu District. It had been the location of much of the fighting between the Ugandan army and the Lord's Resistance Army. The economic activity of 90% of the population in the district is subsistence agriculture (AOGU, 2001). The crops grown in Northern Uganda are; Cereals: (finger millet, sorghum), maize; roots and tubers; (sweet potatoes and cassava) beans, pigeon peas, soybeans, cow peas and oil crops: (ground nuts and simsim), cash crops: (cotton, sunflower and horticulture crops: fruits and vegetables), Emerging crops: upland rice, oranges, and green grams (NUALRP, 2012). Agriculture was and remains the mainstay of the local economy and its revitalization is therefore critical to the recovery process in the Lord's Resistance Army affected regions. Land disputes have arisen by different people claiming property and land that the refugees left behind. The people in Northern Uganda have lost their farms and crops in the course of war. This study intended to evaluate the effect of conflict on gender roles on agricultural production in Post Conflict Greater Gulu district, Uganda.

2. MATERIALS AND METHODS

This chapter covers the methodology used in the study. It describes the research design, study area, study population, sampling strategy and data analysis.

2.1 Study Site

The Site for the study was Northern Uganda in the greater Gulu and Amuru districts. Amuru is located approximately 60 kilometers, by road, west of Gulu town, the largest town in the sub-region (Figure 3.1). Gulu is located 332 Kilometers from the capital city Kampala. Gulu district is located in Northern Uganda between longitude 30-32° East; latitude 02-4° North. It is bordered by Amuru and Nwoya district in the west and southwest respectively (Uganda Bureau of Statistics, 2012).

Amuru District is bordered by Adjumani District to the North, South Sudan and Lamwo District to the Northeast, Gulu District to the East, Nwoya District to the South, Nebbi District to the Southwest and Arua District to the West. The administrative headquarters of

the district at Amuru , The coordinates of the district are: 02- 49° North, 31- 57° East (Office of Prime Minister, 2012).

According to UBOS (2012), Amuru District was established by the Ugandan Parliament in 2006. Prior to that, the district was part of the Greater Gulu. Amuru District, together with Agago, Gulu, Kitgum, Lamwo, Nwoya and Pader Districts, are part of the larger Acholi sub-region. It is home to an estimated 2.3 million people and whereby 2 million people were displaced from their homes and the world once again was hardly aware of what was going on in Africa.

The population of Gulu District is 298,527 and Amuru is approximately 250,800. Amuru district population is growing at an estimated annual rate of 3.5% (UBOS, 2012). The economic activity of over 90% of the population in the Greater Gulu and Amuru districts is subsistence agriculture (UBOS 2012).

According to ALREP (2010) Agriculture is the main economic activity carried out by rural population in Greater Gulu and Amuru districts, as a livelihood for the majority of the population. Crop production and livestock rearing are the main agricultural activities, these acts as a source of both food and income for the communities. The AAH (2007) report confirms that a smaller proportion of the population are involved in petty trade activities such as selling of crop produce, brewing and selling alcohol, selling local consumable goods, handcrafts, foodstuffs which are mainly sold in the shift/village markets within the region. The major crops that contribute to household income include; Peas, sunflower cotton, tobacco, maize, millet, sorghum, sweet potatoes, groundnuts, beans, cassava, and simsim (OCHA, 2006).

However, during the last twenty (20) years, less than 1% of the land was utilized for agriculture on account of insecurity caused by the Lord's Resistance Army. With the return of security to Northern Uganda in 2006, the situation in the districts is expected to improve. Amuru District is one of the new districts carved out of Gulu district in 2006. The district is bordered by the Sudan in the North, Gulu in the East, Kitgum district in the North East, Masindi District in the south, Nebbi in the south West and Arua in the West (Muyomba *et al*, 2010).

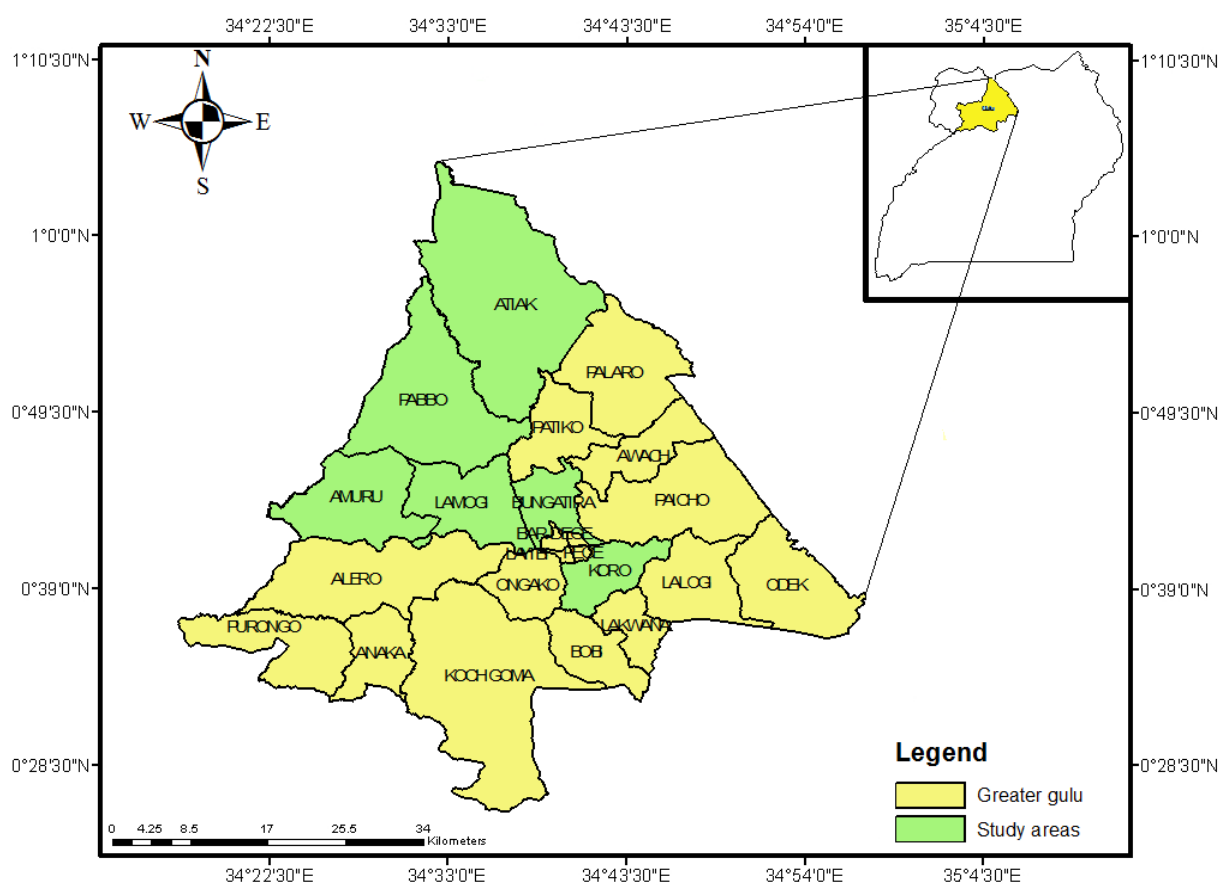


Figure 2.1: Map of the Greater Gulu District Showing the Study Areas
Source: Researcher (2013)

2.2 Study Population

The population within Post Conflict Northern Uganda, Greater Gulu district was estimated at 298,527 and Amuru 250,800 people. The study targets the households from the former Internally Displaced Persons, Sub-County Chiefs, and Local Councillors, elders and opinion leaders and the Non-Governmental Organizations. The Heads of Departments from the District Headquarters who comprise of the Chief Administrative Officers, the Resident District Commissioners, Local Councilor, L5's, the Community Development Officers, District Agricultural Officers and Agricultural Officers in the Counties, and Sub- Counties.

2.3 Research Design

To evaluate strategic options for sustainable agriculture production in Post Conflict Greater Gulu district, Uganda. Evaluation research based on Spearman's rank either when data are scaled on an ordinal scale (or greater) or when you want to determine whether the relationship between variables is monotonic (Bordens & Abbot, 2011); therefore, positive correlation between conflict and agricultural production in Post Conflict Northern Uganda is

expected. Spearman's rank-order correlation, or ρ (p), is correlation between the two rankings (Upton & Cook, 1999).

2.4 Sampling Strategy

A reconnaissance visit was made to the study area between 5th and 25th November 2013 to examine the effect of conflict on gender and agricultural production in Post conflict Greater Gulu, district. The information obtained formed the basis for selection of House holds for the survey. During the same period, the questionnaire was pre tested (to 44 formerly internally displaced persons (IDPs) in Nwoya District) and necessary corrections were made on the questionnaire before a full-scale survey was undertaken. This process utilized convenience sampling method.

The study adopted a number of sampling methods to select the samples. A total of multistage random sample size of 200 respondents was subjected to questions, selected from the two Districts of the Greater Gulu and Amuru. For this social survey, Households sampled from the sub-counties of Unyama, Pabo, Koro and Lamogi were selected by the researcher with assistance from the Local Councilors (LCs). These comprises of the extremely vulnerable individuals (EVIs) who have just left the camps, and some part of the host communities to which they have returned. Random number table and proportional allocation techniques were used to select Households from the following clusters:

The District Officials were purposively selected as recommended by Punch (2001) thus for quantitative research, the sampling may be probabilistic (if representativeness is important) or purposive (if, for example, the point of the research is to study a relationship between variables). According to Mugenda and Mugenda (2003), when the study population is 10,000 and above, a random sample size of 384 is adequate.

Table 1: Summary of Sampling Methods and Sample Size of Respondents from and Amuru District, Northern Uganda

Study Population	Sampling Method	Sample size
Former Internally Displaced persons (IDPs) Households	Multi stage Random	384
Sub-county chiefs	Purposive	6
Local Councilors	Purposive	100
Elders and Opinion leaders	Purposive	10
Key informants:- Sub-County	Purposive	25

Chiefs, Local Councilors, Opinion Leaders, Elders		
Focused Group Discussion:- RDC, CAO, LC5, DAO, NGO Officers, CDO, Opinion Leaders, Elder, CBO representatives and Former IDPs	Quota	8-12
Observations	Purposive	10
Document Content	Purposive	5

2.5 Data Collection

The study employed the following sources during the data collection of primary and secondary data. Data Collection was through the administration of questionnaires, interviews and observation and documentary analysis.

2.6 Data Analysis and Presentation

The data collected from both primary and secondary sources were analyzed to get information on the gender participation and agricultural production in Post Conflict period 2006 to 2013, greater Gulu and Amuru districts in Uganda.

3. RESULTS AND DISCUSSION

3.1 To evaluate Strategic Options for Sustainable Agricultural Production in Post Conflict Period

The study sought to establish options for sustainable agricultural production in post conflict period.

3.2 Gender Equality and Equity in Society is for Sustainable Agricultural and Rural Development

The study sought to find out gender equality and equity in society is for sustainable agricultural and rural development. The Results are given in Figure 1.

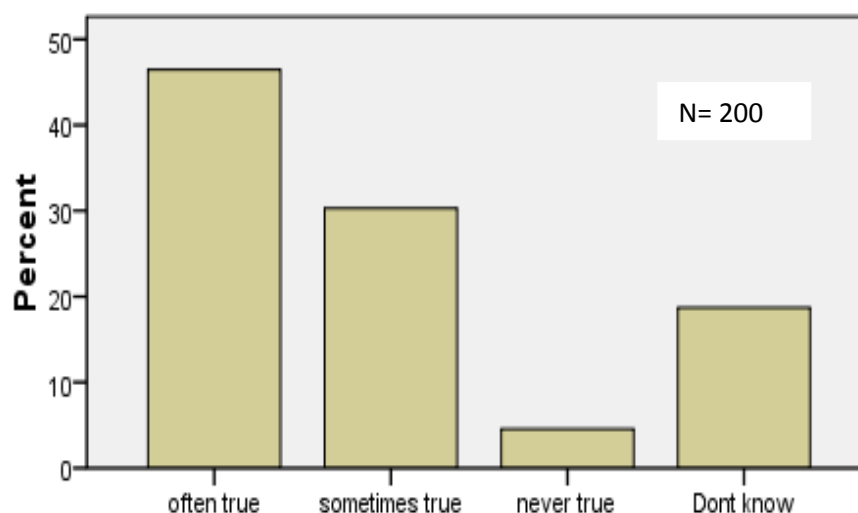


Figure 1: Gender Equality and Equity in Society is for Sustainable Agricultural and Rural Development in Greater Gulu, Uganda

Pearson Chi-Square value ($\chi^2_{3,0.01} = 72.010$) showed that there was highly significant ($P < 0.01$) variation on the view that gender equality and equity in society is for sustainable agriculture and rural development. The Results given in Figure 1 imply most households support gender equality and equity in society is for Sustainable Agricultural and Rural Development. Often true 46.0% (92), sometimes true 30.0% (60), never true were 4.5% (9) and don't know 18.5% (37). Results from key informants revealed that there was low participatory democracy. FGDs supported that few women have benefited from national land use policy initiative to ensure sustainable Agriculture. Key informants found that age group, group membership, group activities as well as gender and agriculture were equally important Criteria used to choose community to work with. Greater Gulu should adopt the findings from World Bank (2012) argument that greater gender equality is not just the right thing to do but also smart economics. It also highlights the need to improve the availability of quality gender disaggregated data and supports more experimentation and systematic evaluation.

3.3 Effects of Disasters on Infrastructure, Environmental Degradation, Hunger and Death

The study sought to find out if the effects of disaster could be extremely damaging infrastructure, causing environmental degradation hunger and death. Results are given in Figure 2.

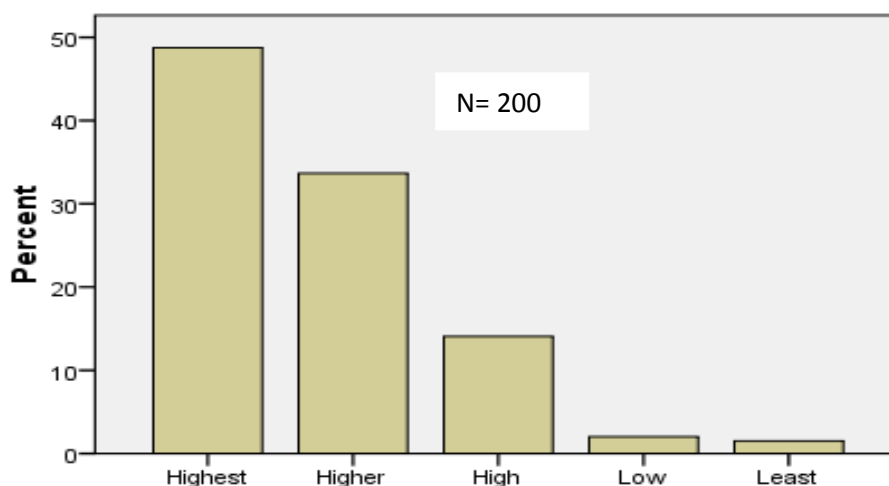


Figure 2: Effects of Disaster on Infrastructure, Environmental Degradation, Hunger and Death in Greater Gulu, Uganda

Pearson Chi-Square value ($\chi^2_{4,0.01} = 170.523$) showed that there was highly significant ($P < 0.01$) variation on the view that Effects of disasters could be extremely damaging infrastructure, causing environmental degradation hunger and death. Results in Figure 2 show highest 48.5% (97), higher 33.5% (67), high 14.0% (28), low 2.0% (4) and least 1.5% (3). These imply most of the household's view that effects of disasters could be extremely damaging infrastructure, causing environmental degradation hunger and death. Key informants were of the view that infrastructure was the least preferred in core activities of organizations. From Focused Group Discussions, it emerged that most women and men heard of climate change.

The irony is that the findings from the study are in disagreement with those of the Office of the Prime Minister. The District leadership in Greater Gulu and Government implement policies on Disaster Preparedness. OPM (2008) assures citizens that, the main function of the National Disaster Preparedness and Management Centre is to save lives and property and minimize loss as a result of a disaster. Government will keep a core of trained individuals across all ministries who can easily be mobilized and deployed by the National Disaster Preparedness and Management Centre in the face of a complex disaster. Examples of such teams are mobile medical and public health team, fire brigade, police, community volunteers, evacuation teams, relief supply teams, debris and garbage collection teams, logistic and telecommunication experts (OPM, 2008).

3.4 Support Systems Relayed by Government and Non- Government

The study sought to find out support systems relayed by Government and Non-Government help people cope with changes in cost of living. Results are given in Figure 3.

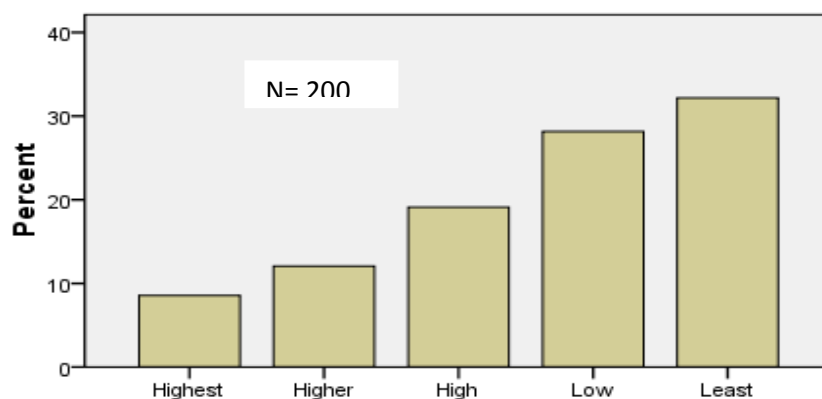


Figure 3: Support Systems Relayed by Government and Non-Government in Greater Gulu, Uganda

Pearson Chi-Square value ($\chi^2_{4,0.01} = 40.724$) showed that there was highly significant ($P < 0.01$) variation on the view that support systems relayed by government and non government help people cope with changes in cost of living. Results in Figure 3 show that majority of households disagree that support systems relayed by Government and Non-Government help people cope with changes in cost of living. Highest were 8.5% (17), higher 12.0% (24), high 19.0% (38), low 28.0% (56), and least 32.0% (64). Majority of key informants ranked affirmative action 7.4% (7) very low. Focused Group Discussions indicated that nobody had heard or benefited from cooperatives as government initiative to ensure sustainable agriculture.

This is in agreement with the IDMC (2012) the government's Peace Recovery and Development Plan for Northern Uganda sets out a comprehensive approach to support reconstruction and Internally Displaced Persons return. In practice however, this, and other ambitious recovery and development programmes in Northern Uganda, have suffered protracted delays. Considerable resources have been invested but positive impacts to enable Internally Displaced Persons to find durable solutions remain limited (IDMC, 2012).

3.5 Community Involvement and Participation should be Encouraged

The study sought to establish community involvement and participation should be encouraged. The Results are given in Figure 4.

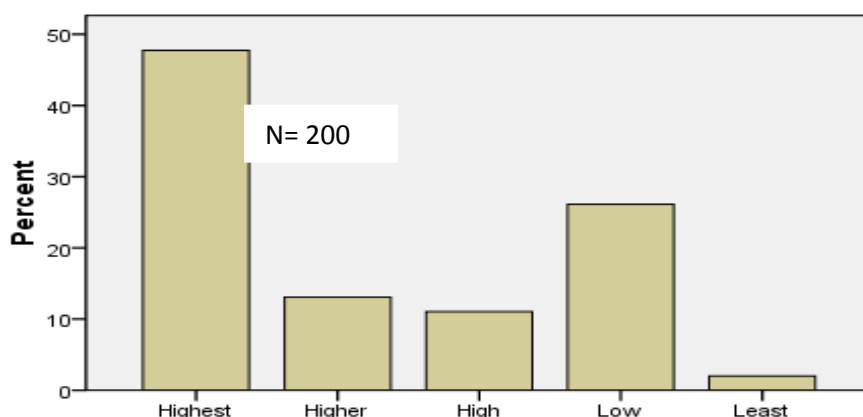


Figure 4: Community Involvement and Participation Should be Encouraged in Gulu and Amuru, Uganda

Pearson Chi-Square value ($\chi^2_{4,0.01} = 125.246$) showed that there was highly significant ($P < 0.01$) variation on the view that community involvement and participation should be encouraged. The results in Figure 4 show highest were 47.5% (95), higher were 13.0% (26), high 11.0% (22), low 26.0% (52) and least 2.0% (4). These imply that most households are in view that community involvement and participation should be encouraged. Key informants responses on strategies used for sustainability in sensitization of the community ranked low 34.7% (33). From Focused group discussions it emerged that majority lack community involvement and participation.

This is in agreement with Peterman *et al*, (2011), in part, the levels and appropriateness of use, access, and adoption of inputs are determined by the setting, farming systems, and context of the study in question. A number of rudimentary generalizations can be made about the differences in farming systems across regions. In Asia, where monogamous extended or nuclear families dominate, and where families jointly farm agricultural land, men serve as the primary agricultural decision makers and laborers. In many African societies, where polygamous families are common, access to resources and decision making is divided between household members.

3.6 Capacities, Capabilities, Environmental Life Support Systems and Disasters Management

The study sought to find out capabilities and capacities are challenges in environmental life support systems and Disaster Management for Nations. The Results are summarized in Figure 5.

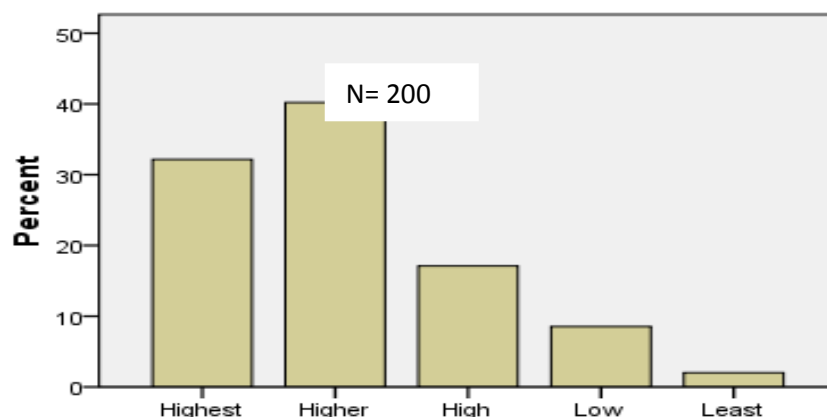


Figure 5: Capacities, Capabilities, Environmental Life Support System and Disaster Management for Greater Gulu, Uganda

Chi-Square value ($\chi^2_{4,0.01} = 101.427$) showed that there was highly significant ($P < 0.01$) variation on the view that capacities and capabilities are challenges in environmental life support systems and disasters management for nations. Results in Figure 5 shows that highest were 32.0% (64), higher 40.0% (80), high 17.0% (34), low 8.5% (17) and least 2.0% (4). These imply in most households are in the view that capabilities and capacities are challenges in environmental life support systems and disaster management for nations. Key informants were of the view that ownership of available resources ranked 1.1 % (1). In Focused Group Discussions the findings were that security to keep food from invasion of animals was rated 9.1% (1) this is rated very low and is an indicator that capabilities and capacities are challenges in environmental life support systems and disaster management.

Greater Gulu should adopt what happened in UK Deputy Prime Minister Nick Clegg revealed a proposed government mandate that will force companies listed on the London Stock Exchange's main market to publish the full details of their greenhouse gas emissions. His announcement came on the heels of NASDAQ's plan to join forces with four other stock exchanges – Cairo, Istanbul, Johannesburg and Sao Paulo – to encourage companies to list more of their environmental, social and governance risks (Environmental Leader, 2012).

3.7 Adaptation, Risk Reduction, Understanding Current and Future Hazards

The study sought to establish how adaptation and risk reduction is necessary for people in understanding current future hazards. Results are given in Figure 6.

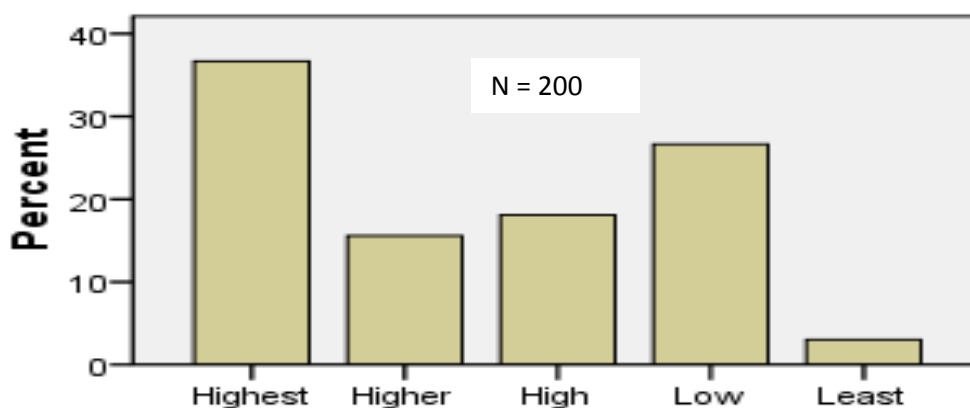


Figure 6: Adaptation, Risk Reduction, Understanding Current and Future Hazards in Greater Gulu, Uganda

Pearson Chi-Square value ($\chi^2_{4,0.01} = 63.085$) showed that there was highly significant ($P < 0.01$) variation on the view that adaptation and risk reduction is necessary for people in understanding current and future hazards. The Results in Figure 6 show highest were 36.5% (73), higher 15.5% (31), high 18.0% (36) low 26.5% (53) and least 3.0% (6). These imply that few households are on the view that adaptation and risk reduction is necessary for people in understanding current and future hazards.

The researcher observed lack of awareness in house holds in risk reduction is necessary for people in understanding current and future hazards.

.... stray elephants from Murchison National Game Park attack us and destroy our crops now and then, especially in the month of August and September 2013, but there is no intervention from our local leaders and government..... This has left the communities neighboring the National Park vulnerable and helpless. (Opinion Leader: Amuru District, November 2013).

From Focused Group Discussions it emerged that few had practiced risk reduction. Pearson Chi-Square value ($\chi^2_{4,0.05} = 10.00$) showed that there was significant ($P < 0.05$) variation in the distribution of women who practiced risk reduction. Key informants did not agree on the fact that communities' have knowledge on disaster risk reduction. The findings from Kovalesk (2013) differ from that of Greater Gulu in that those of Pennsylvania have been recognized for accomplishments including winning the Pennsylvania Environmental Council's People's Choice Sustainability Award in 2008, Pennsylvania Horticultural Society's Community Greening Award in 2011, and Chester County Citizens for Climate Protection's Gene Wilson Award for Environmental Sustainability in the year 2012.

3.7 Government work with Partners and Communities to Reduce Health risk and Promote Safety during Emergency

The study sought to establish how government works with partners and communities to reduce health risks and promote safety during emergency. Results are summarized in Figure 8.

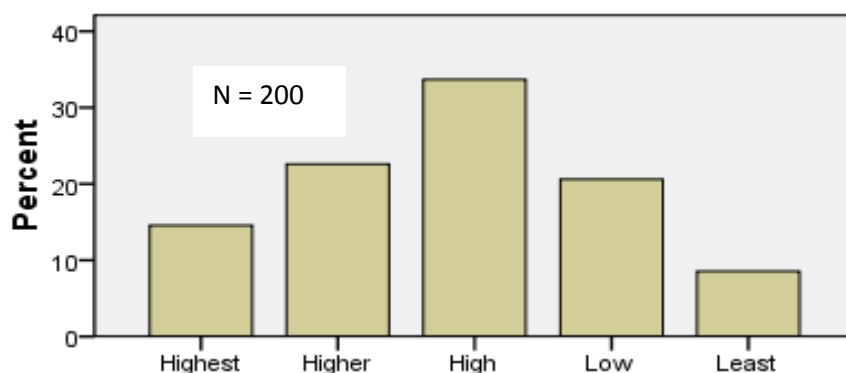


Figure 7: Government works with Partners and Communities to Reduce Health Risks and Promote Safety During Emergency Greater Gulu, Northern Uganda.

Pearson Chi-Square value ($\chi^2_{4,0.01} = 35.296$) showed that there was highly significant ($P < 0.01$) variation on the view that government works with partners and communities to reduce health risks and promote safety during emergency. Results in Figure 8 imply majority of the households disagree that government works with partners and communities to reduce health risk and promote safety during emergency. Highest were 14.5% (29), higher 22.5% (45), high 33.5% (67), low 20.5% (41) and least 8.5% (17). Focused Group Discussions indicated few had freely trained in disaster risk reduction. Results from Key Informants indicate that strategies used for sustainability were ranked 34.7% (33).

These results are in agreement with the Common Wealth, (2009) that, National actors, particularly NGOs, community groups, lawyers associations, national human rights institutions, all have a key role to play in monitoring human rights in times of conflict, because of their knowledge and capacity on the ground. But the will and capacity of a national Government to support human rights monitoring varies greatly from country to country.

3.8 Develop Sustainable Action to Agricultural Production

The study sought to establish how to develop sustainable action to agricultural production. Results are summarized in Figure 9.

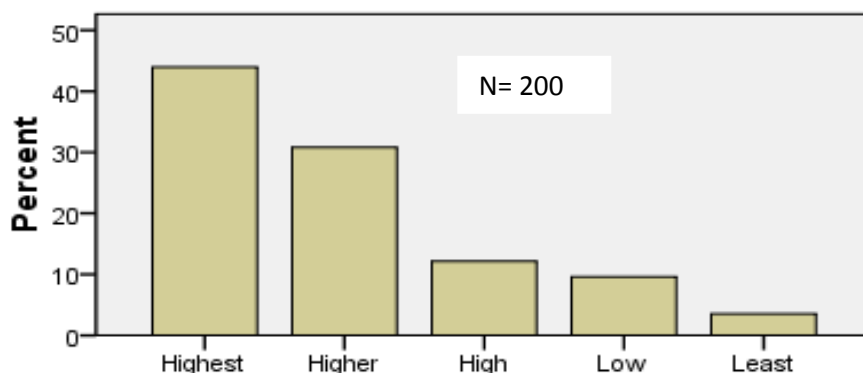


Figure 8: Develop Sustainable Action to Agricultural Production in Gulu and Amuru, Uganda

Pearson Chi-Square value ($\chi^2_{4,0.01} = 112.000$) showed that there was highly significant ($P < 0.01$) variation on the respondents view on the need to develop sustainable action to agricultural production. The Results in Figure 4.9 show highest 43.5% (87), higher 30.5% (61), high 12.0%, low 9.5% (19) and least 3.5% (7). This implies few households are in support to develop sustainable action to agricultural production.

The people of Greater Gulu should learn from the World Bank (2013) Report that landless women and men lease degraded forest lands and obtain complementary training in sustainable land management, basic literacy, and awareness of women's legal rights. Local women group promoters are employed to ensure that women's voices are heard and that women play leadership roles. Group promoters link with professional women to build supportive networks (World Bank, 2013).

Results from Focused Group Discussions indicated few who had knowledge in disaster risk reduction. Pearson Chi-Square value ($\chi^2_{1,0.05} = 5.00$) showed that there was significant ($P < 0.05$) variation in the distribution of women who delivered community based on early warnings. Key informants responses for Knowledge in Disaster Risk Reduction were, yes 40% (25), no 59% (37) Responses were shown in Table 1.

Table 1: Focused Group Discussions on Communities have Knowledge on Disaster Risk Reduction in Gulu and Amuru, Uganda.

Communities have Knowledge on Disaster Risk Reduction	Percentage
Yes	40.3%
No	59.7%

The findings of the study are in line with the World Bank (2012) that Sustainable Agriculture and Natural Resource Management (NRM) activities seek to increase agricultural

productivity through adoption of practices that maintain the long-term ecological and biological integrity of natural resources. Activities in this subsector cut across the rural, social, and environmental issues of natural resource management to sustain significant increases in farm productivity through the efficient use of land and other resources (World Bank, 2012)

3.9 Limited and Uneven Agricultural Baseline Data

The study sought to determine if there is limited and uneven agricultural baseline data in Northern Uganda. Results are given in Figure 10.

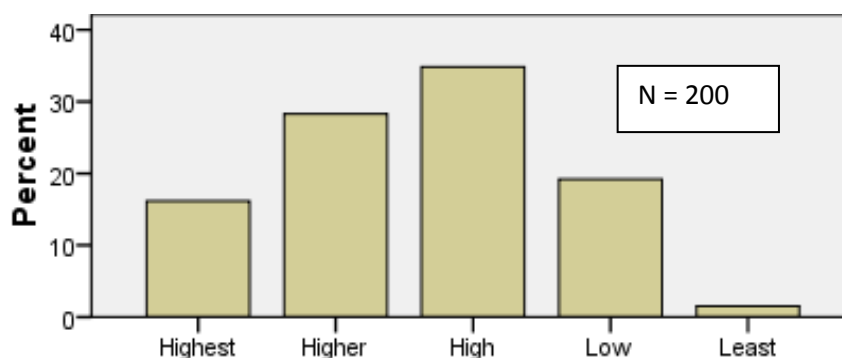


Figure 9: Distribution of Household Responses on Limited and Uneven Agricultural Baseline data in Northern Uganda.

Pearson Chi-Square value ($\chi^2_{4,0.01} = 63.97$) showed that there was highly significant ($P < 0.01$) variation on the view that there is limited and uneven agricultural baseline data in Northern Uganda. The Results in Figure 10 show highest were 16.0% (32), higher 28.0% (56), high 34.5% (69), low 19.0% (38) and least 1.5% (3). This implies that majority of the households responses were in the view that there is limited and uneven agricultural baseline data in Northern Uganda. Focused Group Discussion were in opinion that Government should Empower Agriculture through school education 8.7% (16). Most of the Key informants agreed that communities have skills in Agricultural Produce Processing. Agriculture and Food Production were rated 45.1% (32).

This is in agreement with European Commission (2006); Resources are the backbone of every economy. In using resources and transforming them, capital stocks are built up which add to the wealth of present and future generations. However, the dimensions of our current resource use are such that the chances of future generations - and the developing countries - to have access to their fair share of scarce resources are endangered.

4. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

4.1 Summary of Findings

The study aimed to evaluate the effect of conflict on gender roles on agricultural production in Post Conflict Greater Gulu district, Uganda. The researcher was able to identify the impact of conflict, Low levels in gender participation, lack of knowledge in sustainable agricultural production and risk reduction contributed to the poverty and suffering of the people in post conflict greater Gulu 2006 – 2013. These were ranked in decreasing order in households and are summarized here below:

A total of 200 Households were sampled from Greater Gulu District in the year 2013. Majority of the households disagree that government works with partners and communities to reduce health risk and promote safety during emergency. Highest were 14.5% (29), higher 22.5% (45), high 33.5% (67), low 20.5% (41) and least 8.5% (17). From Focused Group Discussions it emerged that few had practiced risk reduction. Households support gender equality and equity in society is for Sustainable Agricultural and Rural Development. Often true was 46.0% (92), sometimes true 30.0% (60), never true were 4.5% (9) and don't know 18.5% (37). Results from key informants revealed that there was low participatory democracy. Focused Group Discussions supported that few women have benefited from national land use policy initiative to ensure sustainable Agriculture. Majority of households disagree that support systems relayed by Government and Non-Government help people cope with changes in cost of living. Household's view was that effects of disasters could be extremely damaging infrastructure, causing environmental degradation hunger and death. Need to increase availability, accuracy of data & information on gender and agricultural development. The Results show often true were 47.0% (94), sometimes true 37.0% (74), never true 8.5% (17) and don't know 6.5% (13).

4.2 Conclusions

The following conclusions were drawn from the study;

Government works with partners and communities to reduce health risk and promote safety during emergency. Gender equality and equity in society is for Sustainable Agricultural and Rural Development. The lack of awareness among house holds in risk reduction in order to understanding current and future hazards. The households disagree that government worked with partners and communities to reduce health risk and promote safety during emergency. Few women have benefited from national land use policy initiative to ensure sustainable

Agriculture. Effects of disasters could be extremely damaging infrastructure, causing environmental degradation hunger and death.

4.3 Recommendations

Considering the findings of this study, the following are recommended were made;

Government develops a comprehensive approach to support reconstruction, Peace, Recovery and Development Plan for Internally Displaced Persons Return and to assure households of peace. A comprehensive risk reduction management framework should be formulated for Greater Gulu District.

REFERENCES

- [1] Action Against Hunger (AAH) (May 20007). ACF International Network Anthropometric Survey Final Report IDP Camps and Resettlement Areas of Gulu & Amuru Districts, Northern Uganda.
- [2] ALREP (2010). Agricultural Livelihood Recovery Project for Northern Uganda.
- [3] Bordens K.S., & Abbot B. B., (2011). Research Design and Methods. A Process Approach. Eighth Edition. McGrawHill Singapore.
- [4] Common Wealth Office, (2009). UK Government Strategy on the Protection of Civilian in Armed Conflict. Retrieved from [http://www.gov.uk/government/uploads/system/attachment data/file](http://www.gov.uk/government/uploads/system/attachment_data/file).
- [5] Environmental Leader. (2012 July 31). Companies use Sustainability Reporting to help Formulate Strategy. Conference News – Dever, June 21-23. <http://www.environmentalleader.com/2012/07/31/companiees-use-sustainability>
- [6] European Commission (2006). Sustainable Use of Natural Resources. European Union Programme for Uganda (April 2007). Northern Uganda Agricultural Recovery Programme (NUARP) Project No. 2007/13524/1, Volume 2 Final Report.
- [7] FAO & Consultative Group on International Agricultural Research (CGIAR) 2012. Training Guide. Gender and Climate Change Research in Agriculture and Food Security for Rural Development.
- [8] Forum for Women Democracy for Women in Democracy (FOWODE) (2012). Gender Policy Brief for Uganda's Agriculture Sector. ISBN: 978-9970-14-002-2. Published by Forum for Women and Democracy (FOWODE) with support from United Nations joint Programme on Gender equality.

- [9] IDMC (2012). International Displacement Monitoring Centre, Norwegian Refugee Council, Uganda, Need to Focus on Returnees and Remaining IDPs in Transition to Development.
- [10] Kovalesk, B. (2013). Caring for Each Other as we Care for the Earth. Retrieved from <http://business.time/2012/04/20/poll-consumers-care-less-about-theenvironment>.
Camphill Kimberton 2000-2013.
- [11] Mangano, M., & Lambroschini S. (2013), Situation Analysis for Northern Uganda. ACTED Agency for Technical Cooperation and Development in Uganda, Northern Uganda Strategy (2010 – 2014).
- [12] Medical interventional study of war affected Gulu district (2001). Uganda an ISIS-WICCE Report in collaboration with African Psycare Research Organization (APRO) Association of Obstetricians and Gynaecologists of Uganda (AOGU) Department of Orthopedics, Makerere University.
- [13] Mugenda O.M., & Mugenda A.G., (2003). Research Methods Quatitative and Qualitative Approaches. Nairobi African Center for Technology Studies.
- [14] Muyomba Lillian-Tamale, Owor Arthur & Akena Walter (2010). Local Government Councils Performance and the Quality of Service Delivery in Uganda, Amuru District Council Score –card 2008/2009, ACODE Policy Research Paper Series, No. 37 2010, Kampala.
- [15] Northern Uganda Agricultural Livelihoods Recovery Programme (NUALRP) (2012). *Building Productive Infrastructure to Support Agriculture and Livelihoods in Acholi Sub-region Northern Uganda*. Funded by European Union Agency Technical Cooperation (ACTED). Government of Uganda PRDP.
- [16] Office for Coordination of Humanitarian Affairs (OCHA) (2006). *Humanitarian Exchange Magazine Number 36. ISSN: 1472-4847*. Overseas Development Institute (ODI). Retrieved from ochaonline.un.org/cap2005/webpage.asp?menuID=8039&page=1336.
- [17] Office of the Prime Minister (OPM) (2012) - Department of Disaster Preparedness and Refugees. Retrieved from Home page.
- [18] Office of the Prime Minister (OPM) (2008). Department of Disaster Preparedness and Refugees. Retrieved from Home page.
- [19] Peterman, A., Behreman J., & Quisumbing A. (2011). ESA Working Paper NO. 11-11. Review of Empirical Evidence of Gender Differences in Non Land Agricultural

Inputs, Technology and Services in Developing Countries. Food and Agriculture Organization of the United Nations. Retrieved from home page web address.

[20] Punch, K.F. (2001). *Developing Effective Research Proposals*. ISBN-13:978 14129268 2nd Edition London United Kingdom Sage Publication Ltd.

[21] UBOS, (2012). Uganda Bureau Of Statistics, Statical Abstracts, Kampala Uganda.

[22] UNAIDS (2007). *Countries Emerging from Conflict: Lessons on Partnership in Post Conflict Reconstruction, Rehabilitation and Reintergration*, Addis Ababa.

[23] Upton Graham & Cook Ian (1999). *Introducing statistics*, Oxford University press, Great Britain.

[24] World Bank (2012). *Gender Issues in Monitoring and Evaluation in Agriculture. The Agriculture and Environmental Services*. Washington DC.

[25] World Bank (2013), *Gender in Agriculture*. Retrieved from Home page.