Food Security Mapping and Analysis Report





The existence and functionality of policies, systems, structures and institutions working on food security in Baringo and West Pokot Counties, Kenya



Report prepared and submitted by:



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1Thigiri Hilltop/off Thigiri Ridge Road P.O. Box 66471 - 00800 Nairobi/Kenya

Email: info.nairobi@kas.de

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Dr. Charles Okech Odhiambo, Ph.D.

Director,

Great Leap Consult Limited.

AFFIRMATION

The Food Security Stakeholder Analysis/ Mapping exercise was meant to identify the existence and functionality of policies, systems, structures and institutions working to ensure food security in Baringo and West Pokot counties in North-Western Kenya.

Except as acknowledged by the references in this document to other authors and publications, the report consist of our own work. This is part of the requirements of KAS to promote learning, sharing of ideas and documentation for future reference. The work will serve as a baseline for KAS Kenya's Food Security Project, "Crisis Prevention through the Promotion of Good Governance in the Area of Food Security Project-SI EHoW 1" that KAS Kenya is implementing in Baringo and West Pokot counties.

Primary qualitative and quantitative data collected throughout the Food Security Stakeholder Analysis/Mapping process remain the property of KAS. Publication of this report in full or part, and use of the information and data contained therein must only be done upon prior permission from KAS and only for non-commercial purposes.

GLOSSARY

AAIK	Action Aid International in Kenya
ACF	Action Against Hunger (in French)
ACTED	Agency for Technical Cooperation and Development
ACTED	Anglican Development Services
AfDA	
	Agriculture Fishering and Food Authority
AFFA	Agriculture, Fisheries and Food Authority
AIDS	Acquired Immune Deficiency Syndrome
AMPATH	Academic Model Providing Access To Healthcare
AMREF	African Research Foundation
APHIAplus	AIDS, Population and Health Integrated Assistance
ASALs	Arid and Semi-Arid Lands
ASDSP	Agriculture Sector Development Support Programme of the Ministry of
	Agriculture
ASF	ASAL Stakeholders' Forum
CABESI	Camels, Bees and Silk (a local NGO in West Pokot, promoting these enter-
	prises)
CBOs	Community Based Organizations
СВРР	Contagious Bovine Pleuropneumonia
ССРР	Contagious Caprine Pleuropneumonia
CDF	Constituencies Development Fund
CDTF	Community Development Trust Fund
CEDGG	Centre for Enhancing Democracy and Good Governance
CEFODE	Citizen Focus For Development
CERF	Common Emergency Relief Funds
CF	Child Fund
CIDP	County Integrated Development Plan
CMAHAs	Community Managed Animal Health Assistants
CMDRR	Community Managed Disaster Risk Reduction
COMESA	Common Market for East and Southern Africa
CRS	Catholic Relief Services
CSG	County Steering Group
CSOs	Civil Society Organizations
DDG	Danish Deming Group
EDE	Ending Drought Emergencies
EWS	Early Warning System
FAO	Food and Agriculture Organization of the United Nations
FBOs	Faith Based Organizations
FEWS-NET	Famine Early Warning Systems Network
FFA	Food For Assets
FGDs	Focus Group Discussions
FGM	Female Genital Mutilation
FM	Frequency Modulation
FMD	Foot and Mouth Disease
GDP	Gross Domestic Product
J	Gross Politication Frontice

HCDA	Horticultural Crops Development Authority
HI	Handicap International
HINI	High Impact Nutrition Interventions
INGOs	International Non-Governmental Organizations
KALRO	Kenya Agriculture and Livestock Research Organization
KARI	Kenya Agricultural Research Institute
KAPP	Kenya Agricultural Productivity Project
KAS	Konrad Adenauer Stiftung
KERUDI	Kerio Rural Development Initiative
KIIs	Key Informant Interviews
KM	Kilometre
KNBS	Kenya National Bureau of Statistics
KNHRC	Kenya National Human Rights Commission
KRCS	Kenya Red Cross Society
KVDA	Kerio Valley Development Authority
LNGOs	Local Non-Governmental Organizations
LRF	Legal Resource Foundation
MDGs	Millennium Development Goals
MED	Micro Enterprise Development
MoA	Ministry of Agriculture
МоН	Ministry of Health
MUSAT	Multi Utility Stakeholders' Assessment Tool
MYWO	Maendeleo Ya Wanawake Organization
NCPB	National Cereals and Produce Board
NDMA	National Drought Management Authority
NSA	Non State Actors
PADO	Pokot Pastoralists Development Organization
PAN	Pokot Accountability Network
POKATUSA	Pokot, Karamajong, Turkana and Samburu
POM	Pokot Outreach Ministry
PPI	Progress out of Poverty Index
PPR	Peste Des Petits Ruminants
PRDP	Pokot Rural Development Project
SPSS	Statistical Package for Social Scientists
SIKOM	Pokot Word meaning Coming Together for a Purpose
TI	Transparency International
TLPF	Tegla Lorupe Peace Foundation
TOR	Terms of Reference
UN	United Nations
UNICEF	United Nations Children Education Fund
WASH	Water, Sanitation and Hygiene
WATSAN	Water and Sanitation
WFP	World Food Programme of the United Nations
WG	Women Group
WTO	World Trade Organization
WVK	World Vision Kenya

INTRODUCTION

The effects of global warming and the associated climate change have manifested in recurrent droughts and unpredictable, erratic and below-average rainfall, with poor spatial and temporal distribution; particularly in the Horn of Africa and other regions of the Sub-Saharan Africa. In Kenya, the Northern region, that is predominantly arid and semi-arid, is the worst affected. Droughts in this region have been recurring every 2-3 years since the turn of the Century, making the region prone to humanitarian food and technical assistance from the government, faith-based organizations (FBOs), and local and international civil society organizations (CSOs) from time to time almost every year. This greatly compromises the food security situation of the people in these regions.

Much attention has been given, however, to the far Northern Kenya area, covering Marsabit, Turkana, Mandera and Wajir, with little attention being given to agro-pastoral clusters/regions further south; such as West Pokot and Baringo. These regions have increasingly been affected in the recent years, with Baringo and West Pokot suffering badly off within the periods 2014-2015. The situation is likely to replicate over time, with the intensities and impact of the droughts and famines likely to get worse than before.

Whereas previous programmes by the government and many other INGOs have hardly focused on these two counties, the need to focus more specifically on these two counties now than ever before cannot be overemphasized. This is largely because the livelihood options for the majority of the households in these two counties is livestock rearing (pastoral and/or agro-pastoral systems), petty trade, honey-gathering, fishing (especially in some parts of Baringo County) and little mixed farming and irrigated agriculture. Average monthly household incomes are hardly adequate to meet the basic needs of the average households, pushing majority of the people within the two counties to live in abject poverty. Marketing of the produce is poorly organized, with most of the farmers selling their produce individually at non-competitive prices that would further compromise returns on production. Although some efforts are being made by the government (National and County) as well as the Non-State Actors (NSA) to promote value addition; illiteracy, ignorance and high poverty have made the level of adoption to be very low making middlemen and transporters to cash in during the harvest seasons, buying much of the produce cheaply and in bulk only to sell the same later at exorbitant prices. Important to mention is the role of the Agricultural Sector Development Programme (ASDSP) and many more other like-minded actors which have become greatly instrumental in strengthening value chain development, building social inclusions and equity among rural and urban communities towards reducing poverty and improving food security.

Despite the Civil Service Rationalization Programme of the year 2000, and which has continually been implemented thereafter, extension agents in both Baringo and West Pokot Counties are still few. Devolving extension services to the county governments has to some extent aggravated the situation, where public staffs in the respective institutions/entities appear demotivated due to poor and late pay, and delayed promotions. Additionally, poor organization of local marketing looms as the citizens of the two counties think of individual marketing rather than group marketing. Small farmer groups with various commodities are now trying to expand their reach, needing a lot of technical and financial support to grow their product base.

It is in this regard that Konrad Adenauer Stiftung (KAS) is beginning to implement the Project "Crisis Prevention through the Promotion of Good Governance in the Area of Food Security", with an objective of contributing towards the improvement of the food security situation for the communities living in Baringo and West Pokot counties through capacity enhancement. The capacity enhancement interventions are furthermore aimed at promoting good governance and public participation in decision making processes. At the commencement of this project, the study has been undertaken as one of the measures to also establish baseline information in the area of food security intervention in the two counties.

SECTION 1.0 EXECUTIVE SUMMARY

Many parts of the arid and semi-arid (ASAL) parts of Kenya, like other parts of the sub-Saharan Africa, have suffered frequent, more severe, unpredictable episodes of drought in the 21st century. This is majorly due to global warming and the climate change in general. Due to the unpredictable episodes of drought and floods, much attention has been given to these areas by both the government and non-state actors (NSAs), with much focus being on the north-eastern parts of Kenya. Little attention, however has been given to the north-western parts of the Country, notably Baringo and West Pokot, that have of late suffered severe droughts and massive loss of livelihood and life as a result of floods, since 2014.

It is for this reason that Konrad Adenauer Stiftung (KAS) has designed a project dubbed "Crisis Prevention through the Promotion of Good Governance in the Area of Food Security", with an objective of building household and community resilience against disasters and improving the food security situation and household incomes for the communities living in Baringo and West Pokot counties through interventions that aim to promote good governance. At the commencement of this project, this Stakeholders' Analysis/Mapping study was commissioned in order to identify the key players and policies in food security in Baringo and West Pokot counties and the specific needs they address individually and collectively.

The study took the design of cross-sectional exploratory research adopting concurrent mixed methods approach to generate both rich quantitative and qualitative data that are useful in triangulating information and coming with valid conclusions that would in-turn, be helpful in making realistic and practical recommendations. Quantitative aspects of the study involved using a structured questionnaire administered face-to-face to solicit primary information from 397 respondents, who were all household heads drawn from selected wards and villages in each of the sub-counties of Baringo and West Pokot (198 from Baringo and 199 from West Pokot) and identified through purposive, proportionate and snowball sampling. The data obtained from this study were analysed using SPSS, Version 20.0 and descriptive and inferential statistics used to organize and present findings at p<0.05.

On the other hand, qualitative aspects of the study involved obtaining data from 4 different farmers' groups engaged in food security interventions (2 from Baringo and 2 from West Pokot) and 16 key informants, all experts in various aspects of food security (8 from each county). All the participants for the qualitative aspects of the study were selected purposively followed by snowball sampling. With the help of the partners and some of the key informants, a detailed Stakeholder Mapping Matrix was developed for each of the two counties.

Findings of the study indicated that the two study sites are generally food insecure, largely being contributed to by environmental, political, socio-economic and policy factors. Pastoralism, agropastoralism, mixed small-scale crop and livestock farming, small scale crop farming, commercial cash crop farming, dairy farming, beekeeping, fishing and fish pond farming, as well as petty trade are some of the major sources of livelihoods in the two counties. Most of the heads of households involved in the study (36.5%) were illiterate (i.e. never went to school), while only 15.4% completed primary education. Some 13.9% of the respondents completed only lower primary education. The level of illiteracy was found to be higher in West Pokot compared to Baringo, with 25.3% of respondents from West Pokot being completely illiterate compared to 11.2% from Baringo. A majority (80%) of the study respondents were married, with an average household size of 6, and legally owned average land sizes, 0-2 acres, hence, relying largely on community and government land for crop farming and livestock rearing. Major crops grown include maize, beans, sorghum, finger millet, cowpeas, vegetables, fruits, sweet and Irish potatoes; while major livestock kept include zebu cattle, dairy cattle and their crosses, sheep, goats, local chicken, camels, pigs, bees and fish.

Although the study established that 23.5% of the respondents from the two counties were living below poverty line at the time of the study, it was evident that West Pokot is poorer and more food insecure than Baringo, with the former having a hunger period of 4-6 months, while the latter has a hunger period of about 3 months. The main reasons cited for the chronic food insecurity in the two counties were climatic (much of the area is ASAL); socio-cultural (pastoralism is practiced as a tradition, hence, difficult to leave even though expensive and has minimal returns); low capacity to undertake modern farming due to high poverty, ignorance and illiteracy, poor access to institutional support (extension, credit, research and marketing); poor policies; lack of political goodwill; low level of investment in agriculture and the food security sector by the government and farmers; poor access to agro-inputs; poor natural resource management practices; high levels of insecurity; and use of poor quality, low yielding crop varieties and animal breeds.

The study established that both the National and County governments in the study area, together with politicians, the media, NSAs, UN-agencies and government-affiliated players (notably KRCS, KVDA and KALRO) are involved in the area of food security; with the relationship between the government and the other players being collaborative and that of partnerships. Major issues addressed include irrigation; livestock upgrading; disease and pest management; improved access to livestock feeds and marketing; value addition; agroforestry; diversification of agriculture; capacity building on modern agricultural practices; conservation agriculture; introduction of early maturing, drought-and disease-tolerant crop cultivars; diversification of farming; and improved access to water for human, domestic and livestock use. Most of the players in food security work through the County Steering Group (CSG) coordinated by NDMA as the most preferred structure for engagement.

Findings indicated that the strategies currently being used by the players to reduce food insecurity are fairly effective, efficient and sustainable, although there is minimal citizen participation/ involvement; as well as minimal political support. Policies in place and being used in the two counties at the time of the study, such as on agricultural research, agricultural extension, disease and parasite control, environmental protection and marketing; are somewhat out-dated and needed contextualizing and domestication to the local contexts, but the two county governments have done little to domesticate the policies to suit their unique needs. Key relevant policies by the National and County governments that need to be strengthened and implemented well for tackling root causes of food insecurity in the two counties are such policies as on Ending Drought Emergencies, Livestock feeding and Disease control, and Irrigation; as well as the County Policy in West Pokot that require that every sub-county hold their own agricultural shows/field days.

The study concluded that in view of the high poverty and food insecurity situation in the two counties, despite the efforts by most players to reduce food insecurity in the two counties, little has been achieved due to lack of political goodwill, ignorance by most of the citizens, high poverty levels, poor stakeholder coordination and lack of a structured way of engagement between NSAs and the government, hence, most of the stakeholders have been working in silos. This calls for a paradigm shift in dealing with the situation. Hence, the study recommended a broad stakeholder involvement in implementing the KAS Food Security Project; greater collaboration and networking to build a critical mass that would sensitize communities and political players to have a changed mindset, provide more political support to food security interventions and reduce political rhetoric. The study also recommended interventions that would support diversified production, increased investments in agriculture and food security sector; supporting the County governments in domesticating or developing sound and effective policies that strengthen various food and agricultural institutions; supporting community-prioritized and community-owned sustainable food security programmes, mainly in irrigation; and promoting greater participation by the food security actors in the two counties. The network of actors would ensure joint planning, monitoring and evaluation, reduce duplication of efforts, assure synergy and value for money; and reduce back-stabbing and unnecessary criticisms.

SECTION 2.0 BACKGROUND INFORMATION

2.1 About the Assignment

Konrad Adenauer Stiftung (KAS) is a German Political Foundation working in Kenya since 1974. KAS is implementing the food security project under the "one world, no hunger initiative of the Federal Ministry for Economic Cooperation and Development (BMZ)" to help change the mindset of National government and her agencies, county governments of Baringo and West Pokot, and other stakeholders and to equip them with the capacity to make sustainable contributions in the prevention of droughts and famines. This will be achieved through a series of training and forums targeting both state and non-state actors. These activities are aimed at conducting a thorough analysis of the key causes of famine and drought and educating stakeholders on the importance of policies and governance practices that promote preparedness as compared to reactionary approach to emergencies.

Every year, Kenya is adversely affected by spikes of drought, which impact negatively on food security in various parts of the country. This is a worrying and growing concern throughout the country, with pastoralist communities being the most affected as a result of natural disasters and unreliable weather. Northern (and recently parts of North-Western) Kenya has particularly suffered frequent droughts and famine, consequently receiving a lot of support in the form of humanitarian aid and technical assistance.

In the past, international organizations have mainly focused on regions in the far North of Kenya such as Wajir, Mandera, Turkana and Marsabit who were the most affected every year. However, regions further south of Northern Kenya have increasingly been similarly affected in recent years. In 2014 for example, Baringo and West Pokot Counties were particularly affected. The situation is likely to worsen in coming years. Climate change experts predict that drought of catastrophic proportions is likely to take place every two or three years in these two regions. Previous food security programmes have hardly focused on these two counties, creating the necessity for proactive multi-stakeholders' intervention.

At the beginning of the project "Crisis Prevention through the Promotion of Good Governance in the Area of Food Security", KAS commissioned a field study in Baringo and West Pokot to map out actors (public, institutional, structures and non-public), the geographical areas of operation within the two counties, analyse the issues in regard to food security in the two counties, identify the policies, best practices, lessons learnt; and gaps to be addressed if the communities' resilience, food security situation, and household incomes are to be improved.



Lake Baringo flooding during the month of April - May 2016 - picture by the KAS

SECTION 3.0 METHODOLOGY FOR ANALYSIS/MAPPING

3.1 Purpose of Stakeholder Analysis/Mapping

The main objective/purpose was to identify the key actors, issues and policies in the field of food security in Baringo and West Pokot counties and analyse individual and collective needs.

The specific objectives of the mapping study were:

- 1. To identify the area of coverage (policies and implementation) by the two tiers of government and government affiliated players in food security working in Baringo and West Pokot counties;
- 2. To identify the area of coverage by non-state actors working in food security in Baringo and West Pokot counties;
- 3. To identify the relationships existing between the state and its agencies and other non-state actors working in food security in Baringo and West Pokot counties;
- 4. To identify and analyse the issues covered by the organizations and institutions working on food security in Baringo and West Pokot counties;
- 5. To identify and analyse issues affecting the implementation of food security programmes in Baringo and West Pokot counties;
- 6. To establish best practices and lessons learnt from existing players' past experiences; and
- 7. To develop feasible recommendations for KAS and other partners in the field of food security to guide project implementation.

3.2 Target Audiences for the Stakeholder Analysis/Mapping Exercise

The Food Security Stakeholder Analysis/Mapping exercise targeted the entire Baringo and West Pokot County government officers, as well as National Government officers working in the area of Food Security in the two counties. It also targeted the political class (at the County Assembly Level); Civil Society Organizations (CSOs), including CBOs, FBOs, Local Non-Governmental Organizations (LNGOs) and International Non-Governmental Organizations (INGOs); multi-national organizations working in the two counties in the area of food security (e.g. FAO, WFP); the Kenya Red Cross Society (KRCS), which is the lead agency in terms of disaster response in Kenya; the media (like Kalya FM and Chemgei FM); parastatal bodies (like the Kerio Valley Development Authority [KVDA]); and private companies dealing with food security issues (like the Kenya Seed Company and Brookside Dairies Limited) among others.

3.3 Study Design

The analysis and mapping exercise adopted a cross-sectional exploratory study where data was collected once within a period of 4 days from the target individuals and groups. The cross-sectional design took the concurrent mixed methods approaches where both quantitative and qualitative methods were applied to generate rich information to helpfully explore each of the study objectives. Qualitative data was collected to triangulate individual household survey data for the purpose of validating the findings. This, together with secondary data also enhanced the process by assuring internal and external validly of the results.

3.4 Study population and sampling

The study used purposive and snowballing sampling techniques. First, a key player in the area of Food Security, Agricultural Sector Development Support Programme (ASDSP) was purposively identified with the help of Research supervisors with local knowledge of the areas and on the basis of involvement in the area of food security. Due appointments were then made with the identified key stakeholders, who were then interviewed as key informants as per the objectives of the exercise.

ASDSP County Coordinators for each of the two counties were then asked to name the other players in this sector. The information obtained from the coordinators, the supervisors as well as that obtained from the review of secondary data; was then used to compile the full list of the stakeholders to be interviewed.

In each County, two community-based groups (Women Groups and Farmer Groups) were also purposively identified in Baringo and West Pokot counties on the basis of their involvement in the area of food security. The same participated in the FGD exercises which were facilitated by a selected team from among the research assistants that had been specially trained on the same, on quality assurance and use of voice recorders to gather information.

For the quantitative survey, the study had proposed to engage 380 household heads in the exercise in both Baringo and West Pokot Counties. The number 380 was arrived at using Yamane's (1967) Formula for study populations less than 10,000 (in this case, households), and adding 10% for non-response rate:

$$n = N$$

$$1 + N (e)^2$$

Where:

n =the desired sample size (for target populations less than 10,000);

N = the population size;

e = the level of precision or statistical significance set;

From secondary information obtained from the County Coordinators for ASDSP in Baringo and West Pokot counties, about 2,500 households in West Pokot and Baringo Counties were perceived to be actively engaged in food security initiatives, implementing food security programmes with the County and/or National governments, parastatals and/or NSAs (about 1,200 households from West Pokot and 1,300 households from Baringo).

Therefore, for measurement at p<0.05, the sample size would be:

$$n = \frac{2,500}{1+2,500 (0.05)^2}$$

=344.827 (which we shall approximate to 345 households)

Adding 10% for non-response rate, our study population would, therefore, have been 380 households in West Pokot and Baringo counties. This number would have been obtained proportionately as per Table 1 below:

Table 1: Proposed Sample Size for Household Survey in Baringo and West Pokot

County	Sub-County	Area (Km²)	Population	Sample Size
			(2009)	
	Baringo North	1,703.5	93,789	33
	Baringo Central	799.9	89,174	32
	Koibatek (Eldama Ra-	1,002.5	105,273	38
Paringo	vine)			
Baringo	Mogotio	1,314.6	60,959	22
	East Pokot (Tiaty)	4,516.8	133,189	47
	Marigat (Baringo South)	1,678.0	73,177	26
	Total	11,015.3	555,561	198
	West Pokot/Kapenguria	1,822.5	139,500	50
	South Pokot	1,284.0	132,100	47
West Pokot	Pokot Central/Sigor	2,109.7	85,079	30
	North Pokot/Kacheliba	3,953.2	156,011	55
	Total	9,169.4	512,690	182
Grand Total		20,184.7	1,068,251	380

Sources: 1. Kenya National Bureau of Statistics (KNBS), Baringo (2012)

2. County Government of West Pokot (2013), West Pokot County Integrated Development Plan (CIDP), 2013-2017.

Nevertheless, the actual data collection involved 397 households proportionately distributed among the various sub-counties as shown in Table 2.

Respondents for the household survey were selected by purposive sampling followed by proportionate cluster sampling, followed by snowball sampling techniques, with each sub-county being considered a cluster. Thus, in each county and sub-county, only wards and villages where there were households that had been or were currently being actively involved in the implementation of food security programmes promoted by partners were involved.

In West Pokot and Baringo counties, the actors that were actively or had actively implemented food security programmes (on the basis of vulnerability as documented in reports obtained from ASDSP and World Vision offices) were purposively identified with the help of the Ministry of Agriculture, ASDSP County Coordinators, CABESI and the beneficiaries' in terms of the exact locations and villages. These were the villages/wards that were then targeted for the study (household survey). With the help of Village Administrators, a vulnerable household in every village that participate (d) in the programme was identified. The head of this household was then interviewed face-to-face by the research assistants using a household questionnaire tool. He/she would then be asked to mention any other vulnerable household in the same village that participated in the programme. The head of such a vulnerable household would then also be interviewed. This went on until the targeted number of vulnerable households in every subcounty was attained.

Table 2 gives a summary of targeted and actual respondents for the household survey in Baringo County, while Table 3 gives a summary of targeted and actual respondents for the household survey in West Pokot County.

Table 2:Targeted Household Survey Beneficiaries in Baringo County

County	Sub- county	Sub- county Code	Ward/Villages targeted	Beneficiaries targeted	Number of households targeted	Actual Number of households reached	Response Rate (%)
Baringo	Baringo North	01	Barwessa Ward (Villages: Muchukwo, Kiptolelyo, Chemura, Kalel, Katibel, Kabelgo/ Kiptaiwa, Kaberi, Kapkarani, Keturwo, Senebo, Kiptilingon, Barbarchun, Kerio Keu, Endo-Kerio) SaimoWard (Villages: Kaptere, Kapcheptinya, Ayiebo,	World vision, KRCS, ASDSP Programme beneficiaries	33	33	100
			Kamarigat, Boin) KabartonjoWard (Villages: Bossei, Kapchekor, Kapcheptinya)				
			OssenWard (Bebyemit village) KabarnetWard				
			(Seguton village) BartabwaWard (Kokwomoi village)				
	Baringo Central	02	Kapropoita Ward(Villages: Kapkut, Mumol, Kapkem, Kapsergon, Kapsoiyo, Kinyo) Kabarnet Ward (Villages: Molol, Kipkolong,	Child Fund, ASDSP, FFA Programme beneficiaries	32	32	100
			Kipkoloi, Kapno, Salawa, Kabutit, Kapteno, Oinobmoi, Kapsigorian)				
			Orokwo Ward (Villages:Kipkolot)				
	Koibatek (Eldama Ravine)	03	Maji Mazuri/ Mumberes (Villages: Korogocho, Kambi, Milimani, Andama, BlueGum, Centre, KambiNyasi, Igure, Githioro, Kiamakara)	KRCS Programme beneficiaries	38	39	102.6
			Ravine Ward (Villages: Benonin, Luita)				

County	Sub- county	Sub- county Code	Ward/Villages targeted	Beneficiaries targeted	Number of households targeted	Actual Number of households reached	Response Rate (%)
	Mogotio	04	Mogotio Ward (Villages: Lomanira, Molos, Sirwa) Emining Ward (Villages: Kimose, Oterit, Rosoga, Kamar, Sirwa)	World Vision, KRCS Programme beneficiaries	22	22	100
	East Pokot (Tiaty)	05	Loyamorok Ward (Villages: Chebilat, Kolewon, Cherelyo, Cheptuya, Salawa, Kamusuk, Silao, Lemuyek, Kongasis)	Action Aid, KRCS Programme beneficiaries	47	46	97.9
	Marigat (Baringo South)	06	Marigat Ward (Villages: Ngoswe, Namunyak,Eldume, Lugumai, Perkerra, Ilchamus, Kamasula, Komokonge, Sirinyo, Mlima)	NDMA, World Vision, Child Fund Programme beneficiaries	26	26	100
	Total				198	198	100

Table 3: Targeted Household Survey Beneficiaries in West Pokot County

County	Sub-county	Sub- county Code	Ward/Villages targeted	Beneficiaries targeted	Number of households targeted	Actual Number of house- holds reached	Response Rate (%)
West Pokot	West Pokot (Kapen- guria)	07	Pnagei Ward (Villages: KVDA, Kishaunet) Riwo Ward (Kitelakapel village) Mnagei Ward (Villages: Showground, Kamito)	KVDA Food Security Programme beneficiaries	50	60	120
	South Pokot	08	Chepareria Ward (Villages: Ywalateke, Chepkopei, Aron, Loyamuruk)	NDMA Food Security Programme beneficiaries	47	47	100
	Pokot Central (Sigor)	09	Seker Ward (Marich Village) Weiwei Ward (Chepkaser village	WVK and ASDSP Food Security Programme beneficiaries	30	30	100
	North Pokot (Kacheliba)	10	Suam Ward (Villages: Tapadany, Karon, Chepkaneroy)	AAIK Food Security Programme beneficiaries.	55	62	112.7
	Total				182	199	109.3

All the respondents for the qualitative study (KII and FGD) were identified by purposive sampling, followed by snowball sampling. FGD respondents consisted of homogenous groupings of males or females drawn from the areas of interest. Heterogeneous grouping of FGD respondents was proposed, but could not be attained due to socio-cultural issues in the two communities.

3.5 Selection and training of research assistants

A total of 16 research assistants (8 for each county) were recruited from the community in each of the respective counties. In addition, 2 Research Supervisors were also recruited, one from each of the two counties. The team was selected on the basis of their academic qualifications (for sound literacy and numeracy competencies), previous engagement in similar assignments, character, knowledge of the Project area, and ability to communicate fluently in the local dialect. In each county, the team was then trained for two (2) days at a centrally located venue within each of the two counties of study (Kabarnet Hotel and Kapenguria Bible Centre for Baringo and West Pokot, respectively).

The training majored on understanding the role of the research assistants in this exercise, key competencies for obtaining credible information, ethical skills and understanding the various tools. The training enabled the team to master the tools (both quantitative and qualitative) and gain confidence in articulating the specific issues that the exercise sought to establish. The team was also taken through an orientation on data quality management skills.



Great Leap Consultant taking Research Assistants through a training session in Baringo

3.6 Data collection

The survey entailed both qualitative and quantitative data collection through primary and secondary data collection methods namely:

1. Household survey

This involved face-to-face administration of the survey questionnaires to heads of vulnerable households that have in the past or were at the time of the study, participating in food security programmes initiated by partners (See Table 2). Data was collected over a period of four (4) days, with 397 heads of vulnerable households participating (198 in Baringo and 199 in West Pokot, giving a response rate of 104.5%). The household survey tool (i.e. questionnaire) and appendices used captured various indicators of poverty, food security and coping mechanisms, stakeholders involved in food security and issues addressed, as well as community's best-perceived ways of eradicating perennial food insecurity in the two counties.

2. FGD

41 beneficiaries of previous and on-going food security programmes participated in FGDs (27 in West Pokot [13 women and 14 men] and 14 in Baringo [8 women and 6 men]). All the FGD discussant from Baringo were members of farmers' groups, while those from West Pokot were members of Women groups¹.

In West Pokot County, two women groups were involved in the FGDs; KOMESI Women Group (13 women participated) in Pokot North (Kacheliba), all beneficiaries of Action Aid International in Kenya's Food Security Programme; and Kongasis Women Group (14 men participated) in West Pokot (Kapenguria), all beneficiaries of FAO's Food Security Programme.

In Baringo County, 7 members (3 women and 4 men) of Food for Assets Programme of World Vision Kenya and 7 members (5 women and 2 men) of Kituro Farmers' Group supported by Child Fund participated in the focus group discussions.

It is worth noting that while in Baringo County, the groups were heterogeneous (women and men together), in West Pokot this was not feasible due to cultural reasons, hence, only homogeneous groups of men and women participated in the discussions.

Table 4 gives a summary of the focus group discussants for each of the counties of study.

Table 4: Summary of FGD Participants in Baringo and West Pokot

County	Group Name	Supporting	Major activity	Area of	Pa	Participants		
Di		agency		coverage	Female	Male	Total	
Baringo	Food for Assets Group	World Vision Kenya (WVK)	Working in irrigation projects in return for assets. Various food crops are produced in the irrigation schemes, including maize, beans, tomatoes, and onions	Baringo South (Marigat)	3	4	7	
	Kituro Farmers' Group	Child Fund (CF)	Production of fruits	Baringo Central	5	2	7	
	Total				8	6	14	
West Pokot	KOMESI Women Network	Action Aid Inter- national in Kenya (AAIK)	Agriculture & Livelihoods; Girl Child Education and Anti FGM Campaigns;	Pokot North	13	Nil	13	
	Kongasis Women Group	FAO, CABESI and CDTF	Camel rearing, beekeeping and honey processing; fish farming; raising fruit tree nurseries (for pawpaws, mangoes) and fodder crops; aloe vera planting and processing.	Pokot Central	Nil	14	14	
	Total				13	14	27	
	Grand Tota	l			21	20	41	

In West Pokot County, cultural orientation would not allow women to freely participate in a discussion with men. Thus, although two women groups participated in the FGDs, in one of the groups, only male members who also belong to the group participated in the session.

3. KII

Semi structured interviews were conducted with 16 food security experts (8 in each county) drawn from the media, local administration (chiefs), national and county government, government affiliated organizations (Kenya Red Cross Society), civil society groups (including local and international NGOs), details of which are summarized in Table 5.

Table 5: Summary of Key Informants for Baringo and West Pokot

County	Key Informant	Organization	Area of coverage	Venue for Interview
Baringo	Journalist/Reporter	Chemgei FM Radio	Entire Baringo County and beyond	Kabarnet Town
	Senior Chief for Kapseret-Mosop Location	National Government	Kapseret-Mosop Loca- tion	Kabarnet County Offices
	Environmental Resilience and Social Inclusion Officer	ASDSP	Baringo County	ASDSP Offices, Kabarnet
	Director of Agriculture	County Government	Baringo County	Kabarnet County Offices
	Director of Livestock Production	County Government	Baringo County	Kabarnet County Offices
	Senior Administrator in the Governor's Office and Coordinator, Disaster Management	County Government	Baringo County	Kabarnet County Offices
	Coordinator for Baringo and Elgeyo Marakwet	KRCS	Baringo and Elgeyo Marakwet counties	KRCS Kabarnet Offices
	Field/Civic Educator	CEDGG	Baringo County	Kabarnet Hotel
West Pokot	Project Manager, Child Protection	WVK	West Pokot County	World Vision Offices, Kapenguria
	County Coordinator	ACTED	West Pokot County	ACTED Offices, Kapenguria
	Programme Coordinator	CABESI	West Pokot County	CABESI Offices, Kepenguria
	Project Director	SIKOM	West Pokot County	Oil Libya, Maku- tano
	4 male members of Farmers' Cooperative Society	Pokot Farmers' Cooperative Society	West Pokot Sub-county	Pokot Farmers' Cooperative Society Offices, Makutano
	County Coordinator	ASDSP of Ministry of Agriculture	West Pokot County	ASDSP Offices, Makutano.
	Crops Officer	Ministry of Agriculture, Livestock and Fisheries Development	West Pokot County	Ministry of Agriculture Offices, West Pokot County.
	Programme Officer	Kalya FM Radio	West Pokot County and beyond	Kalya FM Offices, Makutano

4. Documents review

This entailed reviewing existing information from KAS Kenya Office and partners in Baringo and West Pokot counties. Notable documents reviewed include the County Integrated Development Plan (CIDP) for Baringo and West Pokot counties (2013-2017); West Pokot County Livestock Sub-sector Strategic Plan (2013-2017); Food Security Situation in Kenya (Unknown Author and Date); Ending Drought Emergencies in Kenya; Draft Food Security Issues in Kenya: Situational Analysis (FEWS-NET; Undated);

and Partnership for Transformational Devolution, Strengthening the Capacities of State and Non-State Actors for effective devolved Governance in Kenya-Mapping Report of the State of Devolution and Non-State Actors in selected spots in Rift Valley, Lower Eastern and Coast regions (KAS, 2015). Others are, Baringo County 2013 Long Rains Food Security Assessment Report, 5th-9th August 2013 (NDMA, 2013); Lake Baringo-Experience and Lessons Learned Brief (by E.O Odada et al.); and "The Issue of Food Security in Kenya", a Master's Thesis by Urte Saduskaite (2014), Aalborg University.

3.7 Data Quality Assurance

The consulting team had the mandate to assure data quality and the entire research process meets international quality standards. In this regard, the consulting team inducted the Research Assistants and the Research Supervisors on the methodology of eliciting credible information from the respondents, discussed and agreed on data quality and pre-analysis sheet to be filled by each Research Assistant and Research Supervisor. The Research Assistants were monitored daily by the two supervisors recruited for the exercise; who in-turn provided daily feedback and update to the consulting team. Being involved in KIIs, the vastness of the study sites, the rugged terrain and limited available means of transport (only 1 vehicle was available per study site), it was, however, not possible for the consulting team to provide technical backstopping during the data collection exercise for the team of Research assistants. Feedback was only given to the Supervisors through which, such reached the team of Research Assistants.

At the end of each day, the Research Supervisors undertook a daily check on the quality of work done, with challenges and lessons learnt being discussed with the team of Research Assistants. Together, the team generated solutions to the problems faced in the field, with the Research Supervisors referring more technical issues to be handled by the consulting team.

3.8 Data Entry and Analysis of Quantitative and Qualitative Data

A team of four data entry clerks entered the quantitative data (from the survey questionnaire) at Great Leap Consul Limited offices over a period of three (3) days. Although this team is experienced in data entry, they were given a one-day orientation on the tool and made to acquaint themselves with the data screen before the entry exercise begun. Data was entered using SPSS Software screen, Version 21.0. SPSS Software, Version 21.0 was used to analyse the data after cleaning, with descriptive statistics being used to organize and present the data in terms of minimum and maximum values, means, and percentages/proportions. Pi-charts, tables, and bar graphs were also used to present the findings. Further analysis involving inferential statistics was undertaken to establish significant differences between the counties and sub-counties with respect to the variables under study.

Qualitative data (KIIs and FGDs) was first transcribed from the voice recordings into word. The word version was then entered into an excel spreadsheet and analysed using the Framework Approach. The Framework Approach of analysis has the advantage of allowing themes to develop both from the research questions and from the narratives of research participants. The process of data quality assurance began during the data collection, by ensuring that most of the qualitative study (all the KIIs) was undertaken by the consulting team that are skilled in this area. A select team comprising the Research Supervisors and two Research Assistants from each study site helped with the FGD facilitation after being inducted on the tool and given orientation on the use of the voice recorder and how the process should be undertaken.

The discussions were facilitated, with probing done to ensure that rich data was generated from the interviews and discussions. The responses were recorded verbatim using Sony digital recorders; with note-takers taking notes of important cues that would help in remembering key aspects of the deliberations. This gave the facilitators and note-takers opportunity to take note of important non-verbal communication with the respondents. The recorded information was then carefully transcribed, with

each discussion being listened to several times in entirety to immerse in the whole, before commencing the transcription. The transcribed information in the word format was then transposed into an excel spreadsheet before being subjected to the Framework Analysis Approach².

The researchers had to familiarize with the data, which involved looking at the typed work over and over again, and carefully comparing it with the voice recordings and the summary notes captured from the field. This way, the researchers immersed into the details of the interviews and FGDs and got a sense of the discussions as a whole before breaking each of them into parts. Major themes began to emerge during this process.

The next stage involved identifying a thematic framework. This was achieved by writing memos in the margin of the text in the form of short phrases, ideas or concepts arising from the texts and beginning to develop categories. At this stage, descriptive statements were formed and an analysis carried out on the data under the questioning route.

The third stage, known as indexing, involved sifting the data, highlighting and sorting out quotes and making comparisons both within and between cases. The fourth and final stage called charting; involved lifting the quotes from their original context and rearranging them under the newly-developed appropriate thematic content.

² Framework Analysis Approach is a method of managing qualitative data analysis that enables users to organize and manage data through a process of summarization resulting in a series of themed matrices. This allows for the analysis to be executed thematically and for undertaking exploratory analysis of the whole dataset.

SECTION 4.0 LIMITATIONS

Due to socio-cultural issues, it was not possible to have heterogeneous groupings for focus group discussants in West Pokot County, which would have in normal circumstances enabled generation of rich discussion that would give very good information on the subject under discussion. Rather, homogenous groupings of males or females alone were involved in the discussions. Culturally, this would enable women to freely talk, but certain issues may not fully come out as it would have done if men were to be part of such discussions. The situation was, however, different in Baringo County; where heterogeneous grouping was achieved for the focus group discussants.

The vastness of the study area, rugged terrain and poor public transport system made daily monitoring of the household survey exercise by the team of consultants somewhat limited. The team, therefore, relied much on the goodwill of the Research Supervisors and the data quality tools that had been shared with the Research Assistants and the Supervisors, who were also trained in using the same. Some parts of the study area were so much far flung that only motorcycles could access, availability of which was not always guaranteed unless with prior booking.



 $Research \ Assistants \ undergoing \ simulation \ training \ on \ field \ data \ collection \ for \ West \ Pokot \ County \ - \ Picture \ sketch \ courtesy \ of \ the \ KAS$

SECTION 5.0 RESULTS AND DISCUSSIONS

Map of Kenya showing the Study area (Baringo and West Pokot Counties)

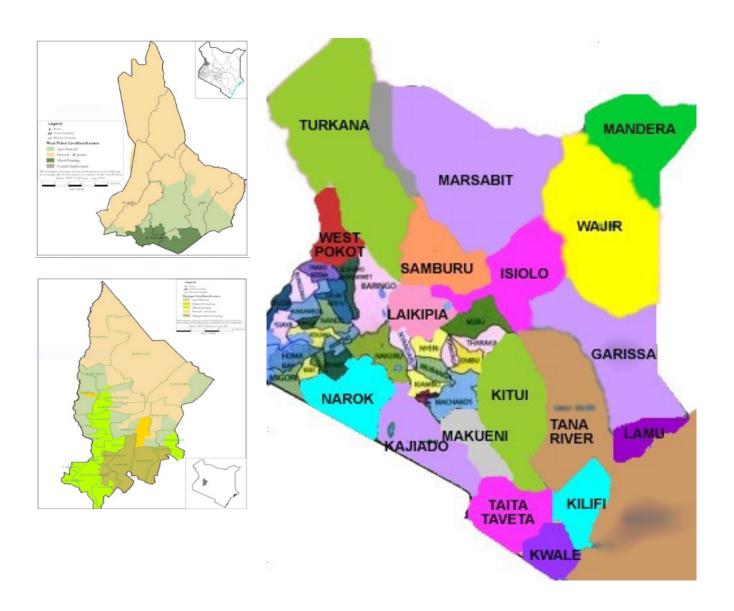
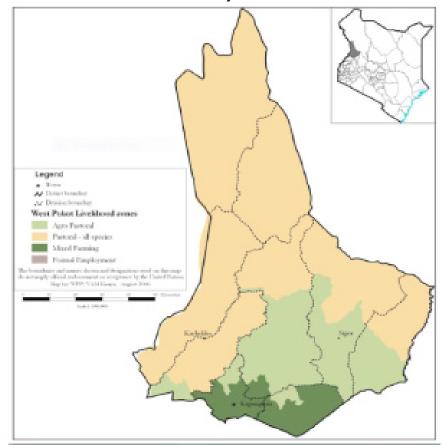


Figure 1: Map of Kenya showing the position of the study area (Source: WFP / VAM Kenya, 2013)

Livelihood Zones for West Pokot County



Livelihood Zones for Baringo County

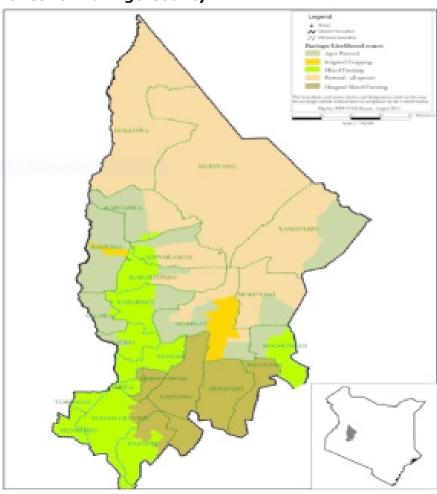


Figure 2: Map of West Pokot and Baringo counties showing the livelihood zones (Source: WFP / VAM Kenya, 2013)

5.1 Socio-demographic Characteristics

Quantitative aspects of the Analysis/Mapping Exercise involved collecting data from household heads. The socio-demographic characteristics of the respondents were explored. The proportion of the respondents was 1:1 for Baringo (49.9%) and West Pokot (50.1%), respectively.

Table 6 shows the proportion of males and females among the study respondents.

Table 6: Distribution of study respondents by gender

County		Gender of h	Total			
	Male		Female			
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Baringo	103	25.9%	95	23.9%	198	49.9%
West Pokot	136	34.3%	63	15.9%	199	50.1%
Total	239	60.2%	158	39.8%	397	100%

As shown in Table 6, more males (60.2%) participated in the study compared to females (39.8%), with 34.3% of the males being from West Pokot County and 25.9% from Baringo County. On the other hand, more females from Baringo participated in the study (23.9%) compared to West Pokot (15.9%). Both counties are typically patriarchal, with the social fabric of the Pokot in West Pokot County somehow being much more intact compared to that of communities living in Baringo County. This would explain why more females from Baringo participated in the study compared to Pokot County.

The minimum age of the study respondents was 18, while the maximum was 89, with a mean of 43.6 years. Thus, no child-headed households participated in the study.

Table 7 shows the distribution of the study respondents by marital status.

Table 7: Distribution of study respondents by marital status

Marital status of Household	County		Total (n=395)
Head	Baringo	West Pokot]
Married	37.5%	42.5%	80.0%
Single	4.6%	3.3%	7.8%
Widow	5.6%	2.8%	8.4%
Widower	1.8%	0.8%	2.5%
Divorced	0.0%	0.5%	0.5%
Separated	0.5%	0.3%	0.8%
Total	49.9%	50.1%	100.0

As shown in Table 7, majority (80.0%) of the respondents were married (with 42.5% from West Pokot and 37.5% from Baringo), while some 8.4% of the household heads interviewed were widows. Only 7.8% of the household heads interviewed were single, probably representing the proportion of the community that had delayed marriage due to economic factors; a further indication of the strength of the social fabric of the communities in the two counties (marriage being valued and considered an honourable institution).

Figure 3 shows the distribution of the study respondents by their educational level.

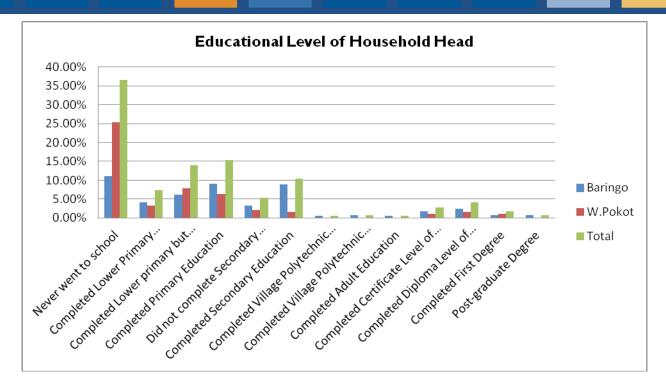


Figure 3: Distribution of household heads by Educational Level

As shown in Figure 3, the two counties have high levels of illiteracy, hence, majority (36.5%) of the study respondents indicated that they had never gone to school at all (25.3% from West Pokot County and 11.1% from Baringo). Only 15.4% of the study respondents (9.1% from Baringo and 6.3% from West Pokot) had completed primary school education; while 13.9% had completed lower primary school education (Class 1-3), but did not complete upper primary school education, with 7.8% of these being from West Pokot and 6.1% being from Baringo.

From the findings presented in Figure 3, the respondents from Baringo seemed to be better educated compared to those from West Pokot. To establish significant differences in the educational level of household heads from the two counties of study, a T-test was done. Findings are presented in Table 8.

Table 8: Distribution of Household heads by literacy levels

Literacy Level of Household Head	County		Total
Literacy Level of Household Head	Baringo	West Pokot	(n=395)
Never went to school	11.1%a	25.3%b	36.5%
Completed Lower Primary Education(Class 1-3)	4.1%	3.3%	7.3%
Completed Lower primary but did not complete Upper Primary Education	6.1%	7.8%	13.9%
Completed Primary Education	9.1%	6.3%	15.4%
Did not complete Secondary Education	3.3%	2.0%	5.3%
Completed Secondary Education	8.9%a	1.5%b	10.4%
Completed Village Polytechnic after Primary Education	.5%		.5%
Completed Village Polytechnic after Secondary Education	.8%		.8%
Completed Adult Education	.5%		.5%
Completed Certificate Level of Education	1.8%	1.0%	2.8%
Completed Diploma Level of Education	2.5%	1.5%	4.1%
Completed First Degree	.8%	1.0%	1.8%
Post-graduate Degree	.8%		.8%
Total	50.1%	49.9%	100.0%

Note: Each subscript letter (a & b) denotes a subset of County categories whose column proportions differ significantly from each other at the 0.05 level.

Table 8 shows that there is a significant difference in the number of household heads that had never gone to school at all and those who completed secondary education in the two counties. Thus, more respondents (25.3%) from West Pokot were relatively illiterate compared to those from Baringo (11.1%); and more respondents from Baringo (8.9%) had attained secondary level of education compared to West Pokot (1.5%).

Several studies have indicated that education is necessary for one to acquire basic literacy and numeracy skills for adoption of modern farming practices, hence, tackling root causes of poverty. It therefore, goes without saying that West Pokot, having most of its citizens being illiterate; is more food insecure compared to Baringo County.

The households that participated in the study had an average size of 6 (minimum of 1 and maximum of 20). The large household sizes, with high illiteracy levels could also imply low average household incomes, hence, high poverty rate in the study area.

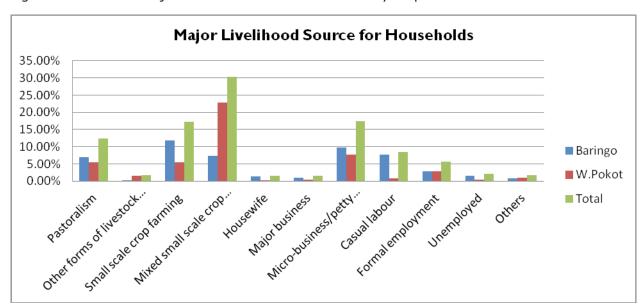


Figure 4 shows the major livelihood sources for the study respondents.

Figure 4: Distribution of study respondents according to major livelihood sources

As shown in Figure 4, the study established that the major occupation (livelihood source) for the study respondents was mixed small-scale crop and livestock farming (30.3%). Micro-business or petty trade is slowly picking up in the study sites (17.4%), but more rapidly especially in Baringo County (9.7%) compared to West Pokot County (7.7%). Small scale crop farming (17.2%) is also gaining prominence in the study sites, thanks to the several efforts by the food security actors to initiate irrigation projects in the study area. Pastoralism that has been the major source of livelihoods is slowly being replaced by modern farming approaches, especially in the fertile lowland parts of the study area, hence, was reportedly the main livelihood source for only 12.3% of the study respondents.

Findings from qualitative aspects of the study indicated that there are varied sources of livelihoods in both Baringo and West Pokot counties, depending on the agro-ecological zones. Generally, the communities living in the two counties could be said to practice agro-pastoralism, with commercial crop farming, dairying, fishing, and honey production in Baringo; and agro-pastoralism with commercial crop farming, dairying and honey production in West Pokot County.

"In this region, most of the people are pastoralists and a few who reside on the highlands grow crops such as cereals and do dairy farming" (Key informant 5, Baringo).

"It is mainly pastoralism, although the County could on the basis of livelihood options be divided into two; such that the South and West Pokot sub-counties practice largely mixed farming, incorporating dairy and some bits of cash crop farming (pyrethrum and coffee); while North and Central Pokot sub-counties are largely ASAL and practice mainly pastoralism" (Key informant 14, West Pokot).

From the study findings presented in Figure 4 and qualitative aspects of the study, therefore; it could be noted that the major livelihood sources in the two counties of study, Baringo and West Pokot are:

- Pastoralism;
- ii. Agro-pastoralism (i.e. Mixed small scale crop and livestock farming);
- iii. Small-scale crop farming;
- iv. Dairy farming;
- v. Commercial cash crop farming;
- vi. Fishing;
- vii. Honey production;
- viii. Micro-business/petty trade.

The study established qualitatively that agroclimatic conditions and socio-cultural aspects have largely contributed to pastoralism and livestock rearing as a major source of livelihoods in the two counties. The Pokots who live in both counties, with majority living in West Pokot County, for example; have traditionally lived with livestock, hence, the perception is that do not keep them for food security per see, but as a tradition.

"Climatic factors, 2/3 of West Pokot County is ASAL. The other is Sociocultural factors. Tradition and culture of the Pokots is such that they attach a lot of value to livestock, with the community having a feeling that it has grown all along with livestock" (Key informant 11, West Pokot).

"An aspect of attitude also contributes to the livelihood options the communities engage into. Most people have stuck into old practices and are reluctant to change and venture into new enterprises" (Key informant 14, West Pokot).

Figure 5 shows the distribution of the study respondents according to the type of land used for grazing and farming. The study established that majority (39.8%) of the study respondents indicated that they used community land for grazing and/or crop farming (with 26.3% being from West Pokot and 13.6% being from Baringo). Only 27.4% of the study respondents practiced livestock and crop farming on private land that had title deeds (19.5% from Baringo and 7.9% from West Pokot). Another 25.7% of the study respondents practiced farming (crop and livestock) on private land that did not have title deeds (18.1% from West Pokot and 7.6% from Baringo).

Although the study indicated that there are parts of Baringo County where community land is still largely used, it was clear that use of community land for grazing and/or crop farming was more pronounced in West Pokot, further reaffirming the strength of socio-cultural ties in that community.

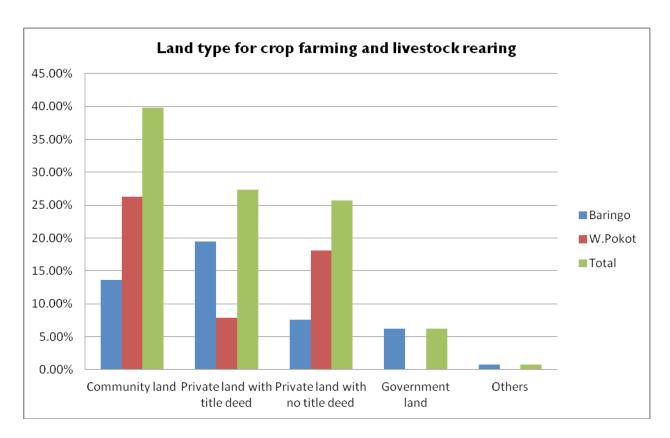


Figure 5: Distribution of households by land type for livestock and crop farming

 $Respondents were asked to indicate reasons for not having titles to their land holdings. Findings are indicated in Figure \, 6.$

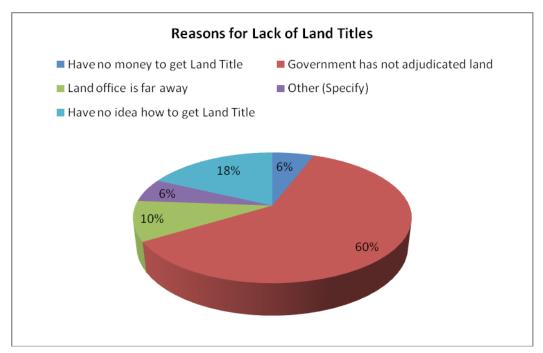


Figure 6: Distribution of study respondents according to reasons for lack of land titles

As shown in Figure 6, although majority (60.5%)of the study respondents indicated that lack of Government's initiative to adjudicate land was the main reason why they lacked titles to their land, 18% said they had no idea on how to go about the process of acquiring titles to their land, while

about 10% said the land offices were located far away from them; an indication that more community sensitization and awareness is needed on this matter so as to counter the fairly high levels of ignorance and illiteracy on the part of the communities living in Baringo and West Pokot, if food insecurity issues are to be comprehensively addressed. There is also the need for advocacy to have the Government further decentralize land adjudication and establish adjudication offices closer to the people, as 10% of the study respondents cited long distances to the offices as the main reason for their lack of these vital documents.

The study established that a majority (68.9%) of the respondents had between 0 and 2 acres of land that they legally owned or leased for agricultural activities (See Table 9), hence, relied heavily on community land (Fig. 5) to undertake food security initiatives. Respondents from Baringo County also depended on government land (6.2%) for ensuring their households were food secure compared to those in West Pokot (0%) as shown in Figure 5. This, together with the fact that more respondents from Baringo County indicated they had titles to their land (19.5% compared to 7.9% in West Pokot), is probably an indication that there has been more community awareness and sensitization on the need to have security to land in Baringo than in West Pokot. Again, it could also imply that land in Baringo County has more value compared to that in West Pokot, hence, mobilizing individuals to undertake food security programmes would be easier there than in West Pokot, where land is still seen more as a community asset than an individual asset.

Table 9: Distribution of households by sizes of land used for farming

Land sizes	Cou	Total (n=322)	
	Baringo	West Pokot	
0-2 acres	25.5%	43.5%	68.9%
2-4 acres	9.6%	8.4%	18.0%
4-6 acres	4.7%	4.3%	9.0%
6-8 acres	0.6%	0.3%	0.9%
8-10 acres	0.0%	0.3%	0.3%
10 acres and above	1.2%	1.2%	2.5%
Total	41.9%	58.1%	100.0%

The study respondents were asked to indicate their average monthly incomes from all sources, including remittances. Table 10 presents the findings.

The study established that majority (26.6%) of the respondents (14.8% from Baringo and 11.7% from West Pokot) had a monthly income of Kshs. 1,001-2,500; while 23.4% of the study respondents (14.3% from West Pokot and 9.1% from Baringo) had a monthly income of Kshs. 2.501-5,000. Up to 21.9% of the study respondents (12% from West Pokot and 9.9% from Baringo) had a monthly income of between zero and Kshs. 1,000; an indication of high poverty levels in the study areas.

Table 10: Distribution of respondents according to average monthly incomes

Average Monthly income from all	County		Total (n=384)
sources (including remittances)	Baringo	West Pokot	
Kshs. 0 - 1000	9.9%	12.0%	21.9%
Kshs. 1001- 2500	14.8%	11.7%	26.6%
Kshs. 2501 - 5000	9.1%	14.3%	23.4%
Kshs. 5001 - 7500	4.4%	5.5%	9.9%
Kshs. 7501 – 10,000	3.6%	3.1%	6.8%
Over Kshs. 10,000	7.3%	4.2%	11.5%
Total	49.2%	50.8%	100.0%

5.2 Poverty, Livelihood and Food Security Issues

The study undertook to profile the respondents based on Progress out of Poverty Index (PPI). Findings of the study indicated that overall, the study respondents from the two areas (Baringo and West Pokot) had a mean PPI score of 30.3% (maximum of 88% and minimum of 0%). The implication of this is that about 23.5% of the study respondents are food insecure and that the two counties contribute to about 63.7% of Kenyans living below the poverty line. Available data indicates that the poverty index in West Pokot is 56% (CG-WP, 2013a). Thus, poverty in Baringo and West Pokot counties is a reality that has to be tackled from its root causes by any serious development partner working in these counties. Considering the multidimensionality of poverty, concerted efforts by different players to address root causes of poverty is necessary, hence, the need for stakeholder mapping and analysis for effective collaborations, networking, and partnerships in this venture.

From the qualitative study, the communities in the study area define poverty as a state of having a lowly educated household head with a large family (or household size) that the principal caregiver is unable to take care of in terms of its food, clothing, education, health, water, shelter and security needs.

"Poverty is when, for example you go to a family and find that the children are many, the mother is not educated on family planning, the many children cannot go to school, food and clothing is a problem, the house they are living in is constructed using mud, they do not have power, tapped water hence just depend on river water and do not have land and even if they do they are on a hill thus cannot cultivate it" (Key informant 8, Baringo).

Thus, from the study findings, many households in the counties of Baringo and West Pokot have heads that are of low education level, and of large sizes that the principal caregivers are unable to meet their fundamental, unalienable and non-transferrable constitutional rights to quality food, water, health care services, education, clothing, shelter and security.

The concept of food security could be defined in several different ways. FEWS-NET, for example, defines it as "a condition in which a population has physical, social and economic access to sufficient, safe and nutritious foods over a given period to meet dietary needs and preferences for an active life"; adding that a food secure population can meet its consumption needs during the given consumption period by using strategies that do not compromise future food security (FEWS-NET). This definition very closely mimics that of FAO; which defines food security as "When all people have physical, social and economic access to sufficient, safe, and nutritious food that meets dietary needs and food preference for an active and healthy life at all times" (Food Security in Kenya).

The Constitution of Kenya, 2010 guarantees every Kenya the right to quality basic services, including food, education, shelter, security, health and water. These are recognized as fundamental and unalienable human rights, and which formed the basis of crafting Millennium Development Goals (MDGs). The first of these goals is concerned with food security, and the objective was to eradicate extreme poverty and hunger by 2015 compared to the levels in 1990s (Urte Sadauskaite, 2014).

It is because of the significance of the issue of food security to a country that almost all governments have a state department of agriculture for ensuring that all citizens are food secure. The attainment of this calls for development and enactment of sound policies, supportive infrastructure (extension services, research and access to credit), and support to access agro-inputs and markets. In Kenya, agriculture is the back-bone of the economy, contributing up to 26% of the Gross Domestic Product (GDP), and over 75% of the labour force is directly and indirectly employed in the agricultural sector (KARI, 2012).

Despite this immense significance, poor policies, poorly developed infrastructure and institutions for providing extension, marketing, and financial services to the farmers are among some of the reasons

that have worked to ensure the country remains food insecure since attaining self-rule from the British colonialist in 1963. The situation is more serious in arid and semi-arid lands (ASALs), of which Baringo and West Pokot are part. With the effects of global warming and the associated climate change being experienced world over, the ASALs are some of the worst affected; with severe, unpredictable, and very frequent droughts being experienced over and over again, making these areas become chronically food insecure.

Going by the FEWS-NET definition, food insecurity could, therefore, be said to be a situation whereby "a population does not have access to sufficient, safe and nutritious food over a given period to meet dietary needs and preferences for an active life" (FEWS-NET). This situation could be caused by several factors, such as insufficient food availability, insufficient food access and inadequate food utilisation. It is worth noting that food security has a temporal dimension: chronic (or long-term) food insecurity could occur when a population has continuously inadequate consumption. Chronic food insecurity would, therefore, arise from conditions of poor food production, limited incomes and poor health. Current (or transitory) food insecurity could occur when a population suffers a temporary decline in consumption. Current food insecurity could result from instability in food production, food prices, household incomes and health conditions.

Generally, causes of food insecurity in Kenya, especially in the ASAL regions, could broadly be categorized into four: policy causes, political causes, environmental causes and socio-economic causes (FEWS-NET).

Findings of the study indicated that low crop yields due to small land sizes (52.0%) was the major contributing factor to food insecurity in Baringo (25.3%) and West Pokot (26.8%) counties; with 32.5% indicating that it was largely contributed to by low yields due to low use of improved farm inputs (seeds, fertilizers, etc.). Yet, another 21.2% of the study respondents felt that it was largely contributed to by low yields due to lack of knowledge on modern production techniques; while 18.4% believed poor access to extension services was the main cause (See Table 11).

Table 11: Distribution of households according to main reasons for food insecurity

Reasons for food insecurity	County		Total	
	Baringo	West Pokot		
Low yields due to small land sizes	25.3%	26.8%	52.0%	
Low yields due to low use of improved farm inputs, like	12.8%	19.6%	32.5%	
seeds, fertilizers				
Low yields due to lack of knowledge on modern pro-	11.8%	9.3%	21.2%	
duction techniques				
Poor access to extension services	6%	12.3%	18.4%	
Poor marketing of farm produce	5.5%	3.5%	9.1%	
Poor utilization of available food substances	3.8%	4.0%	7.8%	
Poor roads, hence poor food distribution	4.5%	3.8%	8.3%	
Poor Government policies	13.1%	4.5%	17.7%	
Poor access to credit to improve production	4.0%	4.3%	8.3%	

Based on severity of the cause, respondents were asked to rank three main reasons for food insecurity in their community. The ranking showed that low yield due to small land sizes (28.7%) was the main reason, followed by low yield due to low use of improved farm inputs (12.8%) and low yield due to lack of knowledge on modern production techniques (7.1%).

Findings from qualitative study indicated that in Baringo and West Pokot, all the four causes of food insecurity are applicable. These are:

A. Environmental causes

i. Unreliable, erratic and often below average rainfall of poor spatial and temporal distribution;

"The rainfall is not reliable..." (Respondent from Food for Assets Group, Baringo).

ii. About 2/3 (70-80%) of the study are is ASAL; typified by low food production.

"About 70-80% of West Pokot County is arid and semi-arid..." (Key informant 14, West Pokot).

"Of course the weather, some of the areas are quite harsh, especially out there we have the ASAL region of East Pokot; Upper and lower Barweso, that place is dry" (Key informant 7, Baringo).

- iii. Soil erosion washing away much of the fertile top soil, leaving the soil bare and unable to support crop production.
- iv. Rugged terrain that cannot allow mechanization of agriculture to be undertaken and also hinders access to markets.

"Most of our productive land cannot be mechanized due to hilly and rocky topography, hence, leading to low production..." (Respondent from Kituro Farmers' Group).

"The County has poor infrastructure and rugged terrain; hence, majority of the population has poor access to the markets and to food" (Key informant 14, West Pokot).

- v. Frequent droughts and unpredictable rainfall, largely as a result of climate change.
- vi. Unpredictable flooding and water logging in farms due to climate change, leading to poor crop yields and loss of livestock, as well as destruction of shelter and displacement of communities.

B. Socio-economic causes

 Communities largely practice pastoralism, which is characterized by low productivity and low market value for the livestock, hence low returns on production. This leads to low household income, hence, food insecurity.

"Pastoralism is the major livelihood source for majority of the population within West Pokot County. Pastoralism is characterized by low productivity and low market value for the livestock, hence low returns on production. This leads to low household income, hence, food insecurity" (Key informant 14, West Pokot).

"The people in this community rely on livestock, if the animals die they will not have any other livelihoods, and this goes ahead to hinder children from going to school due to lack of money..." (Respondent from Food for Assets group, Baringo).

ii. High poverty levels, hence low incomes to purchase agro-inputs. This leads to low production, hence, food insecurity. The high levels of poverty in the community imply that disasters like droughts and floods only work to exacerbate the already worse livelihood situation in the community.

"Most farmers lack money to buy farm inputs like fertilizers and certified seeds...

Also low literacy level has contributed to existence of large families with no reliable source of income, hence, leading to food insecurity among families in these areas"; (Respondent from Kituro Farmers' Group, Baringo).

iii. Insecurity, with most of the communities in the study area being in conflicts with almost all their internal and external immediate neighbours. These ethnically instigated conflicts render markers non-functional, leading to poor access to food, hence, food insecurity.

"Cattle rustling contribute a lot, especially in Marigat and Tiaty"; (Key informant 5, Baringo).

"Insecurity, mainly due to conflicts with neighbouring Turkanas, Marakwets, Turgen and Njemps; as well as the Karamajong of Uganda. Due to the conflicts, farming activities are seriously disrupted, making the population either not get enough food, or get food but of low quality (for survival)" (Key informant 14, West Pokot).

- iv. High incidences of crop and livestock diseases and pests, leading to low yields. Parasitic plants like striga weed (*Striga hermontheca*) and *Prosopis juliflora* (locally known as 'Mathenge') have not only contributed to low crop yields, but the latter is a strong colonizer that also chokes other vegetation, leaving the land bare and is also itself poisonous to livestock; while its thorns are also lethal.
 - "...things that contributes to hunger in our place is sickness which affects the goat... and it really kills the goats" (Respondent from Food For Assets Group, Baringo).
- v. Low uptake of agro-inputs due to high poverty and hence, low household incomes, as well as ignorance. The low uptake of agro-inputs leads to low production.
 - "...also the certified seeds; one goes to market and take any seeds, which may not be fitting in this area and will not grow to maturity" (Respondent from Food for Assets Group, Baringo).
- vi. Lack of certified seeds, leading over-reliance on uncertified leads, hence, low yields.
- vii. Poor land use practices typified by cultivation of river banks and steep slopes without conservation measures. The result is high rates of soil erosion, leading to massive losses of plant nutrients, hence low yields.
- viii. Poor roads, making it difficult to transport products from one part of the County to another, and making farmers prone to over-exploitation by middlemen.
- ix. Lack of knowledge on modern farming practices.

"According to my judgment, most people lack knowledge on the appropriate variety of crop seed which can be planted in our area" (Respondent from Kituro Framers' Group, Baringo).

- x. Poor utilization of food, due to lack of knowledge.
- xi. Population pressure leading to land fragmentation to the extent that arable land would not support commercial agricultural production.
- xii. Poor human health due to frequent outbreaks of diseases, and which are not easily managed due to long distances to nearest health facilities and poor provision of basic health care services to the citizens in the two counties. Sick people cannot produce food.
- xiii. Ignorance and poor attitude to farming among the youth.

"...also majority of the youth are not engaged in farming activities" (Respondent from Kituro Farmers' Group, Baringo).

xiv. Migratory nature of Pokot community, leaving women and children, in particular, more food insecure during such times.

"The community sometimes, being pastoralists; migrate to Uganda in search for livestock feeds and water, especially during periods of drought. It is mainly the men that migrate, leaving women and children without access to milk and meat, hence, food insecurity" (Key informant 14, West Pokot).

xv. Poor marketing strategies and access to markets.

"Poor marketing strategies and access to market information. Much of the livestock offered for sale in the local markets is the large stock, but; which is sold individually and at very low prices by the exploitative middlemen, making returns on production and household income very low. This consequently leads to high household food insecurity" (Key informant 14, West Pokot).

xvi. Non-responsive culture.

"Livestock rearing in West Pokot County is very gender insensitive, with women and children having little access to the large stocks, but absolutely no control over them" (Key informant 14, West Pokot).

"Culturally, the Pokots are not generally agriculturalists, hence, produce only a little food for domestic consumption and not for sale on commercial basis to the markets" (Key informant 11, West Pokot).

- xvii. Limited public awareness and understanding of impacts of human activities on natural resources, including rivers and lakes. This is compounded by high levels of illiteracy, cultural beliefs, and stratification within communities living in Baringo and West Pokot counties.
- xviii. Communal land tenure systems in the marginal mixed farming and agro pastoral zones. Communal land tenure would not allow commercial farming, and is confined to exploitation of natural resources without care to conserve, hence, low yields.

C. Political causes

i. Lack of political goodwill is also contributing to food insecurity in the area. There is a lot of political rhetoric, but minimal tangible action that would address the root causes of food insecurity among citizens of the two counties under study.

"Concerning political goodwill, it is zero. It's like these people don't support the correct party, I don't know" (Key informant 7, Baringo)

ii. Corruption, poor governanceand accountability systems typified by inadequate consultations, inadequate or lack of technical expertise, and insufficient mobilization of institutions to address food insecurity and land use issues.

"If you move to areas which are underdeveloped like East Pokot, you will see the potential for agriculture you can see it's actually governance based because if you make pragmatic approaches to the food security problems we can probably do more" (Key informant 7, Baringo).

D. Policy causes

i. Government policy on staff rationalization has put an imago on staff recruitment. With staff numbers continually going down due to retirement and natural attrition, the numbers of extension officers has tremendously gone down, further contributing to food insecurity in the two counties.

"The extension officers are few in number and the ratio of an Extension Officer to a farmer is 1:1400. Initially, it is supposed to be 1:400. We have shortage of staff and enough personnel to facilitate these services to the farmer" (Key informant 5, Baringo).

Thus, effective dealing with root causes of food insecurity in the two counties would require tackling all the four causes, hence, would call for concerted efforts by all stakeholders for its success. Otherwise, for a single agency, it would require much colossal resources in time, human and financial.

Table 12 shows the main crops grown in each of the two counties (multiple responses were given, since most households practiced mixed cropping and mixed farming).

Table 12: Major crops grown in Baringo and West Pokot counties

Major crop grown	Co	Total	
	Baringo	West Pokot	
Crop1: Maize	27.5%	40.6%	68%
Crop 2: Beans	23.2%	24.9%	48.1%
Crop 3: Millet	3.8%	3.0%	6.8%
Crop 4: Sorghum	0.8%	3.8%	4.5%
Crop 5: Tomatoes	1.5%	1.0%	2.5%
Crop 6: Vegetables	2.3%	0.3%	2.5%

As shown in Table 12, majority of the respondents (68%) indicated that they grew maize, being a popular crop in West Pokot (40.6%) than in Baringo (27.5%). Beans were reportedly the other major crop grown in the two counties, being grown by 48.1% of the study respondents (24.9% from West Pokot and 23.2% from Baringo); while only 6.8% of the study respondents (3.8% from Baringo and 3.0% from West Pokot) indicated that they grew millet. Sorghum, tomatoes and other vegetables are also grown, but in very insignificant quantities among the study respondents as shown in Table 11, despite the great potential of the study area for horticultural farming. Thus, the Project will need to work closely with other partners in food security sector to promote commercialization of indigenous and exotic vegetables and fruits for improved household food security and incomes.

Key respondents and focus group discussants indicated that, other than in some parts where cash crops are grown, the major crops grown in Baringo County are:

- i. Maize;
- ii. Beans;
- iii. Sorghum;
- iv. Millet;
- v. Groundnuts;
- vi. Fruits, like Mangoes, Avocadoes and bananas;
- vii. Vegetables

"The major staple food is Maize and Beans and fruits especially mangoes, but the cost of cultivating maize is very high and sometimes the yield is very low, approximately two sacks per acre" (Respondent from Katuro Farmers' Group).

On the other hand, in West Pokot, the major crops grown, other than cash crops that are grown in some sections, include:

- i. Maize;
- ii. Beans;
- iii. Vegetables;
- iv. Bananas;
- v. Cassava;
- vi. Sorghum;
- vii. Finger millet;
- viii. Irish potatoes.

"Major crops grown in West Pokot are maize, beans, finger millet, sorghum, vegetable and Iris potatoes" (Key informant 15, West Pokot).

"Maize, Potatoes, Vegetable, Sorghum, Finger Millet, Beans, and fruits" (Key informant 16, West Pokot)

The study established that maize was the most popular staple food among the study respondents, reported by 98.7%; while pulses (including beans, green grams, garden/cow peas and groundnuts), notably beans, was the second staple food (81.8%) as shown in Table 13 and Table 14.

Table 13: Distribution of study respondents according to first staple food

First Staple food for household	County		Total	
	Baringo	West Pokot	(n=396)	
Maize	49.0%	49.7%	98.7%	
Sorghum	0.3%	0.3%	0.5%	
Pulse (beans, peas, green grams)	0.0%	0.3%	0.3%	
Rice	0.5%	0.0%	0.5%	
Total	49.7%	50.3%	100.0%	

Table 14: Distribution of study respondents according to second staple food

Second staple food for	C	County	
household	Baringo	West Pokot	
Maize	0.3%	0.0%	0.3%
Sorghum	0.0%	1.3%	1.3%
Sweet potatoes	0.8%	0.5%	1.3%
Pulse (beans, peas, green grams)	37.4%	44.5%	81.8%
Rice	0.8%	0.5%	1.3%
Goat	0.0%	0.3%	0.3%
Fish	0.3%	0.0%	0.3%
Other (Specify)	9.5%	3.9%	13.4%
Total	48.9%	51.1%	100.0%

These findings were corroborated by qualitative findings that indicated that the staple foods include:

- i. Maize (consumed in the form of a paste, commonly known as "ugali");
- ii. Beans;
- iii. Milk;
- iv. Meat;
- v. Vegetables;

"Milk, meat and maize products (Ugali)" (Key informant 14, West Pokot).

Majority of the respondents (53.7%) obtained the maize from their farms, while 45.1% bought it from the markets. More of the respondents from West Pokot (31.9%) obtained maize foods from the farms compared to those from Baringo County, as shown in Table 15.

Table 15: Distribution of study respondents according to major source for first staple food

Major source of first staple food	County		Total
(Maize)	Baringo	West Pokot	
My farm	21.8%	31.9%	53.7%
Buy	26.8%	18.2%	45.1%
Food aid	1.0%	0.0%	1.0%
Others	0.3%	0.0%	0.3%
Total	49.9%	50.1%	100.0%

As for beans, most of the respondents (59.7%) bought it from the markets (32.0% from Baringo and 27.7% from West Pokot), with only 34.7% obtaining it from their farms (21.9% from West Pokot and 12.8% from Baringo) as shown in Table 16.

Table 16: Distribution of study respondents according to major source for second staple food

Major source of first staple food	County		Total
(Beans)	Baringo	West Pokot	
My farm	12.8%	21.9%	34.7%
Buy	32.0%	27.7%	59.7%
Beg	0.5%	0.5%	1.1%
Food aid	0.3%	0.0%	0.3%
Relatives/well wishers	0.5%	0.0%	0.5%
Others	2.9%	0.8%	3.7%
Total	49.1%	50.9%	100.0%

These findings indicate that households in Baringo County probably had higher incomes, hence,, were relatively more food secure compared to those from West Pokot, on the basis of the fact that farm produce hardly lasted more than three (3) months.

Communities in the study area normally have only one planting season (79.3% of respondents indicated so; with 48% being from West Pokot and 31.3% from Baringo), with most of the staple foods being harvested between July and December. October-December is normally the peak harvesting period, when 37.4% of the households harvested the staple foods. While some 19.5% of the study respondents from Baringo harvested their staple foods in October-December compared to 17.8% of households from West Pokot; 25.9% of households in West Pokot harvested their staple foods in July-September, compared to only 10.1% of households in Baringo, as shown in Table 17.

Table 17: Distribution of study respondents by months for harvesting staple foods

Months for harvesting the staple	County		Total
foods	Baringo	West Pokot	
Jan-March	0.9%	0.3%	1.1%
April-June	0.6%	0.0%	0.6%
July-Sept	10.1%	25.9%	35.9%
Oct-Dec	19.5%	17.8%	37.4%
N/A	19.5%	5.5%	25.0%
Total	50.6%	49.4%	100.0%

Thus, it could be concluded that in West Pokot, communities largely have one planting and harvesting season; while in Baringo County, there are parts with two planting and harvesting seasons. Nevertheless, generally; the major harvesting seasons for farming households in Baringo is October-December; while for West Pokot, it is July-September, with harvesting continuing to December.

AT-test was run to establish if there were any significant differences in the yields of the major crops grown in the two counties of study. Findings are presented in Table 18.

Table 18:T-test for significant differences in yields of major crops grown

Major crop grown	Crop yields by County		T-Test comparisons on the
	Baringo	West Pokot	means
Crop1: Maize	830.4kg	791.7kg	No significant difference
Crop 2: Beans	259.5kg	131.4kg	No significant difference
Crop 3: Millet	675kg	100kg	No significant difference
Crop 4: Sorghum	135kg	63.9kg	Significantly different
Crop 5: Tomatoes	6.2kg	13.5kg	No significant difference
Crop 6: Vegetables	1893.5kg	-	

As shown in Table 18, the yields of the major crops grown in the two counties generally have no statistical difference, expect for sorghum, which does much better in Baringo compared to West Pokot.

Aspects of qualitative study indicated that generally the production of the major crops grown is below average in most parts of the study area. For Baringo, the production for most crops, especially those grown in the potential upper areas, which are grown on commercial basis; are near average or just within the potential for the crops.

"I think the production of groundnuts is usually good even if you planted on small size of land it will really help you to even buy food, you can get more profits, it doesn't need too much rainfall, high profits when the production is are high" (Respondent from Food for Assets Group, Baringo).

For West Pokot, the production is below the potential.

"For maize, the yield is 6-8 bags per acre; for Sorghum, it is 5-8 bags per acre; for Beans, it is 6-8 bags per acre; and for Finger Millet, it is 3-4 bags per acre" (Key informant 15, West Pokot).

The potential is higher; for Maize, it is 10-12 bags per acre; for Sorghum, it is 10 bags per acre; for Beans, it is 10bags per acre; for Finger Millet, it is 6 bags per acre" (Key informant 15, West Pokot).

From the expert opinions, focus group discussants and secondary information, some of the potential measures to improve crop production, distribution, access and utilization in the two counties of study include:

i. Establishing irrigation schemes, especially along the permanent rivers like Kerio, Muruny, Suam etc.

"The government should open irrigation schemes since most parts of the county lies in arid and semi-arid areas" (Respondent from KOMESI Women Group, West Pokot).

ii. Empowering local communities for sound and sustainable management of natural resources;

"The government should take initiative on soil conservation" (Respondent from KOMESI Women Group, West Pokot).

- iii. Stocking seeds that are suited to the right agro-ecological zones (particularly the drought-tolerant, high yielding, fast-maturing cultivars) and making them available to farmers.
- iv. Sensitizing citizens of the two counties on the need to use agro-inputs and have the costs of agro-inputs subsidized for increased uptake by farmers.

"Promote usage of fertilizer, certified seeds, each sub county should have a well-stocked cereal stores where farmers can get certified seeds, and fertilizer. The County government should subsidize the cost of the certified seeds and fertilizer for the farmers" (Key informant 15, West Pokot).

v. Undertaking more capacity building of farmers on modern, sound and sustainable agricultural practices.

"I think people from here need training to get more knowledge to expound in the agricultural sector" (Respondent from Food for Asset Group, Baringo).

"The Government should train the communities in farming skills, such as on timely planting" (Respondent from KOMESI Women Group, West Pokot).

vi. Streamlining and expanding marketing of agricultural produce to enable the farmers reap maximum benefit and reduce cases of over-exploitation by middlemen.

"In my opinion there is need to expand the market for mangoes to avoid wastage during harvesting season..." (Respondent from Katuro Farmers' Group, Baringo).

- vii. Improving pests and diseases control and training farmers on the same.
- viii. Lobbying the government to employ enough livestock and agricultural extension officers to offer training to farmers.
- ix. Providing farmers with affordable grants or soft loans to enable them access credit to undertake modern commercial farming.
- x. Promotion of roof water harvesting for kitchen gardening.

- xi. Diversification of agriculture to spread the risks, maximize on complementarity of enterprises and ensure food security.
- xii. Rehabilitation of roads to improve access to agro-inputs and markets;
- xiii. Development and expansion of Micro-enterprises;
- xiv. Distribution of subsidized fertilizer and promotion of traditional high value drought-tolerant crop varieties
- xv. Expansion of High Impact Nutrition Interventions (HINI) to manage malnutrition;
- xvi. Establishing fishing moratoria along Lake Baringo basin.

The study findings further affirm that the harvested food would usually last 3-6 months (48.9% of respondents said so), hence, it is in the months of October-December when the study communities have large food reserves (53.3% have in October; 52.2% have in November; and 44.3% have in December). 36.7% of the study respondents indicated that they have food reserves in September; while 24.3% have food reserves in August; with only 10.6% having food reserves in July.

Some little food reserves are also available till around March-April, hence, the study communities have food reserves over the period of January-April as well (24.1% in January; 21.0% in February; 16.2% in March and 12.9% in April).

Despite food reserves being available in January-April, findings indicated that the communities suffer prolonged hunger spanning from January to July; with biting hunger being experienced in March-June, as shown in Fig. 7.

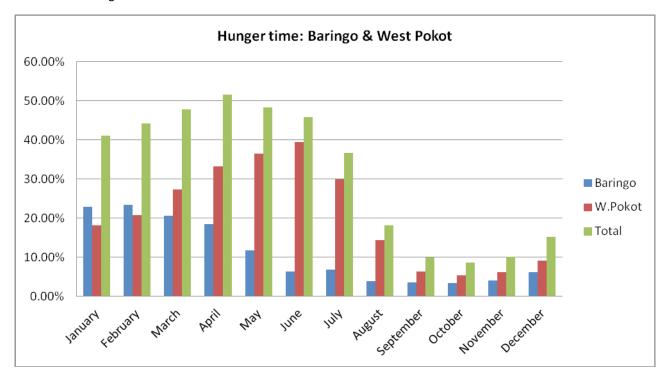


Figure 7: Distribution of study respondents according to Hunger Time

From the findings, more severe hunger is experienced in West Pokot compared to Baringo County.

Further analysis of months of food shortage within the two counties confirmed that West Pokot had significantly higher proportions of households which experienced prolonged hunger months from March through August. Food shortage in the other periods of the year was not significantly different, as shown in Table 19.

Table 19: Hunger period in Baringo and West Pokot Counties

Months of hunger	County		Total
	Baringo	West Pokot	
January	22.8%	18.2%	41%
February	23.3%	20.8%	44.1%
March	20.5%a	27.3%b	47.8%
April	18.5%a	33.2%b	51.6%
May	11.7%a	36.5%b	48.2%
June	6.3%a	39.5%b	45.8%
July	6.8%a	29.9%b	36.7%
August	3.8%a	14.4%b	18.2%
September	3.5%	6.3%	9.9%
October	3.3%	5.3%	8.6%
November	4.1%	6.1%	10.1%
December	6.1%	9.1%	15.2%

Note: Each subscript letter (a & b) denotes a subset of County categories whose column proportions differ significantly from each other at the 0 .05 level.

These findings are further corroborated by those from qualitative aspects of the study, which indicated that in Baringo, hunger period is usually 3-4 months; while in West Pokot County, it is 4-6 months.

"Hunger period is usually February-June (4-6 months)" (Key informant 14, West Pokot).

The respondents indicated that they have never produced surplus food at all, with climatic variability ensuring that there are severe droughts every 2 years. The research team came to terms with the biting hunger over the period of data collection in the community, as data was collected in May; which coincides with hunger period. Thus, 28.8% of respondents indicated that they had no food at all in store at the time of collecting data (16.4% from Baringo County).

No, we don't have surplus...in Baringo we don't unless in Koibatek, Eldama Ravine, but it could not be much for someone to sell" (Key informant 2, Baringo).

Majority (55.9%) of the study respondents do not leave crops in the farm, with 44.2% of the study respondents (34.0% from West Pokot) indicating that all the food left in farm and in store would normally take 4-6 months before being depleted. This implies that root and tuber crops are not popular in the two study communities, despite high potential for them and the fact that they are very useful as drought-and famine-reserve crops. This presents an opportunity for partners to popularize the drought-tolerant root and tuber crops, such as sweet potatoes and cassava as a strategy to improving food security situation in the two counties

As shown in Table 20, due to limited livelihood options, the study communities (84.1%) sold much of the produce soon after harvesting (44.9% from Baringo and 39.1% from West Pokot) in order to generate income to meet other household needs (e.g. education, health, clothing, shelter and security).

Table 20: Distribution of study respondents based on how food surplus is handled

How food surplus is handled by house-	County		Total
hold	Baringo	West Pokot	
Sell	44.9%	39.1%	84.1%
Donate to relatives / needy community members	10.1%	1.4%	11.6%
Donate to rehabilitation centers	-	-	-
Store till following year	8.7%	4.3%	13.0%
Leave on the farm	-	-	-
Other	-	-	-

The practice of selling much of the produce soon after harvesting contributes to chronic food insecurity and a web of poverty in the two counties. This finding was corroborated qualitatively by key informants who indicated that there are parts of West Pokot County that have food throughout the year.

"West and South Pokot regions have food throughout the year. In Kapenguria, food shortages are usually experienced in March-May; while Central and North Pokot regions experience food shortages in October-December" (Key informant 11, West Pokot)

Table 21 shows the average annual household income from crop sales.

Table 21: Distribution of study respondents according to annual income crop sales

Average annual household income from	ehold income from County		Total
crop sales	Baringo	West Pokot	
Kshs 1 - 5,000	9.1%	6.1%	15.2%
Kshs 5,000 - 10,000	9.1%	19.7%	28.8%
Ksh. 10,000 - 20,000	19.7%	10.6%	30.3%
Ksh. 20,000 - 50,000	6.1%	9.1%	15.2%
Over Ksh. 50,000	7.6%	1.5%	9.1%
Don't know		1.5%	1.5%
Total	51.5%	48.5%	100.0%

As shown in Table 21, only 30.3% of the study respondents (19.7% from Baringo County and 10.6% from West Pokot County) fetched on average Kshs. 10,000-20,000 from crop sales annually, implying that there is a potential for commercial crop farming in the study area, but has not yet picked up well. This finding was corroborated qualitatively by key informants, who indicated that in West Pokot; surplus production is rare, but the few commercial farmers available do sell their surplus produce to the National Cereals and produce Board (NCPB) depots, middlemen, businessmen from Lodwar) and local markets.

"Surplus is rare, but commercial farmers who produce sell to the National Cereals and Produce Board (NCPB) depots and local markets" (Key informant 14, West Pokot).

"They sell to businessmen from Lodwar, middlemen, Cereals and Produce Board" (Key informant 9, West Pokot).

Thus, the two counties of study are generally food deficient, with distress sales only being made to secure some income to meet basic household needs. In this regard, the study sought to establish where much of the food consumed in Baringo and West Pokot counties are imported from. Findings indicated that for West Pokot, the imports are largely from Trans Nzoia, Uganda and East Marakwet.

"Trans Nzoia for maize and vegetables, mainly; Uganda for sugar, maize and fruits; and East Marakwet for mangoes, bananas, sweet potatoes, maize and vegetables" (Key informant 11, West Pokot).

On the other hand, for Baringo County, the study established that much of the food consumed is from Marigat, but it comes from as far away as Eldama Ravine, Bomet, Kitale, Eldoret, Kericho, Nakuru, Mochongoi and Keiyo.

"There is a place known as Muchongoi where maize grows very well and also a lot of food stuffs come from Uasin-Gishu a place known as Keiyo, Kericho and Nakuru. This place is a semi-arid area and most of the lands are not favourable for maize farming. Maize is a staple food here and we get it from Bomet, since seasons varies" (Key informant 5, Baringo).

"We may not really know, but us we go to Marigat and buy at most may be we hear they come from Eldama Ravine" (Respondent from Food for Asset Group, Baringo).

Thus, it became evident from the study that not enough of the food consumed in the two counties is obtained from farming.

Table 22 indicates the sources of the food consumed by the study respondents.

Table 22: Sources of food for the study respondents

Sources of food for the households	County		Total
	Baringo	West Pokot	
Buy	43.5%	46.6%	90.1%
Beg	1.5%	1.0%	2.5%
Friends /relatives	4.1%	0.0%	4.1%
Neighbours	0.5%	0.0%	0.5%
Food aid	2.3%	0.0%	2.3%
Others	1.1%	1.1%	2.2%

Majority (90.1%) of the study respondents (46.6% from West Pokot and 43.5% from Baringo) indicated that they obtained their food supplies largely from the local markets which are located very close by; for some (29.7%) less than 2 Km away, for the majority (42.9%) 2-5 Km away; while for others (20.2%), 5-10 Km away. It is only those living in far flung areas (7.2%) that have to trek over 10 Km to reach the nearest market (See Table 23).

Table 23: Average distance to the nearest market centre

Average distance to the nearest mar-	Cou	County						
ket centre	Baringo	West Pokot						
Less than 2 km	22.0%	7.8%	29.7%					
2-5 km	19.4%	23.5%	42.9%					
5-10 km	6.2%	14.0%	20.2%					
Over 10km	2.8%	4.4%	7.2%					
Total	50.4%	49.6%	100.0%					

This finding was corroborated qualitatively, with key informants indicating that much of the study area is largely food-deficient, hence, traders and middlemen take the advantage to buy food from the locals cheaply soon after harvesting and then coming back to sell it very exorbitantly soon after. Again, there are markets in almost all the trading centres between Makutano and Turkana, with each market having a designated market day.

"Buyers come from far and wide (outside the County), notably, from Kitale, and move to buy food products on specific market days at specific trading centres. At Makutano Trading Centre, the market day is on Mondays and Fridays; at Kacheliba Trading Centre, the market days is on Wednesdays; at Chepareria Trading Centre, the market days is on Thursdays; at Ortum trading Centre, the market days is on Wednesdays; while, at Lomut Trading Centre, the market days is on Saturdays" (Key informant 11, West Pokot).

"Mostly the food we use comes from UasinGishu, from where we get vegetables and cereals; in Elgeyo Marakwet, Koibatek in Baringo County, though it produces a small quantity of food. From Marigatirrigation schemes we get onions and tomatoes and some cereals we get from Trans Nzoia" (Key informant 2, Baringo).

Table 24 shows the perception of the study respondents regarding availability of the staple food in the local market throughout the year.

Table 24: Respondents perception regarding availability of staple foods in local markets

Availability of the staple food in	Cour	County						
the local market throughout the	Baringo	West Pokot						
year								
Yes	40.8%	44.2%	85.0%					
No	7.2%	6.4%	13.7%					
Don't know	1.1%	0.3%	1.3%					
Total	49.1%	50.9%	100.0%					

As shown in Table 24, majority (85%) of the respondents (44.2% from West Pokot and 40.8% from Baringo) indicated that staple food was available in the local markets throughout the year; with 61.4% indicating that the prices of the staple food are high and unaffordable (34.4% from West Pokot and 27% from Baringo) as shown further in Table 25.

Table 25: Distribution of study respondents according to rating of food prices in markets

Rating of food prices in local mar-	Cou	Total							
kets	Baringo	Baringo West Pokot							
Affordable	22.3%	15.2%	37.5%						
Unaffordable	27.0%	34.4%	61.4%						
Don't know	0.6%	0.5%	1.1%						
Total	49.9%	50.1%	100.0%						

Most (65.4%) of the study respondents were of the perception that the quality of the staple foods purchased from the local markets was good (36.2% from Baringo and 29.2% from West Pokot); with some 33.5% feeling that the quality was not good (22.3% from West Pokot and 11.3% from Baringo), as shown in Table 26.

Table 26: Distribution of study respondents according to perception on quality of food in markets

Perception regarding quality of	Со	County					
food in local markets	Baringo	West Pokot					
Yes	36.2%	29.2%	65.4%				
No	11.3%	22.3%	33.5%				
Don't know	0.5%	0.6%	0.8%				
Total	48.0%	52.0%	100.0%				

From the findings, it is evident that majority of the study respondents from West Pokot indicated that the food in the local markets was not of good quality. Key informants indicated that much of the food imports for West Pokot come from Kitale, Uganda and East Marakwet regions, hence, it would be important for the Public Health Officers from the Ministry of Health in the two counties of study to interrogate the safety of the sources of the foods to ensure highest standards of quality for human consumption.

"Most of the food imports to this County come from Trans Nzoia, i.e. Kitale, for maize and vegetables, mainly; Uganda, for Sugar, maize and fruits; and East Marakwet, for Mangoes, bananas, sweet potatoes, maize and vegetables" (Key informant 11, West Pokot).

Majority (41.1%) of the study respondents (22.1% from Baringo and 18.9% from West Pokot) indicated that they spent over Kshs. 15,000 annually on purchase of staple foods; while 17.6% spent between Kshs. 7,500 and Kshs. 10,000 annually on purchase of staple foods, with 9.9% of these being from West Pokot and 7.7% from Baringo. Yet, 14.1% spent between Kshs. 5,000 and Kshs. 7,500 annually on the same (10.1% of them from West Pokot and 4% from Baringo) and another 14.1% spent less than Kshs. 5,000 annually on purchase of staple foods (9.1% from Baringo and 5.1% from West Pokot) as shown in Figure 8.

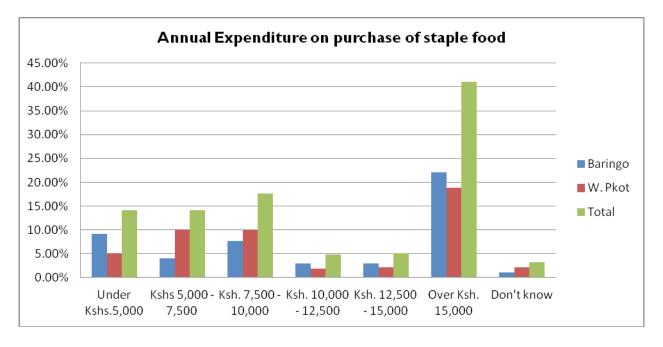


Figure 8: Distribution of households by annual expenditure on purchase of staple foods

Figure 8 indicates that Baringo County relies more heavily on food from the market compared to West Pokot; probably an indication that they have a higher purchasing power compared to their counterparts from West Pokot.

The study sought to establish the livestock enterprises that the communities living in the two counties of Baringo and West Pokot engage in. Findings are presented in Table 27.

Table 27: Distribution of study respondents according to major livestock enterprises

Major livestock enterprises		County					
	Baringo	West Pokot					
Pastoralism	18%	17%	34.9%				
Goat	5.3%	29%	34.3%				
Cattle	6.3%	19.9%	26.2%				
Poultry	5.0%	18.9%	23.9%				
Sheep	1.0%	11.1%	12.1%				

As shown in Table 27, majority (34.9%) of the study respondents practiced pastoralism (18% from Baringo and 17% from West Pokot). Among the livestock types, goats were the main type of livestock kept by majority (34.3%) of the study respondents; while 26.2% of the respondents reared cattle; and 23.9% reared poultry.

Findings from focus group discussions and key informants indicated that the major livestock enterprises in the two counties of study included:

- i. Cattle (largely Zebu);
- ii. Goats (largely East African and some Galla that have recently been introduced for upgrading);
- iii. Sheep (Including Black-headed Persian, some Merino and Dorper);
- iv. Dairy cattle (Friesians and Ayrshires and their crosses; and Sahiwal for upgrading Zebu)
- v. Indigenous chicken;
- vi. Camels (in small numbers);
- vii. Pigs (in small numbers);
- viii. Beekeeping for honey;
- ix. Fishing (along Lake Baringo and permanent rivers, like Turkwel) and fish farming in ponds.

Further, the findings indicated that in Baringo, the major livestock kept were cattle, sheep, goats, camels, indigenous chicken and beekeeping for honey production. Fishing is also done, especially in Lake Baringo.

"Our people rely very much on pastoral farming. We keep livestock such as cattle, sheep, goats and few camels. Besides these, bee keeping is also done and in some areas, irrigation is done" (Key informant 5, Baringo)

On the other hand, from the study findings, the major livestock kept in West Pokot were zebu cattle, sheep (Black-headed Persian, some Merino and Dorper), East African goats and some Galla goats; Dairy cattle (Friesians, Ayrshires and their crosses, and Sahiwal for upgrading Zebu cattle), indigenous chicken, some pigs (less than 1,000 in the entire West Pokot County), bee keeping for honey production, and fishing along River Turkwel as well as pond fishing that is also rapidly taking shape.

"Zebu cattle; Sheep (Black-headed Persian sheep, some Merino sheep and Dorper sheep); East African Goat and some Galla goats; Dairy cattle (Notably Friesian; Ayrshire and crosses; Sahiwal for upgrading the Zebu cattle); Indigenous chicken; Pigs (Less than 1,000 in the entire County); Bee keeping for honey production; Fishing along River Turkwell as well as pond fishing" (Key informant 14, West Pokot).

The production of the major livestock kept in the two counties was noted to be far below the average, according to expert opinions, especially for milk and meat.

"On average, a dairy cow produces about 4 to 5 litres per cow per day while beef animals produce meat of 100kg per cow...Initially, some dairy cattle produce as less as 2 litres to 4 per day and others 4-5 litres. Crops on average are 10 bags per acre of land. Potential yield can double or even triple in a way such that crops can increase to 40 -50 bags per acre of land, milk from dairy farming can elevate to 15 litres per day" (Key informant 5, Baringo).

"Production is low compared to the potential for each livestock type; For example, 7-10 litres of milk/day/cow is very low compared to the average potential yield from Zebu cattle" (Key informant 14, West Pokot).

A t-test was run to establish if there was any significant differences in production means of the various livestock enterprises (pastoralism, goat, cattle, sheep and poultry production) between Baringo and West Pokot study respondents. Findings indicated that there were no statistically significant differences in the means, an indication that livestock production in both counties are generally below average.

Some of the reasons cited for the low livestock production in the two counties of study are; climatic variability, pastoralism, which is an expensive undertaking, trekking the animals over long distances in search for feeds and water, and prevalence of pests and diseases.

"Reasons for low productivity include climate change; Pastoralism, an expensive enterprise that makes the animals use much energy in trekking in search for feeds and water at the expense of production; and Pests and diseases (notably contagious bovine pleuropneumonia [CBPP], PPR; Foot and Mouth Disease [FMD], worms and ticks)" (Key informant 14, West Pokot).

From secondary information and expert opinion, possible measures to improve livestock production in Baringo and West Pokot counties include:

- i. Livestock upgrading and restocking;
- ii. Rangeland reseeding to improve sustainable livestock access to pasture;
- iii. Dip rehabilitation for improved diseases and parasite control;
- iv. Disease surveillance and vaccination of livestock;
- v. Excavation of water pans and construction of dams for domestic, micro irrigation and livestock use;
- vi. Promotion of agroforestry systems, so that the livestock would gain from the complementarily nature of the system, hence increase productivity;
- vii. Capacity building of farmers, especially on simple ways to diagnose and manage simple animal health complications;
- viii. Enhancing access to inputs for disease and parasite control;
- ix. Reviewing policy barring community managed animal health assistants (CMAHAs) from practicing so as to eliminate quacks.
- x. Controlled livestock population and grazing to reduce over-grazing.

"Introduce pasture reseeding programs to help livestock get enough fodder; improve local breeds to high value so as to get more benefit from livestock. i.e. from local goats to Galla goats, local sheep to Black-headed Persian or Dorper, local cattle breeds to Sahiwals for low lands and Friesians for highlands etc.; training livestock keepers on heath management and provide drug store to those who practice pastoralism to help them vaccinate their animals as they move from one place to another since veterinary officers are scarce and cannot provide such services in times of need; and, encourage farmers keep animals that can be managed. Huge heard of animals compete for the little resources i.e. pasture hence, low production" (Respondent from Kongasis Women Group, West Pokot).

Despite pastoralism being a major source of livelihoods for communities living in the study area, it emerged that respondents rarely sold livestock, hence, annual earnings from livestock sales stood at only Kshs. 5,000 -less than 10,000 (25.1% of respondents; with 15.3% from West Pokot). Only 19.2% of the study respondents earned Kshs. 20,000 -less than 50,000 annually from livestock sales (16.5% from West Pokot). Thus, communities living in Baringo are fast venturing into commercial livestock farming compared to their counterparts in West Pokot County.

The study established from qualitative analysis that most of the livestock in Baringo are sold in the nearby local markets, usually in auction form in such markets as Kenyatta and Koriema. Milk is sold to vendors who finally take it to several cooperative societies, such as Brookside Dairies, Daima and Happy Cow in Nakuru.

"Auctions, an Auction is a place whereby sellers and buyers meet. There are over 20 auction markets for household goods...cattle, sheep, goats and also livestock products. The buyers come as far as Nairobi, Eldoret and Nakuru and so many other places. There is a market that is popular known as Kenyatta, and it sells approximately 2,000 to 3,000 goats on every Monday auction; while others sell merely 200 goats. Our people have been enlightened to several cooperative societies such as; Brookside, Daima and Happy Cow in Nakuru. Milk vendors or milk bars also sell their milk in small scale. Marigat has the largest number of milk vendors. Even here in Kabarnet town we have a milk dispenser. Milk that we sell come from to Koibatek" (Key informant 5, Baringo).

In West Pokot, on the other hand; most of the livestock is sold to middlemen who then take them to external markets, like in Kitale, Chwele in Bungoma and Dagoretti.

"They sell to middlemen who then take them to other external markets, e.g. Kitale, Dagoretti, Chwele in Bungoma (with the last two-Dagoretti and Chwele popular for livestock)" (Key informant 11, West Pokot).

5.3 Household Resilience

The study undertook to establish the communities' strategies for coping with drought and periods of hunger within the year. Table 28 presents a summary of the coping strategies adopted by households to cope with hunger within the two counties under investigation.

Table 28: Distribution of households by strategies for coping with hunger

Questions relating to Households' strategies for coping with hunger	Cour	nty	Total
	Baringo	West Pokot	
In the past year, did your family reduce the size and / or the number of meals eaten in a day, in order to have enough food to eat?	34.4%	39.5%	73.9%
In the past year, did your family have any days without eating anything all day, because of a lack of food?	33.2%	36.8%	70.1%
In the past year, did your family resort to utilization of wild resources more frequently than usual (e.g. burning charcoal; gathering wild roots and fruits; fetching and selling firewood; sand harvesting; alluvial gold mining; quarrying, hunting; gathering insects, cutting and selling grass etc.) in order to be able buy enough food to eat?	38.1%	33.6%	71.7%
In the past year, did one or more of your family care-givers work longer hours or take on another job in order that the family had enough food to eat?	38.7%	38.9%	77.6%
In the past year, did your family sell (or consume) more of your small livestock than usual (e.g. goats, sheep, chicken and other fowl, rabbits, pigs) in order to have enough food to eat?	24.7%	34.6%	59.3%
In the past year, did your family use money intended for investing in small business, in order to have enough food to eat?	30.3%	27.5%	57.8%

In the past year, did your family sell off some household possessions (e.g. furniture, mobile phones, utensils, radio, etc.), in order to buy enough food to eat?	17.4%	12.9%	30.3%
In the past year, did your family borrow food or money for food from relatives, friends or neighbours, in order to have enough to eat?	39.6%	36.9%	76.5%
In the past year, did your family sell off (or consume) seed meant for planting next season's crops in order to have enough food to eat?	19.7%	21.2%	40.9%
In the past year, did your family sell off other productive tools or equipment (e.g. ex-plough, sewing machine, rickshaw, carpentry tools etc.) to buy enough food to eat?	5.8%	5.1%	10.9%
In the past year, did your family lease or sell land in order to get money to buy enough food to eat?	10.1%	8.6%	18.7%

Findings indicated that considering a recall period of one (1) year, majority (77.6%) of the respondents coped with hunger by having one or more of the family care givers working longer hours or taking on another job for the family to have enough food to eat (almost equal proportions from Baringo and West Pokot); 76.5% borrowed food or money for food from relatives, friends or neighbours (39.6% from Baringo and 36.9% from West Pokot); while 73.9% reduced the size and/or number of meals eaten in a day (39.5% from West Pokot and 34.4% from Baringo). Others (71.7%) resorted to utilization of wild resources (38.1% from Baringo and 33.6% from West Pokot); while 70.1% (with 36.8% from West Pokot and 33.2% from Baringo) had days without eating anything because of lack of food.

Comparison of the two counties on household resilience indicators showed that significantly higher proportions of households from West Pokot (39.5%) than Baringo (34.4%) reduced the sizes and or the number of meals eaten in a day as an adaptive coping (short term) strategy in order to cope up with food shortage. Selling or consumption of more of the small livestock than usual (e.g. goats, sheep, chicken and other fowl, rabbits, pigs) in order to have enough food to eat was used as liquid asset divestment strategy by a significantly higher percentage of households from West Pokot (34.6%) than Baringo (24.7%), further demonstrating fairly high livelihood instability amongst households in West Pokot than Baringo, as shown in Table 29.

Table 29: Statistical differences in coping with hunger by county

Household resilience questions	Co	unty	Total
	Baringo	West Pokot	
In the past year, did your family reduce the size and / or the number of meals eaten in a day, in order to have enough food to eat?	34.4%a	39.5%b	73.9%
In the past year, did your family have any days without eating anything all day, because of a lack of food?	33.2%	36.8%	70.1%
In the past year, did your family resort to utilization of wild resources more frequently than usual (e.g. burning charcoal; gathering wild roots and fruits; fetching and selling firewood; sand harvesting; alluvial gold mining; quarrying, hunting; gathering insects, cutting and selling grass etc.) in order to be able buy enough food to eat?	38.1%	33.6%	71.7%
In the past year, did one or more of your family care- givers work longer hours or take on another job in order that the family had enough food to eat?	38.7%	38.9%	77.6%
In the past year, did your family sell (or consume) more of your small livestock than usual (e.g. goats, sheep, chicken and other fowl, rabbits, pigs) in order to have enough food to eat?	24.7%a	34.6%b	59.3%

30.3%	27.5%	57.8%
17.4%	12.9%	30.3%
39.6%	36.9%	76.5%
19.7%	21.2%	40.9%
5.8%	5.1%	10.9%
10.1%	8.6%	18.7%
	17.4% 39.6% 19.7% 5.8%	17.4% 12.9% 39.6% 36.9% 19.7% 21.2% 5.8% 5.1%

Note: Each subscript letter (a & b) denotes a subset of County categories whose column proportions differ significantly from each other at the 0 .05 level.

Qualitative aspects of the study indicated that hunger coping strategies vary with region and community, but generally include:

- i. Depending on relief food from the government, KRCS, UN-agencies and other NSAs.
- ii. Relying on market supplies (from such markets as Makutano, Kitale, Sigor, Kacheliba, Uganda, etc.), usually at higher prices than normal.
- iii. Utilizing wild resources, such as gathering wild fruits and insects and/or burning and selling charcoal to get money to buy food.
- iv. Utilizing preserved foodstuff (such as mixture of flour, meat, milk, and vegetables; preserved in honey).
- v. Engaging in casual labour in exchange for food (especially maize).
- vi. Having the whole family migrating to ensure children access milk.
- vii. Engaging in quarry mining in the neighbouring country, especially Uganda.
- viii. Engaging in butter trade (where animals, especially the small stock could be traded in exchange for foodstuffs such as maize).
- ix. Reducing the number and sizes of meals taken in a day.
- x. Selling some productive assets to get money to buy food.

"Food relief; Market supplies (from Makutano, Kitale, Sigor, Kacheliba, Uganda, etc.); and Wild fruits" (Key informant 14, West Pokot).

"Households participate in casual labour in exchange for food, e.g. maize" (Respondent from KOMESI Women Group, West Pokot).

"Households migrate with animals especially young children so that they can drink milk" (Respondent from KOMESI Women Group, West Pokot).

"Households go for mining in the nearby country especially Uganda" (Respondent from KOMESI Women Group, West Pokot.)

"Reduce the number of meals taken per day and sell livestock so that the proceeds are used to buy food" (Key informant 15, West Pokot).

"Community practice batter trade where lowland people exchange their food products with highland people" (Respondent from Kongesis Women Group, West Pokot).

5.4 Area of coverage (policies and implementation) by government and government affiliated players in food security

The study sought to establish the respondents' perception of the role played by the government and government affiliated players in food security in the two counties. Findings indicated that the communities (47.1%) within the two counties (34% from West Pokot and 13.1% from Baringo) were of the perception that they were the major players in food security sector in their respective counties, with 42.3% of the respondents (29.7% from West Pokot and 12.6% from Baringo) indicating that the government was the major player. Another 25.9% of the respondents (20.9% from Baringo and 5% from West Pokot) indicated that the government agencies (such as the KRCS and parastatals) were the major player in food security sector. These findings are presented in Table 30.

The study established from qualitative aspects and secondary data that there are several government policies for addressing food security issues. Notable ones include National Agricultural Extension Policy; National Agricultural Research Systems Policy; Kenya Agriculture and Livestock Research Organization (KALRO) Act; Science, Technology and Innovation Act; Policy for Revitalizing Agriculture; Agriculture Sector Development Policy; and Vision 2030, among the key government policies that relate to food security.

Others include the National Livestock Breeding Bill, 2015; the National Livestock Policy, 2008; Drought Risk Management and EDEs, 2013-2017 Second Term Plan. At the County level, there is the West Pokot Disaster Risk Management Act, 2015 that is hinged on Community managed Disaster Risk Reduction (CMDRR). Efforts have been made to have these policies inform the county fiscal strategy paper and annual development plans.

There are also policies, like on Food and Nutrition Security; Diseases and pests control, and Ending Drought Emergencies (EDE) Common Programme Framework, 2015. Moreover, due to globalization, these government policies operate also within the confines of other regional and global policies, like policies on agricultural marketing and trade (e.g. AGOA), East African Community (EAC), Common Market for East and Southern Africa (COMESA), and the World Trade Organization (WTO).

The study further established that at the time of conducting the exercise, there were efforts being made by the Committee on Agriculture at the county assemblies, both in West Pokot and Baringo to lobby for increased financial allocation to support food security interventions. Other than the bill that has been passed in West Pokot requiring every sub-county to have its own agricultural show as a way of passing agricultural extension messages to farmers, it was, however, not possible to establish which bills were pending hearing at the county assemblies of both counties. The challenge of establishing the actual number and types of Bills pending in the county assemblies was largely due to perceived low capacities by the ward representatives to participate in the local legislative process of the two houses as well as tedious bureaucracy that hinders easy access to the 'List of Pending Bills' from the County Assembly clerks' offices.

Nonetheless, policies on environmental management, safeguarding against wanton destruction of trees; sustainable abstraction of water from natural sources, such as rivers in a manner that assures both local and national interests are balanced; and improving farmers' contact with agricultural extension services through field days and agricultural shows, do exist and are operational in both counties.

"There are several policies, like Animal Diseases Act- if there be a disease or an outbreak, the farmer does not know what to do and loses many of his/her animals. If there is need of quarantine, viral diseases can be managed through vaccination and will require the cows to be restricted movement since it's contagious. Therefore, there are policies guiding on that...We are doing a policy on Dairy Livestock Marketing Core

Management Model. This is whereby you go to a market and elect a Case Committee that will work hand in hand with the County Government. This Committee is entitled to 25% of County Government revenue collected. 5% is left to the Committee that will be used as allowances and other uses. The Case Committee looks at the general issues about markets and if water is available. Samburu and West Pokot and quite a number of other counties already use this Core Management Model .The government gets revenue and it may not release funds faster for management therefore, the 5% revenue left for the committee is used. The other one is the Honey policy - it focuses on the marketing of honey. We are reviewing the policy and soon it will be passed as a bill in the County Assembly" (Key informant 5, Baringo).

"There are National policies, e.g. on diseases and pests control...The County Government has not domesticated or developed any policies or by-laws on Food Security Sector. The County Government procured agricultural machinery, but there has not been developed a framework on how they will be used...The policy on the control of diseases is poorly developed, but the framework is there. Another policy is the Ending Drought Emergencies (EDE) Common Programme Framework" (Key informant 14, West Pokot).

In terms of structures for the implementation of policies and government programmes, much of the food security initiatives are being implemented through the County Steering Group (CSG), whose secretariat is the National Drought management Authority (NDMA).

"The County Steering Group (CSG) through the National Drought Management Authority (NDMA); there is also the County Framework for implementation of agricultural development programmes; and ASDSP is also implemented through the CSG" (Key informant 14, West Pokot).

"The County Government has tried to come up with a policy to introduce agricultural shows in every sub-county. West Pokot had stated one at Kishaunet. In terms of environment management, they say, 'cut one tree and plant two'. Kerio Valley Development Authority [KVDA] had been given mandate to start irrigation along Turkwel belt but in vain by reasons not known. This is contrary o TARDA [Tana and Athi River Development Authority] which had done a lot in Tana and had same mandate. There is also a policy whereby people along River Suam are not allowed to use its water for irrigation because the water feeds Turkwel Dam that is used to tap electricity, which contributes to national grid yet people along the river suffer of hunger. The policy doesn't consider concerns of the locals, but the national government..." (Respondent from Kongesis Women Group, West Pokot).

In terms of implementation, the study established that a number of initiatives have been prioritized by communities and supported by government and government-affiliated players in the area of food security in the two counties. Some of the initiatives include:

- i. Promotion of rain water harvesting technologies to support kitchen-gardening and improve household food security.
- ii. Irrigation projects, especially along the permanent rivers.
- iii. Support for timely livestock off-take to avoid losses en-masse during drought.
- iv. Development of marketing and market infrastructure, including slaughter houses.
- v. Development of livestock holding grounds for improved diseases surveillance and control.
- vi. Livestock upgrading to improve locals. Zebu cattle have been upgraded with Sahiwals, East African goats with Galla; while Red Maasai sheep has been upgraded with Black-headed

Persian, Dorper and Merino sheep. Indigenous chicken are also being upgraded with improved breeds developed by KALRO.

- vii. Improving access to extension services through facilitation and networking.
- viii. Organizing the farmers into farmer groups, through which their capacities have been built by the government and NSAs on a number of issues. Most of the groups are now undertaking commercial production of vegetables, fruits, cash crops, beekeeping, and fishing; and are now divesting to other animals, like camels, Dorper sheep, Galla goats and improved chicken, other than the locals.
- ix. Promotion of orphaned crops, including sorghum, finger millet, high value indigenous vegetables and fruits.
- x. Promotion of high value cash crops, vegetables and fruits, particularly under irrigation.
- xi. Support in value addition.
- xii. Pasture reseeding and promotion of fodder crops establishment to improve livestock access to feeds throughout the year.
- xiii. Support and promotion of seed-bulking plots for improved access to planting materials.
- xiv. Introduction of drought-and disease-tolerant crop cultivars and animal breeds. Such animals as camels have been introduced.
- xv. Promotion of diversification in farming to spread risks and assure household food and income security.
- xvi. Promotion of animal feed preservation for usage during dry periods.
- xvii. Training farmers on post-harvest management of crops to reduce losses.
- xviii. Promotion of agroforestry
- xix. Promotion of conservation agriculture.

"Irrigation schemes initiated through community efforts together with the County Government as a result of the CIDP; introduction of drought-tolerant crop varieties, e.g. sorghum and green grams; promotion of fodder crops production; promotion of seed-bulking plots; and harvesting and storage/preservation of excess fodder" (Key informant 14, West Pokot).

"The community in West Pokot County have adopted new crops that were not there initially, they are currently growing Onions and Irish potatoes that were not common in this area before. Livestock farmers have started keeping Camels that were not there earlier. Camels are hardy; their milk is nutritious and is fetching a lot more in the market. A few other farmers have starting keeping a new breed of sheep, that is Dorper, and chicken which have never been the case before" (Key informant 9, West Pokot).

"Increasing accessibility of water for irrigation through various strategies e.g. buying water tanks to harvest water during rainy season so that we can be irrigating vegetables in our kitchen gardens for consumption and we can sale the surplus to our neighbors" (Respondent from Kituro Farmers' Group, Baringo).

"We have a livestock upgrading programme whereby the dairy farmers are supported with Artificial Insemination (AI) services. For beef -we are intruding bulls of a higher genetic value to improve on the quality of breeds. For the goats we have goats that grow fast and big in body size for example Galla breed. We are distributing them to farmers to improve on their local breed. We also do the

same for sheep by using Merino sheep to attain both market and body weight. Those are upgrading programmes and the County is working on AI for dairy farming, supporting value addition, milk processing plant and bee keeping to put up a honey refinery, if someone has to hawk honey there should be a specific place that honey is sold. Bee hives are also distributed to the farmers at no cost that comes from both County the National government" (Key informant 5, Baringo).

The study established that most of the initiatives being undertaken by the government of late have been relevant, effective, sustainable and fairly efficient.

"The Community initiatives are very effective since majority of the practicing farmers do not move to Uganda with their herd any more during dry seasons. It is sustainable since it's owned by the practicing households" (Key informant 15, West Pokot).

"ASDSP undertook a survey and found out that prior interventions did not involve the community much. As such, there are gaps in the following areas: Community capacity building and exposure. Sustainability was compromised by political interference and/ or policy gaps, as some politicians would like the status quo to prevail. This calls for capacity building of the political leaders as they are the community's voice on issues and the communities listen to them more than anybody else" (Key informant 14, West Pokot).

"The community initiatives are effective in the sense that they are owned by the community, they are efficient due to the fact that Camels produce more milk and they are hardy as compared to the cows since they can go for six months without water, and they are sustainable because there is ready market for the produce" (Key informant 9, West Pokot).

The strategies that have been used include: resilience building; gender and social inclusion; market development; disease and pest management; pasture improvement and support for irrigated agriculture; and alternative livelihoods sources.

"Resilience building, genderand social inclusion by ASDSP; market development, disease management and pasture improvement by the Regional Pastoral Livelihood Resilience Project as strategies for building community resilience through this World Bank-funded Project; water supply, pasture improvement and support for irrigated agriculture by the DRSRP, funded by the African Development Bank (AfDB)" (Keyinformant 14, West Pokot).

In terms of citizen participation, which is a Constitutional requirement, the study established that there has been low citizen involvement and participation in government initiatives to addressing food security issues, as the approach has largely been that of top-down. Nevertheless, with the coming of devolution and the establishment of County governments, the situation is changing for better. The only great challenge in the study areas has been low literacy levels, making many community members lack interest and capacity to participate in government projects.

"Currently citizens are not so much concerned about public participation such as budget making...Several budgets are being made and it's upon the citizens to scrutinize budgets that will work. Numbers of people participating have increased since 2013 to date..." (Key informant 5, Baringo).

"Initially there was no involvement and participation of the Citizen on what was going on but currently partners have started involving the community both national and county government included" (Key informant 9, West Pokot).

"Low or minimal participation in government projects by citizens due to lack of awareness of the need to do so; high levels of illiteracy in the community; and lack of

timely information. Of late, bottom-up approach has tended to improve community participation in government projects" (Key informant 11, West Pokot).

The study further sought to establish how supportive the current politics and funding is to the food security initiatives. Findings indicated that although devolution has brought with it some little improvement, generally there is generally little political support and funding to efforts to addressing perennial food insecurity in the two counties. Politicians still would want hand-outs to be given to the citizens, and make a lot of empty talks, followed by very little action.

"They are not supportive; politicians would still want handouts to be given to the community members" (Key informant 15, West Pokot).

The farmers' groups involved in the FGDs indicated that they had never had any access to the County budget allocations for programmes on food security, and that although the county governments talk of increased budgetary allocation for food security programming, on the ground, the trickle-down effect is minimal. In terms of involvement, the groups further indicated that there is minimal involvement by the government and its affiliates, who only involve them during emergency relief food distributions. These findings were corroborated by key informants.

"There is a lot of political play compared to actual work. Support is limited to interest, based on political implications of the proposed interventions (politicians seem to go for immediate needs of the community rather than long-term interventions). For example, only 2/20 wards have supported the livestock upgrading programme within the County, as others see it as a means of empowering communities economically, hence, limiting their chances of being re-elected as empowered communities are difficult to manipulate" (Key informant 14, West Pokot).

"Minimal support. Policies could be there on paper, but the interpretation on the ground is minimal. Politics on the ground tend to be reactive, rather than proactive. Thus, politics tend to favour provision of relief food that is more reactive, not sufficient to the households affected, and perpetuates a culture of dependency/reliance on the government rather than sustainability and self-reliance by the community. Currently, there seems to be some shift towards irrigation, which could be more sustainable and supportive to the stakeholders' efforts to end perennial food insecurity in West Pokot" (Key informant 11, West Pokot.).

"There is inadequate allocation less than ten percent and there are no clear structures hence nothing has been done" (Key informant 9, West Pokot).

As for whether the farmers' groups are satisfied with the current level and quality of involvement in food security programming by the government and its affiliates, the response was a clear 'No'.

"Not satisfied in the sense that both government and its affiliates should put food security apriority since weak people will not work hence production will be low resulting to a weak nation. Food is paramount and that without food crimes and poverty rises up. The Kenyan Constitution (2010) spells out the importance of decision making and involvement of citizens, which the government and its affiliates should adhere to. Citizens must be involved as they know their needs and can suggest ways to address them" (Respondent from Kongais Women Group, West Pokot).

5.5 Area of coverage by non-state actors working in food security

The study sought to establish from the respondents the different stakeholders working in Baringo and West Pokot counties in the area of food security. Findings indicated that the major non-state actors in food security in these counties are international NGOs (17.4% of respondents were of this opinion) and local NGOs (16.9% of respondents were of this opinion), as well UN agencies (15.1% of the respondents were of this opinion). These findings are presented in Table 30.

Table 30: Distribution of study respondents by their perception of major actors in food security

Major actors in food security in the community	Cou	County						
	Baringo	West Pokot						
Community	13.1%	34%	47.1%					
The Government	12.6%	29.7%	42.3%					
Government agencies and affiliates (e.g. KRCS, Parastatals, etc)	20.9%	5.0%	25.9%					
Community Groups (e.g. SHGs; CBOs/FBOs)	3.3%	11.3%	14.6%					
Local NGOs	7.1%	9.8%	16.9%					
International NGOs	14.4%	3.0%	17.4%					
UN agencies (e.g. FAO, UNICEF, UNDP, WFP etc.)	6.5%	8.6%	15.1%					
Politicians	2.8%	6.0%	8.8%					
The Media	0.3%	1.5%	1.8%					
Others	1.2%	0.9%	2.1%					

Thus, other than the community, the government, government agencies and affiliates, INGOs and LNGOs, UN agencies and community groups were established as the main actors in the area of food security in Baringo and West Pokot counties.

The study further sought to establish the on-going food security programmes (initiatives) in the two counties. Figure 9 presents the findings, with 30.5% of the respondents (17.5% from Baringo) indicating that food for work programmes were on-going at the time of undertaking the study; 18.8% of the study respondents (16.5% from West Pokot) indicating that agricultural recovery programmes were on-going at the time of the study; while 14.5% of the respondents (in almost equal proportions in the two counties) indicated that general food distributions were on-going at the time of undertaking the study. Some 13.2% indicated that cash transfer programme (12.9% from Baringo) was on-going within the community at the time of undertaking the study.

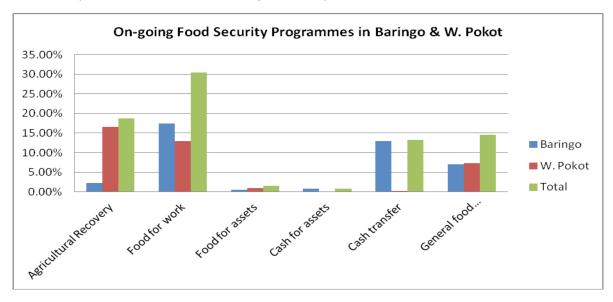


Figure 9: Households' responses on types of on-going Food Security projects

Thus, at the time of undertaking the study, cash transfer programme was largely being implemented in Baringo County, while agricultural recovery programme that was being implemented largely in West Pokot. Food for work and general food distribution (food aid) programmes were being implemented concurrently and simultaneously in both the counties at the time of undertaking the study. These

programmes were being executed by the government in collaboration with KRCS and WFP, among other players.

Findings from qualitative study indicated that the non-state actors in the sector of food security in the two counties are concerned with integrating food security with nutrition, food for assets, general food distribution (food aid), and cash transfer programmes, and scaling up nutrition in emergencies, among others.

"This one is a special project, that is Scaling Up Nutrition in Emergency that is being done by UNICEF, Kenya Red Cross, World Vision and MoH and it is only for emergencies..." (Key informant 7, Baringo).

Detailed analysis of the qualitative study established that there are several non-state actors in the area of food security, including multi-national agencies and state-owned societies. Notable ones include: World Vision Kenya, Action Aid International in Kenya, ChildFund, ACTED, ACF, FAO, WFP, UNICEF, KRCS, The Media (such as Chemgei FM and Kalya FM Radio), several CBOs, FBOs, Women and Farmer Groups.

A multi-utility stakeholders' assessment tool (MUSAT) was developed and used to map the major actors in the area of food security in the counties; giving details of these organizations, including: who they are; where they are located; point person and contact details; year of commencement of operations in the community; geographical area of coverage; their involvement in the area of food security; their capacity; their level of influence; their relationship with the government; and how KAS stands to benefit from working closely with them. These findings are presented in Table 31 and Table 32 for West Pokot and Baringo counties, respectively.

Qualitative aspects of the study indicated thus:

"Action Aid International Kenya, especially in livestock, promoting camels and Galla goats in Central Pokot; World Vision promoting camels production and interventions in health issues (in Central and North Pokot); ACTED, based in Uganda, but has had programmes in North and west Pokot, promoting camels and goats marketing and capacity building; Jitolee Wamama Africa-promoting commercial production of short term crops in Central and North Pokot" (Key informant 11, West Pokot).

"The Ministry of Agriculture runs a radio programme referred to as KILIMO MEDIA in partnership with Kalya FM Radio" (Key informant 16, West Pokot).

"World Vision— supporting communities through micro-enterprise development (MED), especially women by provision of small stocks; Action Aid— undertaking interventions similar to those of WVK; ACTED— almost phasing out, but used to intervene mainly in health; Action Against Hunger (ACF)— Intervene in areas of child nutrition, health and food security; Food and Agriculture Organization (FAO) of the United Nations (UN)— intervene in the area of fruit tree development; Anglican Development Services (ADS)— Intervene in the sectors of WASH, and Food Security, especially goat value chain; Catholic Relief Services (CRS) and VI-Agro— Intervene in the area of agroforestry...The actors pick specific wards, with no single actor covering the entire County" (Key informant 14, West Pokot).

Table 31: West Pokot County Stakeholders in Food Security

																_		
How KAS' Food Security Project stands to benefit from stakeholder (Partnership: Lessons learn/challeinges; lobbying to influence policy change, etc.)	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation							
Relationship with Gov't (Strong, Fair, Weak)	Fair	Strong	Strong	Strong	Fair	Fair	Fair	Fair	Strong	Fair	Fair							
Level of influence (High, Medium or Low)	Medium	High	High	High	Medium	Medium	Medium	Medium	High	High	High	Medium	Medium	Medium	Medium	High Figure	Medium	Medium
Capacity/ Resources (Budget; Personnel;Vehicles; Equipment / implements; Technical capacity)	A demonstration land, 2 tractors, Human resource	Human resource and capital	Human resource	human resource	Human resource and capital	Human resource and capital	Human resource and capital	Human resource and capital	Human resource	Human resource and capital	Human resource and capital	Human resource and capital	Human resource	Human resource				
Interest in Food Security Programming (Policies & implementation)	Increased household income	Implementation of activities	Policy implementation	Food supplement	Policy implementation	Policy implementation	Policy implementation	Implementation of activities	Implementation of activities	Policy implementation	Policy implementation	policy and activity implementation	Implementation of activities		policy and activity implementation	Policy implementation	Policy and activity implementation	Policy implementation
Geographic Area of coverage (Subcounties/Wards)	West Pokot Sub Coutny	Entire West Pokot County	Pokot South Sub County	Centarl Pokot Sub County	Entire West Pokot County	Entire West Pokot County	Pokot North Sub County	Entire West Pokot County	Entire West Pokot County	West Pokot and Pokot North	West, Central and Pokot South	Entire West Pokot County	Entire West Pokot County					
Duration of work in County (Year of commencement)	2009 to date	2010 to date	2014 to date	2011 to date	2013 to date	2013 to date	2003 to date	2007 to date	2014 to date		2013 to date	2014 to date						
Type of Stakeholder (Gov't/ NSA)	FBO	OBNI	ODNI	OĐNI	Government body	ODNI	OĐN	LNGO	OĐNI	INGO	OBNI	ODNI	Association	ODNI	OBNI	ODNI	LNGO	Association
E-mail Address	prdpelcknwd@ gmail.com		amisoi@tikenya. org	hob-wp.ke@ acf-international. org	Ruto.kirole@ redcross.or.ke		sikompeace@ yahoo.com	thepadowest@ yahoo.com	Giuesee- be_pblcack@ fao.org		wmkisiero@ unicef,org	jrotino@mercy- corps.org			emily.partany@ actioNairobid. org	Chepkonga- nose@wvi.org		marymari- ac200@gmail. com
Tel. Contact	0700 854 654	0726 034 319	722590019	706850323	72854374		711538258	724738983	70233637	716198754	727474593	721650099	71860144		726306986	721262914		729570941
Name of contact person	Mr.Ambrose P Merian	Mr. Emmanuel Tinja	Mr.Abraham Misoi	Mr. Silvester Kyuli	Mr. RutoKrole		Mr.Akoule Joseph	Mr. Geofrey Sangwatei	Mr. Giueseebe .P. Black	Mr. PhiliphOchieng	Mr.Wilson Kisiero Mein	Mr. Josiah Rotino	Mr. Jacob Siree		Ms. Emily Partany	Mr. Moses Chepkonga		Mrs. Mary Marich
Physical address/ Location	P.O BOX 642 - 30600 Kapenguria	P.O BOX 273 – 30600 Kapenguria	PO Box 417 - 30600 Kapenguria	P.O Box 396 – 30600 Kapenguria	P.O Box 322 – 30600 Kapenguria	P.O Box 30125 – 00100 Nairobi	P.O BOX 663 – 30600 Kapenguria	P.O Bo 183 – 30600 Kapenguria	P.O Box 75 – 30600 Kapenguria	P.O Eldoret	P.O Box 44145 – 00100 Nairobi	P.O Box 651 – 30600 Kapenguria	PO Box 67 – 30600 Kapenguria		PO BOX 345 – 30600 Kapenguria	PO Box 630 – 30600 Kapenguria		
Name of Stakeholder	Pokot Rural Development Project (PRDP)	ACTED	Transparency International (TI) Kenya	ACF	Kenya Red Cross Society (KRCS)	AMREF	SIKOM Peace Network for Development	Pokot Pastoralist Development Organization (PADO)	UN FAO	UNWFP	UNICE	Mercy Corps	Kenya Livestock Association – Pokot Brnch	АМРАТН	Action Aid Kenya	WorldVision Kenya	Pokot Outreach Ministry (POM)	Maendeleo Ya Wanawake Organization (MYWO)
o Z	_	2	æ	4	5	9	7	8	6	01	=	12	33	4	15	91	17	8 8

How KAS' Food Security Project stands to benefit from stakeholder (Partnership; Lessons learnt/challenges; lobbying to influence policy change, etc.)	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Through joint working and advocacy, policy formulation	Lobbying for policy change and equitable service delivery	Joint advocacy and lobbying activities to influence policy and attitude change
Relationship with Gov't (Strong, Fair, Weak)	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Strong	Strong	Fair
Level of influence (High, Medium or Low)	Medium	Medium	Medium	Medium	High	Medium	High	High	Medium								
Capacity/ Resources (Budget; Personnel;Vehicles; Equipment / implements; Technical capacity)	Human resource	Human resource	Human rsource	Human resource	Human resource	Human resource	Human resource	Human resource and capital	Human resource	Human resource and capital	Policy, Human Resource; Vehicles; Office buildings; Community and political support	l car					
Interest in Food Security Programming (Policies & implementation)	Implementation	Implementation	Implementation	Policy implementation	Policy implementation	Policy implementation	Policy implementation	Policy implementation	Policy implementation	Policy implementation	Implementation	Policy implementation	Implementation	Policy implementation	Policy and activity implementation	Sustainable food security to citizens	Agricultural value chain development strategy
Geographic Area of coverage (Sub-counties/Wards)	West and Pokot North	Entire West Pokot County	Entire West Pokot County	Entire West Pokot County	Pokot North Sub County	Entire West Pokot County	Pokot North and Central Pokot	Pokot North Sub County	West Pokot County	Entire West Pokot County	Sekerr Ward	West Pokot Sub Coutny	Riwo, Mnagei and Kapenguria wards	Entire West Pokot County	Entire West Pokot County	Entire W. Pokot	Entire W. Pokot
Duration of work in County (Year of commencement)			2013 to date	2014 to date					2015 to date							2013 to date	2013 to date
Type of Stakeholder (Gov't/ NSA)	CBO	CBO	CBO	CBO	INGO	Association	UNGO	OĐNI	INGO	OBNI	Association	OĐN	CBO	CBO	Parastatal	Gov't	Govt
E-mail Address	scherop- nongeai@yahoo. com	pcpsgyngat@ yahoo.com	cabesimarket@ yahoo.com	kamsleornard@ gmail.com	jangele@Irf-ken- ya.or.kw	bkibet@knchr. org	nhfforhealth@ gmail.com	davis 2003@ gmail.com	dcheboce- code2009@ gmsil.com		pellow@nrt-ken- ya.org	gksabila@yahoo. com	philipinekidu- lah@jitokeze.org	pankape2011@ gmail.com	gabriel.mbog- ho@ndma.go.ke		asdspwest- pokot@ yahoo.com. westpokotcc@ asdsp.co.ke
Tel. Contact	706414853	726600341	792428089	727229627	727816107		711590308	703235025	710728077		725822146	721467011	729918595	725207787	722246594		710904320
Name of contact person	Mrs. Susan Cherop	Mrs. Elizabeth Chepkukat	Mr. Paul Losute	Mr. Benard R Kamsait	Mr. John Angele	Mr. Kibet Kurgat	Mr. John Ngimor	Mr. Davis Wafula	Mr. David Cgheboh	Mr. Kuskus Michael	Mr. Silas Chemwal	Mr. Geoffrey Sabila	Mrs. Philiphine C Kidulah	Mr. Francis Soprin	Mr. Gabriel Mbogho		Mr. Perer Odhiambo Owoko
Physical address/ Location		P.O Box 417 – 30600 Kapenguria	P.O BOX 342 – 30600 Kapenguria	P.O Box Kapenguria	P.O BOX 334 – 637 Kapenguria	P.O Box 299-30200 Kitale	P.O Box 608 - 30600 Kapenguria	P.O Box 342	P.O Box Eldoret		P.O Box 035 – 30600 Kapenguria		P.O Box 440 – 30600 Kapenguria	P.O Box 187 – 30600 Kapenguria	P.O BOX 22 – 30600 Kapenguria	Kapenguria	
Name of Stakeholder	KOMESI Women GROUP	Yangat Girl Generation Potential Sensitization Group	Camel Bees and Sik (CABESI)	West Pokot Youth Bunge	Legal Resource Foun- dation (LRF)	Kenya National Human Rights Commission (KNHCR)	Netherlands Harambee Foundation For Health	Danish Deming Group (DDG)	Citizen Focus for Development (CEFODE)	Tegla Lorupe Peace Foundation (TLPF)	Masol Conservancy	Handicap International (HI)	Jitokeze Wamama Africa	Pokot Accountability Netork (PAN)	National Drought Management Authority (NDMA)	County Government (Directorate of Agriculture, Livestock & Fisheries)	ASDSP (under the Mo.A)
o Z	61	50	71	22	23	24	25	26	27	78	29	30	3.	32	33	34	35

Š	No. Name of Stakeholder Physical address/ Location	Physical address/ Location	Name of contact person Tel. Contact E-mail Address	Tel. Contact	E-mail Address	Type of Stakeholder (Gov't/ NSA)	Duration of work in County (Year of commencement)	Geographic Area of coverage (Sub- counties/Wards)	Interest in Food Security Programming (Policies & implementation)	Capacity/ Resources (Budget; Personnel;Vehicles; Equipment / implements; Technical capacity)	Level of influence (High, Medium or Low)	Relationship with Gov't (Strong, Fair, Weak)	Relationship How KAS' Food Security Project with Gov't stands to benefit from stakeholder (Strong, Fair, (Partnership; Lessons learn/challenges; Weak) lobbying to influence policy change, etc.)
36	POKATUSA Peace and Development Organization	Kapenguria	Mr. Geofrey Lipale			ODNI		Entire W. Pokot	Advocacy for peace as a prerequisite for food security	Community support; Human resource; Office block.	Medium	Fair	Advocacy for peace and tranquility, platform for advocacy on food security.
37	KALYA Radio station Makutano	Макитало	Carol Muok	0716793728	cheptoocarol@ gnail.com	Radio station		Entire W.Pokot	Dissemination of farming technologies	Community support; Human resource; Office block	Medium	Fair	Dissemination of information on good agricultural practices and sharing of learning

Table 32: Baringo County Stakeholders in Food Security

	Name of Stakeholder Physical address/Location	Physical address/Location	Name of contact Tel. Contact person		E-mail Address	Type of Stakeholder (Gov't /NSA)	Duration of work in County (Year of commencement)	Geographic Area of coverage (Sub-counties/	Interest in Food Security Programming (Policies & implementation)	Capacity/Resources (Budget; Personnel; Vehicles; Equipment/ implements; Techni- cal capacity)	Level of influence (High, Medium or Low)	Relationship with Gov't (Strong, Fair, Weak)	How KAS Food Security Project stands to benefit from stakeholder (Partner- ship; Lessons learnt/chal- lenges; lobbying to influence policy change, etc.)
>	WorldVision Kenya	Marigat	John Mutisya	0721 541 519	john_mutisya@wvi.org	OSNI	Eearly 90's to date	Baringo North &South	Advocacy		Medium	Fair	Lobbying to influence Policy change
0	Child Fund- Kenya	Kabarnet	Alfred Tanui	0710 275 389	alfkip2007@yahoo.com	OSNI		Baringo Central & South	Advocacy		Medium	Fair	Lobbying to influence Policy change
× 0	Kenya Red Cross Society	Kabarnet	Flora Kyondo	0721 247 109	kyondoflora@yahoo.com		2008 to date	Entire Baringo County	Disaster Management	Human Resource,2 cars,	High	Fair	Lobbying to influence Policy change
	ASDSP	Kabarnet	Cherutich Kiptoo	0725 538 641	kcreuben@gmail.com, baringocc@assdsp.co.ke	Gov't	2013 to date	Entire Baringo County	Agricultural value chain development strategy	4 technical officers, I car	Medium	Fair	Joint advocacy and lobbying activities to influence policy and attitude change
_	NDMA	Kabarnet	Amos Nyakeyo	0721 217 004	amos.nykeyo@ndma.go.ke	Gv't	2013 to date	Entire Baringo County				Fair	Lobbying to influence Policy change
	AFFA	Kabarnet	Chrispin Amumo	0722 625 917	amuano@ymail.com	NGO		Kerio/Mogotio				Fair	Lobbying to influence Policy change
	Action Aid Kenya	Tangulbei	Denis Orioki	0727 117 286	denis.orioki@actionaid.org	INGO	1996 to date	Baringo East				Fair	Lobbying to influence Policy change
	Bare Care	Kabarnet	Philip Tomno	0721 860 972	philtomno@yahoo.com	NGO	2002 to date	Entire Baringo County	Advocacy	human resource	Medium	Fair	Lobbying to influence Policy change
	Lembus Forest Community Inte- grated Conservation Project	Eldama/Ravine	Mathew Birir	0722 338 319		СВО		Eldama Ravine		Human resource	Medium	Fair	Lobbying to influence Policy change
	Emoin Women Group	Tenges	Agness Songol	0716 535 053	emoinwomengroup@ gmail.com	СВО		Baringo Central		Human resource	Medium	Fair	Lobbying to influence Policy change
	Centre for Community Empowerment		Moses Lemeluk	0724 753 671	mlemeluk@gmail.com	СВО		Mochongoi		Human resource	Medium	Fair	Lobbying to influence Policy change
_	Water and Farm Aid	Marigat	francisChesang	0725 908 516		СВО		Marigat		Human resource	Medium	Fair	Lobbying to influence Policy change

hip How KAS' Food Security t Project stands to benefit air, from stakeholder (Partner- ship; Lessons learnt/chal- lenges; lobbying to influence policy change, etc.)	Lobbying to influence Policy change	Lobbying to influence Policy change	Lobbying to influence Policy change	Lobbying to influence Policy change	Lobbying to influence Policy change	Lobbying to influence Policy change	Lobbying to influence Policy change	Lobbying to influence Policy change	Lobbying to influence Policy change	Lobbying to influence Policy change	Lobbying to influence Policy change	Lobbying to influence Policy change	Lobbying to influence Policy change		Lobbying to influence Policy change	2	و ا و	to influenc	to influenc	to influenc	to influenc
Relationship with Gov't (Strong, Fair, Weak)	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Рооб	Poop	Fair	Fair	Fair			Strong	Strong	Strong	Strong	Strong
Level of influence (High, Medium or Low)	Medium	Medium		Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium			High	High	High	High	H Fgi
Capacity/Resources (Budget; Personnel; Vehides; Equipment implements; Techni- cal capacity)	Human resource	Human resource		Human resource	Human resource	Human resource	Human resource	Human resource	Human resource	Human resource	Human Resource,5 Technical officers	Human resource	Human resource, I car, 10 secretariat	Human resource			Policy, Human	Policy Human Resource: Wehicles;	Policy Human Resource; Vehicles; Office buildings;	Policy, Human Resource, Vehicles; Office buildings; Community and	Policy, Human Resource, Mehicles; Office buildings; Community and political support
Interest in Food Security Programming (Policies & implementation)				Education and health	Advocacy and lobbying in Peace	Advocacy	Advocacy & Good governance in social and economic		Horticulture ,Advocacy & conservation	Horticulture and dairy goat/cow	Horticulture & Advocacy		Advocacy	Advocacy		Advocacy in Early warning signs and mitigation	Advocacy in Early warning signs and mitigation Sustainable food security	Advocacy in Early warning signs and mitigation Sustainable food security to citizens	Advocacy in Early warning signs and mitigation Sustainable food security to citizens	Advocacy in Early warning signs and mitigation Sustainable food security to citizens	Advocacy in Early warning signs and mitigation Sustainable food security to citizens
Geographic Area of coverage (Sub- counties/ Wards)	Baringo North	Mogotio	Entire Baringo	Baringo Central	Baringo North	Baringo south	Entire Baringo		Baringo	Baringo Central	Entire Baringo	Entire Baringo	Entire Baringo	Churo		Baringo Central & North	Baringo Central & North Entire Baringo	Baringo Central & North Entire Baringo	Baringo Central & North Entire Baringo	Baringo Central & North North Entire Baringo	Baringo Central & North Entire Baringo
Duration of work in County (Year of commencement)				1979 to date	19th July 2013	2004 to date	April 2014 to date		2005 to date	2008 to date	2013 to date	2006 to date	1996 to date	2013 to date		2013 to date	2013 to date	2013 to date 2013 to date	2013 to date	2013 to date	2013 to date
Type of Stakeholder (Gov't /NSA)	СВО	СВО	OĐNI	CBO	CBO	CBO	СВО	СВО	СВО	CBO	CBO	CBO	OSU	СВО		СВО	CBO	CBO	CBO	CBO	CBO
E-mail Address			ikibet@aphiarift.org	akiptui@yahoo.co.uk	jkandagor@yahoo.com	samsonlempakany@ gmail.com	stanley@gmail.com		patrickkabutie@yahoo. <u>com</u>	setkubor@gmail.com	Ruttostella@yahoo.com	allankipkol@yahoo.com	godfreykipsoi@gmail.com	lomoto@yahoo.com		iasiah.biwott@gmail.com	iasiah biwott@gmail.com	iasiah biwott@gmail.com	iasiah.biwott@gmail.com	iasiah.biwott@gmail.com	iasiah.biwott@gmail.com
Tel. Contact	0727 441 863	0715 295 414	0722 997 735	0722 777405	0717 854 690	0710 594 193	0724 014406	0722 338 319	0722 446 994	0722 802 590	0722 168 606	0724 067 603	0725 509 757	0721 318080		0726 110 839	0726 110 839	0726 110 839	0726 110 839	0726 110 839	0726 110 839
Name of contact person	IilianKemei	Geofrey Chero- gony	Jonah Kibet	Andrew Kiptui	James Kandagor	Samson Lem- pakany	Stanley Chelelgo	Peter Cheboi	Patrick	Ann Kirui	Stella Rutto	Allan Kipkol	Godfrey Kipsoi	Amos Lomoto		Isaiah Biwott	Isaiah Biwott	Isaiah Biwott	Isaiah Biwott	Isaiah Biwott	Isaiah Biwott
Physical address/Location			Kabarnet	Kabarnet	Kabartonjo	Tiaty		Kabarnet	Kabarnet	Kabarnet	Marigat	Kerio valley	Kabarnet	Churo		Kabarnet 426- 30400	Kabarnet 426- 30400	Kabarnet 426- 30400	Kabarnet 426-30400	Kabarnet 426- 30400	Kabarnet 426- 30400
Name of Stakeholder	Kiptaiwa Coffee Farmers	Endeleza Mazingira	APHIA PLUS	Morop Family and Child Help Programme	Kaporion Peace Net	Loitip water project	African Wildlife Protection Fund	Jipe Moyo Support	MbaraKaptich	Set Kubor Women Group	Bawosfam	KERUDI	CEDGG	Churo Livelihood Initiative	Citizen Participation	Forum	Forum County Government	Forum County Government (Directorate	Forum County Government (Directorate of Agriculture,	Forum County Government (Directorate of Agriculture, Livestock &	Forum County Government Of Agriculture, Livestock & Fisheries)
o Ž	4	5	91	-1	<u>&</u>	6	20	21	22	23	24	25	26	27	28		29				

5.6 The relationships between the state and its agencies and other non-state actors working in food security

The study sought to establish the relationship existing between the government (national and county) and other non-state actors working in the area of food security in Baringo and West Pokot counties.

Findings of this investigation indicated that generally the relationship has been good, and mainly that partnership and collaboration and support to NSAs to deliver to the citizens. However, there is no structured way of engagement, such that limited joint planning and monitoring occurs on specific issues. Thus, it would be necessary to develop a structured way of having non state actors engaging with the government.

"Very good relationship, typified by partnerships. The County Government has funded community development through some NSAs, e.g. Lomut, a group has been funded through NjaaMarufuku Kenya (NMK); CABESI, funded by ASDSP" (Key informant 11, West Pokot).

"Collaborative relationship with joint planning on specific issues, but there is no structured way of engagement, such that a policy framework from the County Government is necessary to streamline and structure the engagement of the various development actors in the County" (Key informant 14, West Pokot).

Nevertheless, possibly (from key informants) there is more government support to NSAs in West Pokot than in Baringo; a fact that may need to be further verified through a separate investigation. Moreover, sometimes a challenge arises because some of the positions, like that of MCAs and Governors are political. Politicians have a tendency of giving empty promises in public places in order to gain political mileage, but which promises they never meet. Moreover, an office could be said to be as good as the officer in it, hence, while some public servants are quite supportive, knowing that the NSAs help them to meet their obligations to the electorate, some feel the NSAs have all the money to drive development, hence, are only interested in out-of-pocket allowances rather than supporting to meet the core development objectives.

"In my opinion, they are like talking a lot saying they will do this, they will do that, they can even have the plan and budget but implementing it becomes difficult and it does not happen. You will find that everyone does their own project, if the County Government has a project, they do it alone, SDSP does theirs but if the Non State Actors and the National Government came together and brought all their funds together in addressing food security, the impact would be different" (Key informant 8, Baringo).

"Politicians? In fact I criticize them so much. Politicians always give empty promises. Regional campaigns come they say they will do this but surely they do least. They just chip in when someone has died. 2013 in Baringo North people died from eating boiled wild seeds kind of nuts and the politicians come and promised them relief food will be brought to the families... Have you seen any CDF targeting farmers its only institutions like schools. Politicians just come when there are problems and as a matter of fact they don't deliberate this with farmers at grassroots level" (Key informant 1, Baringo).

5.7 The issues covered by the organizations and institutions working on food security

The study established that some of the issues covered by organizations and institutions working on food security in Baringo and West Pokot counties include promotion of irrigated agriculture, introduction of drought-and disease-tolerant, fast-maturing and high yielding crop cultivars and animal breeds, and promotion of sustainable animal feeds and feeding strategies.

"Some of the community initiatives to try to address the perennial food insecurity in West Pokot include irrigation schemes initiated through community efforts together with the County Government as a result of the CIDP; introduction of drought-tolerant crop varieties, e.g. sorghum and green grams; promotion of fodder crops production; promotion of seed-bulking plots; and, harvesting and storage/preservation of excess fodder" (Key informant 14, West Pokot).

Other initiatives include promotion of alternative livelihoods; capacity building on modern crop and animal husbandry practices; improving animal health management; improving market infrastructure, access to market information and organizing marketing for better prices; intensified partnership and collaboration between the government and the private sector; as well as improved extension services to farmers.

"Some of the effective community and partner initiatives to addressing the food insecurity in the area are development of markets by the County Government as community prioritized projects; development of livestock holding grounds; irrigation projects, e.g. Weiwei Irrigation Scheme in Central Pokot, and other new irrigation schemes coming up. KVDA has undertaken capacity building and establishment of demonstration plots for provision of seed materials; KAPP has had programmes to improve livestock breeds by upgrading locals; as well as capacity building on feeds and feeding of livestock; the Ministry of Agriculture, especially in ASALs has intervened to improve production of feeds (seed bulking plots for hay making). Others are, alternative livelihoods promoted by the government and the private sector (e.g. Jitokezee Wamama Africa that promote short-term crops in the ASAL parts of the County); CABESI has an alternative livelihoods programme for local community, e.g. beekeeping; provision of camels as alternative livelihoods by CABESI, Ministry of Agriculture and Livestock, Action Aid and World Vision. ASDSP and partners (CABESI and Yang'ato Sopan) are promoting 3 value chains (Honey, Goat Meat and Indigenous chicken) as alternative livelihood options on commercial basis...Infrastructure development by the County Government to increase access to markets and inputs; increased extension services by the County Government (more staff and improved facilitation); and increased collaboration between the County Government and the private sector" (Key informant 11, West Pokot).

SECTION 6.0 CHALLENGES AND GAPS

The study established that the following are some of the issues affecting the implementation of food security programmes in the two counties:

Poor community involvement in the food security initiatives, making most of the citizens of the
two counties have a poor perception that government project are not meant to benefit them
sustainably, but to tackle immediate needs, while NGOs have all the money required to solve their
long-term development challenges. This puts a lot of pressure on NGOs, with high community
expectation; while government projects are riddled with corruption and mismanagement, but
drawing little or no community attention.

"The notion that government programmes even if mismanaged, the government will just bring another one encourages corruption and mismanagement of government-funded programmes, much of whose funds end up being embezzled" (Key informant 11, West Pokot).

2. Low level of acceptance of food security projects by communities in the two counties, partly contributed to by political influence from the political leaders.

"The community has been used to a certain way of doing things hence, it is difficult to change their mind-set" (Key informant 11, West Pokot).

- 3. Low funding level to food security players, yet the communities are riddled with high poverty levels, hence, need to be addressed is so enormous that the external support often looks like a drop of water in the ocean.
- 4. Unpredictable funding streams, with funding sometimes being withdrawn mid-way before the scheduled period of project phase-out, making it difficult to objectively assess the impacts of such projects.
- 5. Relatively low number of non-state actors in the food security sector compared to other sectors, such as health, WASH and education.

"Most development partners are focused on other sectors, such as peace building and conflict resolution, health, WASH; anti FGM campaigns, but few players focus on food security. Thus, the food security sector receives low funding, yet it is the core of the County" (Key informant 11, West Pokot).

- 6. Inadequate capacity of the local community to engage in modern and commercial agriculture. This is compounded by high levels of illiteracy and ignorance (lack of exposure) by most of the citizens of the two counties.
- 7. Rugged terrain, hampering transport and distribution of agro-inputs and agricultural produce from one part of the two counties to another.
- 8. Political interference, making most politicians put pressure on the government and development partners to deliver short-term and more-or-less relief support rather than sustainable and long-term development projects.

"This in part has been contributed by politics of the day, whereby people are aligned to certain politicians and do not accept other people if not aligned to the same politicians they are aligned to" (Key informant 11, West Pokot).

9. High levels of insecurity, with a lot of inter-community conflicts with neighbours both within Kenya and externally.

"Insecurity with a lot of inter-ethnic/community conflicts, pitting the Pokots against the Turkanas, Marakwets and Karamajong (of Uganda)" (Key informant 11, West Pokot).

- 10. High levels of illiteracy by most of the citizens from the two counties, whose level of understanding is, therefore, low; and who often misinterpret or misunderstand government policies and programmes.
- 11. Mis-interpretation of policies by politicians for political reasons, and difficulties in balancing political interests.

"Politicians come from certain communities, which they expect to vote for them enmasse. Sometimes, in a bid to safeguard against hurting their political constituency, politicians give policies wrong interpretation so as to gain political mileage" (Key informant 11, West Pokot).

- 12. The County Governments of the two study areas have not domesticated or developed any policies or by-laws on Food Security Sector; making players in this sector work in a very disjointed manner and in silos, without much harmony.
- 13. The policy on the control of diseases is poorly developed and should be reviewed, even though it provides the framework for reviewing it.
- 14. The County Government of West Pokot procured agricultural machinery, but there has not been developed a framework on how they will be used.

SECTION 7.0 BEST PRACTICES AND LESSONS LEARNED

7.1 Best practices from existing players' past experiences

- 1. Initiating irrigation projects is the best way to empower communities in the two study areas to effectively reduce the impact of food insecurity. Some 43.7% of the study respondents indicated this was the best way to ending perennial food insecurity in their communities, a fact that was also corroborated by the key informants.
- 2. Investing on gender-inclusive farming practices that empower women to actively participate and earn a living from agricultural activities greatly empowers communities and helps to reduce the negative influence of certain socio-cultural practices that bar women from owning and controlling large stocks. The starting point would be to promote rearing of such livestock as chicken, sheep and goats, which women would readily have control over.
- 3. Involving communities in food security projects right from the project design stage through to the evaluation stage, irrespective of their literacy level assures greater success. This way political bickering would have minimal influence on the community perceptions regarding such projects.
- 4. Involving the media and politicians in food security projects right from the start assures greater success, since; this way, all their fears, misconceptions and over-expectations are dealt with right from the start.
- 5. Successful food security projects address both the production and marketing aspects of the produce; incorporate a broad spectrum of stakeholders, and leverages on private-public-partnerships for sustainability, ownership and greater impact.

7.2 Lessons learned from existing players' past experiences

The following are some of the lessons learnt through community participation and collaboration with the government and other players in the food security sector, based on previous engagements:

- i. Much needs to be done jointly by all stakeholders if food insecurity is to be addressed in Baringo and West Pokot counties;
- ii. Joint planning involving communities, government and NSAs is necessary so as to build on synergy and leverage the limited funding by the few players in the food security sector. Through joint planning, a lot could be achieved with minimal resources;
- iii. There is need for stakeholders in the food security sector to refocus the little available resources so as to address the root causes of poverty and food insecurity in the two counties, rather than meeting immediate needs of citizens or political objectives;
- iv. There is need for broader stakeholder involvement through partnerships and collaborations in the area of food security to have a common framework and front for engagement and addressing food security issues in the two counties;
- v. Initiatives that promote income diversification are key to meeting livelihood needs and reducing over-dependence on one natural resource as a source of livelihoods;
- vi. Initiatives that improve livelihood security quickly obtain the support and participation of local communities;

- vii. Environmental conservation should focus on means of achieving the end result;
- viii. Exploitation of alternative water resources, such as rain water harvesting through roof catchment and development of micro-irrigation is necessary for household food security;
- ix. Continuous capacity building of farmers and farmer groups is needed so as to keep them abreast with changes in development. Given the limited extension contact with government officers, NSAs need to fill the gap, by passing new innovations from research to the farmers in a timely and contextualized manner that could spur adoption for sustainable improvement in food security and household incomes.
- x. Communities need to be sensitized and supported to reduce reliance on rainfall for agriculture, and, instead; venture into commercial farming, practicing new farming technologies under irrigation;
- xi. Growing of short term, fast-maturing crops that are resistant to drought and diseases is helpful in improving food insecurity as it reduces the hunger gap;
- xii. Considering the low literacy levels and ignorance (i.e. lack of exposure), effective way to build the capacity of the farmers in the two counties is by way of field days, educational tours and agricultural shows to help farmers acquire knowledge and skills to grow more food.
- xiii. Government needs to develop a structured way of supporting and collaborating with NSAs to address food insecurity;
- xiv. One of the most effective ways of reducing perennial food insecurity in the study areas is by reducing post-harvest losses, reducing distress sales, improving storage and preservation methods, and improving marketing.
- xv. A sustainable Food Security Programme needs to have software (capacity building) components as well as hardware (tangible support, like in irrigation infrastructure) components. A Programme like ASDSP is doing a lot, but because it is mainly dealing with capacity building, creating coordination forums and platforms for sharing and exchange of ideas, it may not achieve much unless there is meaningful partnerships and collaboration to fix the missing component-the hardware bit.
- xvi. Biodiversity is key as a source of income and food.
- xvii. Financial investment in initiatives for natural resource management is necessary for the success of the same;
- xviii.Proper documentation is necessary to capture lessons leant form interventions, gaps and challenges; and pass these through appropriate media and channels by extension agents for sharing with other stakeholders.

SECTION 8.0 CONCLUSIONS

In conclusion, the study established that the two counties are generally food insecure; this being largely contributed to by high levels of illiteracy, insecurity, lack of security to land, the unfavourable climate (much of the study area is ASAL), over-dependence on community land and pastoralism as a livelihood source, hence, production for subsistence and not on commercial basis. Other factors contributing to this include low uptake of agro-inputs, limited extension services, poor market information and uncoordinated marketing strategies that predisposes the farming community to over-exploitation by middlemen.

Even though the two counties are generally food insecure, with a lot of similarities in several parts, in general, West Pokot County seems to suffer more food insecurity compared to Baringo. This could be because of the fact that West Pokot is largely less cosmopolitan than Baringo, hence, has high level of ignorance and low exposure to modern farming practices. It also has its social fabric still fairly strong and intact, but in retrospect; suffers from the effects of some rigid and insensitive socio-cultural practices, customs and traditions. Such practices, customs and traditions limit gender inclusivity in agriculture, hence, restricting women's access to and control over natural and productive assets, such as land and livestock, especially the large stock.

Probably it is because of the high level of poverty, food and economic insecurity, as well as perceived marginalization by previous regimes that the non-state actors in West Pokot also enjoy more government support and receive better support from the state compared to those from Baringo.

Most of the food security players in the two counties have spent fairly more resources on undertaking emergency response programmes than on sustainable long-term development projects. And, because of poor politics, most of the non-state actors in the area of food security working in the two counties have received minimal political support, as the political class tend to see the NSAs more as donors rather than partners.

The region has stagnated in addressing food insecurity partly because of corruption and poor governance, as well as ignorance and a wrong perception impregnated in the minds of the communities that even if government projects are wasted and do not benefit the communities much, another one will soon come to replace them. This perception has made communities ignore what the government officers do, and instead, focus more attention for support on non-state actors, seen as having all the money to solve the community problems.

The government has done little to harmonize policies affecting the food security sector and to coordinate the operations of all stakeholders therein. As a result of this most of the players undertake small, but disjointed interventions, work in silos and without any form of coordination, hence, considering the multidimensional nature of poverty and the immense needs within the communities they serve, the impact is minimal.

Political interference, lack of political goodwill, low funding to agricultural sector, illiteracy, ignorance and low involvement of citizens in long-term and sustainable food security projects probably remain the greatest hindrances to the success of any food security interventions in the two counties. Probably this has been contributed to by lack of participatory approaches to development, hence, a top-down approach to development that does not involve beneficiaries and stakeholders much at the initial stages. Involving political leaders, citizens and the media in every stage of food security interventions, would probably help to overcome this.

Insecurity and climate change are major causes of food insecurity in the two counties, and need concerted efforts by all players in food, livelihoods and economic security to address. It will take human efforts to eradicate extreme hunger and poverty, by making deliberate efforts to enhance peaceful

coexistence between communities living in different parts of the country and to sensitize them and build their capacities on sustainable measures to reduce and adapt to climate change effects for sustainable food and livelihood security.

Although the government is the primary service provider, and has a constitutional duty to meet social rights of its citizens; rights of which include access to high quality food, quality basic education services, quality basic health care services, WASH, shelter and security; the relationship between the governments of the two counties and other players in the area of food security has not been that which helps to forge a common front and which complements efforts for sustainable food and livelihood security interventions. It will take deliberate efforts by those in power and administrative offices to change attitude, play a more facilitative role, create an enabling environment for non-state actors to perform their duties effectively (through policy formulation and development of infrastructure) and provide adequate budgetary support to the initiatives aimed at addressing food insecurity from its root causes. The citizens have a duty to hold the government and political leaders accountable, but can only do so if they are sensitized, mobilized, and made aware of these rights, privileges and obligations, and their entitlements. The media and other partners could be useful in helping to achieve this; in as much as deliberate efforts to work together in partnership with citizens, politicians and government administrators will.

SECTION 9.0 RECOMMENDATIONS

From the study, the following recommendations have been made for consideration by KAS Kenya to consider as it embarks on implementing the Food Security Project in the two counties:

- 1. There is need to sensitize the community on the need to divest and grow drought-tolerant root and tuber crops, such as cassava and sweet potatoes to reduce over-reliance on cereals and pulses as staple food, and to improve the food security situation.
- 2. The Project should sensitize the communities living in the two counties to diversify sources of livelihoods and reduce over-reliance on pastoralism as a source of livelihoods. Such livelihood options like beekeeping, silk farming, dairy goat and cattle rearing, wool sheep rearing, camel rearing, and aloe vera cultivation should be promoted.
- 3. Farming communities should be organized into groups and trained on business management, after which they should be provided with opportunities for economic development so as to reduce the culture of selling much of the food produced soon after harvest in order to earn income to meet other basic household needs in education, health, clothing, shelter and security.
- 4. Sustainable food security projects in the two counties should consider promoting irrigation for commercial production of indigenous and exotic fruits and vegetables, especially along permanent rivers, like Muruny, Kerio, Iyon, Turkwel and Suam. This would assure year-round production that would not only improve household food security, but would also sustain the huge demand in the market, thereby ensuring sustainable household incomes, hence, reducing extreme hunger and poverty.
- 5. The Project should work closely with other stakeholders to upgrade livestock and improve access by farming communities to extension services and agro-inputs. This way, there would be improved production and productivity and improved household incomes from improved livestock production and sales.
- 6. The Project staff should consider lobbying the government and private companies to subsidize and make agro-inputs more affordable and accessible to farming communities in Baringo and West Pokot counties so as to ensure improved agricultural production.
- 7. The Project should work closely with such partners as the Ministry of Agriculture, Livestock and Fisheries, CABESI and ASDSP to train farmers on modern crop and livestock husbandry practices, disease and parasite identification and management for improved household food and economic security.
- 8. The Project should together with other partners advocate for and lobby the government to speed up land adjudication in order to facilitate the acquisition of land titles for security of tenure that would allow commercial agricultural production possible.
- 9. The Project together with partners (including the media and politicians) should sensitize the communities in the two counties to secure titles to their lands for security of tenure that would enable commercial agricultural production and access to agricultural credit possible.
- 10. The project should work with partners (Government, NDMA, the media) to provide more market information, and work closely with the government and private partners to sensitize communities to engage in group marketing of crops and livestock produce as to enjoy economies of large scale and have a better bargain for their products.

- 11. The Project should lobby political leaders to support food security initiatives and sensitize their constituencies to support in implementation and monitoring of the same for sustainable development and eradication of extreme hunger and poverty.
- 12. There is need to involve the politicians and media right from the design of food security interventions in the stud area for them to give it a buy in and clearly understand their roles. The immense role the two institutions play in successful implementation of food security projects in the study area cannot be over-emphasised.
- 13. The Project should lobby the county governments of the two counties to prioritize food security as a means of reducing poverty in the study area, hence, allocate more funding to agriculture and the food security sector.
- 14. The Project should work with other players in the area of food security (especially those with legal background) and facilitate the county governments to develop suitable legislations that would address perennial food insecurity in the study areas.
- 15. The Project should lobby the county governments and KRCS to build more warehouses (possibly in every sub-county, starting with those that are perceived to be ASAL) for storage of storage of food for emergencies and for sale to citizens at subsidized prices during times of distress.
- 16. It would be important for the Project to follow up and establish how far the recommendations contained in a report of Stakeholders Analysis by NDMA in 2014 have been implemented. Implementation of these would go a long way in ensuring that drought early warning systems (EWS), preparedness, response and recovery are improved through a broad stakeholder involvement and commitment of financial support.
- 17. The Project should work closely with partners, such as TeclaLorupe Peace Foundation and POKATUSA Peace and Development Organization, the media and politicians/opinion leaders to ensure peaceful coexistence between the local communities and their neighbours. It is only when peace prevails that sustainable food security interventions could be undertaken.
- 18. The Project should work closely with other partners, like the Ministry of Agriculture, ASDSP, and various LNGOs to build capacities of farming communities within the two counties of study so as to reduce post-harvest losses of crop yields, which is also a major contributing factor to the chronic food insecurity in the region.
- 19. The Project should work closely with partners such as WVK, UNICEF, KRCS to forge for linkage between developing food security, WASH and nutrition. Integrating food security, access to potable water, sanitation, hygiene and nutrition is important, as households may have access to food, but still end up with children and pregnant and lactating mothers being malnourished due to poor food utilization and inadequate sanitation and hygiene practices. Thus, developing communities' skills and capacity to produce enough food for domestic consumption and sale is itself not enough to ensure malnutrition and ill-health is tackled. Such programmes as HINI and Nutrition in Emergencies should be supported.
- 20. The project should work closely with other partners to lobby the government to improve policy/ plans on food security in Baringo and West Pokot counties-policies and governance issues on food security (tackling issues such as production, post-harvest, marketing and partnerships) and public accountability on food (especially for food distributions in emergencies).
- 21. The Project should work with politicians, the media, MoA and others to address socio-cultural issues hindering utilization of certain foods and promote vale chain development for such foods as cassava, sorghum, millet, green grams, and cow peas.

- 22. The Project should work closely with the ASAL Stakeholders' Forum (ASF) to forge a strong and united front that could undertake effective advocacy to influence change in attitude, practice and perception among citizens in the study area, governments, NSAs, the media and other development players in the area of food security in Baringo and West Pokot.
- 23. The Project should work with other players in the area of food security to initiate village savings and loaning groups among the farming communities living in the two counties. This would enable such communities, especially the vulnerable groups (e.g. women) build social and financial capital that would enable them have improved access to social services and credit through which they would in-turn be able to promote modern farming practices. By empowering such vulnerable groups in the community, the ripple-effect would be so greatly and development would be speeded up, hence, poverty would greatly be reduced within a short time-span.
- 24. The Project, together with other stakeholders, notably the County Government and ASDSP should support field days, educational tours and agricultural shows as a means of enabling the farmers acquire knowledge and skills on new farming techniques with which they would be able to improve food production in the two counties, hence, reduce food insecurity. With reduced numbers of government extension staff, and the fact that there are low levels of literacy in the two counties of study, such methods as on-farm demonstrations, field days, educational tours and agricultural shows would be ideal to reinforce learning with practical exposure that would go a long way in improving farming practices.
- 25. The Project should work with partners and other stakeholders in the area of food security to initiate youth friendly farming technologies (e.g. pond fish farming/aquaculture, silk farming, and beekeeping) that would help in luring the youth into commercial farming and looking at farming as a business, and not just a hobby. This would help to reduce the number of idle and unemployed youth in the community, thereby helping to reduce such vices as hooliganism, and other engagements in non-productive activities. Through this, household food and economic security would be improved.
- 26. The Government should be sensitized an supported technically to develop policies and criteria for funding non state actors engaged in the area of food security to enable those serious NSA with programmes that empower communities, but that face funding challenges, be able to undertake sustainable food security interventions that would go a long way in reducing food insecurity in the study areas.

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ANNEXES

Annex 1: List of Research Assistants and Research Supervisors-Baringo and West Pokot





Annex 2: Programme for Training Research Assistants and Research Supervisors



Annex 3: Data collection Tools



Kenya PPI.pdf









Annex 4: Data Quality Control Tools















Crisis Prevention through the promotion of Good Governance in the Area of Food Security in Northern Kenya.

Contact Details

Konrad-Adenauer-Stiftung Kenya Office I Thigiri Hilltop/off Thigiri Ridge Road P.O. Box 66471 - 00800 Nairobi/Kenya Phone: +254 (20) 261 00 21/2/3



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