KNOWLEDGE ATTITUDES AND PRACTICES (KAP) AND COMMUNICATION FOR DEVELOPMENT (C4D) SURVEY IN WEST POKOT COUNTY

Report submitted to:
Action Against Hunger | ACF International; Kenya Mission.

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April 2014

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ACKNOWLEDGEMENTS

This survey captured the Knowledge attitudes and practices of Maternal Infant and Young Child feeding ad WASH practices in West Pokot County. The survey was made possible through the financial support from UNICEF and ECHO to Action Against Hunger (ACF) International; Kenya Mission.

The West Pokot County Government (WPCG) was in the forefront of the survey. The survey would not have been possible without the front line assistance of Ms. Leah Chelobei West Pokot County Nutrition officer, and her team from the County Council for Research Science and Technology led by the County Director of Health Services Dr Solomon Kokwo. As well as the County health officers who acted as team leaders for the survey teams.

The following ACF staff played a frontline role in the planning and implementation of the survey; Imelda Awino - Head of Nutrition Department, Jacob Korir - Deputy Head of Nutrition Department, James Njiru - MIYCN Program Manager, Sylvester Kyuli - Head of West Pokot Base, Susan Luballo - Nutrition Program Manager, Josphas Sang - Base logistician, Nahashon Kipruto - Food Security and Nutrition Surveillance Officer, Ms. Monica Mukami - Human Nutrition and Dietetics Unit Ministry of Health.

Lastly and most importantly we thank the residents of West Pokot, and especially the households that allowed us to involve them in the survey.

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ACRONYMS AND ABBREVIATIONS

ACF	Action Against Hunger | ACF International
ANC	Ante natal care
ASAL	Arid-and Semi Arid Lands
CHWs	Community Health Workers
CPU	County Planning Unit
C4D	Communication for Development
ENA	Emergency Nutrition Assessment
FGD	Focus Group Discussions
GAM	Global Acute Malnutrition
HiNi	High Impact Nutrition Interventions
KAP	Knowledge Attitudes and Practices
KII	Key Informant Interviews
MOH	Ministry of Health
MtMSGs	Mother to Mother Support Groups
MIYCN	Maternal Infant and Young Child Nutrition
NAAIAP	National Accelerated Agricultural Input Access Program
PNC	Post natal care
SPSS	Statistical Package for Social Sciences
TBAs	Traditional Birth Attendants
WASH	Water and Sanitation and Hygiene
WHO	World Health Organization
WPCG	West Pokot County Government

EXECUTIVE SUMMARY

Introduction

This section summarizes the findings of a Maternal Infant and Young Child Nutrition (MIYCN) survey undertaken in West Pokot County during the period of February 2014. The survey was meant to provide a baseline to key ACF activities in the county specifically the proposed Communication for Development (C4D) intervention to contribute towards reduction of high stunting rates in the county.

Objectives

1) To determine the status of key MIYCN and hygiene indicators in West Pokot County.
2) To determine inhibitors, enhancers and pre-disposers to appropriate MIYCN practices
3) To identify existing and other possible Communication for Development (C4D) channels to support and sustain social and behaviour change towards optimal MIYCN.
4) To explore opportunities for integration and linkages of nutrition and health interventions to improve uptake of MIYCN messages and behaviour change.
5) Review previous recommendations of MIYCN KAP surveys, identify the gaps and generate recommendations for integrating C4D approach for social and behaviour change communication process
6) To assess the capacity of healthcare system and community structures as the platform and agents of change and support for effective social and behaviour change.

Methodology

The survey applied a two stage stratified cluster sampling with the clusters being selected using the probability proportional to population size (PPS). The villages constituted the sampling frame. The target population was mothers/caregivers of children 0-23 months of age in West Pokot County. Using the CARE (2010) protocol for IYCN sample size calculation, a sample size of 164 children aged 0-23 months based on the breastfeeding indicator with the highest sample size was obtained. This sample was then multiplied by 4 to cater for the 4 age groups of six months between 0-23months (0-5months, 6-11months, 12-17 months, and 18-23months). This gave a total sample size of 656children aged 0-23months. However, with 6 teams collecting data for 7 days we were able to obtain 712 children aged 0-23 months. Statistical Package for Social Scientists (SPSS) version 20.0 was used in entry and analysis of data. Descriptive statistics were used to calculate percentages, while for data comparison with 2013 KAP survey; T-Test statistics was used based on sample sizes, design effect and percent proportions, with $p<0.05$.

Qualitative data on MIYCN influencers was collected through 29 FGDs and 6 KIIs.

Summary of Key findings

A total of 672 households were sampled and caregivers for 712 children aged 0-23months interviewed. Key findings are shown below.

Household Characteristics	% KAP 2014	% KAP 2013	
Sex of head of household			
Male	99.3	95.2	
Female	0.7	4.8	
Respondent ever been to school			
Yes	59.8	63.8	
No	34.4	36.2	
Child characteristics	**% KAP 2014**	**% KAP 2013**	**P-Value**
Sex of children 0-23months			
Male	54.1	52.3	0.615
Female	45.9	47.7	0.615
Age of children in completed months			
0-5 months old	33.4	37.0	0.294
6-23 months old	66.6	63.0	0.294
Hygiene Indicators	**% KAP 2014**	**% KAP 2013**	**P-Value**
Sources of water			
River	48.6	39.2	**0.009***
Piped water	18.9	22.7	0.199
Borehole	9.8	8.4	0.500
Unprotected spring	7.0	14.5	**0.001***
Unprotected shallow well	5.9	1.8	**0.002***
Lagga	5.8	3.8	0.191
Protected well	1.2	3.0	0.094
Earth pan with infiltration	1.2	0.4	0.283
Protected spring	0.6	1.0	0.543
Duration of time to water source	**% KAP 2014**	**% KAP 2013**	**P-Value**
Less than 30 minutes (<500m)	63.4	57.9	0.122
Within 1 hr (<2km)	22.6	20.7	0.534
More than 1 hr but within 24hrs (>2km)	14.1	21.3	**0.010***
Drinking water treatment			
Treat drinking water	20.4	27.1	0.315
Methods of Water Treatment applied			
Boiling	56.9	61.3	**0.000***
Chemicals	30.8	24.8	**0.000***
Pot and other filters	6.9	10.9	**0.011***
Traditional herbs	3.8	1.5	**0.001***
Decant	1.5	1.5	0.103
Access to and utilization of latrines	**% KAP 2014**	**% KAP 2013**	**P-Value**
Got access to a toilet	50.8	48.7	0.563
Type of toilet/latrine			
Traditional/pit latrine	83.6	87.1	0.170
Ventilated improved pit latrine	16.1	11.2	**0.050***

Flush toilet	0.3	1.7	0.065
If No, where they defecate			
Bush	90.4	87.4	0.192
Open field	3.0	1.6	0.866
Near river/lagga	6.6	6.3	0.188
Hand washing practices	**% KAP 2014**	**% KAP 2013**	**P-Value**
Occasion when wash hands;			
Before eating or preparing meal	94.8	92.3	0.167
After using toilet/defecating	48.0	53.4	0.137
When washing face	42.9	30.3	**0.000***
Before feeding child including breastfeeding	39.7	38.9	0.821
After attending to child defecated	39.2	30.3	**0.001***
After handling animals	25.4	17.2	**0.005***
When bathing	10.9	12.5	0.495
After changing sanitary towels	9.1	3.2	**0.001***
What is used to clean/wash hands			
Water and soap sometimes	75.1	59.3	**0.000***
Water and soap always	24.9	25.3	0.900
Water only	17.7	14.5	0.228

Maternal experiences	**% KAP 2014**		
Source of advice on breastfeeding initiation			
Health worker	43.8	-	
Mother in law	17.6		
Mother	13.7	-	
Grand mother	13.7		
Neighbour	4.7	-	
Media	0.8		
Attended ANC during pregnancy	88.2	-	
Key reasons given for those who did not attend ANC		-	
Too far	60.0	-	
Not aware	20.0	-	
TBA services adequate	10.7	-	
Others	9.3		
Duration of pregnancy during 1st ANC visit			
1st trimester	8.3	-	
2nd trimetser	60.8		
3rd trimester	30.9	-	
No. of ANC visits		-	
1-3	69.9	-	
4 and above	30.1		
Supplementation and delivery	**% KAP 2014**	**% KAP 2013**	**P-Value**
During pregnancy issued with iron and folate supplement	85.8	55.1	**0.000***

Place of delivery for current child At home by TBA Health facility At home with auxilliary mid-wife At home without assistance Other (along the road, mother in law, neighbour)	 60.3 32.2 4.0 1.9 0.7	 - - - -	
Maternal knowledge	**% 2014 KAP**	**% 2013 KAP**	**P-Value**
A baby should be put to the breast immediately they are born	92.0	87.5	**0.044***
A baby should be given first milk that comes to breast during first 3 days after delivery	93.9	-	
Breastfeeding practice	**% KAP 2014**	**% 2013 KAP**	**P-Value**
Ever breastfed	98.6	98.0	0.524
Pre-lacteal feeds given	19.4	43.1	**0.000***
Early Initiation of breastfeeding (0-23mo)	89.5	78.7	**0.000***
Exclusive breastfeeding under 6 months (0-5mo)	37.9	43.5	0.113
Continued breastfeeding at 1 yr (12-15mo)	85.2	82.3	0.276
Continued breastfeeding at 2 yrs (20-23mo)	65.7	50.0	**0.000***
Bottle feeding and use of other inappropriate drinking utensils (0-23mo)	26.1	-	
Complementary feeding practices	**% 2014 KAP**	**% 2013 KAP**	**P-Value**
Introduction of solid, semi-solid or soft foods (6-8 months)	70.8	83.6	**0.000***
Minimum dietary diversity (=<4) 6-11 months 12-17 months 18-23 months 6-23 months Breastfed	 9.8 19.9 21.6 16.4	 - - - 52.0	 **0.000***
Minimum meal frequency for breastfed children 6-8 months (2 times) 9-23 months (3 times) 6-23 months (3 times)	 97.4 94.7 93.7	 24.5 - 81.3	
Minimum acceptable diet 6-8 months 9-23 months Breastfed 6-23months	 8.8 15.4 12.6	 - - 44.8	 **0.000***
Responsive feeding yesterday			
Child ate all food he/she should Did something to encourage child	60.4 36.0		

to eat			
Maternal dietary diversity			
Food groups Starches Dark green leafy vegetables Other Vitamin A rich fruits and vegetables Other fruits and vegetables Organ meats Meats and fish Eggs Legumes, nuts and seeds Milk and milk products	 98.7 72.2 1.8 4.0 1.5 0.6 3.3 22.5 58.7	- - - - -	

Communication for Development (C4D) assessment

The key C4D process steps undertaken included;

- Problem analysis
- Behaviour rating and prioritization
- Behaviour analysis
- Channels/media analysis
- Communication objectives, activities and M&E aspects.

The C4D objectives developed are;

1. Men and village elders will support and encourage exclusive breastfeeding up to 6 months of age.
2. Women and caregivers will stop giving prelacteal feeds to children at birth.
3. Breast feeding mothers will exclusively breastfeed for six months
4. Allocation of food in the household will not discriminate on age and sex of the individuals.
5. Women and children's diet will incorporate more food groups including animal source foods.
6. Active and supportive feeding of children will become a common practice in the community.
7. TBAs will play an emotional support and referral role to pregnant women.

The following strategies, activities and M&E indicators were developed;

Communication for development strategies, activities and M&E

Objective	Strategies	Activities	M&E Indicators
1, 4 & 5	- Train male health workers on MIYCN - Mobilize men and village elders and engage them through	- Development of training materials on MIYCN targeting men and village elders (church leaders, teachers, elders).	- Training materials for men and village elders developed on relevant themes - No of trainings for

	Community Conversations on MIYCN training and changing cultural practices to support women and children. - Develop communication materials on, pre-lacteal feeding, maternal and young child nutrition, and good eating practices for women and children, and responsive feeding targeting men and village elders	- Training of male health workers on MIYCN - Mobilization of men and village elders - Community Conversations on EBF with men and village elders - Community Conversations on food culture as it related to women and children with men and village elders	male health workers on MIYCN - Meetings held and no of men and village elders mobilized - No of training groups formed for men and village elders - No of Community Conversations held per month per area - Content taught per session
2, 3, 4, 5 & 6	- Development of MIYCN materials content specific to pre-lacteal feeding, maternal and young child nutrition, and good eating practices for women and children, and responsive feeding - Training of health care workers on content above - Strengthening MTMSG's with specific focus on the above topics. - Development of communication material on the above content through folklore, community broadcasts, and local-based films.	- Development of training materials on MIYCN targeting women and children on stated content/themes. - Training of health workers on MIYCN - Formation of MTMSG's - Establishment of quarterly forums to engage with Grandmothers, TBAs, mothers in law - Road shows and film sessions targeting market days in different villages show casing songs, dances, films, community broadcasts on stated content/themes.	- Training materials developed based on stated content/themes. - No of trainings held for health care workers including CHWs based on agreed content/theme. - No of MTMSG formed and frequency of meetings per month. - No of forums established for engaging grandmothers, mother in laws. - No of quarterly meetings held with grandmothers/mother s in law per agreed schedule. - No of songs, dramas developed on content/theme. - No of road shows held and target markets covered as agreed.
7	- Promote partnership between TBA and Health workers	- Train TBAs on identification and early referral of obstetric complications - Train TBAs on emotional support of pregnant women - Establish an incentive program for TBAs bringing	- No of TBA trainings on referral done. - No of trainings to TBAs on emotional support to pregnant mothers using folklore, songs, and

		mothers to facilities in a timely manner.	meetings. - Status of incentive program.
All	- Sensitization and advocacy meetings and talks with county leaders, chiefs and headmen on MIYCN and the role of culture. - Sensitization meetings held with the County council on research for technology and development (CCRTD) - Sensitization and partnership building meetings with other partners on the ground including NGO's, CBOs	- Quarterly meetings with county leaders, chiefs and head men on MIYCN and the need to change cultural practices. - Quarterly meetings with CCRTD. - Mapping out all the relevant stakeholders and partners needed to integrate MIYCN. - Targeting and arriving at working partnerships with other stakeholders on MIYCN related activities.	- No of county leaders, chiefs and headmen targeted. - No of quarterly meetings held per agreed schedule. - No of partnerships formed. -

Conclusions

Generally women appear knowledgeable on MIYCN issues with gaps seen in areas such as; appropriate feeding utensils, benefits of colostrums and pre-lacteal feeding. The mother is the predominant decision maker on what to feed the baby. The citing of MtMSGs as a source of information was however very low even though ACF has invested heavily.

Feeding practices are low, especially EBF, use of inappropriate feeding utensils, dietary diversity, and responsive feeding. Poor dietary diversity is largely due to low intake of animal sourced foods among both children and women. Minimum acceptable diet (adequate dietary diversity and meal frequency) was very low due to poor dietary diversity even though the meal frequency was high.

Socio-cultural practices are a major hindrance to both infant and maternal nutrition practices, and need to be addressed. Maternal diets are very poor due to food insecurity and socio-cultural practices. C4D is likely to play a big role in addressing this behaviour gaps.

The predominant livelihood activities are rural agriculture and informal employment. High level of illiteracy (34.3%) compared to the national average of 19.3%. This has implications on the approach to training and education materials development and subsequent uptake.

Access to safe drinking water still remains a big challenge to a large majority of the residents of West Pokot County, the main source of drinking water is river, with safe drinking water (piped water, protected well and earth pan with infiltration) accessible to only 21.3% of households. Also, around a third (36.7%) of the households take one hour or longer to a water source, with only a fifth (20.4%) treating their water. Half of the residents do not have access to a toilet/latrine and majority of them use the bush to defecate. When it comes to hand

washing, only a quarter of the residents practice appropriate hand washing (use of soap and water always).

Access and utilization of health services is still a major challenge. The biggest hindrance is distance to health facilities and the hilly and wild terrain for most of the regions. This is especially so in North, Central regions. Access to breastfeeding information was reported by only a third of the mothers (35%) similar to complementary feeding information (31%). It is important to note that the predominant source of information is from the health worker.

Two thirds of women delivered at home. This was largely due to distance to the health facilities and a high preference for TBA delivery.

A further review of literature indicates that with devolution of funds and governance, the West Pokot County government has come up with a County Integrated Development Plan (CIP) for 2013-2017, which has health, water and sanitation among the priority areas.

In order to improve MIYCN practices in West Pokot County Behaviour Change Communication (BCC) is needed. Upon C4D analysis and rating the following seven problem behaviours need to be tackled;

- Limited awareness and participation of men and elders on infant feeding is playing a big role. It denies women and caregivers the support they need from key decisions makers.
- Perceived inadequacy of breast milk seems to be a major reason as to why women are not practising exclusive breastfeeding up to six months. There is need to educate the women as well as build their confidence.
- Giving of prelacteal feeds is culturally engrained in this community. During focus group discussions it became apparent that key influencers such as grandmothers and mothers in law play a big role in strengthening this negative practice.
- Poor food allocation choices by sex and age. Food allocation practices among the community are such that some food taboos deny women and children access to certain good quality foods, especially animal source foods. Yet, in areas within the same area where integration to other cultures has taken place such as in the South, these practices are not being practiced. The custodians of these cultures need to be engaged in structured discussions to change some of these practices which lead to poor dietary diversity of children and women. This is partly due to negative cultural practices, poor nutrition practices such as selling all the food, and food insecurity. There is need to tackle those behavioural aspects that can easily be changed.
- Active engagement of children during feeding was noted to be low. It is important to actively engage in child feeding. The use of communication channels such as folklore would play a key role in encouraging this practice.
- Very high TBA assisted deliveries at home. Need to partner with TBAs so as to play an emotional support and referral role to pregnant women.

Recommendations

The recommendations target service delivery improvement and systems strengthening as well as C4D.

Issue	Recommendation	Responsible
Minimal gains in translation of knowledge into practice by mothers and caregivers	Implement proposed C4D strategy	MoH, ACF, WPCG
	Mapping out and developing working relationships with all the relevant stakeholders and partners needed to integrate MIYCN through BCC	MoH, ACF, WPCG
Desire for MIYCN information is evidently high among women and caregivers	Development of content specific training materials on MIYCN targeting men, village elders (church leaders, teachers, elders), women, children and health workers.	MoH, ACF, WPCG
	Strengthen MtMSGs through strengthened supervision of meeting schedules. Process evaluation of MtMSGs program to understand its effectiveness, efficiency, uptake, and any challenges being faced in roll out.	MoH, ACF, WPCG
	track availability of MCHN booklets in the registers	MoH, ACF, WPCG
Cultural barriers to optimal MIYCN practices	A review of training gaps on MIYCN especially among health workers in areas such as maternal nutrition and behaviour change, since much of the previous training has centred on IYCN.	MoH, ACF, WPCG
	Road shows and film sessions targeting market days in different villages show casing songs, dances, films, community broadcasts on MIYCN.	
	Regular engagement with County government leaders, chiefs and head men on MIYCN and advocacy on the need to change cultural practices.	
Low MIYCN knowledge and participation amongst men and other stakeholders on MIYCN	Mobilization and engagement with men, village elders, grandmothers, TBAs through Community Conversations around MIYCN activities and food culture.	MoH, ACF, WPCG

High food insecurity and low women empowerment	Advocate for acceleration of other interventions that address food insecurity and economic empowerment of women economically. The role of ACF would be to work closely with the CPU (County Planning Unit) as a stakeholder and undertake advocacy work while actively participating in the performance review meetings to ensure the facility increase, water availability, and irrigation targets are being realized.	MoH, ACF, WPCG

INTRODUCTION

Strong evidence continues to come in on the benefits of breastfeeding, according to the Lancet Child Survival Series, exclusive breastfeeding during the first 6 months and continuing breastfeeding through twelve months was rated as the number one intervention for preventing child mortalities (Jones, 2003). Among the recommended programming principles to help achieve success include; promotion of optimal nutrition practices in communities, support to health care providers at facility and in the community, and integration of nutrition assessment, counselling and support in to child health (USAID, 2012).

Data from the Kenya Demographic and Health Survey of 2008-09, 35% of children under the age of five years are stunted, with 16% underweight and 7% wasted. The median duration for Exclusive Breast Feeding (EBF) has remained at 21months over the last three DHS surveys (1998, 2003, 2008-09). There was however, a reported improvement in EBF of children less than six months of age at 32% in 2008-09 compared to 11% in 2003. According to the Kenya Nutrition Action Plan (NNAP) report for 2012-2017 child malnutrition remains a major challenge. The immediate causes of malnutrition are inadequate food intake and disease while the underlying causes include poor maternal/child care practices, household food insecurity, inadequate health services (WHO, 2010).

Background

West Pokot county has four main Sub-counties namely West, Central, South and North Pokot with three major livelihood zones: pastoralism (dominant in Pokot North), agro-pastoralism (dominant in Pokot Central), and mixed farming (practiced in West Pokot). There are 58 health facilities in the county. The vastness and harsh terrain pose challenges to delivery and access of nutrition and health services.

The nutrition status in the County has shown steady improvement in the last three consecutive years reducing as indicated by global acute malnutrition (GAM) of 14.9% (2011), 12.3% (2012) to 9.8% (March 2013), this could be an indication that on-going programming work is starting to make gains. However chronic malnutrition (stunting) indicated critical levels at 46.6% in 2013. This is mainly associated with prolonged food insecurity, inadequate food intake and/or poor MIYCN and care practices.

The capacity of the West Pokot population to successfully manage stresses and shocks is always challenged not only by climatic variability and uneven distribution of poor rainfall over the past decade but further by structural factors including: increasing prices of essential foods and non-food items, poor livestock prices (leading to deteriorating terms of trade for livestock owners) and poor production systems. Other Specific factors additionally

undermining the ASAL production system include: declining rangeland production through invasive species, conflict arising from water and marginal pasture and increasingly entrenched dependency on food aid with growth in peri-urban populations around food distribution centres. According to the 2013 long rains assessment report, the food security situation is diverse, in that for mixed and agro-pastoral livelihood zones the situation is stable in minimal food insecurity phase, while the pastoral livelihood zones are under the stressed food insecurity phase. Besides ACF, other actors involved in health and nutrition interventions include; Kenya Red Cross, WFP, and the Ministry of Health coordinating.

Action Against Hunger (ACF) has been implementing High Impact Nutrition Interventions (HiNi) and surveillance activities with an overall aim of *Building Capacity for Emergency Nutrition Response* in West Pokot county since 2012. West Pokot County is situated in the Arid and Semi-Arid Lands (ASAL) region of Kenya. The county borders Uganda to the West, Trans Nzoia and Marakwet to the South and Turkana to the East, North and East and Baringo to the East

ACF is working mainly with Ministry of Public Health and Sanitation (MOPHS) and also other developmental partners. ACF provides support for the High Impact Nutrition Interventions (HiNi) package at the health facilities and community in partnership with MOH targeting children below five years old as well as pregnant and lactating mothers.

The strategies used by ACF include:

- Assisting MOH in the formation of Mother to Mother Support Groups (MTMSGs) to promote appropriate IYCN practices.;
- Capacity enhancement on Integrated Management of Acute Malnutrition (IMAM), IYCN, Training of Trainers (ToT) for Community Health Units; and
- Water and Sanitation and Hygiene (WASH), by conducting health facility and School needs assessment for toilets.
- Integration of outreach sites.

Objectives of the survey

Overall the survey aimed to assess knowledge, attitudes and practice on Maternal, Infant and Young Child Nutrition (MIYCN) and hygiene among mothers and caregivers. The following were specific objectives;

1) To determine the status of key MIYCN and hygiene indicators in West Pokot County.
2) To determine inhibitors, enhancers and pre-disposers to appropriate MIYCN practices
3) To identify existing and other possible Communication for Development (C4D) channels to support and sustain social and behaviour change towards optimal MIYCN.
4) To explore opportunities for integration and linkages of nutrition and health interventions to improve uptake of MIYCN messages and behaviour change.
5) Review previous recommendations of MIYCN KAP surveys, identify the gaps and generate recommendations for integrating C4D approach for social and behaviour change communication process

6) To assess the capacity of healthcare system and community structures as the platform and agents of change and support for effective social and behaviour change.

Justification for survey

There was a KAP survey previously done in 2013. Thus there was need to conduct An MIYCN and WASH survey so to compare the results to assess program performance and change in trends. The survey is also going to form the basis for C4D design, strategies, and integration into ongoing programming and monitoring behavioural outcomes.

Study challenges and limitations

Data collection covered all the originally sampled clusters except cluster number 30 Cheptamus due to insecurity.

The reception in the field was cordial in all the cluster except Kaptenei village in Ptoyo where the village contact person was at first uncooperative as he felt his village has been visited too many times by surveys.

The questionnaire as original proposed and later adopted did not capture the frequency of milk feeds intake, this therefore meant the analysis could not capture meal frequency for non-breastfed children aged 6-23months.

METHODOLOGY

The survey employed both quantitative and qualitative methods to establish the prevalence of MIYCN practices as has been agreed upon in the nutrition sector, focusing on the knowledge, attitude, and practices relating to maternal nutrition, infant and young child feeding, and Hygiene promotion interventions. The survey further explored the Communication for Development (C4D) approaches to drive social and behaviour change towards adopting optimal MIYCN practices. The survey was conducted in a participatory manner involving MOH, ACF field staff, and the community.

The Study Design

The survey was a cross-sectional descriptive study with both quantitative and qualitative components. The survey was conducted in two phases in a participatory manner. Consensus on the scope of the work was agreed upon by MoH, West Pokot County Government and ACF. Further, after the NIWG methodology presentation, it was agreed that the survey adopt and validate the new MIYCN proposed questionnaire. After cognitive and face validity of the original tool was done, the tool was revised and shortened so as to take the requisite time of half an hour on average per household so as to cover the survey within the budgeted time and avoid respondent fatigue. A Key Informant Interview (KII) schedule and FGD guides were adopted from the previous ACF IYCN and C4D guides used in Dadaab in 2013.

The second phase of the survey involved training of the survey team and data collection and analysis. Quantitative data was collected through administered questionnaires to mothers and care takers of children 0-23 months at the household level. Key Informant Interviews were conducted by team supervisors assisted by one data collector. Information on MIYCN practices and the health and nutrition situation in the district and the challenges constraining the provision of health and nutrition services and prospects for integrating C4D was obtained.

The FGDs were conducted among a cross-section of the community members to solicit their perceptions on the MIYCN practices in the County as well as the inhibitors, enhancers, and pre-disposers to such practices. The FGDs conducted covered distinct groups of; men, pregnant and lactating women, grandmothers and mother in laws, CHWs, and community leaders. KIIs were conducted with health workers at the facility level. The qualitative information collected from the FGDs was used to complement the quantitative data and also to provide an in-depth understanding of the community's IYCN practices and potential C4D channels.

The Target Population

The target population was mothers/caregivers of children 0-23 months of age in West Pokot County. In addition, fathers, grandmothers/mothers in law, CHWs, men, pregnant and lactating women, and health facility staff were also targeted because they are considered to be major stakeholders on IYCN issues.

Sample Size Determination and Sampling Procedure

Sample Size Determination

The sample size for collection of data on IYCN indicators was calculated by stratified proportionate sampling methodology (using the Care International Sampling Spread Excel Sheet). This was to cater for the sample sizes required for the various indicators of IYCN practices, which are disaggregated by age (CARE, 2010). The indicators prevalence used for the sample size calculation were those from the findings of the last IYCF KAP survey conducted in West Pokot County in 2013. Different desired precision levels were used for each of the four IYCN indicators and a design effect of 1.5 for the cluster methodology (Table 1).

Information on the proportion of the under-fives and the average household size was solicited from the Kenya National Bureau Statistics at the County level and the findings of the latest KAP IYCF Survey in West Pokot County in 2013. A non-response rate estimated at 5% (same as that used in the most recent nutrition survey) was used in the calculation of the sample. The resulting sample sizes for the four IYCN indicators are shown in the Table 1 below:

Table 1: Estimated sample size and household size for KAP survey 2014

Indicator	Estimated prevalence (%)	± desired precision	Design effect	Sample size	Average household size	% children under 5	% non-response households	Households to be included
Exclusive breastfeeding	43.5	10	1.5	154	Divide the sample size by the no. of clusters and use it as the target no. of children per cluster			
Timely initiation of breastfeeding	78.7	8	1.5	164	6.6	20	5	327
Minimum dietary diversity	29.7	7	1.5	267	6.6	20	5	532
Minimum meal frequency	43.8	8	1.5	241	6.6	20	5	480

Based on the CARE manual protocol, the breastfeeding indicator with the highest sample size was chosen, giving a sample size of 164 children aged 0- 5 months. This was then multiplied by four to cater for the 4 age groups within 0-23months (0-5months, 6-11months, 12-17 months, and 18-23months). A total sample size of 656 children aged 0-23months was obtained. This was meant to enable us capture substantial sample sizes per age group during analysis. This translated to 15.6 approximately 16 children aged 0-23months per cluster.

A total of 30 FGDs were selected from the 42 clusters, this was based on the practicality of having one team conduct one FGD in a day excluding the first day for mobilization purposes and one day for KIIs . The total FGDs done were 29 (original plan was for 30 but due to insecurity reported in one cluster), broken as follows; Pregnant and lactating women 6, men 5, CHWs 5, grandmothers and mothers in law 3, and community leaders including religious 10. A total of 5 KII were done with health workers at the facility.

Sampling procedure

A two-stage sampling methodology was used to select the study participants (mothers/care givers) of children 0-23 months old.

Sampling Stage 1

The first stage of sampling involved selection of villages which constituted the sampling unit. The village was the smallest geographical unit for which population statistics were available. All the villages in each of the sub-locations in all the divisions in West Pokot County constituted the sampling frame. The population statistics were from the National Census (2009) projections. Emergency Nutrition Assessment (ENA) for Standardized Monitoring and Assessment of Relief and Transitions (SMART) version November 2013 was used to randomly select the villages/clusters.

Each of the villages was listed together with its total population. The cumulative population was then calculated and used in the computation of a population proportional to size (PPS) sampling design to identify the specific villages to be covered by the survey. After computing the cumulative population, the sampling interval was determined by dividing the total cumulative population by the 42 clusters required. A random number (equal to or less than the sampling interval) was then selected from a Table of Random Numbers and the village where the random number fell was the first cluster to be selected for the survey. Subsequent villages were selected by adding the sampling interval to the number first selected. Through this process, the locations of the sampled villages/clusters were identified.

Sampling Stage 2

The second stage involved selection of 16 households per cluster. A list of all existing households per cluster with children 0-23months was identified in consultation with the village elder in the cluster. The required 16 households were thereafter selected through simple random sampling. Once a house was selected, the survey team visited the household and verified if the target child aged 0-23 months of age was present. If the target population was found and respondent was willing to participate in the survey, then the relevant data was collected from the respondent. The same procedure was used in each of the selected 16 sampled households.

All children 0-23 months old in a household were included in the sample.

Data collection tools

Both quantitative and qualitative data was collected. Structured questionnaires (see Annex 2) were used to collect quantitative data. The indicators captured in the questionnaire were:

1. Timely initiation of BF (0-23 months)
2. EBF under 6 mo (0-5 months)
3. Continued BF at 1 yr (12-15 months)
4. Bottle feeding (0-23 months)
5. Timely complementary feeding (6-9 months)
6. Introduction of solid/semi-solid/soft foods (6-8 months)
7. Minimum dietary diversity (6-23 months)
8. Minimum meal frequency (6-23 months)
9. Minimum acceptable diet (6-23 months)
10. Consumption of Iron rich foods (6-23 months)
11. Water and sanitation for the household.

The qualitative component comprised of Key Informant Interviews (KII) with health facility staff and Focus Group Discussions (FGDs) with fathers, grandmothers/mothers in law, CHWs, men, pregnant and lactating women, separately to establish the community's perceptions on IYCN practices as well as the cultural, socio-economic, and other factors influencing these practices. Also it explored the Communication for Development (C4D) approaches to drive social and behaviour change towards adopting optimal MIYCN practices.

Implementation of the Survey

Survey Team

The survey was coordinated and supervised by an external consultant. The consultant was assisted by the MIYCN Programme Manager, West Pokot County Nutritionist, MIYCN steering group representative and the West Pokot Nutrition Program Manager ACF. The survey was conducted using 6 teams; each team comprising 4 members, inclusive of a team leader/. The team leader and one enumerator conducted the FGDs and KIIs whereas the other two enumerators administered the questionnaires and recorded the responses.

The team leaders were drawn from the West Pokot County Ministry of Health staff and ACF program officers who were highly experienced. The other data collection team members were largely drawn from community members with post-secondary school level of Education (KCSE) and with prior experience in surveys. The team leader was in charge of the data quality control in the team.

Each team was assisted by a village elder (recruited at the village level) to guide the survey team in locating the boundaries of the village and also with the population statistics for the households in the village. The consultant conducted two of the Key Informant Interviews (KIIs) and in addition sat in three (3) of the 29 FGDs.

Training of team members

Three-days of training on data collection were conducted before the commencement of the survey by the consultant in collaboration with ACF. The training focused on the objectives of the survey, methodology, interviewing techniques, accurate recording of responses, data collection tools and data entry. Role-plays on how to administer the questionnaire and record responses were also conducted for both quantitative and qualitative methods. Two pilots of the tools were done on the second and the third day of training. This was done in a nearby village from the training area, and in a village had not been selected as a survey cluster for inclusion in the survey. Thorough debriefing after each field activity was conducted and feedback shared.

Field pre-test of the survey tools

During the two field pilot exercises the consultant, ACF staff and MoH representative accompanied and observed the teams during the pre-testing in order to identify the weaknesses and strengths of the teams. The survey teams also piloted the survey procedures; sampling, interviewing techniques, and the duration taken to sample and interview one household noted. All the filled in questionnaires were checked by the consultant. The survey team met to give feedback on the pre-testing exercise and the necessary adjustments were made to the questionnaire.

Data Quality Control during collection and data entry

The quality of data was controlled as follows:

- Three day training of teams to ensure standardized the interviews and other data collection procedures;
- Field level cross checking of the questionnaires by the team leaders before leaving the households to ensure that they were filled correctly and completely;
- Spot checks by supervision team during data collection and making necessary corrections where necessary;
- Daily review of filled questionnaires followed by feedback to specific teams based on issues of concern
- The concurrent data collection and data entry provided early opportunity for individual feedback to enumerators on quality of data collected.
- Daily debrief meetings helped manage the teams, maintain team work and resolve any challenges resulting from group dynamics.
- The data entry team was involved in the preparation of the data template in SPSS. This helped build their confidence and competence in working with the data.
- The data entry team, practiced data entry with the pilot questionnaires before using the actual survey data.
- Upon completion, the data entry teams swapped questionnaires and did double entry for 10% of the total questionnaires (712) which were selected at random. This helped check the quality of data entry overall and by each data entry clerk.

In the end, the data collection and entry exercise was considered highly satisfactory.

Data management and analysis

Quantitative data
Data was collected from the households with children aged 0-23months. Data entry was conducted concurrently by a data entry team of three who were under the coordination and supervision of the consultant assisted by the ACF (MIYCN) Program Manager. Data was entered into the Statistical Software for Social Sciences (SPSS) version 20 and analyzed by the consultant. All the infant and young child feeding indicators were analyzed based on the WHO (2010) protocols.
Descriptive statistics were analyzed based on SPSS, then using the 2013 prevalence and sample size against the 2014 findings and the study design effect, t-test statistics were done to determine the statistical significance of differences in prevalence rates for indicators, with $p<0.05$.

Qualitative data
The data from both focus group discussions and key informant in-depth interviews were captured using pre-prepared note-takers sheets. Content analysis involved the detailed exploration for common themes and assigning of labels to variable categories. The categories or themes were identified in advance, in line with the objectives and scope of the assessment. The themes were clustered into a patterned order so as to identify variables that predicted general concepts and isolation of repetitions done. Inferences were made from

particular data under each theme and conclusions drawn from the findings. The qualitative data was used for triangulation of the findings; and to complement the quantitative data obtained from reported interview information. The qualitative data was also used to report findings on community's knowledge, attitudes and practices of MIYCN and C4D assessment of communication channels and behaviour assessment for C4D strategy development and integration. Analysis was based on the AED (2003) FGD participatory analysis protocol.

FINDINGS

A total of 672 households with care givers for 712 children 0-23 months interviewed with the following key findings.

Household profile

The survey findings indicate the main source of livelihood for the households is farming which entails both crop and livestock farming (43.4%) closely followed by slightly over a third of the households engaged in informal employment such as providing labour on farms and activities such as charcoal burning (34.0%).

Table 2: Household profile

Household Characteristics	N	%
Sex of head of household		
Male	541	99.3
Female	4.0	0.7
Main source of livelihood		
Rural agriculture	293	43.4
Informal employment	229	34.0
Pastoralism	61	9.2
Formal employment	50	7.4
Other (mining, urban agric. etc)	41	6.0
Average Household size		
Mean (sd)	5.2 (2.7)	

Majority of the respondents were in a form of union (95.3%) with very few either divorced, widowed or single (4.7%). On education, slightly over a third (34.4%) never having any formal education. This is close to what was recorded during the 2013 KAP survey (36.2%). On those with education, 38.4% of the respondents had completed primary education with only 11% having completed secondary education and above. This indicates high levels of illiteracy considering the national average is 19.3% based on the 2008-09 KDHS report, this has a negative implication on health behaviours and attitudes. Christianity is the predominant religion (95.4%). Most of the respondents (89.8%) were unemployed housewives.

Table 3: Respondent characteristics

Respondents characteristics	N	%
Marital status of respondent		
Currently married	498	75
Currently living together	135	20.3
Single/never married	24	3.6
Separated/divorced	5	0.8
Widowed	2	0.3
Respondent ever been to school		
Yes	426	59.8
No	245	34.4
Completed level of education of the respondent		
Primary	271	50.6
None	112	38.4

Secondary	46	6.6
College/University	31	4.4
Religion		
Christian	634	95.4
None	17	2.5
Traditional	8	1.2
Muslim	6	0.9
Main occupation		
Unemployed/housewife	598	89.8
Employed informal	36	5.4
Employed formal	17	2.6
Student	6	0.9
Other	9	1.3

Characteristics of children 0-23 months

There were slightly more boys (54%) than girls (45.6%) as had also been shown in the previous KAP survey of 2013. This representation was however not statistically different between the 2 survey findings. Of the total 0-23 month cohort, slightly over a third of the sample were from the age category of 0-5months, while the other age categories as described by the WHO, were as follows; 6-11months, 12-17months, 18-23months were 27.1%, 21.9% and 17.6% respectively. This a much better improvement on category age group attainment range compared to the sampling approach of the 2013 KAP survey which created a huge discrepancy range in age cohort spreads of between 37% (0-5 months old), 12% (6-8 months old) and 11.9% (12-15month olds). The attainment of high sample sizes per age category increases the chances of calculating IYCN indicators more accurately, especially for those indicators that require the use of a denominator from the upper age groups (complementary feeding and continued breastfeeding). The age of the child was verified from documented evidence (child health card or birth notification) for majority of the children (87.6%), this is important in terms of increasing the validity of the child's age, overall there was minimal age recall obtained from maternal recall, all of which were statistically significant.

Table 4: Characteristics of children aged 0-23 months

Characteristics	N	2014 KAP %	2013 KAP %	P-Value
Sex of children 0-23months	712			
Male		54.1	52.3	0.615
Female		45.9	47.7	0.615
Age of children in completed months	712			
0-5 months old		33.4	37.0	0.294
6-23 months old		66.6	63.0	0.383
6-11 months old		27.1		-
12-17 months old		21.9		-
18-23months old		17.6		
Range	0-23 months			
Mean (sd)	9.67 (6.67)			
Source of birth date	638			
Documentary evidence*		81.7	56.3	**0.000***
Seasonal/Events calendar		9.9	2.8	**0.000***
Maternal recall		8.5	40.9	**0.000***

*Child Health Card and Birth Notification

Source of drinking water

The predominant source of drinking water for close to half of the households is the river (48.6%) which increased significantly from 2013, followed by piped water (18.9%). In terms of access to safe drinking water (piped water, protected well and earth pan with infiltration) only 21.3% of households had access, with no significant change in this trend from 2013. There is need to invest in increased safe drinking water access through construction of more protected wells and earth pan, alongside piped water, plus water treatment.

Table 5: Sources of drinking water

Sources of water	N	2014 KAP %	2013 KAP %	P-Value
River	673	48.6	39.2	**0.009***
Piped water	673	18.9	22.7	0.199
Borehole	673	9.8	8.4	0.500
Unprotected spring	673	7.0	14.5	**0.001***
Unprotected shallow well	673	5.9	1.8	**0.002***
Laga	673	5.8	3.8	0.191
Protected pan with infiltration	673	1.2	-	-
Protected well	673	1.2	3.0	0.094
Lake	673	0.7	0.2	0.283
Protected spring	673	0.6	1.0	0.543
Dam	673	0.3	0.2	0.780

Distance to source of water and water treatment

Slightly over two thirds of the households take less than half an hour to and from a water source, but still slightly more than a third (36.7%) take one hour or longer to and from a water source, though there was a significant drop in the proportion who take more than one hour to a water source. Only a fifth of the households (20.4%) treat their drinking water. The predominant form of water treatment was boiling for just over half (56.9%) that treated their water, it is worth noting that use of herbs for treatment is also used, though by a small proportion (3.8%). The trend however, indicates a significant increase in water treatment especially use of boiling and chemicals which could be attributed to WASH initiatives in the area compared to 2013.

Table 6: Duration to water source and back

Duration of time to water source	N	2014 KAP %	2013 KAP %	P-Value
Duration				
Less than 30 minutes (<500metres)	674	63.4	57.9	0.122
Within 1 hour (>500 metres to <2km)	674	22.6	20.7	0.534
More than 1 hour but within 24 hrs(>2km)	674	14.1	21.3	**0.010***
Drinking water treatment				
Treats drinking water	670	20.4	27.1	0.315
Treatment given to drinking water				
Boiling	130	56.9	17.3	**0.000***
Chemicals	130	30.8	6.9	**0.000***
Filters	130	6.9	3.0	**0.011***
Traditional herbs	130	3.8	0.4	**0.001***
Decant	130	1.5	0.4	0.103

Access and utilization of latrines

A half of the respondents (50.8%) reported having access to a toilet, of the remaining half majority (90.4%) defecate in the bush. Of these, majority (83.6%) used traditional/pit latrine, with only 16.4% use either an improved pit latrine or flush toilet, there is a positive significant increase in the proportion using a ventilated improved pit latrine. The trend from 2013 indicates no change in the access and utilization for the other indicators.

Table 7: Access and utilization of latrines

Access to and utilization of latrines	N	2014 KAP %	2013 KAP %	P-Value
Got access to a toilet	666	50.8	48.7	0.563
Location of the toilet	**325**			
In compound		89.2		
Elsewhere		10.8		
Type of toilet/latrine	**317**			
Traditional/pit latrine		83.6	87.1	0.170
Ventilated improved pit latrine		16.1	11.2	**0.050***
Flush toilet		0.3	1.7	0.065
If No, where they defecate	**334**			
Bush		90.4	87.4	0.192
Near river/lagga		6.6	6.3	0.866
Open field		3	1.6	0.188

Hand washing practices

Hand washing is one of the key HiNi indicators. Only a quarter of the respondents (24.9%) practiced appropriate hand washing (use water and soap always). With a majority of those who use soap and water doing it sometimes (75.1%) a trend similar to the 2013. However, there was a significant rise in the proportion using water and soap sometimes, these needs to be assessed further to find out whether the cause is due to practice or lack of access to soap.

When it comes to occasions when hand washing is done, most of the respondents cited hand washing before eating or preparing a meal (94.8%). The other occasions were reported by less than a half of the respondents for each. Compared to 2013 there was a significant increase in hand wash during face cleaning, after attending to a child who has defecated, after handling animals and changing sanitary towels. With those gains and no drop in any indicator we can conclude that there are gains being made in improving hand washing practices.

Table 8: Hand washing practices

Hand washing practices	N	2014 KAP %	2013 KAP %	P-Value
Occasion when wash hands*				
Before eating or preparing meal	673	94.8	92.3	0.167
After using toilet/defecating	675	48.0	53.4	0.137
When washing face	673	42.9	30.3	**0.000***
After feeding child incl. breastfeeding	673	39.7	38.9	0.821
After attending to child defecated	673	39.2	30.3	**0.001***
After handling animals	673	25.4	17.2	**0.005***
When bathing	670	10.9	12.5	0.495
After changing sanitary towels	670	9.1	3.2	**0.001***

Others (e.g. from field)	671	7.6	-	
What is used to clean/wash hands	668			
Water and soap sometimes		75.1	59.4	**0.000***
Water and soap always		24.9	25.3	0.900
Water only		17.7	14.5	0.228
Others (e.g. animal urine)		0.2	0.6	0.400

Multiple responses

Maternal health seeking behaviours

Among the respondents only slightly over a third (35%) received advice to help them start breastfeeding. With 43.8% of them getting the advice from a health worker, with other sources combined being predominant (mother, grandmother, mother-law, neighbour). This indicates a gap while also providing a strong basis for working through other sources/channels to educate the women.

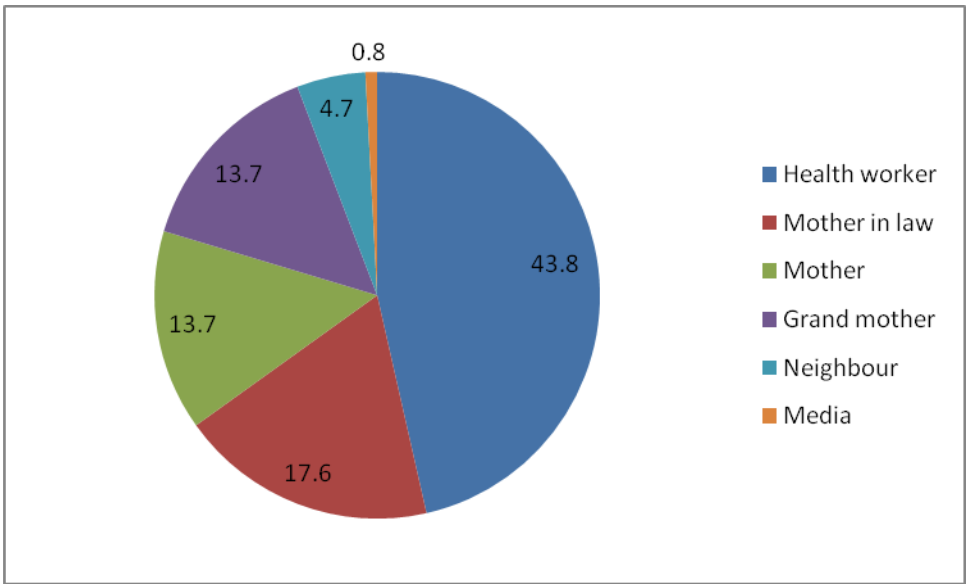

Figure 1: Percent source of advice on starting breastfeeding for 2014 KAP (N=256)

On complementary feeding 31.7% of respondents reported receiving advice on complementary feeding. Health workers were the predominant source of information, with mothers also playing a role. It is also notable we see a 13% proportion reporting CHWs an increase from 5.2% reported in 2013. This has implications on the need to strengthen health worker and CHW information delivery, engagement with mothers to ensure they have the right information and change their attitudes towards by giving the right IYCN information and advice. A review of the CHW trainings on IYCN shows that in June 2013 ninety two CHWs were trained on IYCN, and there exist documented presence of MtMSGs spread across the County covering 182 villages (Central – 48, South – 44, West – 46, North - 44). While Health worker training shows 31 trained as ToTs in April 2013 with a majority (80.6%) being men. With such high investment in MtMSG there is need to evaluate the implementation through process evaluation to see whether it is working and any challenges needing to be addressed.

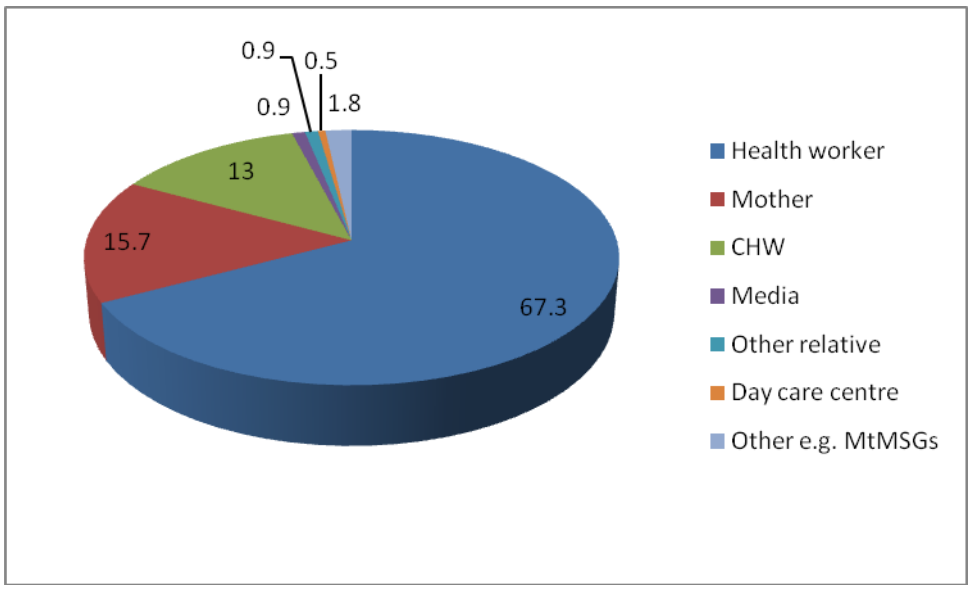

Figure 2: Percent source of information on complementary feeding 2014 KAP (N=189)

When it comes to decisions on what to feed the child, an overwhelming majority reported that it is the preserve of the mother (95.8%), hence the need to empower the mother with the right information.

ANC data was collected by maternal recall. Most respondents (88.2%) reported attending ANC during pregnancy (N=676), the 2008 KDHS had a national average was 92%; with a big proportion of those who did not attend citing distance to the clinic (60%), being unaware (20%) or feeling the TBA services were adequate (10.7%). Majority of those who went to ANC (60.8%) attended during the second trimester, with most (61.1%) attending ANC 3 to 4 times (N=593). Around two thirds also reported receiving information related to; place of delivery, own health, HIV and breastfeeding. Only close to a half of them reported getting information on their own nutrition. This indicates the need to integrate maternal nutrition in to IYCN.

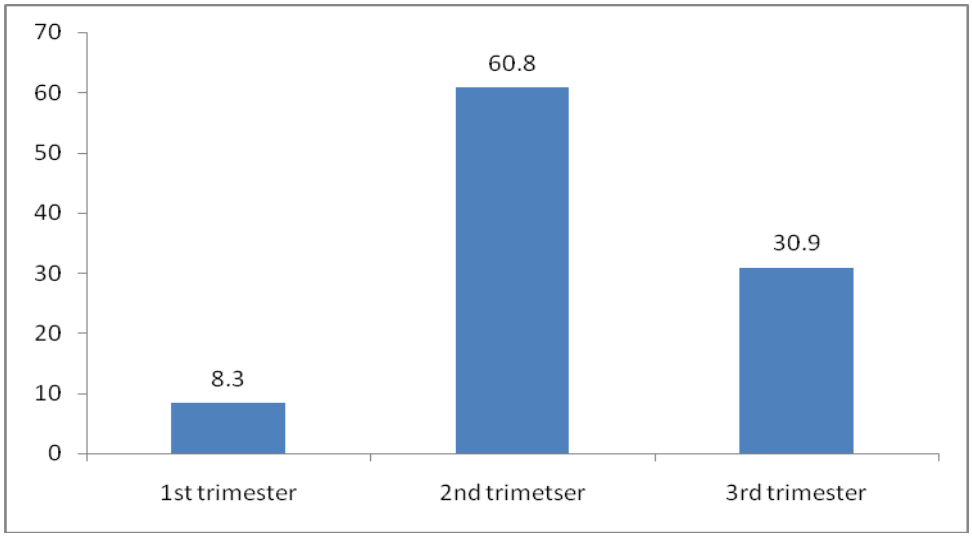

Figure 3: Duration of pregnancy during first ANC visit 2014 KAP (N=598)

Most respondents (85.8%) reported receiving iron and folate supplements (N=635). Two thirds (60.3%) delivered at home with assistance of a TBA, with only a third (32.2%) delivering at a health facility, the skilled delivery figure is higher than the 18% indicated in the West Pokot Strategic Plan for 2013-2017 (N=668). This indicates a big gap in terms of promoting skilled birth attendance at delivery. The findings from FGDs with men, women, CHW's, and KIIs with the officials from MOH and ACF are in agreement with these findings. The issue of distance to the health facility was widely repeated in the FGDs, as well as cultural perceptions and practices, for examples as one respondent said *"Pregnant mothers attend clinics when their pregnancy is clearly seen for example 4 months because there is fear of going for pregnant test and results turn negative".* There is need to promote partnerships between TBAs and health workers, so that they play the role of escorting mothers to facilities while providing emotional support to mothers in labour. Previous findings from the Kenya Safe Motherhood Demonstration Program (KSMDP) had similar recommendations especially in areas where over 40% of deliveries are by TBAs (KSMDP, 2003).

Table 9: Maternal experiences

Maternal experiences	N	2014 KAP %	2013 KAP %	P-Value
Attended ANC during pregnancy	676	88.2	55.1	**0.000***
Key reasons given for those who did not attend ANC Too far Not aware TBA services adequate Others (tired, no money, didnt want)				
Number of times attended ANC during pregnancy 1 - 3 4 and above	593	 69.9 30.1		
Type of information given during ANC visit Place of delivery HIV/AIDS Breastfeeding Own health Own nutrition	608	 64.1 59.9 57.9 56.6 49.7		
During pregnancy issued with iron and folate supplement	635	85.8		
Place of delivery for current child At home by TBA Health facility At home with auxilliary mid-wife At home without assistance Other (along the road, mother in law, neighbour)	668	 60.3 32.2 4.0 1.9 0.7		

Maternal IYCN knowledge and attitudes

Most women believed a child should be put to the breast immediately after birth (92%), be given colostrum (93.9%), be breastfed within half an hour of birth (78.8%), should not be given pre-lacteals (83.9%), and indicating the need to breastfeed exclusively up to 6 months (83.1%). These findings indicated a high level of knowledge and attitudes towards optimal breastfeeding practices.

Areas of low knowledge included; actual benefits of colostrums (less than 50%) to the child, and the type of utensil to use for feeding liquids to a child (cup/bowl without cover and with spoon) which was only mentioned by close to a quarter of the respondents (22.6%) only. Plain water (49.5%) and herbs (15.2%) were the most mentioned pre-lacteal feeds.

Table 10: Maternal knowledge on IYCN

Maternal knowledge	N	2014 KAP %	2013 KAP %	P-Value
A baby should be put to the breast immediately they are born	675	92	87.5	**0.044***
A baby should be given first milk that comes to breast during first 3 days after delivery	658	93.9		
Would feed baby on colostrums	636	92.3		
Reasons for those who would not give colostrum Its dirty milk, watery, child will vomit.	59	 83.1		
Benefits of breastfeeding colostrum to baby Provides energy Nutritious to the baby Prevents diseases/infections Cleans baby's stomach Dont know	633	 48.0 44.2 32.4 9.5 23.3		
After how long baby should be put to breast after birth Within 30 minutes Less than 1 hour Hours Days Dont know	674	 78.8 16.3 3.3 0.9 0.7		
Prelacteals Imediately after birth baby should be given something to drink/eat other than breastmilk	677	 16.1		
If yes should give the following Plain water Herbs Milk other than breastmilk Honey Sugar/glucose water Sugar/salt solution Infant formula	73	 49.5 18.0 10.1 10.1 9.0 2.3 1.1		
Its important to exclusively breastfeed up to 6 months	587	83.1		
Container that should be used to feed liquids to a baby Cup with a nipple/teat	602	 26.5 22.6		

Cup/bowl without cover with spoon Gourd Cup with holes Bottle with nipple		23.3 16.8 10.8		

Breastfeeding practices

Most of the children were ever breastfed (98.6%). There was a significant drop in use of pre-lacteal feeds, close to a fifth of the children (19.4%) were reported to have been given pre-lacteal feeds compared to 43.1% in 2013 KAP survey, most of which was plain water (45.6%), sugar water mixture (14.4%) and herbs (15.2%). This is largely practiced due to cultural practices as reported in the FGD, *"When a child is born we give the baby warm water before breast feeding to clean the child's throat and the stomach" "Also honey is important so that the mouth of the baby does not close"*

Proportion of children who were put to the breast within one hour of birth was significantly higher at 89.5%, compared to the 2013 KAP findings of 78.7%. Children that were exclusively breastfed to 6 months stood at 37.9% based on the 24-hr recall method this is lower than the 43.5% in the 2013 KAP survey though not significantly different.

Continued breastfeeding at 1 year (85.2%) and 2 years (65.7%) showed a declining trend as age progresses. These rates are significantly higher compared to the 2013 KAP figures of 82.8% and 50% respectively. Twenty six percent of the respondents reported practicing bottle feeding and other inappropriate use of drinking utensils, with covered cups and gourds being the predominant utensils.

Table 11: Breastfeeding practices

Breastfeeding practice	N	2014 KAP %	2013 KAP %	P-Value
Ever breastfed	694	98.6	98.0	0.524
Pre-lacteal feeds given	711	19.4	43.1	**0.000***
Types of pre-lacteal feeds Plain water Herbs Sugar/glucose water Animal milk Sugar/salt solution Honey Infant formula Tea infusions	125	 45.6 15.2 14.4 11.2 8.0 3.2 1.6 0.8		
Early Initiation of breastfeeding (0-23mo)	712	89.5	78.7	**0.000***
Exclusive breastfeeding under 6 months (0-5mo)	227	37.9	43.5	0.113
Continued breastfeeding at 1 yr (12-15mo)	115	85.2	82.3	0.276
Continued breastfeeding at 2 yrs (20-23mo)	70	65.7	50.0	**0.000***
Bottle feeding and other inappropriate drinking utensils (0-23mo)	517	26.1	-	

Complementary feeding practices

The proportion of children aged 6-8months that received solid, semi-solid or soft foods was significantly lower at 70.8% compared to the 2013 KAP survey at 83.6%, this could be

indicative of children receiving either breast milk or animal milk without any solid foods in the diet. The proportion of children with minimum dietary diversity (food from four or more food groups), shows poor dietary diversity among the three age categories listed by WHO, namely; 6-11 (11.2%) months, 12-17 months (20.8%), and 18-23months (21.8%). This is despite the minimum meal frequency of at least 2 meals for 6-8months and 3 meals for 18-23months old being high at 97.4% and 94.7% among breastfed children respectively. The poor dietary diversity scores contribute to the poor minimum acceptable diet proportions computed at 8.8% and 15.4% respectively, this perhaps explains the very high stunting rates recorded in the 2013 SMART survey at 46.6%. Further, consumption of iron rich foods (meats) was very low at below 10% for either age group.

Overall, appropriate complementary feeding which is measured by combining the proportion of children 6-23months still breastfeeding and receiving solids stood at 57.2%. Also compared to 2013 KAP there was a significant decline in complementary feeding indicators. A review of the 2012 integrated nutrition surveys shows closer trends to the 2014 survey than the 2013 findings, for example; dietary diversity for non-breastfed children who consumed 4 food groups and above was 10.5% in 2012 which is slightly below but around the range of figures emerging from the 2014 survey on dietary diversity status. The only findings from 2012 comparable to the 2013 findings are based on a cut off of 3 food groups as a minimum for breastfed children 6-23months and got a dietary diversity score of 36.5%, while for the 2014 survey when we re-analyze and use the 3 food group as minimum dietary diversity for breastfed children we get a minimum dietary diversity of 43.6%. Note, according to the WHO (2010) IYCN indicators recommendations the minimum dietary diversity is 4 food groups or more.

There is need to design interventions to tackle improvements in complementary feeding practices, especially; dietary diversity including consumption of iron rich foods among children 6-23months. Other factors that need to be borne in mind for improved complementary feeding include; women's workload which keeps them away from young children at times, poor livelihoods and food insecurity were among the reasons given during FGD's, also feeding practices such as use of tea as one respondent noted *"The young children are fed with milk, tea, porridge and ugali for 6-23 months the rest eat what the household members feed on".*

Table 12: Complementary feeding practices

Complementary feeding practices	N	2014 KAP %	2013 KAP %	P-Value
Introduction of solid, semi solid or soft foods (6-8 months)	89	70.8	83.6	**0.000***
Minimum dietary diversity				
6-11 months	179	11.2		
12-17 months	149	20.8		
18-23 months	124	21.8		
6-23 months	441	17.5		
6-23 months breastfed	326	16.3	52.0	**0.000***
Minimum meal frequency for breastfed				

children				
6-8 months (2 times)	78	97.4	24.5	**0.000***
9-23 months (3 times)	229	94.7	-	
Minimum acceptable diet				
6-8 months	102	8.8		
9-23 months	370	15.4		
Consumption of iron rich foods (meats)				
6-11 months	192	2.6		
12-17 months	156	3.2		
18-23 months	125	7.2		
Appropriate complementary feeding (BF plus solids) (6-23 mo)	463	57.2		

Responsive feeding is part of the psycho-social principles of active feeding practices. Evidence shows that active feeding habits have a positive effect on child growth (PAHO/WHO, 2001). From this survey, only slightly more than a third (36.0%) of the respondents reported doing something to encourage the child to eat, with the predominant action being verbal encouragement of the child (81.6%). The findings indicate a need to educate and encourage the caregivers on responsive feeding activities.

Table 13: Responsive feeding practices

Responsive feeding yesterday	N	%
Child ate all food he/she should	508	60.4
Did something to encourage child to eat	503	36.0
Actions taken		
Encouraged child verbally	184	81.5
Offered another food/liquid	189	10.6
Ordered strongly/forced child to feed	185	6.5
Another person helped child to eat	183	6
Gave other form of encouragement	184	3.8
Modelled food (with or without toy)	188	1.6
Talked to child while feeding main meal	356	46.9
Talking actions		
Praised child	241	68
Talked about the food	240	21.7
Ordered child to eat	242	19.8
Threatened child	237	3.8
Talked about other things	240	2.5
Told child she liked the food	238	2.1
Asked child questions	238	2.1
Rewarded the child	235	1.7
During main meal child self fed at any moment during meal	513	37.8
Child self fed as follows		
All the time	215	47
Half the time	215	31.6
Little bit of time	215	21.4

Maternal dietary diversity

Maternal nutrition is an important MIYCN issue as it is an important determinant of a mothers positive pregnancy outcomes as well as the child birth weight status (Muthayya, 2009). Development of the nine food groups was developed based on the FAO (2011) guidelines. The predominant diet from the maternal dietary diversity assessment included starches (98.7%) and dark green leafy vegetables (72.2%). With Animal Source Foods (ASF) being the least consumed at organ meats (1.5%), meats and fish (0.6%) and eggs (3.3%). Milk and milk products were the only high value protein and calcium sources reported at 58.7% (N=618). This diet indicates a very poor protein, iron, and zinc consumption.

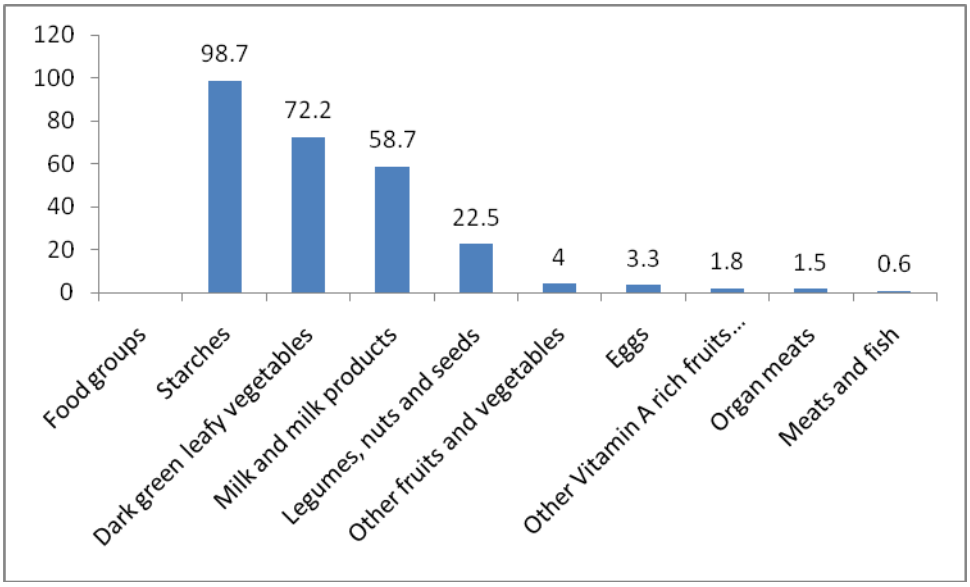

Figure 4: Percent maternal dietary diversity 2014 KAP

During FGDs and KIIs it among the factors contributing to poor maternal diets included; cultural practices such as prohibition of certain foods from women such as organ meats, women's workload, food insecurity, as one elderly woman said *"we believe some foods shouldn't be given to young child & mothers such as liver"* and one pregnant woman reported *"Immediately after delivery the mother is usually given porridge, ugali, while a few families slaughter a goat, there is no change for diet for most families". "The ugali that have stayed overnight 'rukwo' is not culturally accepted, one participant confesses to have had sleepless night when she took this", "A woman is not supposed to drink water for a month you only drink milk and porridge. it is believed if you take water you die".*

Factors influencing MIYCN practices

Based on the FGD and KII analysis the following were found to be the positive and negative MIYCN influencers

Table 14: Factors influencing MIYCN practices

Positive influences	Negative influences

• Universal initiation of breastfeeding, this was highly practiced and rated by the participants. • Giving colostrums, even though a few respondents reported it as being dirty milk, a big majority perceived it beneficial and went ahead to initiate. • Continued breastfeeding especially up to 1 year is well practiced, but faces challenges when early pregnancies occur as breastfeeding has stop. • Even though dietary diversity was very low, meal frequency indicated more feeding times.	• The practice of giving pre-lacteal feeds is common and culturally supported. As one FGD respondent said "*When a child is born glucose is very important and also some medicine from the forest. This medicine is included with the milk that the small child takes*" • Perception of inadequate breast milk among some breastfeeding mothers. "*Other mothers don't always have enough milk for the baby. This leads to other women introducing food for the child before 6 month*". • Women's workload seems to pose a challenge to their exclusive breastfeeding, "*Most lactating mothers don't practice exclusive breastfeeding because they are overworked*" also "*When mothers give birth, she is the one to know what she would eat. There is nobody to help her".* Men will expect household chores to be catered for as a priority, as one lactating woman reported "*if a mother is found breastfeeding and she has not fetched water for animals, she will be beaten*". • Family planning is not widely practiced (9.5% use of FP per strategic plan report 2013-2014), and is viewed negatively especially by the men, "*No discussion of Family Planning with the man at home since he can chase or beat you up*". Culturally one is highly regarded when they have many children, "*The men who are respected are ones with many children(children are source of prestige)*". Some women have negative associations to family planning, "*They believe when you take family planning medicine you get fat fast, you become lazy and cannot climb hills or carry firewood*". Thus pregnancy is used as a reason to stop breastfeeding, "*Breastfeeding stops immediately after one is pregnant*" and depending on the time it occurs it could lead to early cessation of breastfeeding "*Mothers become pregnant early hence breast feeding is terminated early*" • Negative perceptions about the types of foods to introduce to children is also a key hindrance to quality complementary foods, as one CHW said *"Not giving children eggs because they believe that if give them can't talk or delay speech"* • Cultural food practices and choices do constrain the types of foods especially animal sourced foods that pregnant and lactating

	women can feed on, *"Once you deliver you can't eat 'piapay',fatty meat" ,"Pregnant mothers don't eat organ eat" "The ugali that have stayed overnight 'rukwo' is not culturally accepted, one participant confesses to have had sleepless night when she took this", "Other foods restricted include; dead animal meat, vegetables that have been infested with worms 'ptalok' this is a taboo for pregnant women" "A woman is not supposed to drink water for a month you only drink milk and porridge.it is believed if you take water you die", "When one has taken fruits or meat one should not take milk because it is forbidden", "mothers who are pregnant are not given milk or eggs since it makes the child to grow fat and becomes a problem during time of delivery".* • Iron and folate supplement utilization is constrained by reported experiences of mothers from taking the supplements, "*Are given when they go for clinic but they don't take it. Because they feel nausea when they eat and vomit."* • Attendance to ANC and PNC is constrained by distance to health facilities, negative health seeking behaviours, '*why should one attend PNC if she is in good health*' • Hospital delivery faces constraints such as the hospital delivery cost as compared to a TBA cost "*Most women prefer delivering at home with assistance of TBAs, because they don't need instant payment and one can deliver a number of children and cost is cheaper since they only give out one goat*", this is rather unusual considering the government scrapped maternity fees. Negative perceptions about hospital delivery "*Those who have complications go to the hospital*", distance and terrain to the health facility "*Due to steep terrain, it is difficult to access women to teach them on MIYCN*", and the treatment received at health facilities, "*most of the nurses are harsh contributing to home delivery*" • Incentive workers such as CHW's feel lack of incentives to their work inhibits their willingness and enthusiasm to work, "*since there are no incentives to us, our husbands see it as a waste of time and so they refuse"*

MIYCN Communication channels

During the course of the FGD's and KIIs the following was noted as concerns communication channels for use in promoting MIYCN activities;

- Due to the diversity of the county in terms of livelihoods and subsequent wealth, access to media, such as radio, TV is not homogenous, and varies. The Northern and Central districts are more hardship areas with poor livelihoods hence access to radios and TVs would be minimal compared to South and Western regions.

- In areas where radio is accessible, local stations such as Kalya FM are seen as potential media channels. "*When a doctor goes in the broadcasting station,.. whereby the doctor is being asked questions to answer*"

- Avenues and channels to access men and village elders are important considering their role as heads of households and communities, "*Men should be taught about importance of balancing their families diet" "Village elders should be used to pass information to their villages"* "*Elders usually mobilize the community in case of a new message*"
- Use of chiefs baraza's presents another avenue, thus engagement with the community leaders on MIYCN and use of their forums is another opportunity "*When an idea is passed at a baraza they are effectively implemented at the household leve*l"
- Use of folklore media was also recommended as one of the channels. Adoption and formation of songs and dance after child birth. Songs should be geared towards MIYCN practices and the positive impact which will be created, and challenges to be tackled during the sessions too in MIMSGS.
- Markets are a key feature of the community life. In fact in some clusters we had to target days that are not market days, lest we find no one at home. Communication activities should be tailor made to coincide with market days, where better coverage and access is assured.
- During the survey period, few respondents cited accessing MTMSGs and the reason given from the ACF and MOH team, was that they have only recently decentralized MTMSGs from being facility based to community centre, hence the low coverage at the moment. There is need to closely monitor an support the MTMSGs to ensure they are held regularly and any challenges needing technical support provided.
- Majority of the community members are Christians, there is need to organize sensitization, awareness and seminars on MIYCN among church leaders. This will likely have a trickledown effect to the community as they engage with the community in church.
- Illiteracy is quite high among the community, there is therefore need to tailor make IEC materials in local languages, also enhanced use of pictorials and songs to help those who cannot read.

- For those community members who are unable to regularly access health facilities due to distance, there is need to look for ways of availing BCC materials to them, in ways that they can easily understand and use.

Governance and development devolution context

The West Pokot County Integrated Development Plan (CIDP) 2013-2014 prioritizes among other sectors health, water and sanitation, and agriculture. The government proposes to establish 34 new dispensaries while improving the facilities and staffing levels in the existing health infrastructure. Water supply, and harvesting technologies targeting over 116,000 households. On Agriculture initiatives proposed include expanded irrigation activities in Lormut, Cherangen, Seker, Masol, Riwo, Sebit and Endugh, alongside County accelerated NAAIAP program to help boost food access.

COMMUNICATION FOR DEVELOPMENT (C4D) ASSESMENT AND ANALYSIS

Behaviour Change Communication practices that aim at developing skills and capabilities to manage ones won health and development are needed. C4D is one such strategy (UNFPA2006, UNICEF/WHO, 2010). The following section using the C4D concept to assess, analyze and come up with a strategy.

Problem analysis

It is important to identify and distinguish behavioural from non-behavioural problems to be targeted in BCC interventions.

Table 14: Communication for development problem analysis

Problem:	Poor Maternal Infant and Young Child Nutrition (MIYCN)		
Manifestation	- Low exclusive breastfeeding rates - Low ANC attendance and frequency - High home deliveries - Poor child and maternal dietary diversity - Poor acceptable diet and low iron consumption - Poor responsive feeding practices		
Level of causality	**Behavioural causes**	**Non-behavioural causes**	**Sources of information**
Immediate causes	- Giving prelacteal feeds - Perceived inadequacy of breast milk - Low uptake of FP services - Ignorance and lack of participation among men and village elders on EBF - Preference for home delivery - Poor food allocation and choices by sex	- Food insecurity - Women's workload - Poverty	- MIYCN KAP survey 2014 - KAP survey 2013,

	and age - Lack of active engagement of child during feeding		
Underlying causes	- High levels of illiteracy - Low prioritization of Breastfeeding promotion funds at county level	- Poor transport infrastructure - Low nutrition staff numbers in health facilities	- MIYCN KAP survey 2014 - KAP survey 2013,
Basic causes	- Low outreach level	- Lack of funds	- KII

Problem statement: *West Pokot County has poor maternal infant and young child nutrition. This is probably as a result of the following: low literacy, food insecurity, poor cultural practices related to pre-lacteal feeding, high home deliveries, low ANC attendance and frequency, lack of involvement of men and village elders, leading to low exclusive breastfeeding rates under 6 months of age, poor maternal and child dietary diversity, poor acceptable diet and low in iron, and inadequate responsive feeding practices.*

Behaviour rating and prioritization

Based on; relevance, occurrence and impact of the behaviours. A review is done on the changeability and importance rating.

Table 15: Communication for development behaviour rating and prioritization

Rating	More important	Less important
More changeable	Priority 1: *More changeable and important behaviours* - Ignorance among men and elders on EBF - Perceived inadequacy of breast milk - Giving of pre-lacteal feeds - Poor food allocation choices by sex and age - Poor dietary diversity of children and women - Active engagement of children during feeding - Preference for home delivery	Priority 3: *More changeable but less important behaviours* - Low prioritization of Breastfeeding promotion funds at county level
Less changeable	Priority 2: *Less changeable but more important behaviour* - Low level of outreach reported in vast county	Priority 4: *Less changeable and less important behaviours* - Low literacy

Behaviour analysis worksheet

Aims at a better understanding of the selected behaviours to be promote in place.

Table 16: Communication for development behaviour analysis

Problem	Manifestation	Behaviours to	Barriers to ideal	Factors

behaviour		promote	behaviour	promoting ideal behaviour
Ignorance among men and KI on EBF	Men and village elders having very minimal involvement on BF practices and support	Men and village elder involvement in BF activities and support	- Negative traditional believes - Ignorance	- Men and village elders appear receptive to listen and participate - Health staff and local leadership pledged support
Perceived inadequacy of breast milk	Introduction of other liquids and foods before six months	Exclusive breastfeeding to six months	- Ignorance - Lack of confidence	- Mothers demonstrate eagerness to learn
Giving of prelacteal feeds	Introduction of honey, herbs, cows milk and water before initiating BF after birth	Initiation of breast milk immediately after birth only	- Negative traditional believes - Influence from grandmothers	- Grandmothers ready to engage in discussions and learn - TBAs sometimes accompany mothers to facility
Poor food allocation and choices by sex and age	Restriction of organ meats to women, lack of diverse and nutrient dense foods including ASF in children's diet.	- Increased intake of ASF by women and children	- Negative traditional believes - Predominant use of animals for sell and not food	- ASF are available - Use of ASF part of the community
Poor maternal and child dietary diversity	Very limited diversity in diet consumed	- Improvement in local diets through diets and recipes that add diversity	- Poverty and limited livelihood options in some regions. - Negative traditional practices on food allocation	- Some regions are rich in food availability and access. - Men and other stakeholders willing to listen
Active engagement of children during feeding	Minimal active engagement of young children during feeding	- Active engagement of mothers and caregivers during child feeding	- Women's workload	- Mothers receptive to learn
Preference for home delivery	High TBA deliveries	- Promote partnerships with TBA	- Few and far health facilities in	- Some facilities reported TBAs accompanying

			some of the areas	mothers to deliver.

Participant analysis

This involves identification of target audience, partners or allies, plus organizations that can support communication efforts.

Table 17: Communication for development participant analysis

Problem behaviour	Participants			
	Program communication		Social mobilization	Advocacy
	Primary target	Secondary audience	Partners/allies	Partners
Ignorance among men and village elders on EBF	Men, village elders	Religious leaders,	Chiefs and headmen, Health workers	Health workers, county leaders, other NGOs
Perceived inadequacy of breast milk	Women	Grandmothers, mother in law, TBAs	Chiefs, headmen, health workers	Health workers, other NGOs, county leaders
Giving of pre-lacteal feeds	Women	Grandmothers, mother in law, TBAs	Chiefs, headmen, men, health workers	Health workers, other NGOs, county leaders
Poor allocation and food choices by sex and age	Men , women, village elders	Religious leaders, county leaders	Chiefs, headmen, men, health workers	Health workers, other NGOs, county leaders
Poor maternal and child dietary diversity	Women and children	Men	**Chiefs, headmen, men, health workers**	Health workers, other NGOs, county leaders
Inactive engagement of children during feeding	Women and children	Grandmothers, mothers in law, men	Chiefs, headmen, men, health workers	Health workers, other NGOs, county leaders
Preference for home delivery	TBAs	Mothers	Chiefs, headmen, men, health workers	Health workers, other NGOs, county leaders

Channels/media analysis

A review and mapping of communication channels is made. Assessment of their strengths and weakness and effective reach is important to consider.

Table 18: Communication for development channels/media analysis

Target audience	Group affiliation	Where do they spend substantial time?	Whom do they consult on health matters?	Who else can influence them on health related matters?	Channels to be used in communication
Problem behaviour 1: ***Ignorance among men and village elders on EBF***					
Men, village elders	Men's groups	In meetings within the community and around	- Health workers at facility, - Traditiona	- County leaders - Chiefs and headmen	- Talks and meetings - IEC materials

		market centres	l healers		- Community broadcasts
Problem behaviour 2: **Perceived inadequacy of breast milk**					
Women of reproductive age	- Women's merry go round groups	In the homestead, farms, and markets	- Health workers - TBA's - CHW	- Grandmothers, mother in law, husbands	- Talks and meetings - IEC materials
Problem behaviour 3: **Giving of prelacteal feeds**					
Women of reproductive age, grandmothers and mother in laws	- Women's groups	In the homestead, farms, and markets	- Health workers - TBA's - CHW	- County leaders - Chiefs and headmen	- Talks and meetings - IEC materials
Problem behaviour 4: **Poor allocation and food choices by sex and age**					
Men, women, village elders	- Women's groups. - Elders forums - Men's groups	In the homestead, farms, and markets	- Health workers - TBA's - CHW	- County leaders - Chiefs and headmen	- Talks and meetings - IEC materials - Community broadcasts
Problem behaviour 5: **Poor maternal and child dietary diversity**					
Men, women	- Men's groups - Women's groups	In the homestead, farms, and markets	- Health workers - TBA's - CHW	- County leaders - Chiefs and headmen	- IEC materials - Talks and meetings - Community broadcasts
Problem behaviour 6: **Inactive engagement of children during feeding**					
Women, grandmothers, children	- Women's groups - schools	- In the homestead, farms, and markets - Schools	- Health workers - TBA's - CHW - Teachers	- County leaders - Chiefs and headmen	- Folk media (songs, dances, drama) - IEC materials - Short Films - Community broadcasts
Problem behaviour 7: Preference for home delivery					
TBAs	Womens groups	Homesteads	- Health workers at times	- County leaders - Headmen - Health workers	- Folk media (songs, dances, drama) - Talks and meetings

Communication objectives, strategies, activities and M&E

Objectives

8. Men and village elders will support and encourage exclusive breastfeeding up to 6 months of age.
9. Women and caregivers will stop giving prelacteal feeds to children at birth.

10. Breast feeding mothers will exclusively breastfeed for six months
11. Allocation of food in the household will not discriminate on age and sex of the individuals.
12. Women and children's diet will incorporate more food groups including animal source foods.
13. Active and supportive feeding of children will become a common practice in the community.
14. TBAs will play an emotional support and referral role to pregnant women.

Strategies and activities

Table 19: Communication for development strategies, activities and M&E

Objective	Strategies	Activities	M&E Indicators
1, 4 & 5	- Train male health workers on MIYCN - Mobilize men and village elders and engage them through Community Conversations on MIYCN training and changing cultural practices to support women and children. - Develop communication materials on, pre-lacteal feeding, maternal and young child nutrition, and good eating practices for women and children, and responsive feeding targeting men and village elders	- Development of training materials on MIYCN targeting men and village elders (church leaders, teachers, elders). - Training of male health workers on MIYCN - Mobilization of men and village elders - Community Conversations on EBF with men and village elders - Community Conversations on food culture as it related to women and children with men and village elders	- Training materials for men and village elders developed on relevant themes - No of trainings for male health workers on MIYCN - Meetings held and no of men and village elders mobilized - No of training groups formed for men and village elders - No of Community Conversations held per month per area - Content taught per session
2, 3, 4, 5 & 6	- Development of MIYCN materials content specific to pre-lacteal feeding, maternal and young child nutrition, and good eating practices for women and children, and responsive feeding - Training of health care workers on content above - Strengthening MTMSG's with specific focus on the above topics.	- Development of training materials on MIYCN targeting women and children on stated content/themes. - Training of health workers on MIYCN - Formation of MTMSG's - Establishment of quarterly forums to engage with Grandmothers, TBAs, mothers in law - Road shows and film sessions targeting market days in different villages show casing songs, dances, films, community broadcasts on	- Training materials developed based on stated content/themes. - No of trainings held for health care workers including CHWs based on agreed content/theme. - No of MTMSG formed and frequency of meetings per month. - No of forums established for engaging

	- Development of communication material on the above content through folklore, community broadcasts, and local-based films.	stated content/themes.	grandmothers, mother in laws. - No of quarterly meetings held with grandmothers/mothers in law per agreed schedule. - No of songs, dramas developed on content/theme. - No of road shows held and target markets covered as agreed.
7	- Promote partnership between TBA and Health workers	- Train TBAs on identification and early referral of obstetric complications - Train TBAs on emotional support of pregnant women - Establish an incentive program for TBAs bringing mothers to facilities in a timely manner.	- No of TBA trainings on referral done. - No of trainings to TBAs on emotional support to pregnant mothers using folklore, songs, and meetings. - Status of incentive program.
All	- Sensitization and advocacy meetings and talks with county leaders, chiefs and headmen on MIYCN and the role of culture. - Sensitization meetings held with the County council on research for technology and development (CCRTD) - Sensitization and partnership building meetings with other partners on the ground including NGO's, CBOs	- Quarterly meetings with county leaders, chiefs and head men on MIYCN and the need to change cultural practices. - Quarterly meetings with CCRTD. - Mapping out all the relevant stakeholders and partners needed to integrate MIYCN. - Targeting and arriving at working partnerships with other stakeholders on MIYCN related activities.	- No of county leaders, chiefs and headmen targeted. - No of quarterly meetings held per agreed schedule. - No of partnerships formed. -

CONCLUSION

Generally women appear knowledgeable on MIYCN issues with gaps seen in areas such as; appropriate feeding utensils, benefits of colostrums and pre-lacteal feeding. The mother is the predominant decision maker on what to feed the baby. The citing of MtMSGs as a source of information was however very low even though ACF has invested heavily.

Feeding practices are low, especially EBF, use of inappropriate feeding utensils, dietary diversity, and responsive feeding. Poor dietary diversity is largely due to low intake of animal sourced foods among both children and women. Minimum acceptable diet (adequate dietary

diversity and meal frequency) was very low due to poor dietary diversity even though the meal frequency was high.

Socio-cultural practices are a major hindrance to both infant and maternal nutrition practices, and need to be addressed. Maternal diets are very poor due to food insecurity and socio-cultural practices. C4D is likely to play a big role in addressing this behaviour gaps.

The predominant livelihood activities are rural agriculture and informal employment. High level of illiteracy (34.3%) compared to the national average of 19.3%. This has implications on the approach to training and education materials development and subsequent uptake.

Access to safe drinking water still remains a big challenge to a large majority of the residents of West Pokot County, the main source of drinking water is river, with safe drinking water (piped water, protected well and earth pan with infiltration) accessible to only 21.3% of households. Also, around a third (36.7%) of the households take one hour or longer to a water source, with only a fifth (20.4%) treating their water. Half of the residents do not have access to a toilet/latrine and majority of them use the bush to defecate. When it comes to hand washing, only a quarter of the residents practice appropriate hand washing (use of soap and water always).

Access and utilization of health services is still a major challenge. The biggest hindrance is distance to health facilities and the hilly and wild terrain for most of the regions. This is especially so in North, Central regions. Access to breastfeeding information was reported by only a third of the mothers (35%) similar to complementary feeding information (31%). It is important to note that the predominant source of information is from the health worker.

Two thirds of women delivered at home. This was largely due to distance to the health facilities and a high preference for TBA delivery.

A further review of literature indicates that with devolution of funds and governance, the West Pokot County government has come up with a County Integrated Development Plan (CIP) for 2013-2017, which has health, water and sanitation among the priority areas.

In order to improve MIYCN practices in West Pokot County Behaviour Change Communication (BCC) is needed. Upon C4D analysis and rating the following seven problem behaviours need to be tackled;

- Limited awareness and participation of men and elders on infant feeding is playing a big role. It denies women and caregivers the support they need from key decisions makers.
- Perceived inadequacy of breast milk seems to be a major reason as to why women are not practising exclusive breastfeeding up to six months. There is need to educate the women as well as build their confidence.
- Giving of prelacteal feeds is culturally engrained in this community. During focus group discussions it became apparent that key influencers such as grandmothers and mothers in law play a big role in strengthening this negative practice.

- Poor food allocation choices by sex and age. Food allocation practices among the community is such that some food taboos deny women and children access to certain good quality foods, especially animal source foods. Yet, in areas within the same area where integration to other cultures has taken place such as in the South, these practices are not being practiced. The custodians of these cultures need to be engaged in structured discussions to change some of these practices which lead to poor dietary diversity of children and women. This is partly due to negative cultural practices, poor nutrition practices such as selling all the food, and food insecurity. There is need to tackle those behavioural aspects that can easily be changed.
- Active engagement of children during feeding was noted to be low. It is important to actively engage in child feeding. The use of communication channels such as folklore would play a key role in encouraging this practice.
- Very high TBA assisted deliveries at home. Need to partner with TBAs so as to play an emotional support and referral role to pregnant women.

RECOMMENDATIONS

The recommendations target service delivery improvement and systems strengthening as well as C4D.

Issue	Recommendation	Responsible
Minimal gains in translation of knowledge into practice by mothers and caregivers	Implement proposed C4D strategy	MoH, ACF, WPCG
	Mapping out and developing working relationships with all the relevant stakeholders and partners needed to integrate MIYCN through BCC	MoH, ACF, WPCG
Desire for MIYCN information is evidently high among women and caregivers	Development of content specific training materials on MIYCN targeting men, village elders (church leaders, teachers, elders), women, children and health workers.	MoH, ACF, WPCG
	Strengthen MtMSGs through strengthened supervision of meeting schedules. Process evaluation of MtMSGs program to understand its effectiveness, efficiency, uptake, and any challenges being faced in roll out.	MoH, ACF, WPCG
	track availability of MCHN booklets in the registers	MoH, ACF, WPCG

Cultural barriers to optimal MIYCN practices	A review of training gaps on MIYCN especially among health workers in areas such as maternal nutrition and behaviour change, since much of the previous training has centred on IYCN.	MoH, ACF, WPCG
	Road shows and film sessions targeting market days in different villages show casing songs, dances, films, community broadcasts on MIYCN.	
	Regular engagement with County government leaders, chiefs and head men on MIYCN and advocacy on the need to change cultural practices.	
Low MIYCN knowledge and participation amongst men and other stakeholders on MIYCN	Mobilization and engagement with men, village elders, grandmothers, TBAs through Community Conversations around MIYCN activities and food culture.	MoH, ACF, WPCG
High food insecurity and low women empowerment	Advocate for acceleration of other interventions that address food insecurity and economic empowerment of women economically. The role of ACF would be to work closely with the CPU (County Planning Unit) as a stakeholder and undertake advocacy work while actively participating in the performance review meetings to ensure the facility increase, water availability, and irrigation targets are being realized.	MoH, ACF, WPCG

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APPENDICES

APPENDIX 1: Survey work plan

Activity	February (week)			March (week	
	2	3	4	1	2
Selection of consultant and signing of contract					
Present write up of understanding of the TORs and inception note					
Develop and present detailed survey work plan					
Present survey protocol to ACF and NIWG*					
Identification and selection of enumerators					
Training of enumerators and pretest of the data collection tools					
Modify the tools as required and printing of the questionnaires					
Data collection					
Data entry and cleaning					
Data analysis and report writing					
Present the preliminary findings/draft zero report to ACF core team					
Address comments and present draft 1 to ACF and NIWG for approval					
Address any comments and present final report to ACF and NIWG					
Submit all data in soft copy and all filled surveys forms/tools to ACF					

APPENDIX 2: Household survey questionnaire

MINISTRY OF HEALTH IN KENYA

MATERNAL, INFANT AND YOUNG CHILD NUTRITION PROGRAM

KAPS QUESTIONNAIRE 2014

MAIN QUESTIONNAIRE

BACKGROUND		
1.0	COUNTY CODE	
1.1	START TIME (24HRS)	
1.2	FIELD WORKER'S CODE	
1.3	CLUSTER CODE	
1.4	DATE OF INTERVIEW (DD/MM/YYYY)	
1.5	SURVEY RESULTS	COMPLETED ..... 1 INCOMPLETE 2
1.6	DATE OF FOLLOW UP VISITS	
1.7	HOUSEHOLD NUMBER	
	SCREENING FOR ELIGIBILITY	
1.6	Is there a child in this household aged 0-23 months?	**IF 'NO' DISCONTINUE AND MOVE TO NEXT HOUSEHOLD**
1.7	If YES how many children aged 0-23months are their?	
1.8	What is the NAME of the mother/caregiver of the child/ren aged 0-23months?	
1.9	For child/ren aged 0-23months indicate his/her/their age in completed months?	Child 1: ..... Child 2: ..... Child 3: .....
1.10	Have you confirmed child's age?	Yes....1 No....2
1.11	What is the child's date of birth	.....
1.11	How was child's age confirmed? **RESPONSE CODE** 1. Health card 2. Birth certificate 3. Baptism card 4. Seasonal calendar 5. Other (Specify)..	Child 1: ..... Child 2: ..... Child 3: .....

HOUSEHOLD ROSTER

INSTRUCTIONS

Please fill the table below for details of each person who currently live here, starting with the head of the household.

Add a continuation sheet if there are more than 10 household members.

Tick here if continuation sheet was used	

NOTE: Household: People who live together and eat from the same pot

2.0	**2.1 Line**	**2.3 Is (NAME) Male or Female?** [Male =1 Female =2]	**2.4 Please tell me how old (NAME) is.; How old was (NAME) on his/her last birthday?** Record age in completed years; 98=DK	**2.5 Relation to head of household**	**2.6 Level of education** [None=1, Incomplete primary=2, Complete primary=3, Incomplete secondary=4, Complete secondary=5, Incomplete College/University=6 Complete College/University=7]
	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				

	10				

RESPONDENTS DETAILS			
3.1	What is the SEX of the respondent?	Male.....1 Female.....2	
3.2	What is your marital status?	CURRENTLY MARRIED.....1 CURRENTLY LIVING TOGETHER .....2 SEPARATED/DIVORCED .....3 WIDOWED .....4 SINGLE/NEVER MARRIED 5	
3.3	Have you ever been to school?	Yes.....1 No.....2	→ 3.5
3.4	What is the highest level of education that you completed?	None .....1 Primary .....2 Secondary .....3 College/University 4	
3.5	Which religion do you belong to?	Christian .....1 Muslim .....2 Traditional .....3 Hindu .....4 None .....5 Other (specify) 96	
3.6	What would you say is your main source of livelihood currently?	Informal employment .....1 Formal employment .....2 Rural agriculture .....3 Urban agriculture .....4 Remittances .....5 Pastoralism .....8 Mining .....9 Fishing .....10 Other (specify.....96	
3.7	What is your current occupation?	Unemployed/Housewife.....1 Employed Informal .....2 Employed Formal .....3 Student .....4 Other (Specify) 96	

BREASTFEEDING

4.1	Was (NAME) ever breastfed?	Yes .....1 No .....2 Don't know 98	→ 4.3 → 4.2 → 4.4
4.2	IF NO, Why was (NAME) never breastfed? *DO NOT PROMPT; RECORD THE MOST IMPORTANT REASON.* *IF MORE THAN ONE REASON IS GIVEN, PROBE FOR THE MOST IMPORTANT AND CIRCLE AS APPROPRIATE.*	Baby ill .....1 Baby unable to suckle .....2 Baby refused to suckle .....3 Mother refused .....4 Spouse refused .....5 Mother was sick .....6 No/inadequate breast milk .....7 Mother was away .....8 Mother died .....9 Sore/cracked nipples .....10 Advice by health professional .....11 Advice by other person .....12 Baby incubated/in nursery .....13 Other (Specify) .....14 Don't Know 98	
4.3	How soon after birth did you put (NAME) to the breast?	Within 30 minutes .....1 Less than 1 hour .....2 Hours .....3 Days 4	
4.4	After birth was (NAME) given anything before being introduced to breast milk?	Yes .....1 No.....2 Don't know 98	→ 4.7

4.5	IF YES, What was (NAME) given to drink? *[Multiple response possible]*	MILK (OTHER THAN BREAST MILK.....1 PLAIN WATE.....2 SUGAR/GLUCOSE WATER .....3 GRIPE WATER .....4 SUGAR/SALT SOLUTION .....5 FRUIT JUICE .....6 INFANT FORMULA .....7 TEA/INFUSIONS .....8 COFFEE .....9 HONEY .....10 OTHER (SPECIFY) 96	
4.6	What are the reasons (NAME) was given drinks other than breast milk? *[Multiple responses possible]*	NOT ENOUGH BREAST MILK .....1 BABY CRIED TOO MUCH .....2 CULTURAL REASONS .....3 WORK RELATED OBLIGATIONS .....4 WEATHER TOO HOT .....5 FIRST MILK NOT GOOD FOR BABIE.....6 OTHER (SPECIFY) 96	
4.7	After (NAME) was born did you receive any practical support or advice to help you start breastfeeding?	Yes .....1 No .....2 Don't know 98	→ 4.9
4.8	From whom did you receive advice from?	Mother .....1 Father .....2 Grandmother .....3 Mother-in-law .....4 Other relative .....5 House girl .....6 Neighbor .....7 Day Care Center .....8 No one (self) .....9 Siblings .....10 Health worker .....11 Media (print, radio, tv) .....12 Other (specify) 96	

4.9	In your opinion, should a baby be put to the breast immediately they are born?	Yes.....1 No .....2 Don't know 98	
4.10	Should a baby be given the first milk that comes from the breast during the first 3 days after delivery?	Yes.....1 No .....2 Don't know.....98	
4.11	Would you feed your baby on that first milk (colostrum)?	Yes.....1 No.....2 Don't know 98	→ 4.13
4.12	What are the benefits of feeding baby on colostrum? *[Multiple responses possible]*	Nutritious TO BABY .....1 Provides energy .....2 Prevents diseases/infections .....3 Cleans baby's stomach .....4 Nothing specific .....5 Don't know .....98 Other (specify) 96	
4.13	Why would you not feed your baby on colostrum?	Its dirty milk .....1 Not satisfying/ sufficient .....2 Mother needs to rest .....3 Cultural practices (Specify) .....4 Other (Specify) 5	
4.14	After how long from birth should a child/baby be put to the breast?	Within 30mins .....1 Less than 1 hour .....2 Hours .....3 Days .....4 Don't know 98	
4.15	Immediately after birth should a baby be given anything to drink/eat other than breast milk?	Yes.....1 No .....2 Don't know 98	→ 5.1 → 5.1

4.16	If yes, what should the baby be given?	MILK (OTHER THAN BREAST MILK).....1 PLAIN WATER .....2 SUGAR/GLUCOSE WATER .....3 GRIPE WATER .....4 SUGAR/SALT SOLUTION .....5 FRUIT JUICE .....6 INFANT FORMULA .....7 TEA/INFUSIONS .....8 COFFEE .....9 HONEY .....10 OTHER (SPECIFY) 96	
EXCLUSIVE BREASTFEEDING			
5.1	Is (NAME) still breastfeeding?	Yes .....1 No 2	
5.2	Was (NAME) breastfed yesterday during the day and at night?	Yes .....1 No .....2 Don't know 98	→ 5.3
Next I would like to ask you about some liquids and semi-solids that (NAME) MAY HAVE had yesterday during the day or at night;			
READ THE EXAMPLES OF LIQUIDS LISTED BELOW **LIQUIDS**: MILK (OTHER THAN BREAST MILK), PLAIN WATER, SUGAR/GLUCOSE WATER, GRIPE WATER, SUGAR/SALT SOLUTION, FRUIT JUICE, INFANT FORMULA, TEA/INFUSIONS, COFFEE, HONEY etc.			
5.3	Did (NAME) take ANY of these liquids?	Yes .....1 No 2	→ 5.5
5.4	If YES, which ones? MULTIPLE RESPONSES POSSIBLE	MILK (OTHER THAN BREAST MILK) .....1 PLAIN WATER .....2 SUGAR/GLUCOSE WATER .....3 GRIPE WATER .....4 SUGAR/SALT SOLUTION .....5 FRUIT JUICE .....6 INFANT FORMULA .....7 TEA/INFUSIONS .....8 COFFEE .....9 HONEY .....10 OTHER (Specify) 96	
READ THE EXAMPLES OF SEMI-SOLIDS LISTED BELOW SEMI-SOLIDS: CEREALS, VEGETABLES, FRUITS, MEATS, PULSES/LEGUMES, etc.			

5.5	Did (NAME) take ANY of these semi-solids?	Yes .....1 No 2	→ 5.8
5.6	If YES which ones? *[Multiple response possible]*	CEREALS .....1 VEGETABLES .....2 FRUITS .....3 MEATS .....4 PULSES/LEGUMES 5	
5.7	At what age was (NAME) first introduced to other foods (liquids or semi solids) in addition to breastfeeding?	***Indicate as appropriate (one response)*** Day Weeks Months	
5.8	In your opinion is it important for a baby to be breast fed for six months without being introduced to anything else to eat or drink/including water?	Yes .....1 No 2	
CONTINUED BREASTFEEDING			
6.1	Is (NAME) still breastfeeding?	Yes .....1 No 2	→ 7.1
6.2	For how long did (NAME) breastfeed?	***Indicate as appropriate (one response)*** Days Weeks Months Don't know	
6.3	Why did (NAME) stop breastfeeding?	Baby ill .....1 Baby refused to suckle .....2 Mother refused to breastfeed .....3 Mother was sick .....4 No/little breast milk .....5 Spouse recommended .....6 Sore/cracked nipples .....7 Mother was away .....8 Mother died .....9 Baby was old enough to stop .....10 Baby got teeth .....11 Advice by health professional .....12 Advice by other person .....13 Other (specify) .....96 Don't know 98	

BOTTLE FEEDING			
7.1	Yesterday during the day or night did (NAME) drink anything?	Yes ……1 No ……2 Don't know ……98	 → 7.3 → 7.3
7.2	If yes, which container did (NAME) drink from? *[Multiple response possible]*	Bottle with nipple/teat ……1 Cup with nipple/teat ……2 Cup with holes ……3 Cup/ bowl with no cover and spoon ……4 Gourd ……5 Other (specify) ……96	
7.3	What should be used to feed LIQUIDS to a baby?	Bottle with nipple/teat ……1 Cup with nipple/teat ……2 Cup with holes ……3 Cup/ bowl with no cover and spoon……4 Gourd ……5 Other (specify) ……96	
INTRODUCTION OF SOLIDS, SEMI-SOLIDS OR SOFT FOODS			
8.1	At what age did you feed [NAME] her/his first solid /semi-solid food? *[By "solid or semi-solid foods," we mean food that is thick, not a soup, broth, or thin porridge]*	Less than 6 MONTHS ……1 SIX COMPLETED MONTHS ……2 DON'T KNOW ……98	
8.2	Have you received any information about feeding your baby solid, semi-solid foods?	Yes……1 No ……2	 → 8.4

8.3	IF YES, Where do you receive/ have you received information about feeding your baby?	Mother .....1 Father .....2 Grandmother .....3 Other relative .....4 House girl .....5 Neighbor .....6 Day Care Center .....7 No one (self) .....8 Siblings .....9 Health worker .....10 CHW .....10 Media (print, radio, tv) .....11 Other (specify) 96	
8.4	Who mainly decides what [NAME] should and should not eat?	Mother .....1 Father .....2 Grandmother .....3 Other relative .....4 House girl .....5 Neighbor .....6 Day Care Center .....7 No one (self) .....8 Siblings .....9 Health worker .....10 Media (print, radio, tv) .....11 Other (specify) 96	
8.5	At what age in MONTHS SHOULD ONE INTRODUCE first solid/semi-solid food to a baby?	.....	

MINIMUM DIETARY DIVERSITY OF BREASTFED CHILDREN AND MINIMUM MEAL FREQUENCY						
	Please describe everything that (NAME) ate yesterday during the day and night, whether at home or outside the home.					
	a) Think about when (NAME) first woke up yesterday. Did (NAME) eat anything at that time?					
	b) If yes: Please tell me everything (NAME) ate at that time. Probe: Anything else?					
	c) What did (NAME) do after that? Did (NAME) eat anything at that time?					
	d) If yes: Please tell me everything (NAME) ate at that time. Probe: Anything else? Until respondent says nothing else.					
	Repeat question b) above until respondent says the child went to sleep until the next day					
	If respondent mentions mixed dishes like a PORRIDGE, sauce or stew, probe					
	e) What ingredients were in that (MIXED DISH)? Probe: Anything else? Until respondent says nothing else.					
	Breakfast	***Snack***	***Lunch***	***Snack***	***Dinner***	

	Once the respondent finishes recalling foods eaten, read each food group below where '1' was not circled, ask the following question and Circle '1' if respondent says yes, '2' if no and '98' if don't know:				
9.0	How many times did your child eat yesterday? (only ask if child is 6-23 months old) ('Meals' include both meals and snacks (but not extremely small amounts). Breast milk feeds are not included, milk feeds of non-breastfed children are included) [Record exact number of times;8=N/A (child is <=5 months or >=24 months0)]				
	FOOD GROUP	**Y es= 1**	**N o=2**	**DK =98**	
9.1	Grains, roots and tubers				
9.2	Legumes and nuts				
9.3	Dairy products (milk, yogurt, cheese)				
9.4	Flesh foods (meat, fish, poultry and liver/organ meats)				
9.5	Eggs				
9.6	Vitamin-A rich fruits and vegetables				
9.7	Other fruits and vegetables				

RESPONSIVE FEEDING			
	Now I would like to ask some questions about how [NAME] was fed yesterday during the main meal.		
10.1	Yesterday, at the main meal, did [NAME] eat all the food you thought he/she should?	Yes .....1 No .....2 Don't know 98	
10.2	Yesterday, during the main meal, did you do anything to encourage [NAME] to eat?	Yes .....1 No 2	→ 10.4
10.3	What did you do? *[Multiple responses possible]*	Offered another food or liquid .....1 Encouraged verbally ..... 2 Modeled eating (with or without toy) .....3 Ordered strongly or forced the child to eat .....4 Another person helped feed child .....5 Another form of encouragement .....6 Don't know .....98 Others (specify) 96	

10.4	Yesterday, during the main meal while feeding [NAME], did you talk to her/ him?	Yes ……1 No ……2	→ 10.6
10.5	What did you say? *[Multiple responses possible]*	Ordered child to eat ……1 Praised child ……2 Asked child questions ……3 Talked about the food ……4 Threatened the child ……5 Told the child that she liked the food ……6 Rewarded the child ……7 Talked about other things ……8 Don't know ……98	
10.6	Yesterday, during the main meal, did [NAME] self-feed (eat by him/herself, using hands or utensils) at any moment during the meal	Yes ……1 No ……2 Don't know ……98	→ 11.1 → 11.1
10.7	Yesterday, during the main meal, did [NAME] self-feed the whole time, half of the time, or for a little time?	All the time ……1 Half the time ……2 Little bit of time ……3 Don't know ……98	
ANTENATAL CARE FOR THE MOTHER			
11.1	During your LAST pregnancy did you attend any ANC?	Yes ……1 No ……2	→ 11.5
11.2	How many months pregnant were you when you attended the FIRST ANC during that pregnancy?		
11.3	How many times did you attend antenatal care during your pregnancy?		
11.4	Were you given any information on the following? a. Place of delivery b. Your won health c. Your own nutrition d. HIV/AIDS e. Breastfeeding	Yes (1) No(2) …… …… …… …… ……	

11.5	Why did you NOT attend?	Not Aware .....1 Too Far .....2 UNFRIENDLY HCWs .....3 TBA services adequate .....4 Cultural barriers .....5 Other (Specify) 6	
11.6	During your pregnancy with (NAME), were you issued/ did you buy Iron tablet/ syrup or Iron Folate Supplementation? *[Show tablets]*	Yes .....1 No .....2 Cannot remember 3	
POST NATAL SERVICES			
12.0	Where did you deliver?	At home by TBA .....1 At home with auxiliary mid wife .....2 At home without assistance .....3 Health facility .....4 Other (specify) 5	
MATERNAL DIETARY DIVERSITY			
	Please describe everything that YOU ate yesterday during the day and night, whether at home or outside the home.		
	a) Think about when YOU first woke up yesterday. Did YOU eat anything at that time?		
	b) If yes: Please tell me everything YOU ate at that time. Probe: Anything else?		
	c) What did YOU do after that? Did YOU eat anything at that time?		
	d) If yes: Please tell me everything YOU ate at that time. Probe: Anything else? Until respondent says nothing else.		
	Repeat question b) above until respondent says SHE went to sleep until the next day		
	If respondent mentions mixed dishes like a PORRIDGE, sauce or stew, probe		
	e) What ingredients were in that (MIXED DISH)? Probe: Anything else? Until respondent says nothing else.		

	Breakfast	***Snack***	***Lunch***	***Snack***	***Dinner***	***Snack***

	Once the respondent finishes recalling foods eaten, read each food group below where '1' was not circled, ask the following question and Circle '**1**' if respondent says yes, '**2**' if no and '**98**' if don't know:					
13	FOOD GROUP	**RESPONSE: Y=1, NO=2, DK=98**				
a	CEREALS corn/maize, rice, wheat, sorghum, millet or any other grains etc					
b	WHITE ROOTS and TUBERS (white potatoes, white yam, white cassava etc					
c	VITAMIN A RICH VEGETABLES AND TUBERS (pumpkin, carrot, squash etc					
d	DARK GREEN LEAFY VEGETABLES (amaranth, cassava leaves, kale, spinach etc)					
e	OTHER VEGETABLES (other vegetables (e.g. tomato, onion etc					
f	VITAMIN A RICH FRUITS (ripe mango, cantaloupe etc.					
g	OTHER FRUITS and their juices					
h	ORGAN MEAT (liver, kidney, heart etc)					
i	FLESH MEAT (beef, pork, lamb, goat etc.					
j	EGGS					
k	FISH AND SEAFOOD					
l	LEGUMES, NUTS, AND SEEDS (dried beans, dried peas etc)					
m	MILK AND MILK PRODUCTS					
n	OILS AND FATS					
o	SWEETS					
p	SPICES AND CONDIMENTS, BEVERAGES					
WASH						

14.1	What is the MAIN source of drinking water for the household NOW? *[Observe where possible]*	River.....1 Lake .....2 Piped water .....3 Borehole .....4 Unprotected shallow well .....5 Protected well .....6 Earth pan with infiltration .....7 Water tracking/vendors .....8 Dam .....9 Laga .....10 Protected spring .....11 Unprotected spring .....12 Rain water .....13 Other (specify) 96	
14.2	How long does it usually take you to go to the MAIN source of water and back (in minutes)	Less than 30 minutes (<500m) .....1 Within 1 hour .....2 More than 1 hour but within 24 hours .....3 More than 1 day .....4 Don't know 98	
14.3	Do you purify your water before drinking?	Yes .....1 No 2	→ 14.5
14.4	If YES, how?	Boiling .....1 Use traditional herbs .....2 Use chemicals .....3 Pot filters .....4 other filters .....5 Decant .....6 Others (specify) 96	
14.5	On what occasion(s) do you wash your hands? *Record all that applies*	After using toilet/defacating .....1 After attending to a child who has defacated .....2 Before feeding a child incl before breastfeeding ...3 Before eating or preparing a meal .....4 After handling animals .....5 After changing sanitary pads .....6 When washing the face .....7 When bathing .....8 Others (specify) 96	
14.6	What do you use to clean (wash) your hands?	Water only .....1 Water and soap sometimes .....2 Water and soap always .....3 Water and ash .....4 Water and traditional herbs .....5 Others (specify) 96	

14.7	Do you have access to a toilet/latrine facility?	Yes .....1 No 2	→ 14.10
14.8	Is the toilet/latrine in your compound of elsewhere?	In compound .....1 Elsewhere 2	
14.9	If YES what type of toilet/latrine? *[Observe where possible]*	Traditional pit latrine .....1 Ventilated improved pit latrine .....2 Flush toilet .....3 Other (specify) 96	
14.10	If NO, where do you go/defecate/use? (probe further)	Bush .....1 Open field .....2 Near river/lagga .....3 Behind house .....4 Other (specify) 96	

ANY OBSERVATIONS/COMMENTS

15.1	END TIME (24 HRS)		
15.2	SUPERVISORS CODE		

APPENDIX 3: FGD and KII Guides

COMMUNICATION FOR DEVELOPMENT (C4D) PRIMARY DATA COLLECTION TOOLS

CONSENT FORM

The Minsitry of Health and ACF are conducting a rapid assessment to determine factors that influence Maternal Infant and Young Child Nutrition (MIYCN) practices in West Pokot County. The information generated would inform the designing of Behaviour Change Communication intervention and messages to influence positive behavioural outcomes. Kindly provide as much information as possible. The information you provide will be treated with confidentiality. With your consent, I will appreciate your participation in the FGD/KII. Thank you.

FGD AND KII TOOLS FOR VARIOUS TARGET GROUPS

1. FGD tool for pregnant & lactating women, mother in laws and grand mothers

1. Please tell us about MIYCN practices in this community. (Probe for: breastfeeding & complementary feeding practices, Iron and folate supplementation, ANC & PNC attendance, linkage to mother support groups, facility delivery, family planning e.t.c. under the respective age cohorts- early pregnancy, late pregnancy, labour and delivery, 0-6 months, 6-23 months)
2. Probe for appropriateness and inappropriateness of the MIYCN practices listed in question 1. (Probe for the reasons for response given why the mothers consider the practise as appropriate or inappropriate).
3. How do pregnant and lactating mothers, infants and young children normally fed in this community? (Probe for the reasons for response given).
4. Decision making on MIYCN at the household and the community level
    a. Who makes decisions on MIYCN and health in the household and the community?
    b. What specific role do the major decision makers play in MIYCN (what do they influence you to do)

5. Who/What are the sources of infant feeding information in the community? [Probe for role of; TBAs, CHWs, health facilities, family, friends, media, mother to mother support groups and other social networks in the communication network] [Rank with the order of importance]
    a. What are the common messages communicated on MIYCN? (what do they tell)
    b. Is the message relevant/useful to you? (Probe for responses).
6. What are the main challenges you face in providing good nutrition to children and mothers: (PROBE for: Probe for; cultural, socio-economic, livelihood, mother's workload, influence from decision makers in the household, access and utilization of health facilities services, breastfeeding issues, knowledge, frequent pregnancies, mother's nutritional status e.t.c) Record responses based on the cohorts
7. Please make suggestions for the way forward in the efforts to improve IYCF practices in the community?

2. FGD tool for incentive workers (MIYCN counsellors and CHWs)

1. Please tell us about MIYCN practices in this community. (Probe for: breastfeeding & complementary feeding practices, Iron and folate supplementation, ANC & PNC attendance, linkage to mother support groups, facility delivery, family planning e.t.c. under the respective age cohorts- early pregnancy, late pregnancy, labour and delivery, 0-6 months, 6-23 months)
2. Probe for appropriateness and inappropriateness of the MIYCN practices listed in question 1. (Probe for the reasons for response given why the mothers consider the practise as appropriate or inappropriate).
3. How do pregnant and lactating mothers, infants and young children normally fed in this community? (Probe for the reasons for response given).
4. Decision making on MIYCN at the household and the community level
    a. Who makes decisions on MIYCN and health in the household and the community?
    c. What specific role do the major decision makers play in MIYCN?
5. How do you pass messages in the community? (probe the following channels; role models, mentors, IEC materials, cooking demonstrations, group health talks, sensitization sessions e.t.c)
    a. How do you engage mothers to improve on their health and nutrition status and that of their children?

b. What challenges do you face in passing information and skills and effecting positive behaviour change in MIYCN and how can you overcome these challenges?
c. How do MTMSGs embrace/ like MIYCN messaging channels (probe the following channels; role models, mentors, IEC materials, cooking demonstrations, group health talks, sensitization)

6. What are the main challenges you face in engaging communities/mothers to improve nutrition of children and mothers: (Probe for: cultural, socio-economic, livelihood, mother's workload, influence from decision makers in the household, access and utilization of health facilities services, breastfeeding issues, knowledge, frequent pregnancies, mother's nutritional status e.t.c) Record responses based on the cohorts
7. Please make suggestions for the way forward in the efforts to improve MIYCN practices in the community?

4. KII tool for religious and community leaders

1. Please tell us about MIYCN practices in this community. (Probe for: breastfeeding & complementary feeding practices, Iron and folate supplementation, ANC & PNC attendance, linkage to mother support groups, facility delivery, family planning e.t.c. under the respective age cohorts- early pregnancy, late pregnancy, labour and delivery, 0-6 months, 6-23 months)
2. Probe for appropriateness and inappropriateness of the MIYCN practices listed in question 1. (Probe for the reasons for response given why the mothers consider the practise as appropriate or inappropriate).
3. How do pregnant and lactating mothers, infants and young children normally fed in this community? (Probe for the reasons for response given).
4. Decision making on MIYCN at the household and the community level
    a. Who makes decisions on MIYCN and health in the household and the community?
    b. What specific role do the major decision makers play in MIYCN
5. Who/What are the sources of infant feeding information in the community? [Probe for role of; Religious leaders, community leaders, TBAs, CHWs, health facilities, family, friends, media, mother to mother support groups and other social networks in the communication network] [Rank with the order of importance]
    a. Are they adequate in improving MIYCN practices? (Probe for reasons).

b. What are the common messages communicated on MIYCN?
c. Is the message relevant/useful to you? (Probe for responses).

6. What are other cultural beliefs that exist regarding MIYCN in this community (probe for myths and misconception related to MIYCN).
7. What are the main challenges that mothers and families in this community face providing good nutrition to children and mothers: (PROBE for: Probe for; cultural, socio-economic, livelihood, mother's workload, influence from decision makers in the household, access and utilization of health facilities services, breastfeeding issues, knowledge, frequent pregnancies, mother's nutritional status e.t.c) Record responses based on the cohorts
8. Please make suggestions for the way forward in the efforts to improve MIYCN practices in the community?

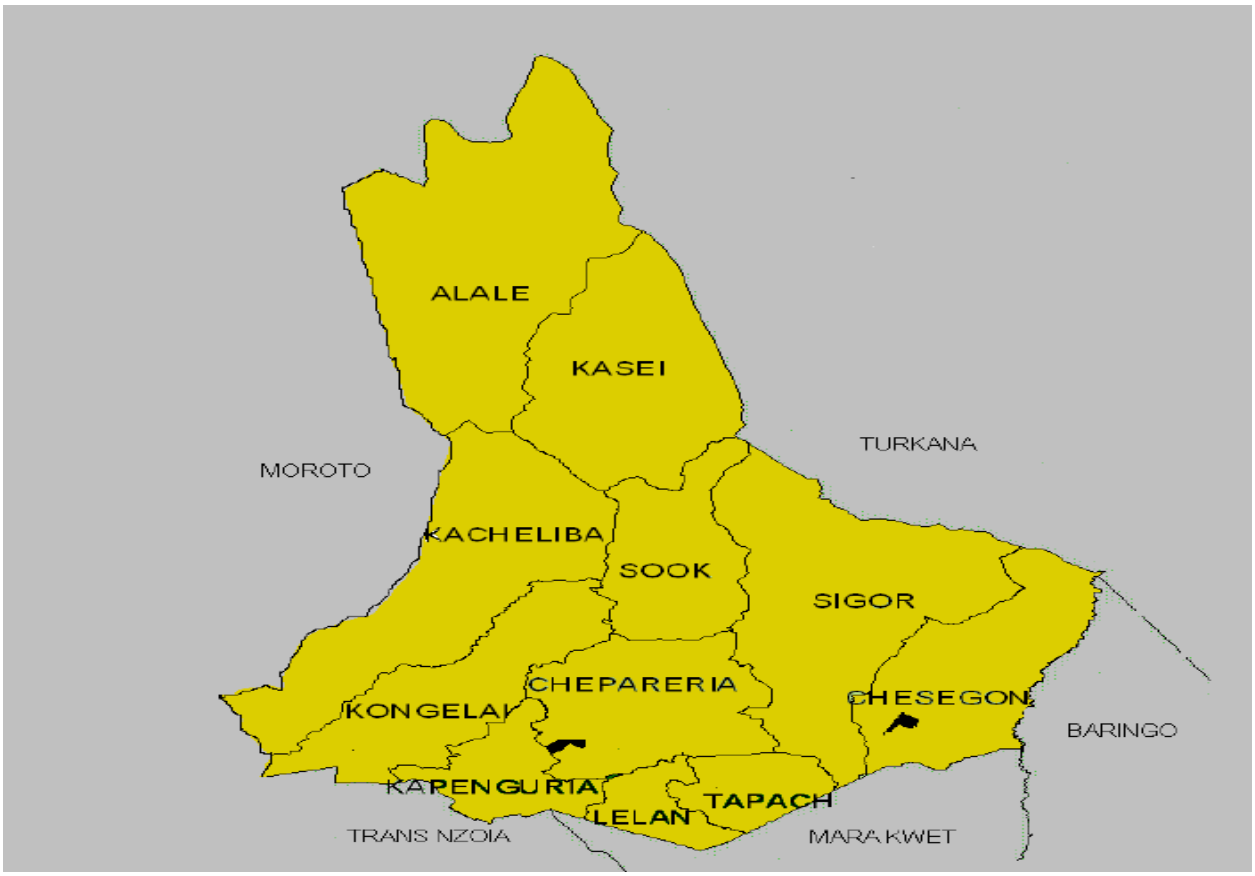
5. KII for coordinators and partner staff

1. What is your role in supporting and coordinating MIYCN communication for development/behaviour change communication activities in your camp?
2. How would you rate the scale and effectiveness of messaging on appropriate MIYCN practices in the community? (Probe for level of coverage of mothers, fathers, the elderly, religious leaders, TBAs, CHWs, mother to mother support groups e.t.c).
3. In your opinion what is the status of pregnant & lactating women and caregivers health seeking behaviour during pregnancy and postpartum care in this community. Is it appropriate? (Probe for practices and for reasons).
4. What factors influence MIYCN practices?
    a. Barriers/predisposers
    b. Reinforcers/facilitators

    (Probe for; cultural, socio-economic, livelihood, mother's workload, influence from decision makers in the household, access and utilization of health facilities services, breastfeeding issues, knowledge, frequent pregnancies, mother's nutritional status e.t.c)
5. In your opinion has information that you have been giving regarding MIYCN brought any changes in maternal, infant and young child feeding practices in this community? (for partners only)
6. In your opinion do you feel that you have the necessary knowledge and skills to effect positive MIYCN behaviour in the community? (Probe the responses)If not what is are the most feasible ways to ensure that you have the necessary knowledge and skills?

7. As a coordinator/partner focal point, what would you recommend to be done to improve communication towards adoption of appropriate MIYCN practices in the community?

APPENDIX 4: Map of West Pokot County



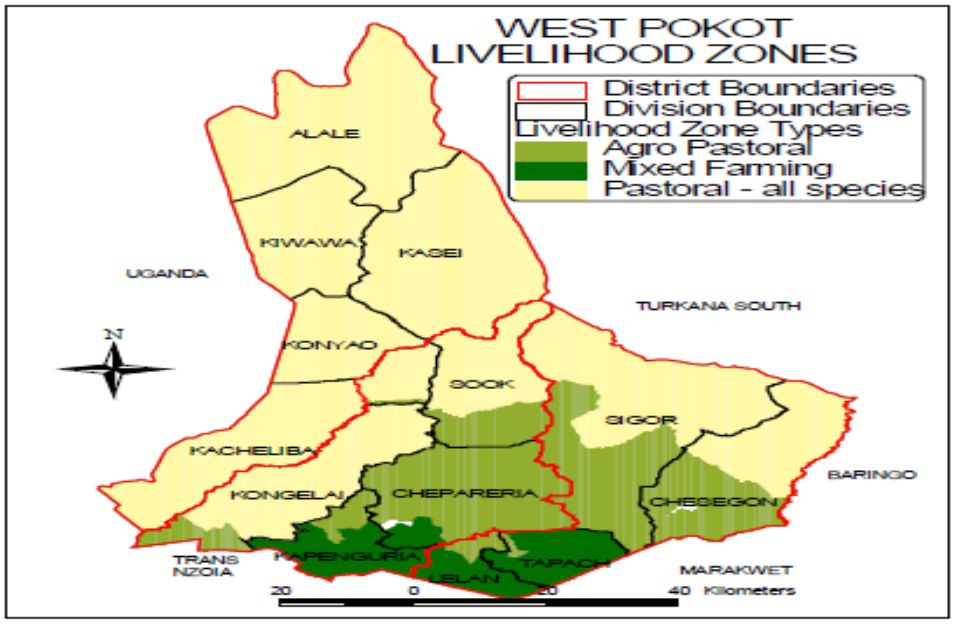


Figure 1: West Pokot County Map

APPENDIX 5: Sampled Clusters

CLUSTER NO:	DISTRICT/SUB-COUNTY	LOCATION	SUB-LOCATION	VILLAGE NAME
	WEST POKOT SUB-COUNTY			
1	WEST POKOT	KISHAUNET	KISHAUNET	LOPALAL
R/C	WEST POKOT	MNAGEI	TARTAR	KATILOK
2	WEST POKOT	KANYARKWAT	KATIKOMOR	KATIKOMOR C
3	WEST POKOT	PTOYO	PTOYO	KAPTENEI
4	WEST POKOT	KAIBOS	KAIBOS	KAIBOS A
5	WEST POKOT	KAISAKAT	SIYOI	KAMARINY B
6	WEST POKOT	KAPENGURIA	MWOTOT	CEREALS 3
7	WEST POKOT	KAISAKAT	KAPCHILA	SIMAT
8	WEST POKOT	KISHAUNET	LITYEI	KAROPKWEN
9	WEST POKOT	MNAGEI	PSIGIRIO	MASAIN
10	WEST POKOT	KERINGET	LORKONOI	TINGWOI
11	WEST POKOT	RIWO	KITALKAPEL	SEES A
12	WEST POKOT	SEREWO	KITALKAPEL	KAPETEKENEI
13	WEST POKOT	CHEMWOCHOI	KOMOL	NYAKWALA
	SOUTH			
14	SOUTH	CHEPKOPEGH	CHEPKOPEGH	MOLKIRIONUN
15	SOUTH	CHEPKOBEGH	PSERUM	KATUYUNWO
16	SOUTH	KIPKOMO		KRESWO
17	SOUTH	SENETWO	SENETWO	CHESETO
18	SOUTH	YWALATEKE	PROPOI	RIRIMBOI
19	SOUTH	KAPYONGEN	SIMOTWO	PORIOROP
20	SOUTH	YWALATEKE	KAPCHEMOGEN	CHEPTUYIS
21	SOUTH	BATEI	ORTUM	ORTUM TRADING CENT
22	SOUTH	KABTABUK	CHEPARTEN	CHEPKOROT
23	SOUTH	KAPTABUK	MESHAU	CHEPUKAT
R/C	SOUTH	PARUA	SEBIT	KOMOLOI

24	SOUTH	SONDANY	KALE	KATIRIPAI
25	SOUTH	PARUA	CHEPKORIONG	CHEPKOLOY
26	SOUTH	SONDANY	NYARKULIAN	TURPACH
R/C	SOUTH	SENETWO	CHEPTURNGUNY	KASEGON
	CENTRAL			
R/C	CENTRAL	MUINO	KITOYO	KITOYO
27	CENTRAL	WEIWEI	KORELACH	OLWA
28	CENTRAL	CHEPKOKOGH	TIRAP	CHERATAK/TILOK
R/C	CENTRAL	LOMUT	PTIASIS	KAMTAWER
29	CENTRAL	MOSOP	KAPKATET	KAPKATET A
30	CENTRAL	SEKEROT	CHEPSERUM	CHEPTAMAS
31	CENTRAL	KAPRO	KOKOTENDWO	KAPKARAM
	NORTH			
32	NORTH	ALALE	ALALE	KASITOT
33	NORTH	KALAPATA	KALAPATA	CHEPKINAGH
34	NORTH	ALALE	ALALE	KAROROK
35	NORTH	KIWAWA	KAURIONG	KAMILA B
36	NORTH	LOKITONYALA	SASAK	NAMUNO
37	NORTH	KAPCHOK	KONYAO	NAPITIRO
38	NORTH	KAPULIO	NAKUYEN	KANKURUT
39	NORTH	SUAM		PKOTONG
40	NORTH	KIWAWA	CHELOPOY	TARAKIT
41	NORTH	KODICH	KARAMERI	IOKILELIAN
42	NORTH	KAPTOLOMWO	KAPTOLOMWO	CHESUSWONI