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Nawiri Desk Review:

A Gender Youth and Social Dynamics Analysis to explore gender, social and cultural norms associated with Acute Malnutrition in Isiolo and Marsabit Counties of Kenya

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Nawiri

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Abbreviations and Acronyms

ASALs	Arid and Semi-Arid Lands
ASGTS	Agriculture Sector and Growth Transformation Strategy
BFCIIG	Baby Friendly Community Initiative-Implementation Guidelines
CADP	County Annual Development Plan
CEDAW	Convention on Elimination of all Discrimination Against Women
CHV	Community Health Volunteer
CHW	Community Health Worker
CIDP	County Integrated Development Plan
CMAM	Community-Based Management of Acute Malnutrition
CPF-EDE	Common Programme Framework for Ending Drought Emergencies
CRS	Catholic Relief Services
DFSA	Development Food Security Activity
EBF	Exclusive breast Feeding
FAO	Food and Agriculture Organization
FFP	USAID Office of Food for Peace
FGM/C	Female Genital Mutilation/Cutting
GBV	Gender-Based Violence
GIS	Geographic Information System
GOK	Government of Kenya
GYSD	Gender, Youth and Social Dynamics
HH	Household
HSNP	Hunger Safety Net Programs
ICT	Information Communication Technology
IPI	Interpregnancy Interval
IYCF	Infant and Young Child Feeding
IYCN	Infant, Youth and Child Nutrition
KAP	Knowledge Attitudes and Practices
KIPPRA	Kenya Institute of Public Policy Research and Analysis
KNAP	Kenya Nutrition Action Plan
KNSPP	Kenya National Social Protection Policy
LMICs	Low and Middles Income Countries
MAM	Moderate Acute Malnutrition
MIYCN	Maternal Infant and Young Children Nutrition
Nawiri	Nutrition in ASALs Within Integrated Resilient Institutions
NSMNS	National Schools Meals and Nutrition Strategy
PLWs	Pregnant and Lactating Women
PYD	Positive Youth Development Framework
RUTF	Ready to Use Therapeutic Food
SAM	Severe Acute Malnutrition
SBA	Skilled Birth Attendant
SMS	Short Message Service
SSA	Sub-Saharan Africa
TBA	Traditional Birth Attendant
USAID	United State Agency for International Development
UN	United Nations
UNICEF	United Nations Children's Fund
WFP	World Food Programme
WHO	World Health Organization

Operational Definitions of Key Terms

***Access**:* Having adequate resources to obtain appropriate foods for a nutritious diet, which depends on available income, distribution of income in the household, and food prices

Agency: The capacity to make decisions about one's own life and act on them to achieve the desired outcome free of violence, retribution, or fear.

Care work: This includes all those activities that go towards the well-being of people, including caring for a household such as cooking, cleaning, collecting water and firewood, caring for the ill, elderly and children, and caring for the community.

Community: A group of people living in the same defined area sharing the same basic values, organization and interests.

Empowerment: Is achieved when women and girls (and other marginalized groups) acquire the power to act freely, exercise their rights, and fulfil their potential as full and equal members of society. While empowerment often comes from within, and individuals empower themselves, cultures, societies, and institutions create conditions that facilitate or undermine the possibilities for empowerment

Intra-household bargaining: According to this study this refers to how women and men participate in and have control over decisions about household resources. It is important to take into account factors affecting the relative 'bargaining position' of different household members, including women and men with different statuses within the household.

Gender analysis: Gender analysis is a subset of socio-economic analysis. It is a social science tool used to identify, understand, and explain gaps between males and females that exist in households, communities, and countries. It is also used to identify the relevance of gender norms and power relations in a specific context (e.g., country, geographic, cultural, institutional, economic, etc.)

***Gender division of labour**:* Refers to the different work assigned to women and men according to the social and cultural context in which they are embedded.

Gender dynamics: Refers to the relationships and interactions between and among people of different genders. Gender dynamics are informed by socio-cultural ideas about gender and the power relationships that define them. Depending upon how they are manifested, gender dynamics can reinforce or challenge existing norms.

Gender equality: Gender equality concerns women and men, and it involves working with men and boys, women, and girls to bring about changes in attitudes, behaviors, roles and responsibilities at home, workplace, and in the community.

***Gender norms, identities and values*:** These are those aspects underlying gender roles and relations. Gender norms, identities and values in any given context define the understanding and expectations of women's and men's capacities, characteristics and social behavior within that context.

Gender roles and relations: These are sets of behavior, roles and responsibilities attributed to people of different genders by the society which are reinforced at the various levels of the

society through its political and educational institutions and systems, employment patterns, norms and values, and through the family.

***Gender, Youth and Social Dynamics Analysis*:** This refers to the study of differences in the intersecting identities of women, men, girls and boys and how these contribute to their conditions, needs, participation rates, access to resources and development, control of assets, decision-making powers and assigned gender roles.

Gender: Socially and culturally constructed set of roles and responsibilities associated with being girl, boy, woman or man, and in some cultures a third or another gender.

Household: A person or group of people who normally cook, eat, and live together irrespective of whether they are related or unrelated.

Social Benefits: Social benefits refer to changes to the social environment, such as changes in social norms or beliefs, economic or legal changes, and changes in relationships at community and societal levels.

Social capital: Refers to networks together with shared norms, values and understandings that facilitate cooperation within or among groups. It includes i) Bonds: Links to people based on a sense of common identities ("people like us") – such as family, close friends and people who share our culture or ethnicity; ii) Bridges: Links that stretch beyond a shared sense of identity, for example to distant friends, colleagues, and associates; iii) Linkages: Links to people or groups further up or lower down the social ladder.

Social Development: A focus on the need to put people first in the development process. It promotes social inclusion of the poor and vulnerable by empowering people, building resilient societies, and making institutions accountable to the people.

Social exclusion: Process by which individuals or groups of people are systematically denied access to rights, opportunities, and/or services. Based on various axes e.g. age, gender, sexual orientation, geography, disability, etc.

Social inclusion: The process of improving the terms on which individuals and groups take part in society – improving the ability, opportunity, and dignity of those disadvantaged based on their identity.

Social norms: Social norms can be understood as either "what most people think and do" or "what individuals believe most people think and do." As such, social norms are about what's considered normal or ought to be normal in a given context and situation.

Wasting: Also known as acute malnutrition, it is characterized by a rapid deterioration in nutritional status over a short period in children under 5 years of age. In children, it can be measured using the weight-for-height nutritional index or mid-upper arm circumference (MUAC). There are different levels of severity of acute malnutrition: moderate acute malnutrition (MAM) and severe acute malnutrition (SAM).

Women's status: Encompass the different value assigned to women in a socio-cultural context and reflects their position in the household and wider society. Women's status mediates their access to opportunities and resources in those contexts.

Youth: Refers to a life stage when one transition from the dependence of childhood to adulthood independence. The meaning of "youth" varies in different contexts. Based on the Nawiri study, the 10-29 age range is used for youth as put forward in the USAID Youth in Development Policy

Executive Summary

Introduction

In August 2020 Catholic Relief Services (CRS) commissioned Kirimon Research Limited to conduct a Gender, Youth and Social Dynamics analysis (GYSD) of USAID Nawiri. The GYSD analysis will explore the gender, social and cultural norms (underlying and systemic drivers) associated with persistent acute malnutrition in Isiolo and Marsabit Counties. The GYSD analysis is comprised of a detailed desk review and primary qualitative field research. This analysis will deepen understanding of the specific gender and social dynamics that influence nutrition outcomes of Nawiri target populations particularly children under 5, pregnant and lactating women and adolescent girls and guide the design of response and implementation interventions. This report contains findings from the desk review.

The GYSD analysis desk review was informed by a realist synthesis approach and is focused on understanding the link between GYSD and acute malnutrition among children in pastoralist communities living in arid and semi-arid lands (ASALs). The desk review is informed by a conceptualization of how GYSD interact with systemic and underlying drivers of acute malnutrition as elucidated in Young's Framework on acute malnutrition. The policy review component of the desk review has been approached through several lenses including USAID's *Integrated Framework for Gender Analysis of Nutrition Policy* and the *Positive Youth Development Framework.*

The desk review provides a broad-based understanding of how GYSD issues emerge in policy, in institutions (formal, informal, and traditional) and within gendered social institutions at community and household levels. Using a breadth of analysis that covers Sub-Saharan Africa (SSA), the review attempts to illuminate pathways through which GYSD *contributes* to acute malnutrition outcomes in children. The review has made concerted efforts to situate its findings within the context of pastoralist communities that inhabit the ASALs of northern Kenya or similar context.

The findings, conclusions and recommendations outlined in this report are based on desk review findings of more than 200 sources comprising (a) peer-reviewed and published literature covering the period 2015 – 2020, (b) Kenya National government policy documents (c) Marsabit and Isiolo county governments policy, strategy planning and budget documents (d) programmatic research, project planning and evaluation reports from various agencies working in the nutrition programming

Research Questions

The desk review for the GYSD analysis was guided by the following research questions:

a) How do laws, policies, regulations and institutional (formal, informal, and traditional) practices influence gender and social dynamics and how they intersect to affect acute malnutrition?
b) How do socio-cultural norms, beliefs and practices affect acute malnutrition across gender and age among vulnerable social populations in Isiolo and Marsabit? How are related norms, beliefs and practices changing over time?
c) What is the relationship between acute malnutrition and women's and men's, girls', and boys' roles (productive?
d) What are the barriers to women's, men's, girls', and boys' access to and control over critical resources, assets, income, social networks, public and private services, employment, technology, and information? How do they impact on nutritional status/ acute malnutrition?
e) How do patterns of power and decision-making across age and gender impact on acute malnutrition among vulnerable groups at the household, community, and county government levels in Marsabit and Isiolo counties?

Findings by Thematic Areas

The key research findings are presented in several sections arranged by research question/ themes and gaps in existing research meant to inform primary qualitative research and Nawiri Theory of Change (ToC).

Question 1: Linking GYSD in the Policy and Programmatic Context of Food Security and Nutrition Programming to acute malnutrition

1.1 Gender youth and social dynamics in national and county policies

There is the consideration of women and youth needs in nutrition-sensitive and nutrition-specific policy across sectors at national and county levels. However, social dynamics and context-specific data disaggregation are not pursued systematically by the relevant institutions. There are strides in ensuring that the legal framework is conducive for gender and youth development reflected in the Constitution of Kenya (2010) and the Gender and Youth policies.

1.2 Gender youth and social dynamics in county institutions

The county governments are charged with the realization of national-level policies. However, there is an inordinate gap in the harmonization of policy implementation between the national and county-level governments. This is reflected in budgetary allocations towards women and youth priorities – the budget allocations are quite limited and there are no clear budget lines on what activities the budgets are intended to support.

1.3 GYSD in Formal, Informal and Traditional Institutions

Within nutrition interventions, informal institutions make a significant contribution in shaping decisions and actions around maternal, infant and child nutrition. Existing formal structures are yet to catch up and identify how to leverage this advantage towards more positive intervention outcomes. An upside to this is the emerging evidence of efforts to incorporate informal institutions in nutrition programming by other development actors. Public participation has improved with the decentralization of government through devolution. However, in pastoral communities' women are not actively engaged in decision-making especially on substantial matters relating to family resources and decisions that affect the community.

Question 2: Relating acute malnutrition to Intra-household and Inter-household Gender and Age Dynamics related productive, reproductive roles, time use and workload

2.1 Gender Division of Labor and Acute Malnutrition

Traditional pastoralist communities are highly patriarchal with rigidly defined gender roles. Men are primarily responsible for taking care of the livestock and providing for the family. Compared to men, women take a larger proportion of the reproductive work including ensuring household food security while at the same time engaging in productive work that extends to caring for livestock i.e., herding and more specific roles related to care of the young animals, pregnant and sick animals, processing of milk and sale of milk products – roles that tend to be more time-consuming and tedious than those of men. The heavy burden on women introduces an uneasy trade-off between daily routine work and childcare with adverse child nutrition outcomes.

Studies have shown that pastoralist traditions are transforming due to climate change and drought, increasing education levels among the youth, urbanization, increased access to improved transport infrastructure and access to modern technology among others. These changes have led to diversification in livelihoods with attendant transformations in gender roles. Increased opportunities for women to engage in economic activities outside the home leads to access to income and autonomy in decision-making for women. This has been shown to result in improved household food and nutrition security and consequently positive outcomes for child nutrition.

2.2 The Nexus between Workload-Time Use and Acute Malnutrition

On average women work for between 10-13 hours each day which is 4 hours more than men. Care work and routine domestic duties consume the better part of their time (average of 7 hours each day). In addition, seasonal migration by the men during the dry season forces the women to take over men's roles further increasing their workload during a period when nutrition for children is critical, and food is scarce. The discrepancy in workload and time use between men and women across seasons has been demonstrated in studies which show that women work 8.5-19 and 14.5-18 hours and men 8-15.5 and 6.8-14 hours in the wet and dry seasons respectively. This affects mother's ability to care for her child with negative implications on to child nutrition outcomes – a situation that is exacerbated for young mothers (who do not have children old enough to assist them in their chores), Pregnant and Lactating Women (PLWs) and widows with children.

Question 3: Understanding how barriers to women's, men's, girls', and boys' access to and control over critical resources (assets, income, wages, social networks, technology, and information) and public and private services impact acute malnutrition in children

3.1 Ownership Barriers and Malnutrition

In pastoralist settings, ownership of key household assets (in this case livestock and land) is controlled by older men. Some studies have shown that in some pastoralist communities changing norms mean that an opportunity exists for women to own small stock which they can dispose of (sell or slaughter) without necessarily consulting their spouses. It has been shown that ownership of resources is important to nutritional outcomes as it enhances women's decision-making ability and participation in both traditional pastoralist and diversified livelihood activities. Also, studies have established that women with access to and control over cash income are more likely to spend it on buying food and other household necessities.

3.2 Access to Productive Resources (Assets, employment income, other income, credit) and Malnutrition

In traditional pastoralist communities' women have access to livestock products such as milk which they fully manage. This milk may be used to meet the household dietary requirement and any excess may be shared out or sold for income. In polygamous settings, younger wives are favoured and given access to the most productive cows in the herd. Opportunities for employment income are limited and access to existing opportunities is hampered by low education levels in pastoralist communities. This is however changing, and the younger more educated generation now have access to employment opportunities in towns. Women's access to credit is restricted because they have limited access to and control over assets. In the recent past, interventions by non-governmental organizations (NGOs) have introduced micro-credit schemes that allow women to own small stock and invest in income-generating activities. This transformation in women's ability to access and control resources is positively associated with favorable child nutrition outcomes.

3.3 Linking Access to Services (Public and Private) and Acute Malnutrition

The ASALs of northern Kenya have suffered structural marginalization since the post-independence, a result of skewed government policy that favored investment in the agriculturally productive part of the country. Whereas attempts have been made in the last two decades to address the resulting inequalities, the regions still trail behind in terms of access to services and critical infrastructure. Beyond this, there are gender barriers that limit women's access to services (for instance women have to seek permission from their husband to access health services), cultural barriers (for instance an ingrained bias for use of informal/ traditional institutions e.g., TBAs, to meet maternal and child health needs) and age-related barriers (younger mothers are likely to struggle more to access health services due to child-caring duties). The intersection of the various women's identities makes them vulnerable and increase the risk of negative maternal and child nutrition outcomes.

3.4 Linking Access to Technology and Information and Acute Malnutrition

Modern communication technology has increased access to information needed for pastoralist communities to transact on livestock and related products. This has provided linkages to markets which would not be otherwise accessible. In addition, mobile phone communication has enhanced existing social networks and created new pathways to resilience. Mobile technology has increased opportunities for women to access financial capital from friends and relatives outside husbands and fathers control giving them control over their income sources. Mobile financial services (e.g., ***M-Shwari, Okoa Jahazi, Fuliza*** and other mobile money-lending services) now provided women access to micro-credit without requiring them to provide collateral. In addition, the expansion of mobile banking services has extended financial inclusion to marginal populations. This increased control and autonomy over their income sources has been shown to positively impact household food security.

3.5 How Gender-Based Violence impacts Acute Malnutrition in Children

In pastoralist community's, some harmful cultural practices against women and girls continue to be practiced. Early and forced marriages are common and are preceded by female genital mutilation or cutting (FGM/C). Studies have linked these harmful traditional practices with low self-esteem, silence and powerlessness and reproductive health inequalities which prevent economic growth limiting women's opportunities. This practice of child early and forced marriage means that girls become wives and mothers at a disproportionately early age. Existing evidence shows a link between early and teenage pregnancy on one hand and poor health and nutritional outcomes for both the mother and child on the other hand. Mothers' exposure to Intimate Partner Violence (IPV) with negative outcomes on optimal child feeding practices (e.g., shortened breastfeeding duration, early termination of EBF and reduced breastfeeding initiation) and the subsequent effect this has on child nutrition.

3.6 Linking Social capital and networks to acute malnutrition

Traditionally, pastoralist communities have relied on their strong social networks to access key shared resources (e.g., pasture, watering points etc.). During times of drought, these networks are a critical means of survival. Social networks have been based on kinship and trust. However, changes in pastoralist livelihoods occasioned by diminishing herds due to extreme climate events have also had an adverse effect on social capital – this has restricted access to avenues for ensuring household food security during stress periods. On the other hand, social capital has been transformed into new uses-such as micro-credit schemes by women in pastoralist communities with possible positive outcomes on household food security. There are intersectional outcomes on social capital for women of different socio-economic background with more vulnerable women having limited and less-diversified social networks.

Question 4: How patterns of power and decision-making across age and gender divides impact on acute malnutrition among vulnerable groups

4.1 Power and Decision Making at Household and Community Levels

In pastoralist communities' women have decision-making power regarding certain household decisions related to food, caring for children and small stock while men dominate decision-making on larger stock and in public spaces. However, there is increased public participation due to changes in governance occasioned by devolution. Despite the attendance of women in various decision-making for a does not necessarily translate to their active participation since they are often bound by cultural norms that restrict their voices outside the home and in the presence of men. Decision-making is not uniform among women – for instance among married women, younger women have less decision-making power, and younger women without children have even much less power than those without children and are often regarded as children.

4.2 Community Decision making and nutrition interventions

The layered levels of decision-making in pastoralist communities coupled with the intersecting identities of women create hidden vulnerabilities with regards to access and control over assets and resources. This influences a woman's ability to ensure household food security, nutrition for their children and access to health services.

Question 5: Socio-cultural norms, beliefs, and practices across gender and age-related to Household Food Security, Maternal Nutrition and Infant and Young Child Feeding (IYCF) among vulnerable populations and how they impact acute malnutrition in children

5.1 Social structures

Pastoralism is a way of life. In pastoralist communities' patriarchal social structures are heavily embedded in the culture and govern all aspects of life. There has been a long-held belief that men have held the dominant productive role in pastoralist livelihoods and economies. However, recent work has shown that women (and boys and girls) have also played a key role in this pastoralist ecosystem. This is evident in the fact that as young people move out of the pastoralist economy and into other forms of livelihood, there has been an inevitable decline in traditional pastoralism as we know it and a shift to alternative livelihoods.

Underlying intrahousehold structure determines access to livestock and livestock products. Whereas it is possible to postulate that such access translates to better household nutrition outcomes, the outcome for child nutrition has not been sufficiently studied. Sub-theme 5.2 Social norms, beliefs, and practices related to Sexual and Reproductive health. At the household level, social norms related to women's education status, early marriage, high fertility rates (i.e., a high number of children per couple) and low inter-child spacing are associated with acute malnutrition.

5.2 Norms and Perceptions related to food preferences, IYCF feeding practices, food sharing and food-related taboos

Beliefs and practices regarding food preferences and taboos and feeding practices are also reported to play a role in acute malnutrition for children. Food taboos related to maternal, and child dietary composition and habits have been widely documented in traditional pastoralist communities. In most traditional culture's elderly female family members (mostly grandmothers) and traditional birth attendants (TBAs) have a strong influence on IYCF practices and tend to advise on discarding colostrum, delayed initiation of breastfeeding, pre-lacteal feeding and introduction of other food before six months often in direct contradiction of advice by health professionals. These compromises optimal child feeding practices and has been associated with acute malnutrition in children. Food sharing norms also prevalent in pastoralist society have been shown to act as a barrier to the effectiveness of therapeutic feeding interventions since therapeutic food is normally shared out to other household members.

5.3 Perceptions towards mothers of children suffering from acute malnutrition and food poverty

Negative community norms have been documented for communities in Marsabit and Isiolo targeting mothers of children suffering from acute malnutrition. This practice has negative implications on mothers' participation and adherence to interventions intended to address acute malnutrition.

Suggested Research Agenda to inform Nutrition Programming

- The desk review has identified a major gap in the availability of studies on the determinants of acute malnutrition in children conducted in pastoralist communities within Kenya
- An ethnographic study will be useful to (a) update existing information on the existing socio-cultural context and (b) identify GYSD pathways to acute malnutrition. Studies in other

settings identify this gap, for instance, the need for an ethnographic study to identify cultural barriers to IYCF to babies aged 6 months and above,

- Generally, gendered inequities were noted in the involvement of men in maternal and newborn health. Specific information on the barriers to men's involvement in maternal and child health in pastoralist settings and how this contributes to acute malnutrition need to be explored.
- A study to explore the gendered differences in understanding of household food security vis a vis animal food security and social status
- Studies did not address women's socio-economic differences and the various complexities in varying women identities with context-specific challenges.
- Policy formulation process was not clear as to the composition of committee members and whether there was public participation to identify men's, women's, girls and boys needs
- The extent to which seasonality and livestock livelihoods associate with acute malnutrition was not clear.
- The review did not establish the local understanding and local perceptions of acute malnutrition if any.
- The relationship between GBV and acute malnutrition is not clear and there is a gap in evidence for pastoralist communities in Northern Kenya
- The relationship between changing livelihoods and acute malnutrition in children is not clear and there is a gap in evidence for pastoralist communities in Northern Kenya
- Information linking ICT to acute malnutrition is scarce
- The interactions between formal and informal (including traditional) institution and how this contributes to acute malnutrition in children deserve further study to ensure that interventions are grounded in a solid understanding of the context within which they operate.

Background

1.1 Introduction

This report presents the findings of a Desk Review on Gender, Youth and Social Dynamics Analysis (GYSD) for the Nawiri project. The GYSD analysis is a two-part study comprising the Desk Review and a Primary Research that seeks to explore the underlying and systemic drivers of global persistent acute malnutrition focusing on Isiolo and Marsabit Counties.

1.2 Understanding of the Assignment

1.2.1 The Project: Nawiri

The project for which the GYSD Desk Review Analysis has been conducted is in the research and design phase of implementation. The project is implemented using a phased approach, involving a robust research phase (Years 1-2) that will inform program design and implementation phase (Years 3-5). The research phase for which the GYSD analysis is part of focuses on building critical evidence for the implementation phase and is organized into four research themes: temporal and spatial distribution; interconnectivity of underlying causes of acute malnutrition; implications of the rapidly evolving institutional context; and transformation of livelihoods.

1.2.2 Goal, Objectives, and Scope of the GYSD Analysis

Goal

The main goal for this study is to identify the key evidence gaps on the intersection between gender, youth, and social dynamics and acute malnutrition in Isiolo and Marsabit counties and inform the project's research and learning agenda including the design of subsequent implementation pilots. The study further provides the much-needed analysis to strengthen gender integration across Nawiri as informed by the project's theory of change (ToC).

Objectives

The GYSD analysis is guided by the following specific objectives:

a) To better understand the root causes of gender inequalities and correlations with the root causes of persistent acute malnutrition in Isiolo and Marsabit counties, as per Nawiri 's ToC.
b) To support the refinement of Nawiri ToC based on GYSD analysis findings and inform the design and implementation of gender-transformative interventions in Isiolo and Marsabit counties.
c) To support the design and development of effective gender, youth, and social dynamics capacity building initiatives for Nawiri project participants and partners in Isiolo and Marsabit.
d) To facilitate effective gender and youth integration into Nawiri's Monitoring, Evaluation, Accountability and Learning frameworks, project planning and key program interventions.

Scope

This assignment comprises a GYSD desk review and related qualitative field study in Isiolo and Marsabit counties. The output from the study (comprising both the desk review and the primary research) will contribute to the refinement of Nawiri's theory of Change (ToC) and to the design of the key Nawiri interventions to address acute malnutrition in the targeted areas. To achieve the objectives of this study, the following activities will be undertaken

- Identifying and gathering key resource materials for the desk review, especially those from Kenya's ASAL and similar contexts

- Mapping correlations between gender, youth, social dynamics, and acute malnutrition knowledge /information gaps in target counties
- Designing field study plan and develop data collection tools and procedures, train survey team, in liaison with Nawiri team leads
- Providing clear assessment and recommendations on specific areas where Nawiri / wider stakeholders can add value to sustainably reduce acute malnutrition, through GYSD-focused interventions
- Providing clear and tangible suggestions for gender and youth sensitivities and integration into Nawiri as fitting
- Provision of a comprehensive GYSD analysis report of not more than 50 pages highlighting recommendations and any key evidence gaps in Nawiri context.
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1.2.3 Research Questions

Overall, the GYSD desk review analysis focuses on answering the following general research questions:

a) How do laws, policies, regulations and institutional (formal, informal, and traditional) practices influence gender and social dynamics and how they intersect to affect acute malnutrition?
b) How do socio-cultural norms, beliefs and practices affect acute malnutrition across gender and age among vulnerable social populations in Isiolo and Marsabit? How are related norms, beliefs and practices changing over time?
c) What is the relationship between acute malnutrition and women's and men's, girls', and boys' roles (productive, reproductive and community) responsibilities, time use and workloads?
d) What are the barriers to women's, men's, girls', and boys' access to and control over critical resources, assets, income, social networks, public and private services, employment, technology, and information? How do they impact on nutritional status/ acute malnutrition?
e) How do patterns of power and decision-making across age and gender impact on acute malnutrition among vulnerable groups at the household, community, and county government levels in Marsabit and Isiolo counties?

1.3 Conceptual Framework

Conceptually, this study borrowed from the renewed ***Nutrition in Drylands: Conceptual Framework for Addressing Acute Malnutrition*** that has been informed by the works of Young (2019)1 on acute malnutrition causality in drylands. However, in this situation, unique attention was paid to systemic and underlying drivers of acute malnutrition. Thus, the study hypothesis that acute malnutrition for pastoralists and agro-pastoralists in arid and semi-arid lands is influenced by gender, age, and other socio-cultural dynamics underpinning.

The renewed conceptual framework on acute malnutrition in ASALs identifies the determinants (immediate drivers) of acute malnutrition (insufficient household food security, inadequate social and care environment and insufficient health services and unhealthy environment) and highlights the underlying and systemic drivers. In this framework immediate drivers affect individuals, underlying drivers affect households or communities, and systemic/basic drivers are related to sub-national, national, and regional levels encompassing a plethora of formal and informal institutions. The unique contribution of this renewed framework is its identification of the role played by the (a) environment, seasonality, and climate variability within the ASAL environment, (b) traditional and transformed livelihood systems of the ASALs and (c) formal and informal systems and institutions in contributing to acute malnutrition.

The effect of climate variability and especially drought as a determinant for acute malnutrition has been demonstrated in multitudes of studies, for instance, studies conducted in Somalia revealed a strong association between all three indicators of malnutrition (wasting, stunting and low MUAC) and the enhanced vegetation index.2 Studies in the ASAL context have also demonstrated an association

between livelihood and acute malnutrition, with children of nomadic pastoralist more likely to suffer malnutrition than children in household adopting agrarian livelihoods.3 Similarly, acute malnutrition has been shown to have seasonal trends within the ASALs.3

Our conceptualization of the linkages between the drivers of acute malnutrition and GYSD is premised on the fact that GYSD interactions with each level of the acute drivers of malnutrition are highly intertwined and will generate a multiplicity of both unique and additive effects on nutrition-related outcomes. Maternal nutrition has been shown to have an association with acute malnutrition in children.4 However, some authors argue that the UNICEF framework does not explicitly account for maternal nutrition.5 Similarly, recent studies have shown that female-headed households are more likely to suffer from food insecurity.6 The extent to which similar associations hold for acute malnutrition need further exploration. Based on our initial review of literature it emerged that GYSD is important in influencing acute malnutrition outcomes at the levels of underlying and systemic drivers. This formed the basis for the linkage between GYSD and Young's renewed framework and provided the basis for detailed desk review to unpack the nature of the underlying pathways to acute malnutrition as influenced by GYSD. It is important to mention that interventions to address malnutrition occur in highly complex policy, institutional and social settings, and the way GYSD would interact with the drivers of malnutrition is not a linear relationship (therefore the conceptualization was highly simplified for clarity of presentation).

At the policy level, evidence suggests that policies aimed at the reduction of undernutrition are successful when approached from a multi-disciplinary and multi-sector perspective. A multi-country policy review of 17 LMICs established that nutrition policies that were accompanied by specific interventions and programmes were associated with reduced mortality for children under five years of age as well as undernutrition reduction.[7] Nutrition-sensitive and specific policies are designed and delivered through formal institutions and structures. However, implementation occurs within a context where there is a multiplicity of informal institutions. This creates an environment where health systems and health service delivery is generally designed with a macro focus on access and coverage as opposed to a microfocus of addressing gender, age-specific and socio-cultural aspects that affect uptake and consistent use of services in the first place. This approach to policy has improved the access and reach of certain interventions such as treatment of acute malnutrition and use of antenatal clinics for pregnant mothers[8] but evidence reveals a significant gap in terms of reducing the prevalence of acute malnutrition.[9] The conceptual framework, therefore, provides for interlinkage between GYSD, policy and the functioning of both formal and informal institutions.

The proposed conceptualization of the linkages between gender, youth, and social dynamics (GYSD) and the drivers of acute malnutrition according to the renewed framework of acute malnutrition is shown in **Figure 1** below.

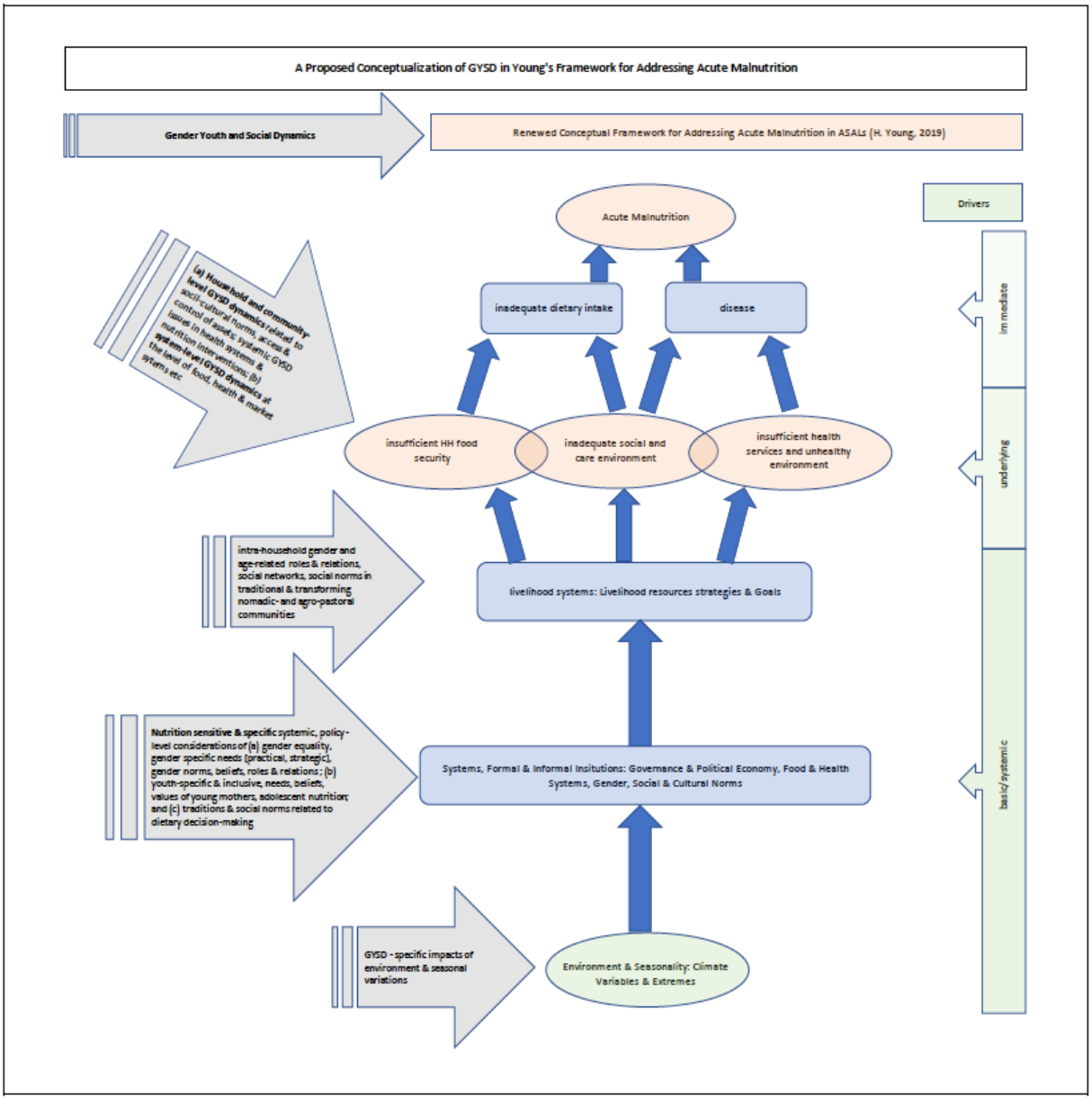

Figure 1 Proposed conceptualization of the linkages of GYSD and the (Helen Young's) Renewed Framework for the Drivers of acute Malnutrition

Application of the framework to the GYSD Analysis Questions

To gain insight into the interplay between gender, youth and social dynamics and acute malnutrition, this study examined how GYSD manifest within systems (policy, legal, and institutional, governance, and political economy – both formal and informal), food and health systems and socio-cultural norms and contributing to acute malnutrition outcomes. This understanding provided an overarching lens within which the research questions were addressed. In applying the ***GYSD in Acute Malnutrition*** conceptual framework to this study, the Havard Framework (Also Gender Roles Framework)[10] was used to define overarching themes, and these were matched with GYSD analysis questions and further applied to the different levels of Young's conceptual framework for acute malnutrition. In addition, the policy review has been informed by the Integrated Framework for Gender Analysis in Nutrition.[11] The desk review findings have been used to refine the GYSD analysis questions and to qualify the sub-questions proposed in the terms of reference (ToR) and generate additional specific sub-questions. This is shown in **Table 1** below.

Table 1 An application of the GYSD-Acute Malnutrition conceptual framework to the GYSD Analsyis Research Questions

Research questions	Theme	Linkage with Young's Framework
How do laws, policies, regulations and institutional (formal, informal, and traditional) practices influence gender and social dynamics which affect acute malnutrition?	Laws, policies, regulations and institutional (formal, informal, and traditional) practices	Systemic,
How do socio-cultural norms, beliefs and practices affect acute malnutrition across gender and age among vulnerable social groups in Isiolo and Marsabit? How are these changing over time (norms, beliefs, and practices)?	Cultural norms and beliefs	Systemic, Underlying
What is the relationship between acute malnutrition and women's and men's roles (productive, reproductive and community) responsibilities, time use and workloads? How do they impact on acute malnutrition?	Gender roles, responsibilities, and time use	Underlying,
What are the barriers to women's, men's, girls', and boys' access to and control over critical resources, assets, income, social networks, public and private services, employment, technology, and information?	Access to and control over assets and Resources	Underlying,
How do patterns of power and decision-making across age and gender impact acute malnutrition at the household, community, and county government levels in Marsabit and Isiolo counties?	Patterns of power and decisionmaking	Underlying,

2. Desk Review Methodology

2.1 Study design

The study conceptualizes the interplay between drivers of acute malnutrition and the social-cultural intervention context related to GYSD in ASALs as highly complex social interactions and therefore adopted a realist synthesis method to review the literature. Realist synthesis examines existing evidence for information on 'what works for whom, in what circumstances, in what respects and how'[12] providing an opportunity to generate a 'tailored, transferrable theory' to inform programming.[13] Existing research was reviewed with the key objective of generating evidence and informing further inquiry to inform the design of context-specific GYSD-informed interventions intended to address acute malnutrition for communities in Isiolo and Marsabit counties. In this respect, published evidence relevant to the gender, youth and social and cultural issues that affect nutrition outcomes (and specifically, acute malnutrition) and their complex interplay within the ASAL context was reviewed. For purposes of this first phase (desk review), the study accessed published, normative, and other documented data on GYSD and acute malnutrition. The methodology for this study was iterative and involved consultation with CRS project team at key stages.

2.2 Technical approach

The desk review involved a systematic review of published and grey literature informed by realist synthesis. This included a synthesis of academic, policy, project progress and evaluation reports from nutrition sector actors (including government and non-governmental organizations). To be effective in collecting data from these sources, strands for literature search were developed across the specific objectives and research questions. A list of keywords and their synonyms were developed to guide the search. A detailed bibliographic listing of the documents used for the desk review is in **Annex 2.**

2.2.1 Source Selection

A comprehensive search of multiple information sources was used to capture an unbiased sample of literature encompassing both published and grey literature. The literature was accessed from both published/ peer-reviewed and grey literature sources as indicated below:

a) Published/ Peer-Reviewed Literature: An electronic bibliographic search was conducted on academic databases, online libraries, and journal catalogues. The search was conducted in English to capture studies on gender and malnutrition, youth and malnutrition, social dynamics, and acute malnutrition. The following bibliographic databases were accessed: ***PubMed, ScienceDirect, JSTOR,*** Directory of Open Access Journals and Web of Science.

b) Grey literature: Multiple grey literature searches were conducted by (a) searching the most commonly used grey literature databases (Google Scholar, 3IE Impact Evaluations and Digital Educational Resource Archive). (b) Locally produced research contained in theses, dissertations, and conference papers (and proceedings) accessed through university research repositories. (c) Additional documents were identified by searching key websites and reaching out to organizations and individuals who have produced research relevant to this study. These included government, UN Agencies (e.g., UNICEF, FAO, WFP, WHO), bi/multilateral agencies (e.g., WB, USAID, EU), INGOs/ local NGOs, and research institutions (e.g., ILRI, IFPRI, CGIAR); and (d) identification of documents through purposive and snowball sampling & professional outreach. The categories of publications covered also included key policy documents, project evaluation reports and additional sources from consultation with sector experts. In addition to the electronic database and grey literature searches, reverse citation searches among the most relevant documents from the searches (a) and (b) above were conducted

2.2.2 Search String selection

Search strings were developed based on the study questions. These encompassed study outcomes, study population comparators, study location and secondary criteria related to Young's conceptual framework. Search terms were tested and refined in **PubMED** accounting for variations in spelling and testing various search term combinations. Combinations of search terms for the key search categories were used as illustrated below.

Outcome	**Population**	**Qualifier**	**Secondary criteria**
(Acute malnutrition AND child….)	(Mothers…)	(norms*….)	(traditional*…)

A complete listing of proposed search terms is provided in **Annex 1**.

2.2.3 Categorization of Texts

Studies identified through the structured search were entered into Zotero [1] and duplicates removed. Remaining studies were shared among the reviewers and an initial screening for relevance, based on the title and abstract carried out. The eligibility criteria is shown in the table below.

Study design	Study focus/ Outcome	Population in study	Comparator/ Other study variables	Location of Study	Years of study
Qualitative, quantitative, mixed methods, evidence reviews	Acute malnutrition, MAM, SAM, undernutrition in children aged<5	Women, adolescent girls, mothers, other caregivers	Gender, age, life-stage, social/ cultural norms, nutrition intervention	LMIC, SSA, Somalia, Ethiopia, Kenya, Marsabit, Isiolo	2015 – 2020

Based on this initial screening step, the first selection of potentially relevant studies was made, gand de-duplication conducted to remove any repetitions among the studies. The remaining studies were then entered into an MS Word template and reviewed for final inclusion or exclusion in the review based on the eligibility criteria shown below.

- Study context: studies conducted in nomadic pastoralist, agro-pastoralist settings.
- Studies that explore relationships between GYSD (at households, community, intervention design/ policy and acute malnutrition).

Studies that explore the relationship between drivers of acute malnutrition and GYSD

2.2.4 Analysis of Texts, Synthesis and Reporting

The analysis involved the following steps:

- The refined list of selected articles/ publications was used in the evidence extraction, appraisal, and synthesis. Articles that did not meet the inclusion/ exclusion criteria at Stage 1 and Stage 2 were recorded and made available as supplementary information in the final desk review report.
- Content & thematic coding by the research question, critical analysis, and synthesis of the literature to address research questions.

[1] Roy Rosenzweig Center for History and New Media. (2020) Zotero [Computer software]. Retrieved from www.zotero.org

The desk review process is represented in **Figure 2 below:**

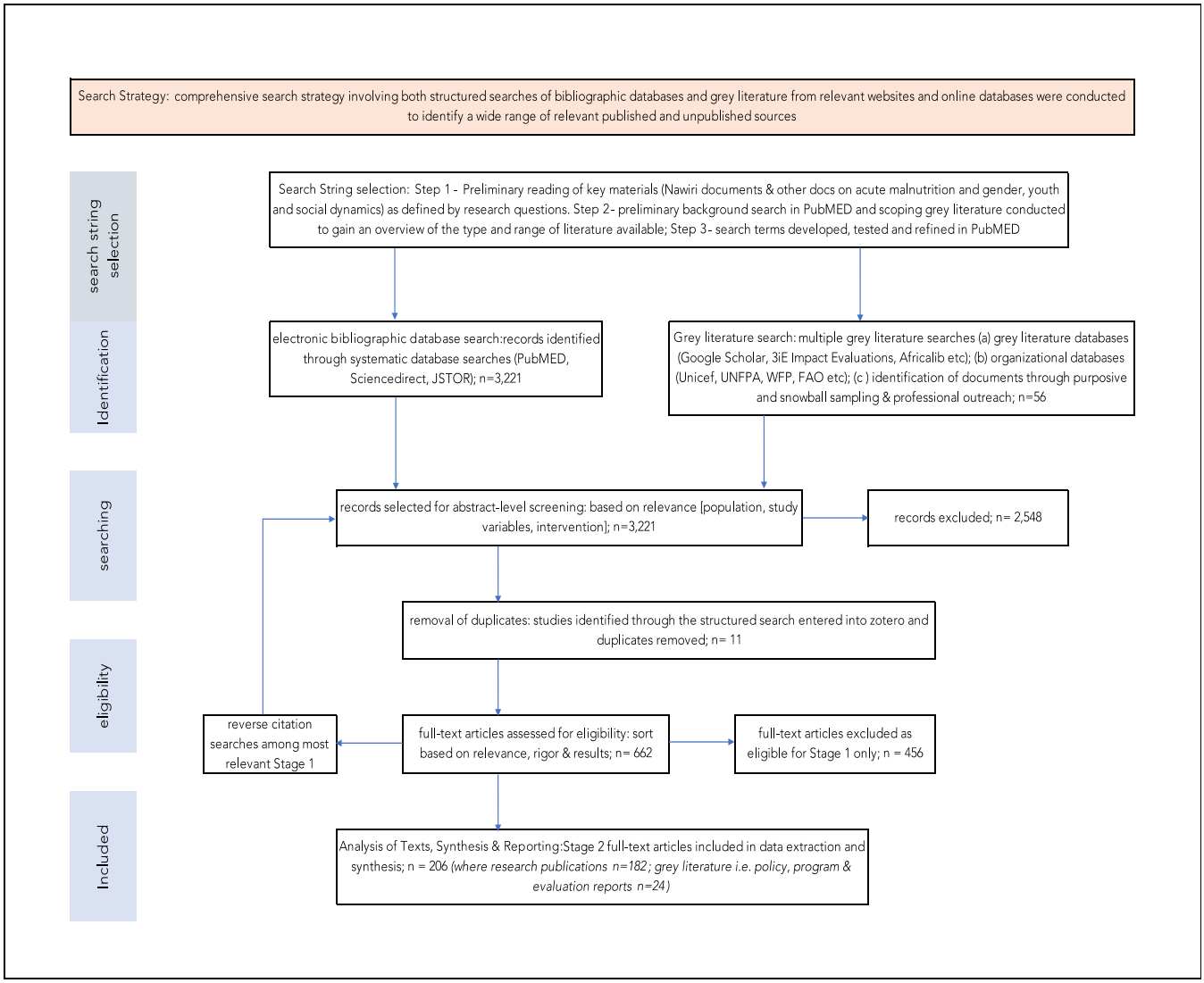

Figure 2 Flowchart depicting desk review approach adopted for the GYSD Analysis

2.3 Quality Assurance

Secondary literature and reports have varied purposes and hence the need for critical assessment. To ensure relevance and quality in the documents reviewed, the following considerations were made:

- ***Currency*** in terms of age of the publication, the relevance for sub-thematic areas under investigations and what different information it provides relative to its peer-publications.
- ***Authority & Credentials*** in terms of the reputation and credibility of the authors within the key themes for this study and whether great expertise exists within the author's line of work to publish on the sub-themes under discussion.
- ***Accuracy & Reliability*** in terms of the validity of the information and the extent to which other sources can verify the information therein contained.
- ***Audience*** as to whom the select publication is intended for i.e., general readership, academia, specific industry etc.

- ***Bias*** as to the extent to which the contents are based on factual evidence from research, the association between the authors and the study-agenda, and the extent to which the point of view expressed in the content affects the accuracy or reliability of the study.

To realize the foregoing, the following questions were asked:

a) What is the overall goal of the publication or data and how does it relate with that of the current GYSD Analysis study?
b) What is the credibility and bias of the source of information and how is it referenced?
c) What is the relevance of the publication or report to the current context?
d) How is the data disaggregated? What is the levels disaggregation?
e) What is the target audience?
f) What is the representativeness of the findings?

2.4 Study Limitations

Based on the above proposed approach, several limitations are envisaged:

a) Lack of published peer-reviewed robust evidence on the relationship between gender, youth and social dynamics and acute malnutrition within ASAL contexts in general and study counties. The dearth of research publications and evidence on gender and other social dynamics interact with acute malnutrition demonstrates a lack of gender and youth sensitive nutritional programmes and practices. While the available literature is not explicit of gender and socio-cultural issues underpinning acute malnutrition in the selected study sites, they provide evidence on a spectrum of themes that speaks to GYSD and acute malnutrition within ASAL settings.
b) The review only considered studies and data published between 2015 and the present (2020). This was in part informed by the need to capture changes in the Kenya country context that have affected nutrition (e.g., adoption of a new constitution in 2010 and the subsequent shift to the devolved government). It is assumed that studies made after 2015 would sufficiently capture the experience in previous years. Secondly, the infrastructure and technology context in the ASALs has changed with expanded access to all-weather road infrastructure, expansion of mobile phone services and increased utilization of digital financial services (esp. MPESA) all of which are of importance to the study.
c) Due to the lack of recent studies describing pastoralist contexts, an exception was made to include some studies outside the time window of 2015 – 2020.

3. Findings

3.1 Introduction

This section presents evidence from the literature on GYSD and acute malnutrition and specifically for pastoralist communities within SSA and in Isiolo and Marsabit counties. Guided by the research questions, the sub-sections will document (a) the county profiles which will provide context on the demographic, social, cultural, economic, political, and governance structures; (b) contextual understanding of GYSD and Acute Malnutrition; key policies and frameworks on acute malnutrition; (c) thematic findings on the relationship between GYSD and acute drivers of malnutrition; and (d) Gaps in findings to inform further Primary Research

3.1.1 County Context

Marsabit and Isiolo Counties represents part of the ASAL counties in the Northern Kenya which is least developed compared to other parts of the country.[14] The dominant mode of production in the two counties, pastoralism is faced with a spectrum of challenges ranging from climate variations, food insecurity to glaring gender inequality. These factors have a direct impact on the feeding, childcare practices, and nutritional status of the pastoralists. On acute malnutrition, the counties continue to record high rates of malnutrition that exceed emergency threshold levels (>15%) in dry, extended drought and wet seasons. The challenge of food insecurity, closely driven by factors such as climate change and other shocks, has been singled out as a major driver of malnutrition at in these settings. However, the various factors act in different combinations to account for malnutrition and variation across socioeconomic settings. Exacerbated by climatic factors, ASALs are particularly at higher risk of increased malnutrition cases based on the risk of food insecurity and drought-related hunger. The mode of subsistence in these areas is often characterized by pastoralism, hence reliance mainly on animal products, with the risk of dietary deficiencies. From the plethora of existing literature, generally, ASALs continue to be disproportionately represented in malnutrition statistics across the county. This could be associated with the temperature shocks and systemic marginalization and exclusion in national development discourse.

Marsabit

As the second-largest county in Kenya after Turkana, Marsabit County occupies approximately 70,944 km^2 with a population of 459,785 that comprises of 243,548 males and 216,219 females.[15] While pastoralism accounts for 81% of sources of livelihoods, agro-pastoralism accounts for 16% and others such as formal employment, casual wage labour, petty trade and fisheries account for the remaining 3%. Analysis of County data shows that acute malnutrition rate has remained high in the past five years. The County's Global Acute Malnutrition (GAM) as classified by WHO-UNICEF classification threshold is considered critical at 18%. Within the county, there are also variations in the rate of acute malnutrition. Thus, malnutrition is a key public health concern for the county government with the prevalence of stunting and wasting rates at 26.5% and 16.3% compared to national figures of 35.3% and 6.7%, respectively.[16]

Isiolo

Isiolo County has a total population of 268,002 (Males 139,510 and Females 128,483) covering an area of about 25,605 square km^2. The county has four main livelihood zones. These include pastoralism (50%), agro-pastoralism (15%) and others such as casual and formal employment account for 32%. The current prevalence of GAM in the county stands at 13.2% which is slightly lower than that of Marsabit.[17] Furthermore, stunting, and underweight as features of acute malnutrition are very high standing at 18.1% and 16.3% respectively. These figures are considered to be higher than the standards that are acceptable at the national scale. Additionally, the county is characterized with poor Infant and Young Child Feeding (IYCF) practices where exclusive breastfeeding (EBF) rates stand at 72.1% which is below the set target of 80%, whilst complementary feeding practices are equally below the recommended levels with dietary diversity and minimum acceptable diet at 32% and 47.6% respectively.

3.2 GYSD in the Policy and Programmatic Context of Food Security and Nutrition Programming

Section Highlights

- Nutrition sensitive policies at both levels of government (national and county) demonstrate awareness of the unique needs of women and youth, but from a technical viewpoint – there is minimal consideration of the social dynamics that influence the uptake of the policies in the first place.
- Gender and youth objectives are not well elaborated in current government policy. The implication is that gender and youth objectives are articulated and implemented from a sector -centric and supply-driven perspective.
- On the issue of resource allocation at the county level, audited county budget (2014 – 2018) for both Marsabit and Isiolo counties do not include clear budget lines for planned gender and youth-related activities. Similarly reporting on expenditure is obscure thus limiting detailed scrutiny of budget information related to gender and youth priorities.
- Despite existing efforts to promote affirmative gender-related laws, these are considered 'elite' and out-of-touch with local realities leading to slow uptake.
- Among other non-state actors, program design and implementation show an increased nuance and understanding of how gender, youth and social dynamics impact infant and young child feeding practices and its effects on nutrition outcomes for children.
- Informal systems are well-established for instance the councils of elders of the Gabbra (the *Guumi Gaayo*) and the Borana (the *Gadda*) hold significant influence over certain cultural issues. However, they also represent a highly patriarchal system whose views on certain issues such as gender is usually discordant with government policy.

Introduction

This desk review sought to identify how nutrition-sensitive and specific policies articulate gender, youth, and social dynamics: What values, ambitions and aspirations do the policies contain in terms of youth and gender? What are the strengths, gaps and opportunities in terms of GYSD sensitivity in the written policies? It also sought to identify how formal institutions interpret and implement policies from a GYSD perspective – are social dynamics considered as enablers or barriers to the realization of nutrition policies? Are gender and youth needs factored in the implementation of programmes by formal institutions?

The desk review of national nutrition-sensitive and specific policies[2] used the: **USAID's *The Integrated Framework for Gender Analysis of Nutrition Policy*.** [11] The framework highlights specific nutrition policy levers as well as gender-sensitive approaches and themes within the given policy. The review of national nutrition-sensitive and specific policies included six documents selected to reflect key nutrition-sensitive sectors: Health,[18,19] Agriculture,[20] Education,[21] Social Protection[22] and the Ministry of Devolution and ASALs.[23]

Gender youth and social dynamics in national and county nutrition-sensitive policies

The review explored 6 key gender themes within the national policy documents as indicated in Table 1 below. Five of the six reviewed documents highlighted explicit gender commitments within their objectives and broad goals although the depth with which gender-goals and objectives were articulated varied across all the documents. Some of the policies indicated a commitment to the gender objectives in the national constitution and international conventions and treaties; for instance, the Kenya National Social Protection Policy, 2011 cited adoption of UN Convention on the Elimination of All Forms of Discrimination Against Women (1979); the Ending Drought Emergency (2015) highlighted alignment with provisions of the UN Security Council Resolution 1325 on Women and Peace and Security, the Constitution of Kenya (2010) and Kenya's National Action Plan on Women, Peace and Security.[24] It was however not clear what specific aspects of these commitments were being addressed in the nutrition-sensitive policies.

A key gap identified in the policy review was a lack of explicit pointers on how stated policy objectives contribute to gender and youth outcomes. One of the reasons behind this gap was insufficient assessment and description of the social landscape within which the policies would be implemented. The policies were also less explicit in addressing strategic gender needs such as empowerment and representation. The exception among the six-national nutrition-sensitive policies was the Ending Drought Emergencies Framework[23] which highlighted the unique social dynamics with regard to women's roles, position within society and control over resources within the drylands such as: changing demographic and social patterns due to migration; increased settling as opposed to pastoral migration and increased commercializing of pastoral resources and the unique impact of such changes on gender roles.

[2] This term is used broadly to generalize for guiding documents regarding standards and practice within a given sector. It could refer to: policies, strategies, action plans, implementation guidelines and frameworks.

Table 2 Analysis of key Policy documents using the USAID Integrated Framework of Gender Analysis

While recent county documents gradually include better nuanced gender and youth objectives, a lingering gap is an explicit socio-cultural mapping of social dynamics that would hinder or enable uptake of the stated objectives.
[Cite your source here.]

in Nutrition Policy

	ASGTS 2019-29	KNAP 2018-22	KNSPP 2011	NSMNS 2017-22	CPF EDE (2015)	BFCIIG guidelines (2016)
Do the vision, goals or principles have an explicit commitment to promoting or achieving gender equality?	Yes	No	Yes	Yes	Yes	Yes
Does the policy considerations and include men and women's practical needs?	No	No	Yes	Yes	Yes	No
Does the policy considerations and include men and women's strategic needs?	Yes	No	No	No	Yes	No
Does the policy consider gender norms, roles and relations?	No	No	No	No	Yes	No
Does the policy avoid considering men and women as homogenous groups	Yes	Yes	No	No	Yes	Yes
Does the policy differentiate between sex and gender?	No	No	Yes	Yes	Yes	No
ASGTS 2019-29 Agriculture Sector and Growth Transformation Strategy (2019-2029); **KNAP 2018-22** Kenya Nutrition Action Plan 2018 – 2022; **KNSPP 2011** Kenya National Social Protection Policy 2011; **NSMNS 2017-22** National School Meals and Nutrition Strategy 2017 – 2022; **CPF EDE (2015)** Common Programme Framework for Ending Drought Emergencies 2015; **BFCIIG guidelines (2016)** Baby Friendly Community Initiative – Implementation guidelines (2016)						

The desk review of nutrition-sensitive and specific policies[3] made use of USAID's *Positive Youth Development (PYD) Framework*[25] to assess key themes in youth participation and inclusion. The review included three objectives: whether the policy's vision, goals or principles have an explicit commitment to promoting youth engagement; whether the policy considers cultural norms and roles of youth within the broader social dynamics; and identifying strategic needs promoted by the stated policy[4]. The six reviewed national policies, with exception of the EDE 2015, didn't sufficiently consider young men and women separately. The EDE 2015, for instance, considers the 'double-blind' experienced by young women in the drylands of Kenya owing to low literacy rates in the drylands as well as low literacy rates among young women in Kenya in general. It also considers the household roles girls are engaged in such as collecting fuel and water as a threat to education commitments, and the compounding impact of dropouts on childbearing and infant feeding (EDE, 2015).

[3] This term is used broadly to generalize for guiding documents with regard to standards and practice within a given sector. It could refer to: policies, strategies, action plans, implementation guidelines and frameworks.
[4] Strategic needs include youth education, youth livelihoods and economic activity, health including adolescent pregnancy, peace and security, youth participation in governance.

Most of the policies addressed youth-related objectives from the premise of skills development, linkage to entrepreneurship opportunities and creating employment. However, the broader social dynamics are not well mapped, and therefore, opportunities for including youth are also missed. For instance, the Baby-Friendly Community Initiative (2016) is silent on mapping social dynamics that influence infant feeding practices. This policy proposes mother-to-mother support groups as a means of using peer support to influence positive infant feeding practices but fails to address factors that determine group membership such as woman's status in the household and her autonomy to participate, as well as other social factors such as education level, age, ethnicity and clan, and socio-economic status. This can lead to frustration and delays in set-up and uptake of certain programme instruments that are recommended in policy documents. This lack of in-depth contextual grounding limits the usefulness of such policies in informing programme design and implementation.

To understand how nutrition-specific and sensitive policies are interpreted and implemented at county level the desk review analysed the County Integrated Development Plans (CIPD) 2013-2017[26] and 2018 – 2022 for Marsabit[27] and Isiolo Counties,[28,29] and the Isiolo County Nutrition Action Plan 2015 – 2017[30] and Marsabit County Nutrition Action Plan (CNAP) 2019 – 2022.[31] Gender review of county policies used the Harvard Framework due to its community and household-level focus on gender dynamics. Based on the Harvard Framework, the gender issues articulated in the CIDPs mostly addressed the mapping of the factors influencing differences between men and women (political, economic and cultural) and improving them i.e., increased representation and participation of women in leadership, minimum representation of women in government positions and active contribution to development through increased participation. The two CNAPs focused on sex-related nutrition needs. In considering the needs of youth, the Marsabit CNAP (2019-2022) and the CIDPs highlighted the need for formal training, increasing skills and employability of youth. Generally, youth and social objectives were addressed from a supply-driven perspective of government intentions and plans around gender and youth empowerment and inclusion. The county policies were not explicit on the gender and youth situational analysis to inform specific social gaps and norms that would act as barriers or enablers of the proposed interventions.

Gender youth and social dynamics in Formal and Informal institutions

To further understand the extent to which policies are effective in addressing GYSD concerns, it is necessary to look at the institutional space within which policies are implemented. Institutions are "any form of constraint that human beings devise to shape human interaction". This is critical since policies are advanced through institutions – both formal and informal and the manner in which institutions interact with policy and with each other determines policy outcomes. The desk review of institutional practices was approached by analyzing gender and youth policies, budget reports for the two counties, county annual development plans and programme reports from several implementing actors.

To understand the perspective of formal institutions, the desk review analyzed Isiolo's Gender Policy 2020-2025[32] and County Annual Development Plans (CADP) 2016 – 2021 from Isiolo[33] and Marsabit[34] counties which highlight county governments' annual budget and intervention commitments. Broadly speaking the gender-objectives slightly improve over the years with most recent CADPs for both counties indicating strategic activities such as the development of county gender policy and county cultural policy; promotion of technologies that are gender-appropriate; disaggregating farmer training by gender; conducting baseline survey on gender; developing a county database on gender-based violence. Isiolo County Gender Policy usefully stipulates a gender empowerment perspective for improving food and nutrition security by including strategic goals such as gender studies and research, implementing trade agreements, developing gendered agricultural marketing policies; supporting female-headed homes to access land with title deeds etc; as well as practical/tactical goals such as training women on nutrient requirements per age groups. This implies an objective within formal

institutions of giving a context-specific lens to gender, youth and cultural dynamics. Like in the policy review, social dynamics are however not addressed from a position of whether formal and informal institutions converge or diverge, which would enable planners and implementers to gauge the probability of attaining certain objectives.

A budget review of allocation to gender and youth services for both Isiolo[35] and Marsabit[36] for the 2014/15-2017/18 financial years indicated limited disaggregation of data in budget reports, presenting a challenge in analyzing investments incurred to achieve gender and youth commitments of both counties. Isiolo's child protection, youth, and women budget allocation of total county budget from 2014/15 to 2017/18 fluctuated as shown in the table below.

Table 3 Budget Allocation to Gender, Youth and Child Protection as Proportion of County Budget - Isiolo

Financial year	Child Protection, Youth and Women Sector Budget Allocation as Share of Total County Budget
2014/15	3.1%
2015/16	5.8%
2016/17	4.1%
2017/18	6.5%
Average (2014-18)	**4.9%**

The analysis shows that 60% of the budget was allocated to recurrent expenses and 40% to development initiatives, but the policy brief did not include specific interventions of budget allocation to youth, women, or child protection, making it difficult to probe further the commitment of the county to the gender and youth priorities indicated in the CADPs and CIDPs. In Marsabit, the allocation to child protection, youth, and women's budget as a share of total county budget from 2014/15 to 2017/18 fluctuated as shown in the table below. (KIPPRA Policy Brief No. 77/2019-2020).

Table 4 Budget Allocation to Gender, Youth and Child Protection as Proportion of County Budget - Marsabit

Financial year	Child Protection, Youth and Women Sector Budget Allocation as Share of Total County Budget
2014/15	2.2%
2015/16	3.8%
2016/17	2.7%
2017/18	2.5%
Average (2014-18)	**2.8%**

The analysis shows that 30% of the budget was allocated to recurrent expenses and 70% to development, but similar to Isiolo, the brief did not highlight the specific activities and that the budget was assigned to, making it difficult to probe government's priorities with regard to gender and youth objectives. To understand whether programming by non-state actors within the two counties is informed by GYSD considerations, the desk review included an analysis of programmatic nutrition reports. For instance, an ethnographic study done in Isiolo and Marsabit mapped social dynamics impacting infant feedings such as an Infant and Young Child Feeding cultural core, the association between maternal workload and infant feeding, the influence of social support systems on infant feeding, women's sense of agency in ensuring sound nutrition practices and the impact of social values such as sharing and social responsibility on child nutrition outcomes.[37] In addition to rural women's workload a Nutrition Causal Analysis is done in Isiolo highlighted the mixed picture of social

transformation as a root cause of malnutrition.[38] An increased value for education improves literacy levels for women on one hand but also leads to dropping out from pastoralism, resulting in split families as men seek employment which then increases women's vulnerability.[38]

Other programme documents such as the Accelerated Value Chain Development report[39] provided detailed gendered disaggregation to programme outcomes such as uptake, access to and application of agricultural technology; sales from livestock; dietary diversity and increased intake of the value chain product i.e. milk that is consumed by programme beneficiaries. The findings could have been enriched by including background information on the social-cultural dynamics that influence gender and youth participation in pastoralism. The Kenya Livestock Systems Activity Gender and Youth Strategy[40] take cognisance of how social norms critically contribute to inequities in livestock market systems, particularly for women and youth, and provides three conceptual frameworks to apply in advancing gender and youth objectives, while the Kenya Livestock Market Systems Activity – Gender and Youth Analysis Report[40] apply those conceptual frameworks to map the social norms that influence gender and youth engagement in livestock value chains. The report highlights how cultural norms inhibit unmarried girls from engaging in livestock trade, limited financial access to market and lack of skills among the youth to participate in livestock trade.

The report also highlights that despite livestock ownership increasing uptake of nutritious products such as eggs and milk, household food insecurity is compounded by women's limited access to resources such as land, and financial services. At global-level, USAID's Health Policy Plus (HP+) highlights four cross-cutting issues, one of which is gender equality. The four cross-cutting themes are considered against a backdrop of complex social-economic determinants such as cultural beliefs and practices, gender roles and power dynamics as shapers of health priorities.[41] At a national level, an end of activity review of ***APHIAplus Imarisha*** project indicates socio-cultural attitudes as a barrier to health access, thus, a key consideration during the development of capacity strengthening. The *APHIA plus Imarisha* response, which was implemented in the Northern regions of Kenya, mapped key structures to be targeted for capacity strengthening and included cultural fora and religious structures along with other formal institutions[42] Similarly the **USAID *Boresha Afya*** project in Tanzania designed to increase assess to primary health services, including nutrition, highlighted stigma and social norms as a major barrier to service uptake by youth and women.[43] The report highlighted that negative social norms (such as patriarchal systems that allow male partners to prevent women from attending health facilities, force women to introduce alternative foods to children under 6 months, norms that normalize GBV) acted as barriers to accessing health facilities, limiting the demand and uptake of health services.

In summary, the programmatic review, in contrast with the national and county policy review, indicated a more explicit consideration of the gender, youth and social dynamics that affect infant feeding practices and resultant nutrition outcomes. Such in-depth studies carried out by different development partners (non-state actors) imply an appreciation of the need for formal institutions to gain perspective of informal and traditional beliefs and practices and how these affect malnutrition, infant feeding and general health-seeking behaviour. The findings from such studies can be enriched by understanding the nuanced interactions between the nutrition objectives of formal institutions and the dynamics of informal institutions. This will be useful to design context-sensitive interventions. The analyses obtained from such studies also provide an opportunity to inform strategic county government plans by incorporating GYSD as enablers or potential barriers to achieving desired outcomes in programming intended to reduce acute malnutrition in children.

Understanding GYSD in Informal and Traditional Institutions

"Informal institutions are often defined as the sets of informal rules that exist outside and alongside "formal" structures of government."[44] or expounded further "informal institution refers to social norms; customary laws and codes of conduct; and their enforcement mechanisms, such as social networks that together guide people's behavior within a society".[44] Informal institutions can influence the uptake of formal services by either: strengthening existing informal practices that promote the objectives of a formal system; challenging norms that hinder objectives of a formal system; substituting existing practices, thereby creating new programme opportunities or creating new customs to enable programmatic changes.[44]

Within public health interventions, informal institutions contribute significantly to shaping decisions and actions that surround infant feeding. A Knowledge, Attitude and Practice (KAP) survey of traditional birth attendants (TBAs) among pastoralist communities in Laikipia and Samburu counties of Kenya revealed that over 97.1% of TBAs provided dietary advice to pregnant women while all but one of the 171 interviewed TBAs provided infant feeding advice to mothers post-delivery.[45] An ethnographic survey carried out in several counties including Marsabit similarly revealed the contribution of informal institutions such as clan, ethnic groups, husband/father, mothers-in-law and grandmothers in influencing infant feeding practices.[37] The study applied a cultural-ecological model to understand how household decisions are influenced by broader social units, leading to a perpetuation of historical-cultural traditions which could lead to values conflict when the goals of older and newer values diverge.[37]

However, infant feeding guidelines fail to provide a nuanced approach to how formal and informal systems will complement each other, or programmatic interventions to strategically influence divergent infant feeding goals. For instance, the BFCI guidelines include mother's-in-law and grandmothers as influencers of infant feeding practices but are silent on crucial social dynamics such as whether the age of the mother can influence inclusion within mother-to-mother support groups. It is thus important for formal institutions to anticipate the contribution of informal institutions as influencers in the uptake of/demand for formal services at the community level.

A qualitative review on uptake of Maternal Newborn and Child Health services in Garissa County revealed the use of male healthcare workers as a barrier to uptake of Ante-natal Clinic and maternity services.[46] Through focus group discussions and interviews, this barrier was identified as a personal preference by clients, as opposed to an inhibition that is religious or cultural in nature. A recommendation from this review informed the need to advocate for respectful and culturally sensitive services by male nurses; utilize Traditional Birth Attendants to advocate for the uptake of maternity services regardless of the gender of the healthcare provider; prioritize the hiring of female nurses.[46] This example demonstrates a formal system that anticipates demand for service based on values in the informal system and an informed approach to mitigate the barrier.

Overall, most of the policies, county plans and programme documents were more explicit on the theme of gender compared to youth and social dynamics – perhaps based on a history of gender mainstreaming in development strategies spanning several decades. The Nawiri project provides a unique opportunity for creating nuance on how formal and informal institutions co-exist with each other and co-create a hybrid institutional space within which GYSD interact influence child malnutrition outcomes.

GYSD related Laws and Legislation in Formal and Informal Institutions

The government of Kenya has prioritized gender equity through constitutional and legal approaches. Some selected sections of Kenya's constitution that advance gender rights include section 27 (3) which states women and men have rights to equal political, economic, cultural, and social opportunities.

Section 45(3): states that "parties to a marriage are entitled to equal rights at the time of the marriage, during the marriage and at the dissolution of the marriage"; Section 60 (1) includes the elimination of gender discrimination within customs that relate to land and property inland.[47] The government has also put in place acts of parliament to define gender-related offences and crimes punishable by law, one of which is the sexual offences act 2006[48] and its amendment 2011 which defines sexual offences with the aim of protecting victims from harmful sexual acts. The protection against domestic violence act 2015[49] defines 14 actions punishable by law, including abuse through child marriage, forced marriage and female genital mutilation (FGM)[49]. Specifically, the Prohibition of FGM Act 2011 aims to protect the mental health and physical integrity that would be violated within a victim of FGM.

Despite the existing laws and acts, data on negative gender practices in Kenya paint a grim picture. 21% of women aged 15 – 49 years have been circumcised, 96% of women have heard of female circumcision.[50] Female circumcision is prevalent among young and adolescent girls with 71.5% of all female circumcisions having been conducted on girls aged 14 years or younger.[50] With regard to domestic violence, over 44% of women have experienced gender-based violence.[50] Tied to these findings are the cultural beliefs and attitudes to GBV and FGM. About 30 % of circumcised girls believe it is a cultural requirement, while over 41% of women believe wife-beating is justified for one reason or another.[50] Literacy levels are associated with the attitude towards FGM: 44.8% of women and 50.1% of men who believe FGM is required by their community have no formal education.[50] This aligns with findings from a Gender Analysis Report that indicates low awareness levels of the laws and policies aimed at promoting and protecting gender-related rights.[51]

During the dissemination of the desk review findings in both Isiolo and Marsabit (1st - 6th November 2020), county stakeholders from government and other institutions indicated low awareness of gender laws at both government and community levels. Government laws are considered 'elite' and out-of-touch with local realities,[5] designed without adequate community engagement and implemented with ready solutions for communities to 'endorse'. In contrast, informal laws such as those instituted by the *Gumi Gayo*[52] possess pervasive awareness levels. The *Gumi Gayo* is an indigenous institution of the Borana communities both in Ethiopia and Kenya with defined informal governance systems. [53]Resolutions made by the Gada, i.e the assembly, seem to possess efficient and rapid communication and ratification by community in contrast to formal laws owing to the trust accorded to the Gada systems.[53,54] However, the *Gumi Gayo's* gender-related resolutions provide a mixed picture of supporting gender rights e.g. (declaring FGM illegal) and inhibiting the same (e.g. requiring husband's consent for a woman to leave her home).[52] While the *Gumi Gayo's* resolution may not necessarily be adopted by formal institutions, lessons on building trust with community could be borrowed. In addition, acknowledgement of this and other informal institutions may be a necessary scoping exercise of the social systems as enablers and barriers to gender laws that would impact on nutrition outcomes. Broadly, the desk review shows that nutrition-sensitive and specific policies are delivered through formal institutions and structures. However, health systems and health service delivery are generally designed with a macro focus on access and coverage as opposed to a micro focus of addressing socio-cultural aspects that affect uptake and consistent use of services in the first place.[55]

[5] Group discussion in Isiolo.

3.3 GYSD and its pathways to acute malnutrition within Pastoralist Communities in the Context of Household Food Security, Maternal Nutrition and Infant and Child Nutrition (IYCN)

Section 3.3.1 Relating acute malnutrition to Intra-household and Inter-household Gender and Age Dynamics related productive, reproductive roles, time use and workload

Section Highlights

- Very few studies in Low and Middle-Income Countries (LMICs) have measured women's and men's, girls', and boys' productive and reproductive workload and the association it has on time for child nutrition/health care practices/nutrition outcomes. This gap is more glaring for pastoralist communities – an issue which has also been adequately documented.[56]
- Women have defined roles in pastoralist production – herding and more specific roles related to care of the young, pregnant, and sick animals, processing of milk and sale of milk products – roles that tend to be more time-consuming and tedious than those of men – herding, watering and sale of animals
- Nutritional programmes/interventions increase demand on the time of women given their time commitments on other productive and reproductive roles.
- Seasonality as an aspect of pastoral production and the role it plays in acute malnutrition did not feature in the reviewed studies from Northern Kenya but there have been studies in Uganda[57] and Chad[58] that have demonstrated the seasonal nature of acute malnutrition in pastoralist communities and its close associations with pastoral livelihoods.
- Most studies on gender roles tend to focus on women and place less emphasis on understanding men's roles. In addition, studies treat women as homogenous and fail to categorize them according to their individual, social, cultural, and economic identities among others. The views and experiences of men, children, young men, and young women are missing/ not distinguishable in the findings.

Gender Division of Labour and Acute Malnutrition

Overall, the studies analyzed show that within pastoral networks gender shapes and determines the different roles and responsibilities given to men, women, boys and girls. These roles, responsibilities and relations are often anchored on the complex cultural fabric of the pastoral communities. Studies show that men and women's roles are essential in the continuation and adaptation of pastoral and agro-pastoral systems.[59–61] Division of labour along gender lines determines the workload and time use for women, men, boys and girls and thus directly impacting on health and nutritional status of children, women and other household members.

To this end, the majority of the studies analyzed indicate that women compared to men take primary responsibility for reproductive work such as cooking, cleaning, taking care of children, fetching water, collecting firewood and taking care of the sick in the household.[59,60,62,63] Studies also demonstrate that women activities within the pastoralist production system include herding and more specific roles related to animal husbandry including care of the young, pregnant and sick animals, processing of milk and sale of milk products – roles that tend to be more time-consuming and tedious than those of men – herding, watering and sale of animals.[61]

These duties are directly influenced by gendered norms, values and relations. For women, these roles are often not recognized and are accorded very low value or considered invisible.[64,65] Women carry out their reproductive roles alongside productive roles such as the production of food which increases the overall responsibilities of pastoral women.[59,66,67] Despite this increase in workload, in instances where women are involved in livestock rearing, there are positive outcomes on household nutrition.[68]

Despite women's contribution to pastoral livelihoods including livestock and agricultural management, they have limited access to and control over key productive resources such as livestock, agricultural produce and land.[69] Men's decision-making power with limited women's role has been shown to extend to IYCF practices for instance decisions on when to start and stop breastfeeding[70–72] and women's health care.[70] This limits women's overall ability to directly influence food choices and dietary practices for their households. There is thus a strong argument for the link between increased maternal autonomy (or increased cooperation between mothers and farhers) and children's nutritional status.[73]

Our review shows that pastoral men feature mostly in decision making and control of resources. Older men specifically are the decision-makers for livestock production and management. Men's responsibilities as herd managers include moving, feeding and watering the herds, castration, vaccination and slaughter, building enclosures, marketing and digging wells.[61,67] The youth or junior men and boys perform most of the physical labour and herding. Adolescent girls are actively involved in herding their mothers' livestock. Widows take over the role of their late husbands in case their sons are not able to carry out the activities; hence, the workload of young widows is particularly high. This, in turn, denies them time to participate in food preparations for themselves and their children.[74]

The Nexus between Workload-Time Use and Acute Malnutrition

It is without a doubt that the way gender roles and responsibilities are structured within pastoral set-ups, the greater burden falls on women. While women's workloads and time use present complexity in the measurement, some studies provide an understanding of the disproportionate workloads for both men and women in livestock and agricultural production.[67,75] From the studies, women have high work overload time burden. Whereas some studies indicate that men and boys may sometimes support the care work and household chores, it is generally understood as a preserve for women and girls in almost all the pastoral communities. Women and girls are dominant in food production and provision including processing and preparation which are some of the most laborious activities in ASALs. At the same time, studies conducted in Kenya and Ethiopia[69] demonstrated that women work on average between 10 to 13 hours per day which is 4 hours more than that of men.[76] Similar studies have highlighted the discrepancy in workload between men and women across seasons demonstrating that women work 8.5-19 and 14.5-18 hours and men 8-15.5 and 6.8-14 hours in the wet and dry seasons respectively.[77] Further, women's care work is the main and laborious activity taking about 7 hours of their time per day. In comparison to men, if women spend more time on care work, men usually report higher care hours too. Cooking is the most time-consuming care activity for women. The gap between women's and men's hours of care work as a primary activity ranged between 3 and 6 hours per day.[78,79]

On the management of livestock, results indicate that women are mostly in charge of daily care for their household's livestock. These daily tasks are time-consuming, and more efficient livestock management is hampered by a variety of factors.[80] Access to water poses a problem, as water facilities are frequently not within the house or on village premises therefore women have to walk long distances to gather sufficient water for domestic use and livestock needs. This scenario leaves women with very little time to care for their young children and ensure their nutritional needs and that of their children are met. It is even more challenging with frequent droughts that magnify an already existing work burden on pastoral women through increased distances to fetching water, collection of

firewood and fodder for livestock.[74] Seasonal migration by male members of the households means that mothers and caregivers are left with limited support and burdened with additional tasks that would have been handled by the men. Young mothers and PLWs are thus rendered especially vulnerable and may find it more difficult to ensure proper nutrition for themselves and their children thus, increasing the chances of acute malnutrition for their children. This is because they are more likely to have fewer people to help them in their work (since the children are younger) and less likely to challenge existing gender norms and request their male partners to support some of their roles as opposed to elderly women who have more resources at their disposal.

Further, there are variances in workload among various groups of women and men depending on their socio-economic disposition. There is a link between malnutrition and women's engagement in pastoralist activities as compared to just solely engaged in domestic duties.[81] Similarly, a study in Ethiopia found that there is a high prevalence of undernutrition (stunting, wasting and underweight and thinness) among children aged 6–23 months in coffee-farming communities.[82] Other studies show that pregnant women and lactating mothers were unable to follow expected healthy nutritional practices because of the high workloads such as taking care of livestock, farm work and household chores.[60,83,84] These groups of women remain occupied throughout the day and worklonger hours which leaves them very little time to prepare food and take good care of their children. Poor feeding habits during pregnancy were found to have a relationship with the wasting of children.[85] Similarly, working mothers are shown to be faced with the challenge of balancing between productive and paid work leading to little attention for nutritious food. Working mothers do not get time to care for their babies hence the children are fed on foods that are available until the mother returns from work.[86] Some studies from Ethiopia and Mali also record the number of children below the age of five in a family has an influence on the children nutritional status which differs radically with families having only one child.[87,88]

The ever-changing seasons' impact on the workload and time-use for both men and women within ASALs. A link between seasonality, acute malnutrition and women's work burden has been established in some studies.[57,83] Women explain that during droughts when food (milk) is scarce it takes a lot of time to search for food and children are left under the care of other children with little or sometimes no food. There is a paucity of studies looking at men's time use. However, some attempts made on this point out that men and women have different time use patterns and burdens.[76] Time matters, especially for women who are involved in agro-pastoral activities and also have to care about the household economy. We, therefore, note that time use, and workload are key determinants for child health and nutrition in pastoral settings. Time is an important aspect of nutritional outcomes since it is a requirement for the production, procurement and preparation of food, childcare and child feeding. Having a high or excess workload for women and girls, as the main participants in childcare, may generate time challenges that directly impact on child's health and nutritional status.

Changes in pastoralist livelihoods have forced transitions in how gender roles and especially the roles of women are defined leading to greater empowerment among women.[89] Definitions of women empowerment in livestock work among Maasai pastoralist women in Tanzania include access to and control over income, resources and decision-making power.[68] Studies among the Borana in Southern Ethiopia show how recurrent drought and loss of livestock herds have decapitated men's ability to provide for their households forcing women to seek income-generating activities outside the home (petty trade, selling charcoal and fuelwood) to feed their families.[90] In addition women are increasingly involved in livestock markets,[65,68] marketing of traditional meat products[91] and marketing of milk products.[92] Studies have shown that with changing roles, the household benefits as women report increased ability to ensure better nutrition for their families,[68] and pastoralist men get more involved in child caring duties[90] and in IYCF practices[93] all of which are associated with positive outcomes on child nutrition.

3.3.2 Understanding how barriers to women's, men's, girls and boys, access to and control over critical resources (assets, income, paid employment, social networks, technology, and information) and public and private services impact acute malnutrition in children

Section Highlights

- There is a history of exclusion and marginalization of Northern Kenya affecting provisions of basic social services such as health and infrastructure, education, water which are poorly developed, less coordinated, and largely fragmented.
- Studies have shown the existence of socio-cultural norms regarding ownership, access, and control over critical resources (such as livestock) in the pastoralist economy which do not allow women and young men access to and control of assets and resources
- Gender-based violence (GBV) has negative implications on women and adolescent girls' autonomy and decision-making related to their sexuality and reproductive health. In pastoralist communities, forms of GBV which seem to be culturally accepted include female genital mutilation (FGM), child early and forced marriage, and wife-beating.
- There is strong evidence linking mother's exposure to IPV with negative outcomes on optimal child feeding practices (e.g., shortened breastfeeding duration, early termination of EBF and reduced breastfeeding initiation) and the effect this has on child nutrition.
- Social norms that allow men to restrict the movement of their wives (requiring women to obtain permission from their partners wherever they are leaving the house) act as barriers to accessing health care services including those that are related to child nutrition.

Ownership Barriers and Malnutrition

Pastoral settings are characterized by barriers related to culture, knowledge, social norms, beliefs, behaviors, decision making in the household and burden of other responsibilities. While livestock is the central means of survival and continuity for pastoralists, access, control and use of livestock products is indispensable for economic, social, cultural, and nutritional wellbeing of households.[94] Women and men have varying degrees of claims on livestock. The complexity of rights in access to and control over resources needs to be viewed in terms of the system of rights available to both men and women - de jure, de facto, nominal, and actual.[95]

The different entitlements on the livestock and their products may be resulting from the dual role of livestock as both sources of subsistence and basis of wealth and prestige (cattle complex). As such, men are associated with the management of livestock and household assets and are considered the owners.[90] Despite the social and cultural norms which dictate that all ownership rights are held by the man, there is increasing evidence that of slight shifts in women's absolute and relative ownership of resources within pastoral communities. This is because ownership of resources is important to nutritional outcomes as it enhances women's decision-making ability and participation in and benefits from specific livelihood strategies.

Women and children, with usufruct privileges, own small cattle at the household. Women are considered as milk managers, where they know how much milk to extract for household use and how much to leave for the calves for their survival and growth.[96] They allocate the milk and its products to different uses such as home consumption, gifts to other family members or friends,[97] and exchange for grain.[95] In addition, women have full control over milk and are responsible for its marketing.[65] Girls, like boys, obtain animals from their parents during special occasions such as marriage and through inheritance. Based on the gender division of responsibilities, women keep small stock as a source of cash for general family expenses (such as buying food), for paying school fees, for health care and

investment. Conversely, some studies from pastoralists in Cameroon, Togo and Ivory Coast paint a different picture.[74,98,99] In these regions, social status (master vs servant) is accorded more value than just being a man or a woman. The wife as the head of the family owns more animals than the man of lower status. Also, in better-off families, men of lower status milk animals under the supervision of women who considered to be of senior status. Our analysis demonstrates that ownership of livestock is one of the essential resources for women as they are a productive asset that they can easily own and that are not bound by complex property rights compared to, for example, land. Increased women's access to and control over livestock among pastoralist communities in Tanzania has been shown to yield positive benefits on household nutrition.[68] Such access is however restricted by prevailing patriarchal norms.

Access to Productive Resources (Assets, employment income, other income, credit) and Malnutrition

The review established that there's unequal access to and control over productive assets and resources (including income, employment) between women's, men's, girls', and boys among pastoral communities.[59,62,100] Access to and control over these resources is differentiated by gender and age, with women and youth playing key roles in natural resource management, but with control over most resources primarily in the hands of older men. Women and girls have limited access to and control of economic resources.[59,66,101] Pastoral communities are patriarchal, and men control household wealth and ultimately have the final say about selling or slaughtering animals.[68] The long-standing inequalities in the gender distribution of economic and financial resources are culturally determined by an asymmetrical power relationship connected to cultural administration of wealth. Women and girls gain access to the property such as land through their male kin.[69,74,101] It was established that property to be inherited through the male line, is more likely to remain within the clan rather than be lost when women are married outside the clan. The relatively informal means by which most pastoral women acquire livestock may help explain the limited rights women in this culture have over animals since more informal means of acquisition are seen as conferring fewer rights to control than an outright purchase.[102] The lack of access and control over resources also limit women's ability to make decisions in their households or communities to influence issues around food security and nutrition.[62]

While poverty is often measured in terms of income or food security, a household's ability to meet its material needs is determined largely by its assets. These are the physical, human, social, financial, and natural kinds of capital that determine what livelihood strategies a household can pursue and how well it can mitigate risks and cope during shocks.[103] Studies indicate that within the pastoral and agropastoral production system, men and women keep animals for multiple purposes, both productive (food security, income) and nonproductive (savings, insurance, cultural). It is worth noting that under such circumstances sometimes the non-productive reasons predominate the productivity ones and thus improving productivity may not be a priority.[96] The value placed on livestock, therefore, varies between men and women and this explains why households, where decisions are made by women, have higher chances of meeting their demands for food during times of crisis and hunger as compared to households where decisions on livestock are made by men. Putting assets in the hands of pastoral women has been shown to have positive outcomes, not only for women themselves but for households. The result is that women's ownership of assets increases their bargaining power thus enhancing their role in household decision-making on expenditures related to children's education, nutrition, and health[6]. Beyond material wealth, assets provide the basis of an agency or the power to act, to reproduce, challenge or change the rules that govern the control, use and transformation of resources. Findings on intra-household dynamics have shown that it is not only the total amount of household assets that determine how households are food secure but also who in the household controls the assets[96].

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Increased women's access to, and control over, assets for example as evidenced through increased participation in commercialization of milk products among Rendille women[104] has been shown to improve household food security and child nutrition. It is therefore evident that increasing women's access to, and control over, assets have a direct link to women's agency over household food security, child nutrition and education as well as the wellbeing of women.[61] The utility of livestock is closely tied to the seasonal availability of natural resources such as pasture and water. For instance, the amount of milk available depends on the availability of pastures for livestock. The less food available to livestock, the less milk they produce. During lean seasons, women's dependency on milk as a source of both food (for both themselves and the children) and income renders them vulnerable. Changes in the availability of natural resources due to the impacts of climate change may compromise a household's food security by further constraining the time available to women to invest in both childcaring and food preparation. This further explains the varying nutritional status of pastoralists with where high malnutrition among children is experienced during the dry season.

Another important factor is land ownership-a study conducted in Pakistan found that women's land ownership plays a noteworthy role in improving various development indicators, including her wellbeing and children's food and nutrition security.[105] Land ownership among pastoralist communities is restricted to men with certain exceptions for female-headed households.[95] In agricultural communities the positive relationship between women's land ownership and child nutrition has been demonstrated. In pastoralist communities, on the other hand, the land is communally owned and thus, understanding how women's land ownership impacts household food and nutrition status is not straightforward.[68] In terms of credit, review of studies show that many pastoral men and women have developed their credit systems in addition to those provided by the formal financial systems like banks and cooperatives.[106] Pastoral women, for instance, have developed their small credit systems where members of a group each save a certain amount of money monthly, which is then granted in turn to each of the women as a loan, normally at no interest. Most of these loans go towards non-income-earning activities although some groups allow loans of animals or milk. These systems tend to function best within social networks where strong social connections ensure that loans are repaid.

Service Provision and Malnutrition

Kenya's Vision 2030[14] sets out the stage by recognizing the history of exclusion and marginalization of Northern Kenya which is predominantly ASALs. Basic social services such as health and infrastructure, education, water, are poorly developed, less coordinated and largely fragmented. The services are limited and way below the national average. The discourse on public and private service providers concerning food security invites the discussion on food resource management including participatory approach. This is where communities, men and women are involved in shaping policy and making decisions that affect their food (in)security. This is because institutions providing services are vested with the responsibility of custodianship in providing assets and resources for food security services.[78] Thus, the way men and women access adequate and quality food is a function (in part) of service providers. They fundamentally influence the availability of food resources management for sustainability and the decisions of local/community institutions related to food provision. This result is that access and utilization of public and private services are determined by factors such as distance to facility, and quality of, health services; monetary and opportunity costs of accessing care; and societal and gender norms governing power dynamics within nomadic pastoralist groups as well as those between them and health care providers. Several studies identify structural barriers to access to treatment services. Some of the demand-side barriers which have gendered implications include distance to the health facility, high opportunity costs to attendance at the facility, and lack of awareness of Community based Management of Acute Malnutrition (CMAM) services by communities living in remote locations [107]. The knowledge, attitudes and practices of health care providers and

health seekers also play a role in utilization, as do hegemonic factors including political will and varying degrees of social conflict.[94,99,108–112] Well sourced and sets up well for the field data collection.

Technology and Information

Communication and access to information and knowledge is a key factor in the socio-economic and cultural development of pastoralists. Notably, pastoral communities have elaborated traditional communication systems used to share experiences on climate change, food and water patterns, ecology, local security among other issues of socio-economic and political importance. However, modern communication technologies, especially mobile telephones, have made significant inroads into these traditions and contributed to the social, economic, and political transformation of the pastoralist way of life. Modern technology has provided livestock information systems, focusing on livestock prices, volumes, markets, forage conditions, disease incidence, water supplies and conflict hotspots.[113] Despite the weak penetration of modern communication technologies into pastoral areas, improvements in telecommunications have greatly benefited pastoralists. Mobile telephones, especially, are contributing to social, economic, and political transformations. Mobile phones allow pastoralists to receive up-to-date market information on where to sell their livestock, reduce transaction costs and improve access to services, thereby raising their household incomes. Whereas in Senegal, short message service (SMS) technology and mobile geographical information systems (GIS) are used in determining pastoral mobility and water point management,[7] in Kenya, pastoralists receive meteorological climate forecasts via radio and mobile phones which helps in destocking and planned mobility. [8]

Modern communication technologies, especially radio and mobile telephones, are increasingly being used by pastoralists in Isiolo and Marsabit to access current information relating to climate change, allow people in the local setting to organize alternating travels to the market which reduces transport and transaction costs significantly. Mobile phone access and money transfer offer women opportunities to communicate and share resources with fellow women.[114,115] Women in these areas reported that mobile phones improved opportunities to earn and access financial capital from friends and colleagues without husbands or fathers knowing, as well as an improved ability to support elderly women and mothers.[116] This gives women much-needed autonomy over their income and has been shown to lead to improved household food security. Additionally, the use of technology like mobile phones has been associated with access to purchased foods leading to increased dietary diversity. Advancement in communication leads to easier communication and coordination of the process of production including food.[117] To the contrary, it has also been shown that in traditional pastoralist communities, mobile phone ownership and use can create gendered power asymmetry and lead to the disempowerment of women.[118]This gendered access to information is a barrier to women accessing markets and improving their sources of income.[119] Despite the evident benefits of improved transport and communication infrastructure, the failure of both county and national governments to ensure adequate coverage is a barrier to pastoralist development.[120] The lack of adequate and timely accessible information on climate change compromises the ability of the community to plan effectively. A challenge in accessing updated market prices reduces the ability of families to strategically market their livestock constraining their access to additional income.

Gender-Based Violence

Gender-based violence (GBV) refers to any harmful act that is perpetrated against a person's will, and that is based on socially ascribed (gender) differences between males and females. It includes acts that inflict physical, sexual, or mental harm or suffering, threats of such acts, coercion, and other

[7] (1 September 2017): 460–71, https://doi.org/10.1016/j.landusepol.2017.05.031 ; Georges Djohy, Honorat Edja, and Nikolaus Schareika, 'Mobile Phones and Socio-Economic Transformation Among Fulani Pastoralists in Northern Benin', *Nomadic Peoples* 21, no. 1 (1 January 2017): 111–35, https://doi.org/10.3197/np.2017.210106.

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deprivations of liberty. These acts can occur in public or private common forms of GBV include sexual violence (rape, attempted rape, unwanted touching, sexual exploitation and sexual harassment), intimate partner violence (also called domestic violence, including physical, emotional, sexual and economic abuse), forced and early marriage and female genital mutilation.[121] It encompasses violence against women and girls as well as violence against men and boys, and other individuals who do not conform to dominant gender roles (ILO 2012). It has also become widely used to address violence against women as a phenomenon that is related to the gender of both victim and perpetrator. Conversely, gender-based inequalities along the food production value chain impede the attainment of food and nutritional security.

In pastoralist communities' harmful cultural practices against women and girls continue to be practiced.[95] In Ethiopia and Kenya women living in pastoralist areas have a nearly 100 per cent chance of undergoing FGM.[113] Child, Early and forced Marriages (CEFM) are common and are preceded by female genital mutilation or cutting (FGM/C)[101]. These cultural practices are harmful to women and girls and constitute gender-based violence (GBV). Studies have linked these harmful traditional practices with low self-esteem, silence and powerlessness and reproductive health inequalities which prevent economic growth limiting women's opportunities. [122]Wife beating and continued practices like FGM have been found to affect the health and social status of pastoralist women. GBV has negative implications on the physical and mental well-being of women, girls, and their families, preventing them from reaching their full potential. GBV prevents economic growth by limiting women's opportunities and perpetuating harmful gender norms that curtail more dynamic, efficient, and equitable economic solutions.[62,99]

The practice of child, early and forced marriage leads to girls getting married during adolescence which is a critical period when their minds and bodies are still developing and have therefore not attained full maturity. The girls often get married too much older men and the decisions regarding marriage are made by men with no consultation with the girls themselves. This is largely explained by power and decision-making differences in pastoralist society, where girls have limited negotiating powers and constrained decision-making space especially with regards to their sexual and reproductive health. This practice of child early and forced marriage means that girls become wives and mothers at a disproportionately early age. Existing evidence shows a link between early and teenage pregnancy on one hand and poor health and nutritional outcomes for both the mother and child on the other hand.[73,123–125] Evidence also exists on the link between poor maternal nutrition and poor child nutrition.[99,126,127]

This review established that there is an association between Intimate Partner Violence (IPV) and child nutrition outcomes. IPV is often a culturally accepted practice in a pastoral society. In northern Kenya for example wife-beating is a common occurrence, but women accept this as a normal occurrence.[122] Evidence linking IPV to negative breastfeeding outcomes (shortened breastfeeding duration, early termination of EBF and reduced breastfeeding initiation) has been strongly established in recent systematic reviews[128–130] with one study demonstrating that women exposed to IPV had more than 50% higher odds of early termination of exclusive breastfeeding. before a child was 6 months compared to women who are not exposed,[131] and another showing that women exposed to IPV or high levels of stress were 25 to 38 per cent less likely to breastfeed.[132] In addition, studies in Kenya and India have shown a relationship between mothers exposure to IPV and lower odds of breastfeeding and early initiation of infant feeding on solids.[133,134] Similar findings were found in a study looking at 51 countries in LMICs and India and Bangladesh. [135–137]A study using 42 demographic surveys from 29 countries reported that intimate partner violence against women in low- and middle-income countries results in compromised growth in children. [64] Studies in Kenya,[138] Nicaragua[139] and Bangladesh[140] have found an association between exposure to IPV and child stunting, a finding which is underpinned by a more recent multicounty study.[141]

One of the causal pathways proposed for the association between IPV and child malnutrition links both prenatal maternal depression to its subsequent related outcomes such as low birth weight, high risk of pre-term birth and increased risk of obstetric complications and the negative effect it has on subsequent child growth and a mothers ability to care for her child.[134,141]Mothers exposure to IPV at the postnatal stage is equally related to maternal depressions and less optimal child feeding practices (such as early termination of exclusive breastfeeding). In addition, there is a strong argument for the intergenerational consequences of maternal exposure to IPV especially as it relates to the increased risk of mothers adopting non-exclusive breastfeeding and non-recommended complementary feeding practices.[133] These studies call for further research to understand the pathways that may be related to post IPV maternal behavior and the effect it has on optimal child feeding practices.[133,139,141]

Social Capital and Networks

Social capital among pastoral actors is characterized by social factors such as trust, norms and networks that can be an asset towards improving the efficiency of society by facilitating coordinated actions.[142] Broadly, social capital comprises three dimensions; bonding, bridging and linking. While bonding speaks to the social cohesion cemented through kinship, location, ethnicity and shared values, bridging is preoccupied with the relationships or networks that go beyond the social stratification and more often involving collaboration. Linking, on the other hand, is all about the engagement with external agencies including policy influence. The review found studies among the Borana in Southern Ethiopia on the association of social capital and community household food security among pastoral women.[143] The study reported that the main resources shared in *marro* (the social security system) are cash, food items and labor. The importance of social safety nets in nutrition among pastoralists was also established in other studies in rural Ghana,[144] Turkana[145] and Eastern Ethiopia[146] suggesting that it's a cultural practice built on trust to offer support in times of need.The review found that social networks and their attendant roles in securing food for households and communities in ASALs have attracted recent research interest[61,142] Such studies have emphasized the realization that food is socially and politically produced and consumed, hence, the important role of social networks and relations in enhancing household food security.[90]

Studies indicate that resource sharing is an integral part of traditional social support mechanism practised by pastoral communities to support vulnerable members. However, the practice is under threat from seasonality and the increased drought frequency and intensity reducing family wealth.[74,90] The place of social capital relationships in risk-smoothing at the individual or community level is often ignored in many studies. Yet, such organisational and collective levels form the foundations for building adaptive and resilience responses, adaptive capacity including in situations of addressing household food insecurity. Studies show that social capital in a community enables greater co-operation among individuals.[142] This co-operation is deemed to be important in resolving issues related to common poverty. Further, studies indicate that social capital creates an informal safety net as it enhances the sharing of risks and opportunities among people in the community.[143] It has been proven that social capital is valuable in addressing health problems, food insecurity, and other vulnerabilities.[66] For instance, results show that households of low-income communities with high levels of social capital are less likely to experience hunger and other nutrition-related problems.[142] However, we note that households that have limited social capital to draw on in times of crisis or need may be susceptible to social exclusion and many other vulnerabilities. Nevertheless, the need for understanding the specific form and nature of social capital that would help to address household food insecurities and improving overall household wellbeing is paramount.

3.3.3 How patterns of power and decision-making across age and gender divides impact on acute malnutrition among vulnerable groups

Section Highlights

- The desk review results showed that women's socioeconomic status and household autonomy were significantly associated with children's nutritional status. The findings indicate that in comparison with men, women have access but lack control rights over livestock, land, and income, which are critical to independent agency and decision-making
- The findings suggest there is a relationship between progression in maternal autonomy with improved child nutritional status. When mothers have control over income, they tend to divert more resources towards health- and nutrition-related expenditures than men
- Most studies established women have a lower status than men. This affects their ability to negotiate, with their partners in household purchases and decision-making. Findings show that women's low social status affects their autonomy in decision-making regarding family size, health-care-seeking behavior, child feeding, support, and care.
- There is an imbalance in decision-making power between men and women in marital relationships with men playing the dominant role.
- The relationship between decision-making and child nutritional status changes with region and context.

Understanding of power and decision making and acute malnutrition

Acute malnutrition is driven by social and community variables that interchangeably affect food production, availability, and distribution.[147,148] Particularly, there is evidence that links patterns of power and decision-making across age and gender dimensions to various levels of malnutrition ranging from mild to acute and severe.[99,149] The areas that exhibit these social and community variables tend to equally exhibit conspicuous trends or patterns of malnutrition.[99,149] Although all persons are at risk of malnutrition especially with high prevalence and incidence of food insecurity, women, girls, and children are at a higher risk of malnutrition.

Restricted participation in decision-making for girls and women, at household and community levels, means that women are unable to guarantee household food security. Women, girls, and children thus remain dependent and highly at risk of acute malnutrition since they are placed on the receiving side of power and decision-making advertently and inadvertently by the social system. Studies show that in most pastoral households, men have the final say in most household decisions- a show of influence and inability for the women to make decisions at that level.[82,125,150] The power and decision-making imbalances render different genders and ages vulnerable to acute malnutrition. This may further imply that gender inequality is a cause and effect of malnutrition and hunger.[151]

Power and Decision Making at Household and Community Levels

The patterns of power and decision making at the household and community levels are pegged on gender and age, with a significant spill-over on vulnerability to acute malnutrition. On gender and age, power and decision-making rest on socially ingrained aspects of gender roles and division of labour. These produce powerful forces account for the perpetuation of disparities for men and women, girls and boys, adolescents, children and adults.[126,152] The disparities in turn influence decision making and power wielded, with effect on acute malnutrition. Thus, the socially constructed notions of gender roles and power impact the nutritional status of different persons across gender and age dimensions. Power relations and decision-making across gender and age influence who has control over resources, and this may impact access to food and feeding habits.

Traditionally, women experience socioeconomic disadvantages that increase their risk of malnutrition. For example, women have traditionally experienced poor access to factors of production such as land. Even when they have access, the control of such a resource is limited based on ownership and decision-making challenges. [150,153,154] Further, gender imbalances in education also present a barrier to women meeting their nutrition needs and those of their children. This manifests in situations where women have limited access to education and information. Limited access to learning and education opportunities for girls disempowers women and reduces their agency. This predisposes them to poor maternal and child nutrition.

Several studies report a positive association between maternal education and the dietary diversity and decisions adopted.[155,156] However, even when forums and education opportunities are organized at the community level, women have household and other gender-assigned chores such as caring roles which limit their ability to participate. These roles are part of women's triple "burden" conceptualized as the productive (tasks contributing to the household economy such as agricultural and livestock production), reproductive (tasks to reproduce and care for the household such as fuel/water collection, food preparation and childcare) and community (tasks supporting community improvement and community's social events and services). While the first two roles confine women more within their households, the third role could open up new horizons for pastoral women within the new institutional arrangements that exist in Northern Kenya. Thus, the triple "burden" of women hinders their full participation in food and nutrition education and information dissemination platforms since more time is spent in domestic spheres. This is because reproductive work is done largely by women is time-consuming, demanding and tedious. Besides, it's not recognized for its economic importance, its undervalued, unpaid, and invisible. Domestic work has no clear demarcations between work and leisure, its without beginning and end. This division of labour perpetuates women's subordination and prevents them from realizing their full potential. Thus, measures must be taken to lessen women's workload and reduce time poverty posed by reproductive work because of the negative effects on the nutrition of mothers and their children.

Specific roles, responsibilities, relationships, decision-making, and power dynamics are defined in a convoluted social system that by subordinating women and allocating them the triple "burden" contributes to acute malnutrition.[147,157,158] This mostly affects women of reproductive age who due to their multiple responsibilities are forced to strike an equilibrium of time shortage and uptake of nutritional, maternal, and child health practices. In most cases, both maternal and child nutrition are compromised to meet other competing social and financial demands.[153,159,160] The outcome of this is that there is a significant association between women's socioeconomic status and their dietary choices and variety.[161] These disadvantages are intertwined with limited access to technology and credit services for economic wellbeing.

Women and girls account for about 60% of chronically undernourished people worldwide. In arid counties in Kenya, acute malnutrition among children aged between 6 and 59 months regularly surpasses the World Health Organization's threshold of 15 per cent, which is considered critical. Further, girls, expectant women, and lactating women remain at an elevated risk of acute malnutrition based on power differences with men.[162] In the same breath, boys are at elevated risk of anaemia; with the same applying to expectant women and girls within the reproductive age (15-59).[99,163] The statistics reveal the underlying impact of power and decision-making across age and gender in the context of malnutrition at the household and community level.

This invokes the gender agenda and power relations in the malnutrition discourse. The gender roles of men and women interact with biological roles with important nutritional status outcomes. For example, based on women's childbearing roles, there is a cyclic loss of iron and this renders them vulnerable to dietary deficiencies compared to men. Women in the reproductive age are particularly

predisposed to this. For the new-borns, their nutrition status is linked intricately with the nutrition status of the mothers during, before, and even after pregnancy as in infant and child malnutrition. [164] This is because maternal malnutrition has been closely associated with low birth weight and consequent infant and child malnutrition.[123,127] Gender relations and power within the society thus yield important implications that border on gender inequalities and imbalances.

Further, the existing socio-economic inequalities amplify power differences between men and women and limits women's role in decision-making with far-reaching implications. The exclusion of women happens against the backdrop of evidence of the role of women's decision-making in improving household nutrition.[149] In certain low resource settings, women have high proclivity than men to direct resources to household welfare including food availability and this influences nutritional outcomes. [73,126,165] In other settings where women have a higher level of decision making and empowerment, malnutrition rates are lower compared to the contexts where women have limited autonomy.[126] Further, women's decision making especially on how to spend the household income is relevant for child nutrition. For instance, studies reveal where mothers have to obtain permission from their husbands to go to the market or spend household financial resources, they are more likely to have an undernourished or malnourished child.[99,125,160] Taking the same cue, studies have also shown that direct access to and control of financial resources among women are associated with improved child and household nutrition.[125]

Community Decision making and nutrition interventions

Although the patterns of power and decision making across age and gender have been seen to negatively impact on malnutrition, aligned patterns have a positive impact. Indeed, short-term interventions have mainly looked at leverage points such as power relations to redefine masculinity to facilitate social and behaviour change including equitable decision making. Research has revealed that the engagement of men produces positive outcomes in terms of household nutrition- for mothers, young people, and children.[166] This is because men provide resources, emotional, and instrumental support for the household and their engagement is linked to nutritional-related activities. These include improved breastfeeding habits and rates and maternal nutritional wellbeing. Women also need to be supported through empowerment which gives them the ability to claim and use their agency and voice to make critical decisions that affect their lives, directly or indirectly. This empowerment is directly linked with improved household dietary diversification, food security, and nutrition.[158]

Decision making at the County Level

Beyond the household and community levels, there exists dynamics of power and decision-making at the administrative or county levels. Arid and semi-arid lands are often marginalized or minimally involved in critical decisions in the development agenda. The results are a lower index of development on nutrition, maternal and child health outcomes. This has been documented in a recent report which identifies some of the major drivers that account for poor nutrition outcomes in northern Kenya including "decades of under-investment; insecurity and conflict; low levels of education and literacy; gender inequalities; high dependence on natural resources; and climate change impacts that are accelerated by population growth, environmental degradation, and rapid demographic shifts."[167] As has been established in the review low levels of education especially among mothers and gender inequities in accessing productive resources and opportunities are closely tied to mothers autonomy and child nutrition outcomes.

The central pillar of the Kenya's' 2010 Constitution was the establishment of 47 devolved governments. County governments were meant to improve service delivery by addressing the specific needs of the people. However, many cannot still discharge the mandated responsibilities including meeting the nutritional need.

In Northern Kenya in general, the county governments face the challenge of persistent food insecurity and ensuing malnutrition in a cross-section of the constituencies. With the current devolved governments, these counties have put in place pathways to reducing the glaring gender inequalities that serve to increase women's vulnerabilities which have had ripple effects on malnutrition. In addition, the involvement of women and youth in the county government affairs through community forums and dialogue have increased their participation in health/nutrition-related education and training. Therefore, the lack of gender considerations in the county government leads to constraints formal institutions' capacity to deliver information and services related to nutrition. Although the counties have made remarkable progress in strengthening their capacity and systems towards food security for the nutritionally vulnerable populations like children and the elderly, [167] the prevailing challenges have undermined the mission. The counties still experience weak coordination and linkages among stakeholders and sectors, such as for nutrition.

3.3.4 Socio-cultural norms, beliefs, and practices across gender and age-related to Household Food Security, Maternal Nutrition and IYCF [among vulnerable social populations] and how they impact acute malnutrition in children

Section Highlights

- Sexual and reproductive health – both male and female circumcision is practiced among the Samburu, Borana, Gabbra and Rendille communities found in Isiolo and Marsabit counties. In adolescent girls/ young women, this marks readiness for marriage which occurs immediately after. Such young women have limited control over their sexual and reproductive choices. This results in reduced agency over decisions related to child spacing – studies have shown that low birth spacing leads to inadequate care and poor nutrition outcomes for children under 5.
- There are distinct beliefs around the type of foods that women in the different life stages can eat. For example, pregnant women are forbidden from taking foods rich in protein such as eggs since it is believed that the foetus will grow 'too big' and there will be complications during delivery. Issues that need further exploration include (a) the nutrition of adolescent girls and how this changes as they enter early marriage, (b) the initiation of both young men and adolescent girls and how they are prepared for marriage, child bearing and rearing and (c) prevailing preferences, beliefs and cultural taboos on food that relate PLWs and mothers of children under 5 years, how these change with the intersection of PLW and mothers' identities as defined by age/ life stage, social, economic, education status and how this affects child nutrition outcomes.
- There is a strong food-sharing culture at both intrahousehold and interhousehold levels. Within the household, this means that rations of supplementary and therapeutic food (for treatment of moderate and acute malnutrition in children respectively) will be shared among other children in the household
- Pastoral communities are characterized by high levels of social capital evident in the intra-clan, intra-communal bonds among different age-sets and defined by gender. In addition, social norms require constant negotiation for access to critical shared resources. This has implications on the capacity of households to survive calamities and adverse life events since they can draw on external resources as a form of coping mechanism. Drawing on such social capital has implications for household food security – the extent to which that also affects child nutrition and specifically, acute malnutrition needs to be studied.
- Studies conducted among pastoralist communities in Isiolo county found that shaming is experienced by mothers whose children are undernourished and are therefore enrolled in a therapeutic feeding programme since they are portrayed as being unable to take care

of their child. This serves as a barrier to the use of the nutrition feeding programme by mothers of affected children.

Social structures

In pastoralist households, social structures occur at the communal and household levels. These social structures are highly gendered and influenced by age considerations. Despite a long-held belief that men played the dominant role in pastoralist livelihood and economic systems, recent work has shown that women (and other groups – boys and girls) have always played a role in pastoral production systems.[104]

At the household level, there are social norms dictating livestock management roles – management occurs at two levels at the household and sub-household level where the women have control over milk management.[96] and also take responsibility for cow and calf health and under certain circumstances are forced to herd livestock.[104] The intrahousehold dynamics are such that younger wives will tend to be favored by their husbands in polygamous households and this has a positive implication on their households access to milk resources. [96] The outcomes for child nutrition due to such intrahousehold structures have not been sufficiently studied. Social networks have been shown to have a positive effect on community-based acute malnutrition treatment due to the positive influence on health-seeking behavior, peer support and breastfeeding practices.[168]

Social norms, beliefs, and practices related to Sexual and Reproductive health

At the household level, social norms related to women's education status, early marriage, high fertility rates (i.e., a high number of children per couple) and low inter-child spacing are associated with acute malnutrition. Among pastoralist communities, there is a preference for high fertility rates because children are representative of wealth and status,[169] future sources of family labour and mitigation against risk. Among the Somali for instance, women who have many children are accorded honour and higher social status since this 'increases their clans' power and gives the family a good reputation'.[170]Studies have shown significant effects of child spacing or interpregnancy interval (IPI) of < 24 months on weight for height Z scores.

A study in Karamoja identified no child spacing (very closely spaced births) as an underlying cause of child malnutrition among both pastoralist and agropastoral populations[57] while another study in North West Ethiopia found that children with low birth spacing (<2 years) were 3 times more likely to suffer from SAM.[171]These findings are consistent with a recent study covering 32 countries in Sub-Saharan Africa that found a decrease in wasting with an increase in interpregnancy interval (IPI). In addition, this study found that interpregnancy interval is closely related to age and education of mother – young mothers and mothers with low education showing the shortest IPIs.[172] This is similar to a study in Ethiopia that reported higher odds for low interbirth spacing for women in pastoralist communities who also demonstrate low literacy levels.[173] Another study has shown evidence of stronger effects of IPI on weight for age for girls[174] with the outcome closely related to parental investment based on evidence from the same study that shows that wider-spaced children received more pre-natal care, were less likely to be born at home and more likely to have a medical professional present at birth.

These findings on birth spacing are critical to informing nutrition programming targeting pastoralist communities in the ASALs of Northern Kenya; for instance, recent studies conducted in the counties of Turkana, Mandera, Marsabit and Wajir reported Low IPIs with the average age of children in HSNP households being 2.5 years in households whose average size was 4.8.[175]

Norms and Perceptions related to food preferences, IYCF feeding practices, food sharing and food-related taboos

Beliefs and practices regarding food preferences and taboos and feeding practices are also reported to play a role in acute malnutrition for children. In a study among Karamoja women, study participants perception of child malnutrition was closely tied to the availability of cow or goat milk. [57] Food taboos related to maternal, and child dietary composition and habits have been widely documented in traditional pastoralist communities. Studies have reported that in certain communities high protein food such as poultry, meat and fish are not fed to young children because of the belief that 'they cannot digest meat'.[176] Nutrition surveys conducted in Marsabit county (covering all sub-counties Laisamis, Moyale, North Horr and Saku) have shown that food taboos related to not eating certain foods (e.g., eggs or chicken) are a barrier to child nutrition.[177] Communities in Saku sub-county for instance believe that feeding infants with high-protein foods such as fish and sheep meat affect their speech development.[177]

Optimal child feeding practices including early initiation of breastfeeding (including colostrum feeding) and exclusive breastfeeding for the first 6 months are critical for infant nutrition outcomes and later feeding practices that have a role in preventing acute malnutrition.[178] A synthesis of multiple studies found that whereas most cultures had support for breastfeeding, most traditional societies delayed breastfeeding due to colostrum being considered 'dirty'.[9] In communities within the East African region, for instance, colostrum avoidance has been documented among the Somali[170] and in communities in the Tigray regions of Ethiopia.[180] In studies in Ethiopia, colostrum avoidance was higher for mothers who reported lower rates of both pre-and ante-natal clinic attendance[180] evident in low levels of information on colostrum feeding since colostrum was associated with the belief that 'it would cause diarrhoea and make the child weak'.[176,180] The practice of colostrum avoidance was reported as being closely related to pre-lacteal feeding and especially among young mothers (<24 years) who gave birth to their first child at home.[178,181] Pre-lacteal feeding, the practice of giving other foods apart from human breast milk to newborns before breastfeeding initiation and the during the first few days of life is a commonly-held traditional practice. In Ethiopia for instance, a systematic review on pre-lacteal feeding across the country found that a pooled prevalence of 26.9% for pre-lacteal feeding among mothers, with the highest rates recorded among pastoralist communities in the Afar region.[182] Pre-lacteal feedings is associated with poor maternal knowledge of IYCF,[183–185]giving birth at home,[182,183]and presence of a member of the extended family in the household.[185] This last finding is closely tied to the influence of elderly members of the extended family on mothers IYCF practices in certain cultural settings. In most traditional culture's studies have noted a strong influence by elderly female family members (mostly grandmothers) and traditional birth attendants (TBAs) on IYCF practices who tend to advice on discarding colostrum, delayed initiation of breastfeeding, pre-lacteal feeding and introduction of other food before six months often in direct contradiction of advice by health professionals.[179]

Evidence of the strong influence of elderly women (TBAs, grandmothers and other community members) on IYCF practices among Somali pastoralist communities was documented in a study conducted in Wajir.[186] The study found elderly women are a major barrier to new mothers practising exclusive breastfeeding instead insisting that babies first food should be animal milk, that babies should be given milk to quench their thirst and to aid colostrum dilution since colostrum is considered 'too strong' and not good for the health of the baby.[186] In contrast, studies conducted in Rural Nepal have found that the presence of grandmothers with the correct knowledge has a positive effect on early breastfeeding initiation, colostrum feeding and complementary feeding practices.[187]

[9] Shanti Raman et al., 'Eating Soup with Nails of Pig: Thematic Synthesis of the Qualitative Literature on Cultural Practices and Beliefs Influencing Perinatal Nutrition in Low- and Middle-Income Countries', *BMC Pregnancy and Childbirth* 16, no. 1 (28 July 2016): 192, https://doi.org/10.1186/s12884-016-0991-z.

In pastoralist communities, food sharing norms reinforce the prevailing perception held by most women that Ready-to-Use Therapeutic Food (RUTF) is food meant to benefit the entire household. [188] This has meant that RUTF is shared amongst children in the household and sold as a source of income to meet other household needs limiting its efficacy. In these instances, not sharing is seen as discriminatory of the other children. In addition, households feeding practices related to food sharing such as child's food being served with the food of other family members have been associated with acute malnutrition in studies conducted among Afar pastoralist communities in Southern Ethiopia.[120] These findings are pertinent in light of recent evidence from a systematic review conducted in Ethiopia which highlights non-adherence towards optimal feeding as the most reported predictor of both wasting and stunting.[189]

Perceptions towards mothers of children suffering from acute malnutrition and food poverty

Negative community norms such as shaming have been shown to have an association with child nutrition outcomes. A study in Marsabit found that shaming and stigma are barriers to mothers attending clinic who have their children treated for MAM and SAM[190]. This has also been reported in the findings of MIYCN KAP surveys conducted in Marsabit with mothers of malnourished children being referred to as 'lazy', 'incapable of taking care of their children' and 'relying on handouts' [177].

The fear of shaming could be closely related to recent findings from a study on the Hunger Safety Net Programme (HSNP) counties of Turkana, Mandera, Marsabit and Wajir which found high prevalence of wasting of 25.6 per cent evidence of high burden of malnutrition.[175] The same study also found that households were income-poor with an average income of about 12,759 Kenya shillings per annum and with household expenditure on food of above 80% of the total monthly household expenditure per adult. Despite these finding, few households reported being enrolled in the supplementary feeding assistance being implemented by UNICEF and targeting poor households.

4. Gaps Identified During the Desk Review

Gaps in availability of recent ethnographic data describing socio-cultural change: a major limitation of this study is the fact that most of the ethnographic publications relevant to the areas of study were conducted prior to 2015 and quite dated (therefore were only utilized as background information). For instance, studies on drought and conflict among the Samburu, Borana and Rendille,[191]studies on the process of pastoralist Sedentarisation and related health, livelihood and nutrition outcomes,[192–194]understanding changes in livelihoods among pastoralist communities, [195,196] women and livelihood studies in pastoralist communities,[65,95,113,197–199]understanding of conflict, transformation in livelihoods and gender studies,[200]describing the socio-cultural aspects of Borana society in terms of the place of women[201] and youth and age dynamics among the Borana,[202] involvement of children in livestock rearing[203] and food practices among the Samburu[204] and the invisibility of gendered inequalities in pastoralist communities.[205]

To understand what recent changes have occurred in these communities in terms of GYSD, it would be necessary to conduct an ethnographic study which also seeks to unravel the linkage with acute malnutrition.

Gap in the ethnographical understanding of pastoralist interaction with rapid transitions in technology and the outcomes that such interaction has on livelihoods, health and nutrition, social relations, and financial inclusion. Whereas some work has been conducted on how mobile phone use has a positive effect on dietary diversity among pastoralist communities in Northern Kenya, [117]how mobile phone access and use has affected gender power dynamics among the Maasai leading to instances of both empowerment and disempowerment among women[118] an important gap in recent ethnography is an understanding of how traditionally pastoralist communities in Northern Kenya (especially among the communities in Isiolo and Marsabit) are interacting with the rapid technological and socio-cultural change triggered by access to mobile telephony and how this has changed existing gender, age and social dynamics related to access and control to resources, livelihood opportunities.

Lack of intersectional understanding of the determinants to acute malnutrition. Most studies that seek to identify social determinants on acute malnutrition focus on understanding the relationships between singular variables. With respect to gender, for instance, most studies are one -dimensional and fail to consider differences in women's identities and lived experiences[118] and how these interact with other factors to lead to either improved or poor nutrition outcomes. Whereas this may be understood as a methodological weakness in quantitative approaches, it obliterates the contextual issues that affect outcomes. Another finding is that most studies have focused on women limiting our current understanding of the effective role of men in child acute malnutrition.

Proposed Research Agenda for GYSD and Acute Malnutrition in Pastoralist Communities

- The desk review has identified a major gap in the availability of studies on the determinants of acute malnutrition in children conducted in pastoralist communities within Kenya
- An ethnographic study will be useful to (a) update existing information on the existing socio-cultural context and (b) identify GYSD pathways to acute malnutrition. Studies in other settings identify this gap, for instance,[206] urge the need for an ethnographic study to identify cultural barriers to IYCF to babies aged 6 months and above,
- Generally, gendered inequities have been noted in the involvement of men in maternal and newborn health.[207]Specific information on the barriers to men's ' involvement in maternal and child health in pastoralist settings and how this contributes to acute needs to be explored.

- Provide an understanding of GYSD in the context of household food security, maternal nutrition, IYCF and how this leads to acute malnutrition in Pastoralist communities of Northern Kenya
- Studies did not address women's socioeconomic differences and the various complexities in varying women identities with context-specific challenges.
- Policy formulation process was not clear as to the composition of committee members and whether there was public participation to identify men, women, girls and boys needs
- The extent to which seasonality and livestock livelihoods associate with acute malnutrition was not clear.
- The review did not establish the local understanding and local perceptions of acute malnutrition if any.
- The relationship between GBV and acute malnutrition is not clear and there is a gap in evidence for pastoralist communities in Northern Kenya
- Information linking access to ICT and related services to acute malnutrition is scarce

Annexes

Several annexes will provide support to the main study report. Annex 1contains the study search strings, (b) Annex 2 is a bibliography of the key literature and materials reviewed and analyzed. while Annex 3 contains the terms of reference for this study.

Annex 1: Search Strings

Eligibility Criteria	Keyword	Qualifier/ Comparator	Secondary Criteria
Study focus/ Outcome	Acute malnutrition, MAM, SAM, IYCF, undernutrition, wasting, persistent GAM in children aged<5/ infants	Social* norms OR culture* norms OR socio-cultural norms OR taboo OR perceptions OR behavior* OR stigma OR shame Gender* roles OR social* roles OR responsible* Food sharing OR eating habits OR nutrition intervention OR nutrition project OR nutrition program or nutrition programming entrepreneur* OR profit* OR Self-Help Group* OR SHG* or shop* OR sell* OR organization* OR organisation*or enterprise*) OR (start-up* OR business* OR startup* OR business* OR employment* OR income generating* OR labour OR market spending* OR income OR salary* OR wage* mobile money OR mpesa OR finance women* empowerment OR girl* empowerment OR women participation OR girl participation	Environment OR climate or variability OR drought OR ASAL OR arid OR semi-arid OR drylands Formal systems OR formal Institutions OR formal institutions or institutions OR government Informal systems OR informal institutions OR cultural institutions or traditional* OR traditional systems OR Policy OR government policy OR county policy OR county government policy health policy OR health sector policy OR nutrition policy OR nutrition sector policy OR agriculture policy OR agriculture sector policy pastoralist* OR agro-pastoralist*
Population in study	Women*, Gender OR female OR mother* OR maternal OR pregnant woman OR lactating mother OR PLW OR male OR girl* OR female* OR adolescent girl* OR adolescent* OR teen* OR teenage girl* OR young adult* OR young female* OR young woman OR young women OR young girl* OR older girl* OR young mother* OR teen* mother* OR child* OR children* OR father* OR parent* OR caregivers*		
Location of Study	LMIC, SSA, Somalia, Ethiopia, Kenya, Marsabit, Isiolo		

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Annex 3 Terms of Reference (ToR)

USAID Nawiri Gender Youth and Social Dynamics Analysis Terms of Reference to explore the underlying causes of acute malnutrition in Isiolo and Marsabit counties of Northern Kenya

1.0 Introductions

1.1 Background

USAID Office of Food for Peace (FFP) is funding a 5-year Development Food Security Activity (DFSA) project that is being implemented in the arid and semi-arid land (ASAL) counties of Isiolo and Marsabit in Kenya. The project, N*utrition in ASALs Within Integrated Resilient Institutions* (Nawiri) is led by Catholic Relief Services (CRS), an international humanitarian agency of the Catholic community in the United States of America in a consortium with Concern Worldwide, Village Enterprise, Tufts University, GAIN, IBTCI and The Manoff Group. The project's goal is to sustainably reduce levels of acute malnutrition among vulnerable populations in Isiolo and Marsabit counties. The project is implemented using a phased approach, involving research phase (2019-2020) that will inform program design and implementation phase (2021-2024). Nawiri implementation involves collaboration and consultation with Isiolo and Marsabit county governments to infuse co-creation, ensure co-learning and co-design of the project interventions to ensure sustainability.

2.1 Goal

The goal of Nawiri gender youth and social dynamics (GYSD) analysis is to identify the key evidence gaps on the intersection between gender, youth, and social dynamics and acute malnutrition in Isiolo and Marsabit counties, to inform the project's research and learning agenda including the design of subsequent implementation pilots and to strengthen gender integration across Nawiri, informed by the project's theory of change (ToC).

2.2 Specific Objectives

The specific objectives of the Nawiri GYSD analysis are:

1. To better understand the root causes of gender inequalities and correlations with the root causes of persistent acute malnutrition in Isiolo and Marsabit counties, as per Nawiri's ToC.
2. To support refinement of Nawiri ToC based on GYSD analysis findings and inform the design and implementation of gender transformative interventions in Isiolo and Marsabit counties.
3. To support the design and development of effective gender, youth, and social dynamics capacity building initiatives for Nawir project participants and partners in Isiolo and Marsabit.
4. To facilitate effective gender and youth integration into Nawiri's Monitoring, Evaluation, Accountability and Learning frameworks, project planning and key program interventions.

3.1 Scope of Work

The scope is to provide overall technical leadership for both the GYSD desk review and related qualitative field study in Isiolo and Marsabit counties, in order to contribute to the refinement of Nawiri's theory of Change (ToC) and to the design of the key Nawiri interventions to address acute malnutrition. This includes.

- Identify and gather key resource materials for the desk review, especially those from Kenya's ASAL contexts and similar
- Map correlations between gender, youth, social dynamics, and acute malnutrition knowledge /information gaps in target counties
- Design field study plan and develop data collection tools and procedures, train survey team, in liaison with Nawiri team leads
- Clear assessment and recommendations on specific areas where Nawiri/ wider stakeholders can add value to sustainably reduce acute malnutrition, through GYSD-focused interventions
- Provide clear and tangible suggestions for gender and youth sensitivities and integration into Nawiri as fitting
- Provide a comprehensive GYSD analysis report of not more than 50 pages, to highlight recommendations and any key evidence gaps in Nawiri context.

3.2 Justification of the study

Existing studies (published and grey literature) shed some light on the drivers of acute malnutrition, including gender and social dynamics, in Kenya's ASALs and similar contexts. However, robust data on the interplay of gender and other social dynamics affecting acute malnutrition in Isiolo and Marsabit remains limited. Although existing literature may provide information on various topical ASAL and nutrition issues, it is generally not specific to how GYSD factors impact on acute malnutrition, nor current or explicitly related to Isiolo and Marsabit counties.

Thus, there is a need to further explore existing studies and reports on the intersection between GYSD and global acute malnutrition in the study sites or similar contexts, with a specific focus on the areas and research questions of inquiry, including a detailed review of relevant laws and policies affecting both counties. The review will build on the initial literature review and scoping studies carried out during proposal development stage, while additional information and resources will be sought from other development partners and relevant county and national government departments.

The key research questions for the GYSD analysis are:

a) How do laws, policies, regulations and institutional (formal, informal, and traditional) practices influence gender and social dynamics and how they affect acute malnutrition?
b) How do socio-cultural norms, beliefs and practices affect acute malnutrition across gender and age among vulnerable social populations in Isiolo and Marsabit? How are related norms, beliefs and practices changing over time?
c) What is the relationship between acute malnutrition and women's and men's, girls', and boys' roles (productive, reproductive and community) responsibilities, time use and workloads?
d) What are the barriers to women's, men's, girls', and boys' access to and control over critical resources, assets, income, social networks, public and private services, employment, technology, and information? How do they impact on nutritional status/ acute malnutrition?

e) How does patterns of power and decision-making across age and gender impact on acute malnutrition among vulnerable groups at the household, community, and county government levels in Marsabit and Isiolo counties?

3.3 Study Methodology

The GYSD analysis will be done in two phases – a desk review (phase 1) and primary qualitative data collection (phase 2). The desk review will focus on identifying and analyzing published and grey literature on the intersection between GYSD and global acute malnutrition in the study sites (or similar contexts) to determine what is already known about the correlation between acute malnutrition and GYSD in ASAL areas (specifically Isiolo and Marsabit counties). To complement this, the qualitative field study will build on phase 1 analysis and findings to deepen knowledge specifically on the underlying determinants of acute malnutrition which relate to gender and social dynamics, in Isiolo and Marsabit. The GYSD qualitative field study will be conducted at three levels; household, community, and institutional levels, to ensure that the perspectives and views of key gender, youth, nutrition, and related stakeholders particularly social protection are duly captured by the study. The design and execution of the qualitative field study will be explicitly informed by the findings of the desk review. Appropriate data collection methods and tools will be used to ensure that relevant data is collected, to inform subsequent activity design and appropriate gender and youth intervention strategies. The use of gender and youth analysis tools to gather information from participants, or to enable them to openly share their views on deep underlying issues in a safe environment/ space, will be facilitated and encouraged. Sensitive data collection and rigorous data analysis and reporting is pivotal; not only to ensure quality and comprehensiveness but also for the overall outcomes of the study.

4.1 GYSD Analysis Research Team

4.2 Key roles of the consultant (s)/ Firm

The Consultant reports to the Nawiri Gender Youth and Social Dynamics (GYSD) Lead with key working relations with Nawiri GYSD Analysis and County Teams. The main roles will include.

- Review all relevant Nawiri project documents and develop a GYSD analysis plan
- Design the GYSD study methodology, sampling plan, and draft data collection tools including the data collection procedures in collaboration with Nawiri staff
- Draft GYSD training agenda for field/ research assistants, in collaboration with the GYSD lead.
- Prepare inception report and detailed field work plan
- Facilitate training of the research team
- Oversee and assure quality though processes of pre-testing, review, and finalization of data collection tools, through appropriate collaboration/ as guided.
- Supervise and actively support primary data collection in the field, to ensure quality processes and outcomes.
- Coordinate data analysis and write the report, collaborating with the necessary Nawiri personnel.
- Facilitate a validation and dissemination workshop
- Prepare final comprehensive desk review report, informed by Nawiri team/ other key actor critical feedback on the draft, and the key actor validation and dissemination session outcomes (as above).

4.3 Individual Consultant (s)/ Firm Qualifications

a) Master's Degree in gender studies, nutrition, sociology, and/ or other relevant social science, with at least 10 years of experience in gender programming and socio-economic analysis.
b) A combination of **strong experience in qualitative research methods**, and **extensive expertise in gender analysis** preferably in the East Africa and/ or pastoralist contexts
c) In-depth knowledge and experience of participatory research approaches and tools.
d) Proven experience in gender research/studies.
e) Experience integrating gender issues into food security/nutrition programs, as well as gender considerations in ASAL area and agro-pastoralist programming. Experience working in a related role with FFP or USAID an added advantage.
f) Experience in training and coordinating with diverse groups of project staff and stakeholders, especially on relevant issues and work. Consortium experience an added advantage.
g) Experience in ASALs, particularly in Northern Kenya, will be an added advantage.
h) Experience in qualitative data analysis packages such as NVivo
i) Excellent analytical and English language report writing skills for diverse audiences, including local and international.
j) Fluency in written and spoken English and excellent communication and interpersonal skills.
k) Excellent time management skills, ability to take initiative and deliver task within set deadlines.

5.1 Reporting Plan

The consultant is expected to submit two bound copies and a soft copy of the final study report (which should be 50 pages maximum, without annexes), including the following components:

- Preliminary Pages (Title page, Table of Contents including a list of annexes, Acknowledgements, Executive Summary, List of Acronyms and Abbreviations, Definition of Terms and Concepts)
- Introduction: Project description, context, purpose, and objectives of desk study
- A complete and comprehensive bibliography
- Methodology and methods, data sources, quality control, data management and analysis mechanisms and the study limitations.
- Desk study findings organized by the key research questions.
- Conclusion based on the findings, key recommendations, and appendices (as per agreement).
- Power point presentation (maximum 20 slides) of the key findings and recommendations.
- Facilitate an interactive Nawiri team dissemination session as guided, at end of assignment.

6.1 Schedule

The consultant (s) shall outline the study's anticipated overall schedule. (i.e., duration, phasing, timing, key milestones etc.) as well as anticipated work hours/ days required. Include outline of issues that might affect data collection and key risk mitigation measures.

6.2 Payment Schedule and Deliverables

The items in Table 3 below will be delivered during the planning, implementation, analysis, and reporting phases of both the desk review and field research:

Table 3: Payment Allocation by Deliverables

Pay Schedule	Criteria (deliverables)	
	PHASE 1 – Desk Study	
30%	**Planning Phase** • Submission and approval of **inception report** and **Bibliography** in line with proposed Nawiri format, including a detailed **work plan and timeline**	**GYSD Analysis Phase I: Detailed Desk Review**
30%	**Comprehensive desk review** • A comprehensive bibliography. • Timely submission of draft report incorporating reviewers' comments, including a full set of findings and recommendations, with all Inception Report commitments addressed.	
40%	**Final report** • Submit 2-3-page, standalone summary of findings, conclusions, and recommendations based on the full report. • Share electronic and hard copies of full final DS report integrating draft report feedback. • Facilitate interaction with Nawiri team and share power point presentation (maximum 20 slides) of key findings, recommendations, and queries as per prior guidance. Highlight recommendations and questions to inform field research (Stage 2).	
	Phase 2 – Primary Field Research	
30%	**Design field plan, develop tools, train, and support field researchers** • Design data collection tools based on desk review findings • Training of the research team	**Phase II: Qualitative Primary Data Collection/ Fieldwork**
30%	**Primary data collection** • Pre-testing, review, and finalization of tools • Oversee and actively support primary data collection, ensure quality and rigor throughout the process • Supervision, active oversight, and field-team support through data collection	
40%	**Data analysis, report writing and dissemination** • Lead and facilitate data analysis, reporting and engage key actors as guided by Nawiri • Oversee rigorous data coding, quality translations, transcriptions, data cleaning, and data analysis – as guided • Share draft report for review by Nawiri team • Finalize report based on feedback received • Facilitate an interactive validation and dissemination meetings with key actors as guided	

Table 4: Estimated duration of activities (60 Days)

DELIVERABLES	ESTIMATED DAYS
Initial meeting with consultants/firm to share project documents and agree on key deliverables and timelines	0.5
Review of project documents and submission of inception report and Bibliography	4
Inception meeting to discuss revised inception report and Bibliography/ lit to be included	0.5

Nawiri