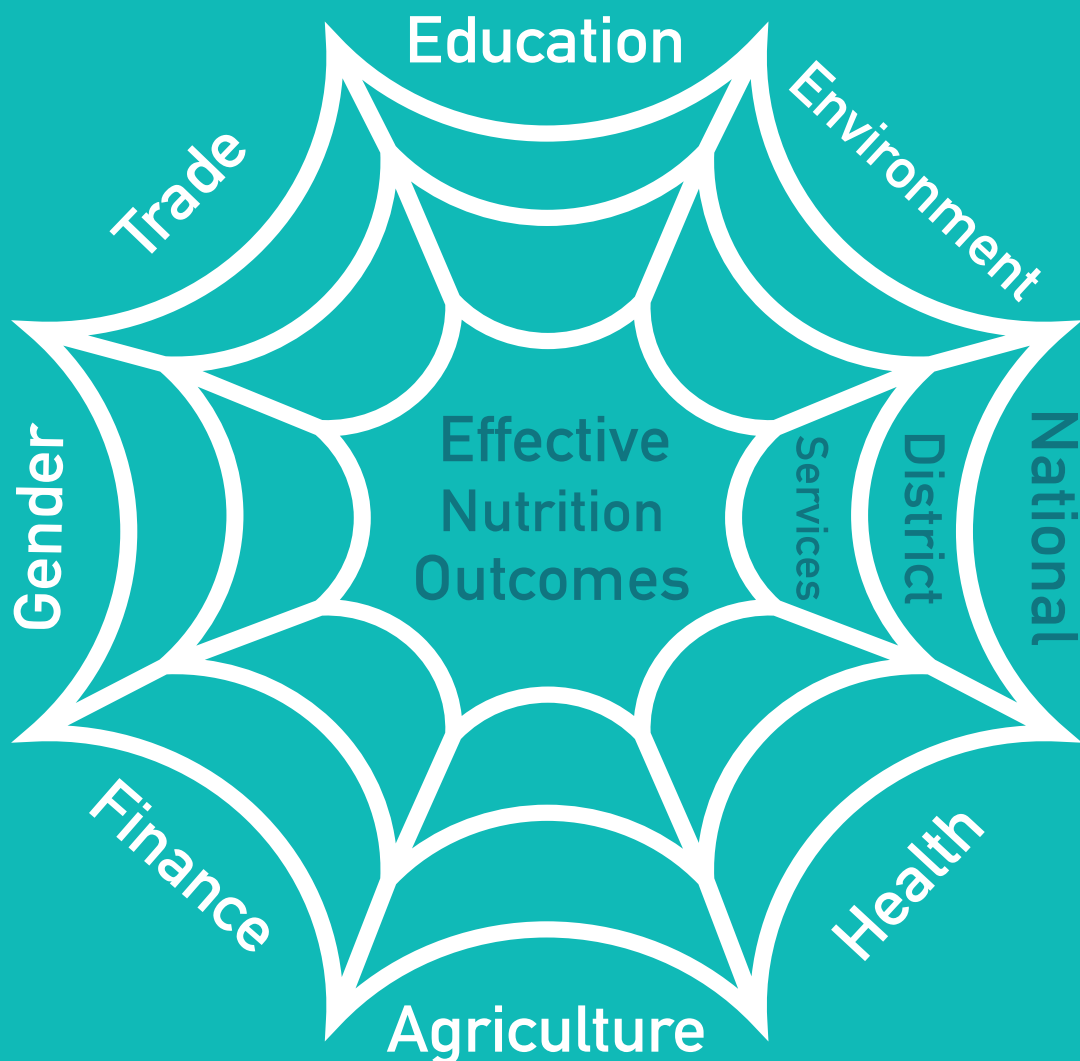


# Beyond Paper Realities:

Fostering Integrated Nutrition  
Governance in Uganda



Brenda Shenute Namugumya

# Propositions

Belonging to the thesis, entitled

## **Beyond Paper Realities: Fostering Integrated Nutrition Governance in Uganda**

1. Without donors putting pressure on the government, Uganda's integrated nutrition strategies would remain paper realities.  
(this thesis)
2. Effective integrated governance requires integrative capacities across governance levels.  
(this thesis)
3. The question of 'how do I as a bureaucrat benefit' is equally important as 'how will citizens benefit' in African public policy making.
4. The madness of a nation is reflected in its leadership.
5. Donor investments trigger resource curses.
6. African hairstyles are fashion statements and expressions of self-discovery.
7. Diversifying diets results in both reduced and increased food waste.

Brenda Shenute Namugumya  
Wageningen, 16th April 2021

**Beyond paper realities:**  
**fostering integrated nutrition governance in Uganda**

Brenda Shenute Namugumya

## **Thesis committee**

### **Promotor**

Prof. Dr C.J.A.M. Termeer  
Professor of Public Administration and Policy  
Wageningen University & Research

### **Co-promotors**

Dr J.J.L. Candel  
Assistant Professor, Public Administration and Policy  
Wageningen University & Research

Dr E.F. Talsma  
Assistant Professor, Division of Human Nutrition and Health  
Wageningen University & Research

### **Other members**

Prof. Dr E. Frankema, Wageningen University & Research  
Dr N. Covic, International Food Policy Research Institute, Ethiopia  
Prof. Dr M.S. de Vries, Radboud University Nijmegen  
Prof. Dr T. Steen, KU Leuven University, Belgium

This research was conducted under the auspices of the Wageningen School of Social Sciences (WASS)

**Beyond paper realities:  
fostering integrated nutrition governance in Uganda**

Brenda Shenute Namugumya

**Thesis**

submitted in fulfilment of the requirements for the degree of doctor  
at Wageningen University  
by the authority of the Rector Magnificus  
Prof. Dr A.P.J. Mol  
in the presence of the  
Thesis Committee appointed by the Academic Board  
to be defended in public  
on Friday 16 April 2021  
at 4 p.m. in the Aula.

Brenda Shenute Namugumya

Beyond paper realities: fostering integrated nutrition governance in Uganda., 230 pages

PhD thesis, Wageningen University, Wageningen, the Netherlands (2021)

With references, with summary in English

ISBN: 978-94-6395-671-0

DOI: <https://doi.org/10.18174/538348>

*Dedicated to my parents*





# **Abstract**

Many African governments have expressed ambitions to govern nutrition in a more integrated manner as specified in the overarching integrated nutrition strategies. The strategies provide the main approach envisioned to guide actors in different sectors and government levels to jointly respond for more effective reduction of malnutrition and its impacts on health, human capital and socio-economic development. This is expected to contribute towards realising the targets of the Sustainable Development Goal 2 on reducing hunger and all forms of malnutrition. Despite the popularity of the integrated nutrition strategies, little is known about their follow-up and ultimate success (or failure) in achieving integrated nutrition governance. This dissertation aims to assess and explain to what extent these ambitions to govern nutrition in a more integrated manner have proceeded beyond paper realities in Uganda. The aim is addressed in four research questions: (i) how has (mal)nutrition been framed by parliamentarians in Uganda over time; (ii) to what extent have nutrition concerns been integrated into cross-sectoral policy outputs over time; (iii) what policy mechanisms explain the observed nutrition policy (dis)integration patterns in Uganda; and (iv) what practices are adopted by frontline workers to enable or obstruct nutrition integration in service delivery?

The questions are investigated using four public policy theoretical concepts: policy framing, policy integration, policy mechanisms and street-level bureaucracy. Identifying the processes, interactions and practices of the different actors involved is necessary to understand shifts towards more or less integrated nutrition governance.

The overall conclusion of the dissertation is that there is progress towards increased nutrition integration in political commitments and the policies adopted in different sectors. However, these commitments were rarely followed up with actual cross-sector services on the ground. The study has provided new insights about the political interpretations, patterns of nutrition integration, the policy mechanisms and practices as well as the conditions fostering and hampering integrated nutrition governance. Donor involvement proved to be a key determinant for ensuring that the endorsed integrated nutrition strategies proceeded beyond paper realities. Efforts to foster and sustain integrated nutrition governance require that the policy makers in government and international actors become more proactive and invest in the domestic capacities at different levels. This includes; deliberate investments in integrative leadership at all government levels, facilitating

frontline workers across sectors to integrate nutrition services; adjusting current nutrition monitoring systems to capture cross-sector and multilevel data; and supporting integrative policy-oriented learning. This is a long-term endeavour – not easily sustained through short-term funded projects – that necessitates going beyond tracking nutrition integration in sectoral policies and checking off performance indicators.

# Table of Contents

<b>Chapter 1</b>	Introduction	1
<b>Chapter 2</b>	The framing of malnutrition by parliamentarians in Uganda	25
<b>Chapter 3</b>	Towards concerted government efforts? Assessing nutrition policy integration in Uganda	49
<b>Chapter 4</b>	A mechanisms-based explanation of nutrition policy (dis)integration processes in Uganda	73
<b>Chapter 5</b>	Integrating/disintegrating nutrition actions in service delivery: The practices of frontline workers	99
<b>Chapter 6</b>	General discussion and conclusion	123
<b>References</b>		149
<b>Supplementary materials</b>		169
<b>Summary</b>		195
<b>About the author</b>		207
<b>Acknowledgements</b>		211
<b>Education certificate</b>		217



# **Chapter 1**

## **Introduction**

## **1. Introduction**

### **1.1 Malnutrition in Africa**

Malnutrition remains a significant public health and socio-economic development challenge in Africa. The term malnutrition encompasses all manifestations of undernutrition, overweight and diet-related non-communicable diseases which are outcomes of imbalanced optimal nutrition (Webb et al. 2018; Ng et al. 2014). Millions of Africans are increasingly affected by a double burden of undernutrition and overnutrition. About half of the countries in Africa have a high coexistence of childhood stunting (linear growth retardation), maternal anaemia (haemoglobin <110g/L) and overweight women (body mass index  $\geq 25\text{kg/m}^2$ ) (Development-Initiatives 2018). The continent is home to 58 million stunted children and, paradoxically, almost a quarter of the global childhood obesity. Likewise, the prevalence of anaemia in reproductive age women and adult obesity is 38 percent and 13 percent, respectively (FAO et al. 2020). The distribution, determinants and severity of the consequences of malnutrition differ across the regions in Africa and within countries.

The acquisition of optimal nutrition is impacted by multiple interacting determinants prevailing in individuals, households and the socio-political environment. The immediate determinants of malnutrition in Africa include inadequate dietary intake, changing food consumption patterns to ultra-processed foods, recurrent infections and poor health status (UNICEF 2020; Nordhagen et al. 2019; Black et al. 2013). Africa hosts about 30 percent of the global undernourished population (FAO et al. 2020). That is, their habitual food consumption pattern provides insufficient energy to satisfy the dietary energy requirements for an active and healthy life (FAO et al. 2019). This is not a surprise, as the region suffers from recurrent food insecurity, inadequate access to quality health, water and sanitation services, and care practices. Furthermore, several environmental and humanitarian crises, climate-related shocks, increasing urbanisation and inequalities in this region promote the malnutrition (FAO et al. 2020; Development-Initiatives 2020).

Africa's transformation towards sustainable development is deterred by malnutrition because of its intergenerational effects on human survival, cognitive development and socio-economic outcomes (Swinburn et al. 2019; Vos et al. 2017; Ng et al. 2014). Nutrition-related conditions (e.g. foetal growth restriction, stunting, wasting, micronutrient deficiencies and suboptimal breastfeeding)

account for 45 percent of childhood mortalities globally (Black et al. 2013). For example, severe underweight and stunting in African children is associated with increased incidences of diarrhoea-related and acute respiratory tract infections and mortalities (Anderson et al. 2019; Black et al. 2013). In sub-Saharan Africa, the economic costs of early childhood growth faltering is estimated at \$34.2 billion (Fink et al. 2016). Ampaabeng and Tan (2013) highlights the persistence of low cognitive abilities in adults exposed to famine during childhood. Further, malnourished individuals lose about 10 percent of their potential lifetime earnings. African countries lost an average of 7.7 percent of annual gross domestic product in 2016 as a result of malnutrition-related health costs and lost productivity (Hoddinott 2016). The cumulative costs associated with type II diabetes, as a result of increasing overweight, are approximated at US\$35-59 billion by 2030 (Jaffar and Gill 2017). These consequences reinforce the integrational cycle of the different manifestations of malnutrition and poverty on the continent.

The past decade registered an unprecedented increase in global and national commitments to avert the multifaceted manifestations, causes and consequences of malnutrition in low- and middle-income countries (Tumilowicz et al. 2018; IFPRI 2016; Haddad 2013). The commitments emphasise importance of simultaneous investment in actions by different sectors to facilitate and sustain improvements in nutrition and economic development. These commitments are espoused in multi-sector or integrated nutrition strategies. Many African governments have recently revised their integrated nutrition strategies, or invested in them, in order to support more cross-sector governance of nutrition (WHO 2018, 2013). In this dissertation, nutrition governance is defined as the interactive process of steering various societal actors towards achieving the collectively negotiated nutrition targets of governments (Bump 2018; Ansell and Torfing 2016; Peters and Pierre 2016). An example of the nutrition targets is the 2030 Sustainable Development Goal 2 of ending hunger and all forms of malnutrition. The integrated nutrition strategies contain the explicit attempts of government to improve nutrition through aligning or fundamentally redesigning the policy goals, instruments, capacities and implementation approaches adopted in different sectors and government levels (cf. Candel and Pereira 2017). Put differently, integrated nutrition strategies offer a 'new' direction for addressing malnutrition. They are expected to stimulate the continued incorporation of nutrition objectives in the policies of different sectors and government levels and to enable the convergence of diverse interventions to households and citizens (Menon et al. 2019; Cejudo and Michel 2017).

Critical voices have emphasised that past ambitions to foster cross-sector action to improve nutrition were frustrated by the inadequate understanding of how nutrition policies influenced the interests and responses of different actors (Pinstrup-Andersen 1993; Fields 1987; Field and Levinson 1975). Various initiatives that monitor the political commitments and effectiveness of the integrated nutrition strategies have proliferated in recent years (Resnick et al. 2018; WHO 2018; Gillespie and van den Bold 2015). However, little is understood about the explicit policy processes, practices and interactions in the different sectors and government levels which collectively influence the nutrition governance outcomes in African countries. This gap in knowledge motivated the research in my dissertation, with a focus on Uganda. The main research question investigated is: to what extent have Uganda's ambitions to govern nutrition in a more integrated manner proceeded beyond paper realities? Uganda has a relatively long tradition of and a well-established reputation for developing integrated nutrition policies, providing a relevant case study for the main research question.

The remainder of this chapter highlights some key challenges to fostering integrated nutrition governance (section 1.2). Section 1.3 provides an overview of the nutrition situation in Uganda by 2020. I present the theoretical approach of analysing integrated nutrition governance in section 1.4. In particular, I discuss the theoretical concepts used in the study: policy framing, policy integration, causal mechanisms and street-level bureaucracy. The research questions are elaborated in section 1.5. Section 1.6 presents the research methodology and methods. The last section 1.7 outlines the structure of this dissertation.

## **1.2 Challenges in fostering integrated nutrition governance**

A variety of actors are implicated in realising the ambitious goals stipulated by the integrated nutrition strategies. These actors (including ministries, international actors, frontline workers, private sector and citizens) differ in their interests, resources, influence and capacities. Hence, they must undergo wide-ranging transformations in their ideas, policies and practices to realise the nutrition policy goals. This research concentrates on the actors in government expected to integrate the nutrition concerns in public policy processes and practices. Efforts to govern in a more integrated way are indicated to encounter varied challenges which may facilitate or constrain



realisation of the required reforms (Hogl et al. 2016; Casado-Asensio and Steurer 2014; Evans et al. 2013). This dissertation examines three key challenges associated with operationalising the cross-cutting policies.

The first challenge for achieving integrated nutrition governance is formulating a shared meaning of malnutrition to guide public policy formulation. The multifaceted nature of malnutrition makes it an ambiguous concept. It is acknowledged that ambiguous problems may inspire policy creativity or constrain the policy reforms required for effective governance (Zahariadis 2008). This raises the question of which policy ideas are prioritised by the multiple actors, including politicians, organisations and technocrats, involved in making nutrition policies. Policy ideas are the ways policy actors interpret and assign possible solutions to a perceived societal problem (Lubienski et al. 2016; Jeffares 2014). FAO (2018) emphasises the proactive engagement of politicians in legitimising the nutrition policy commitments made in low- and middle-income economies. Despite their critical position in determining the direction of country policies, little is known of how politicians make sense and communicate about malnutrition. Following Leach et al. (2020) and Cullerton et al. (2018), I argue that the multiplicity of technical interpretations utilised in nutrition literature camouflage the vast, and sometimes contrasting, perceptions that politicians and policy makers apply to suit their country contexts, capacities and interests. Disentangling the dominant definitions of malnutrition used by politicians to guide policy responses is important to design strategies which nurture cross-sector action and sustain the political commitments.

The second challenge is ensuring the actual integration of nutrition concerns in policies of different sectors and government levels. Sectors, in this case, denotes the government ministries involved in nutrition policy. Participation of actors and institutions, operating at different government levels and supporting diverse mandates, is a critical success factor for identifying, implementing, achieving, and evaluating nutrition policy objectives. Hence, the degree of integration of nutrition in specific-sector policies is a key indicator of integrated nutrition governance. Although various previous studies identify the diverse actors, politics and measures involved in achieving integrative goals, few studies follow up to assess the consequences of integrated policy designs (Casado-Asensio and Steurer 2014; Rayner and Howlett 2009). In addition, the number of tools to monitor the compliance of governments and ministries have increased in recent years (for example: Development-Initiatives 2020; Baker et al. 2019; WHO 2018; Reich and Balarajan 2012; Menon

et al. 2011). However, research to understand the changes in the policy outputs of different sectors is sparse. Moreover, many studies have a narrow scope focused on individual sectors which limits comprehensive understanding of the whole-of-government action in nutrition (Hodge et al. 2015; Lachat et al. 2015; Holdsworth et al. 2015). Thus, how and when policies developed in different sectors change remains a grey area. Further, questions about the explicit mechanisms that explain the changes in integration are raised in policy integration and nutrition literature (Trein et al. 2020; Capano et al. 2019). Various institutional, socio-economic and political factors that enable or constrain effective nutrition governance are documented (Development-Initiatives 2020; Gillespie and van den Bold 2017; Balarajan and Reich 2016; Fields 1987). Yet, the precise causal processes through which these factors facilitate nutrition (dis)integration remain underexplored.

Integrating nutrition actions in the service delivery systems of different sectors is the third challenge for realising integrated nutrition governance. Inconsistencies between policies on paper and ultimate implementation are widely mentioned to impede the attainment of policy goals (Tumilowicz et al. 2018; Huttunen 2015; Daugbjerg and Sønderskov 2012; Lipsky 2010). In other words, the top-down authoritative policy measures alone are ineffective in structuring the operations in other government levels. This understanding raises critical questions about the ultimate practices that define nutrition integration in service delivery and the interactions among different government levels. Nutrition governance research highlights the top-down alignment of policy objectives and administrative arrangements (Salam et al. 2019; Turcan and Bene 2017; Pomeroy-Stevens et al. 2016). Nonetheless, often inadequate attention is given to how nutrition integrative demands are experienced by frontline workers and the practices shaping service delivery on the ground (but see: Schneider et al. 2019; Fanzo et al. 2015).

Confronting the challenges and lack of information described above, this dissertation aims to provide empirical insights and explain the changes in the nutrition governance involving different policy sectors, contexts and government levels in Uganda. This research is positioned at the interface between nutrition governance and public policy and administration disciplines which enables more detailed assessment of the intricate processes and practices in nutrition governance.

### **1.3 Overview of the nutrition situation in Uganda**

Uganda has invested in developing integrated nutrition strategies since 1996 to organise different actors to address undernutrition (Potts and Nagujja 2007; Bachou and Labadarios 2002; FAO 2002). Despite reducing childhood stunting prevalence from 45 percent in 2000/2001 to 29 percent in 2015/2016, 41 percent of the population is undernourished (FAO et al. 2019), overweight and diet-related non-communicable diseases are increasing, and there are regional disparities in the distribution of malnutrition (UBOS and ICF 2018) (figures 1.1 and 1.2). Whereas the national prevalence of childhood stunting is 29 percent, the regional distribution ranges between 14 and 41 percent (UBOS and ICF 2018). Slightly over half (53 percent) of the children below five years are anaemic and four percent have overweight. Uganda's cost of hunger estimates showed that 15 percent of all childhood mortalities were associated with undernutrition, seven percent of all school repetitions were linked to stunting; and 80 percent of malnourished cases and their associated pathologies went untreated (WFP 2013). Equally, the prevalence of anaemia in women and men is 32 percent and 16 percent, respectively. Overweight or obesity affects 24 percent of women age 15-49 years (UBOS and ICF 2018). The 2014 non-communicable diseases survey indicated that 33 percent of annual mortalities were attributed to diet-related non-communicable diseases, e.g. diabetes, cancer and cardiovascular diseases (MOH 2014). The combined exposure to under- and over-nutrition aggravates the impacts on human capital and economic productivity. For instance, the annual estimated costs associated with childhood undernutrition are 1.8 trillion Uganda shillings, which is equivalent to 5.6 percent of its gross domestic product (Hoddinott 2016; WFP 2013).

Uganda's adoption of the different integrated nutrition strategies followed the petitions of various international initiatives and declarations. The most recent initiatives influencing the country's policies include the Scaling Up Nutrition Movement (2010), the Nutrition for Growth Summit (2013), the United Nations Decade of Action on Nutrition 2016-2025; as well as the nutrition resolutions and targets of the 2014 World Health Assembly and the 2030 Sustainable Development Goal 2 on reducing hunger and all forms of malnutrition. The policy strategies adopted to guide the nutrition-related responses in Uganda are the 1996 Uganda National Plan of Action for Nutrition (UNPAN), the 2003 Uganda Food and Nutrition Policy (UFNP) (GOU 2003), and the Uganda Nutrition Action Plan (UNAP) 2011–2016 (GOU 2011). Whereas the UNPAN was

adopted by the Ministry of Health and the UFNP was jointly adopted by the health and agriculture ministries, the UNAP was approved with high-level political affirmation from the president and several ministers representing the sectors of health, agriculture, trade, education, gender and social development, local government and finance.

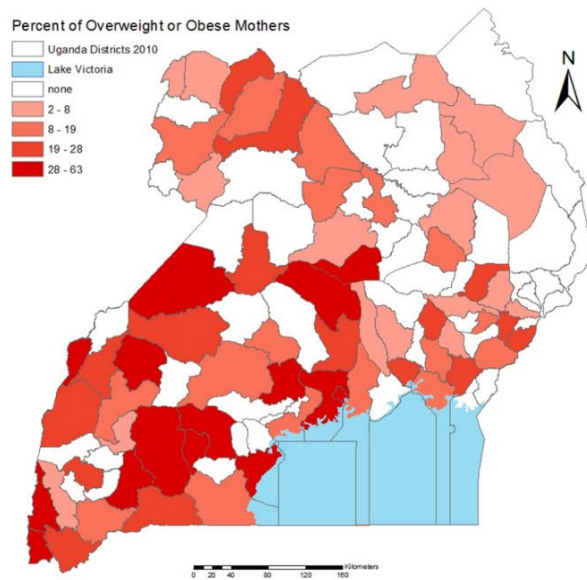


Figure 1.1: Percentage regional distribution of maternal overweight or obesity (UDHS 2010)

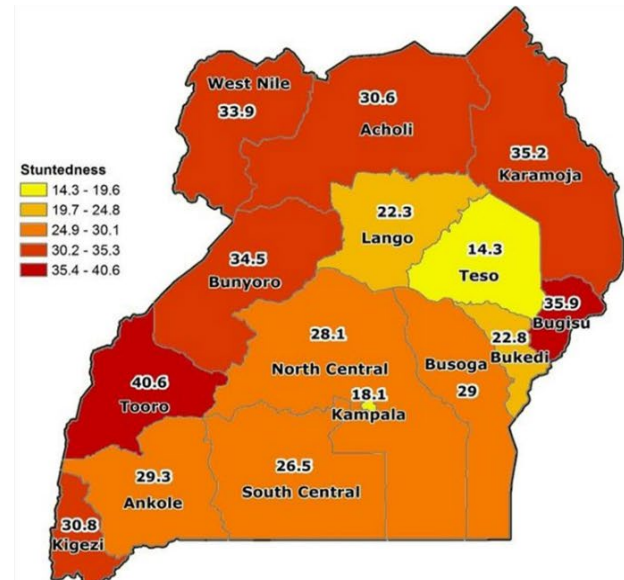


Figure 1.2: Percentage regional distribution of childhood stunting (UDHS 2016)

The Uganda Nutrition Action Plan aims to: 1) increase access to and utilisation of maternal, infant and young child nutrition services; 2) enhance the consumption of diverse nutrient rich diets; 3) protect households from impacts of shocks and vulnerabilities; 4) strengthen the policy and institutional capacities to effectively plan, implement and monitor nutrition interventions; and 5) create awareness and maintain national commitment and community interest in improving nutrition. The five objectives articulate the relevance of multi-sector, multi-actor and multilevel engagement in reducing malnutrition in women and children to establish a strong foundation for sustained development in Uganda. As such, the Office of the Prime Minister was assigned the role of coordinating the implementation of the UNAP—an action that was expected to result in broader changes towards integrated nutrition governance. However, there is inadequate understanding of the changes in the processes and practices influencing the governance of nutrition in Uganda.

The fundamental ideal of Uganda's integrated nutrition strategies is to enable the actors working across different government levels and geographic boundaries to participate in nutrition interventions. Uganda has a decentralised system where decision making authority about programs, finances and management is supposed to be delegated to the 125 local governments. Although this supposed vertical dispersion of authority is critiqued for advancing the political aspirations of the president (Awortwi and Helmsing 2014), local government operations are to some extent autonomous. That is, they develop and implement context-informed development and investment plans, which may diverge from ministerial priorities, and recruit their own human resources (Mushemeza 2019; Ojambo 2012). Several challenges affect the effective and efficient execution of the local governments' operations which have implications for nutrition governance. The challenges include inadequate financing, political patronage, insufficient human resource capacities, multiple parallel monitoring systems and declining quality of service delivery (Mushemeza 2019; Green 2015; Awortwi and Helmsing 2015). Further, financial investments from central government and donor projects vary among and within the districts (Golooba-Mutebi and Hickey 2013; Onyach-Olaa 2003). Empirical research to understand the manifestation of nutrition governance in the multilevel administrative and political system in Uganda is still in its infancy. Analysing the practices in implementing the integrated nutrition strategies in a decentralised governance system contributes empirical evidence to narrow the gaps in nutrition policy and public policy literatures.

#### **1.4 Conceptual framework for analysing changes in integrated nutrition governance**

The core assumption of the integrated nutrition strategies is that horizontal and vertical integration of nutrition concerns across relevant sectors and government levels, respectively, will increase the likelihood of attaining the nutrition-related goals. Thus, integrated nutrition governance is interpreted as the iterative processes and practices of actors in different sectors partaking in advancing the nutrition policy objectives at different government levels (Candel and Biesbroek 2016; A. Jordan and Lenschow 2010). This dissertation focuses on the processes and practices at the political, sectoral and service delivery levels where policy legislation, institutionalization and implementation take place, respectively.

Drawing from public policy literatures, transformations in the governance of nutrition can be understood from analysing the changes in interpretation of the problem (policy frames) (Candel and Biesbroek 2016; Dewulf and Bouwen 2012a), variations in policy designs, specifically the policy goals and measures (Briassoulis 2017; Cejudo and Michel 2017; Hogl et al. 2016; Rayner and Howlett 2009), and the practices across government levels (practices) (Casado-Asensio and Steurer 2014; Daugbjerg and Sønderskov 2012). Variations in the policy frames, policy designs and practices are highly context dependant, which has potential to impact nutrition governance towards increasing or decreasing integration. Context is defined as the dynamic configurations of the socio-political, institutional and agency-based conditions which lead to a specified outcome (Kay and Baker 2015; Falletti and Lynch 2009). Thus, examining the changes in the policy frames, policy design and implementation practices of frontline workers serves an important starting point to comprehend whether nutrition governance in Uganda is more integrated.

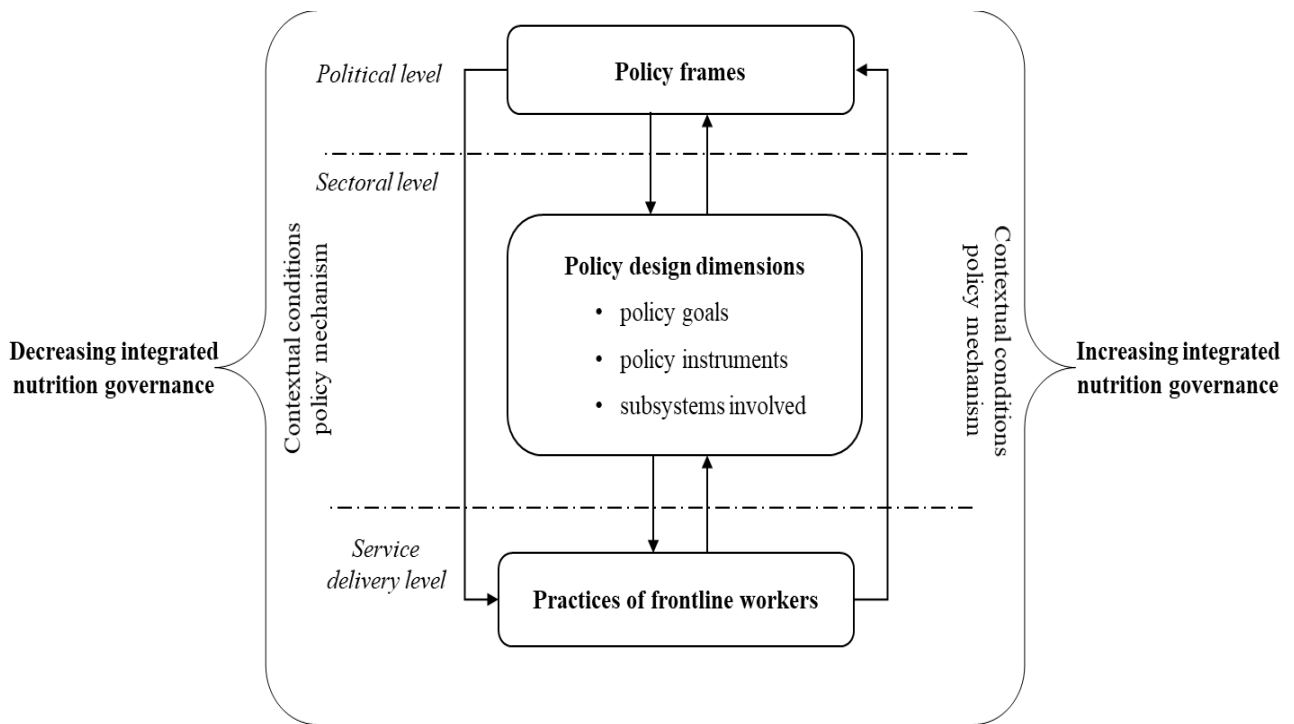


Figure 1.3: Conceptual framework used in this dissertation

The conceptual framework applied in this dissertation (figure 1.3) illustrates these indicative dimensions (policy frames, policy designs and practices) of integrated nutrition governance, the interactions expected among them and the contextual conditions shaping the actions at different

government levels. Interactions among the dimensions are unidirectional suggesting that shifts in one has potential influence on others.

The interactions in figure 1.3 reflect a static point in time, however, shifts towards more or less integrated nutrition governance are expected to differ over time. I apply this understanding to identify the processes and practices influencing the state of nutrition governance. The conceptual framework draws from different public policy concepts – policy framing, policy integration, policy mechanisms and street-level bureaucracy- which have varied theoretical underpinnings. This is necessary to provide a nuanced understanding of the processes and practices happening in all relevant policy and implementation arenas engaged in the governance of this cross-cutting concern (Termeer and Dewulf 2012). The following sections elucidate and operationalise the dimensions highlighted in the conceptual framework.

#### **1.4.1 Political level: policy frame**

The first dimension investigated in this dissertation assesses the policy frames utilised to deliberate on (mal)nutrition in the political arena. Politicians are expected to ascertain nutrition integration through ratifying legislation, monitoring policies and budget expenditures, and creating awareness to transform behaviours (FAO 2018; Chhokar et al. 2015). The different ways that politicians debate a societal problem impact policy decisions, resource allocation and implementation (Knill and Tosun 2012); in directions which may facilitate or hinder addressing nutrition through cross-sectoral responses. Assessing the policy frames provides insights into the dominant ideas promoted by politicians to express their priority aspirations or actions; and to contest competing notions (Jeffares 2014). Policy frames symbolise the distinct and coherent interpretations of a societal concern containing a problem definition, casual attributions and recommended prescriptions (van Hulst and Yanow 2016; Entman 1993). I adopt this framing concept to analyse the construction and evolution of the nutrition policy frames in the political arena.

Framing has conceptual roots across various disciplines (for overview see: Koon et al. 2016; Borah 2011; Dewulf et al. 2009), despite its limited application to understand nutrition policies in African countries. In public policy, framing involves the continuous underscoring of particular aspects of a societal problem and their causes to promote the preferred policy directions (van Hulst and Yanow 2016). As such, policy frames are repeatedly clarified, elaborated or reconceptualised to

boost their credibility and persuasiveness, and to expand, limit or drop policy responses (van Hulst and Yanow 2016; Benford and Snow 2000). Policy frames can be identified from the language used in interactions that are documented (Vink et al. 2013; Dewulf and Bouwen 2012b). Politicians use varied linguistic patterns and rhetorical strategies during interactions to convey different, and sometimes contradictory, representations of reality which affects policy responses (Ilie 2015). This dissertation tracks the changes in the language used by politicians to describe malnutrition, also called expressed political commitment, to reveal the shifts in framing of the issue. Also, policy frames are temporal interpretations responsive to deviations in the policy making context. For instance, the actors participating in frame production manoeuvre to problematise policy issues based on personal interests, issue-related demands, resource availability, and socio-political ideologies (Russell et al. 2019; Steensland 2008). These nutrition frames emphasised by the legislature in Uganda should ideally materialise in the administrative actions of different policy sectors.

#### **1.4.2 Sectoral level: Policy design**

The second dimension explored in this study focuses on the changes in the policy designs developed by the sectors expected to improve nutrition. Integrated nutrition strategies require different ministries to incorporate nutrition concerns in their policies for issue legitimacy and to increase the likelihood of attaining goals. Policies are the programs, laws or regulations resulting directly from the decision-making processes at sectoral and political levels (Knill and Tosun 2012). Policy designs reflect the substantive attempts by government to tackle a policy problem by linking formal defined goals to policy measures and actors expected to implement them (Howlett et al. 2015). To examine the changes in nutrition integration into the policies endorsed in different sectors, I apply the policy integration perspective. Policy integration refers to the extent to which a governance system addresses a societal concern in a more or less holistic manner involving various policy sectors and, possibly governance levels (Tosun and Lang 2017). The concept is popular in researches investigating cross-cutting policy problems in high income countries but has been minimally utilised to understand public policies in the African context.

Many empirical studies on policy integration explore the bundling of policies from different sectors to create unification and interdependencies in solving a crosscutting issue (for example: Metz et al. 2020; Sibbing et al. 2019; G. Jordan and Halpin 2006). However, this dissertation shows how the



adoption of overarching integrated nutrition strategies (re)designs the policies of different government sectors (Cejudo and Michel 2017). Candel and Biesbroek (2016) conceptualised policy integration as a dynamic multifaceted process involving changes (or lack of change) in the policy dimensions. These dimensions are the policy frames, subsystems involved, policy goals and policy instruments. The changes can occur at different paces and possibly in alternate directions, implying that nutrition integration into sectoral policies can be both integrative or disintegrative. This may be attributed to; one, the actors, i.e. subsystems, participating in policy decisions evolve continuously, pursue specific interests and propose certain policy measures which may advance or discount the cross-cutting governance ambitions (Hagelund 2010; Jochim and May 2010). Two, multiple policy goals coexist which have to mutually reinforce each other to realise the integrated objective, but this does not always happen (Rayner and Howlett 2009). Three, gains and losses occur in the policy instruments adopted to realise the cross-cutting goals, expanding and reducing the types and scope available to ascertain integration (Capano and Howlett 2020; Rayner and Howlett 2009).

This research concentrates on the adjustments in the policy dimensions to identify the patterns of horizontal policy integration. That is, the degree to which different policy sectors explicitly incorporate the overarching crosscutting goals and interventions, stipulated in the integrated nutrition strategies, in their policy designs (Trein 2016; Casado-Asensio and Steurer 2014; G. Berger and Steurer 2010).

### **1.4.3 Sectoral level: Policy mechanisms**

Policy integration literature is criticised for highlighting the facilitators and barriers to integration without detailing the causal processes through which they affect governance outcomes (Capano and Howlett 2019; Biesbroek et al. 2014; Peters 2015b). This dissertation contributes to the literature by identifying the causal mechanisms that explain the patterns of nutrition policy integration/disintegration. Many causal mechanisms are described in literature (Capano and Howlett 2019; A. Bennett 2018; Hedström and Ylikoski 2010; Bunge 1997). However, the mechanisms that are distinctly connected with policymaking, here referred to as policy mechanisms, are less understood (van der Heijden et al. 2019; Peters 2015b). Policy mechanisms are unobservable recurring patterns of actor-interactions that bring about changes in policy integration under specific contexts (A. Bennett 2018; Biesbroek et al. 2014). Despite being

unobservable, policy mechanisms are empirically traceable, self-evident and self-explanatory processes that act as causes in generating policy outcomes (Kay and Baker 2015; Beach and Pedersen 2013).

Falleti and Lynch (2009) and Bunge (2004) portray mechanisms as portable concepts which may be reproduced, and may interact with other mechanisms, across space and time due to contextual variations. Based on this understanding, accounting for the contextual conditions helps in determining the directionality of the policy mechanisms; since similar mechanisms may yield dissimilar nutrition integration outcomes in different contexts. Contexts have multidimensional characteristics operating at different levels, namely, the micro (individual behaviour), meso (institutional conditions) and macro (socio-political conditions) levels (Kay and Baker 2015). Distinguishing the specific policy mechanisms through which multiple independent variables (X) generate specific dependent variables (Y) is important in explaining changes in (nutrition) policy integration. Building on this understanding, this research traces the actors participating in policymaking, their activities and relationships, to infer evidence of a policy mechanism linking a cause with the policy outcomes.

Sections 1.4.1 to 1.4.3 examine the top-down capacity of government to realise integration into policies and administrative operations, less is understood about the implementation of integrated strategies (Tosun and Lang 2017; Hogl et al. 2016). For this, a street-level bureaucracy perspective is adopted in section 1.4.4 to focus on service delivery.

#### **1.4.4 Service delivery level: street-level practices**

So far, only a few studies provide a bottom-up perspective of the practices spurred by integrative demands. The third dimension assessed in this research determines the practices exhibited by the frontline workers that implement the integrated nutrition policies. Frontline workers are employees of public and private sector entities that interact directly with citizens either through allocating or sanctioning the benefits (e.g. nutrition interventions) associated with their daily work (Hupe 2019; Lipsky 2010). Practices are the habitual actions and behaviours exhibited by frontline workers during their day-to-day work interactions with citizens (cf. Lipsky 2010). Policy implementation scholars stress that practices in service delivery are shaped by many multidimensional interactions ongoing in any given context, rather than policy prescriptions alone (Tummers et al. 2015; Hupe

and Buffat 2013; Brodtkin 2011; Lipsky 2010). The study in chapter 4 adopts the street-level bureaucracy theory to gain a bottom-up view of how and why demands to integrate nutrition services may or may not be realised on the ground.

The street-level bureaucracy theory claim that frontline workers exercise substantial discretion when allocating or denying benefits attached to their tasks, work under chronically resource constrained conditions, and adopt diverse coping strategies which become the policies experienced by citizens (Lipsky 2010). The established formal or informal practices facilitate adaptations to be made to policy demands during implementation. Following the theorisation of Lipsky (2010), frontline workers exhibit practices that will first limit the demands of citizens and maximise usage of available resources, second modify their understanding of job tasks to align with available resources and achieve set targets, and third modify citizens' perceptions to make the gaps between actual accomplishments and policy objectives acceptable. This classification suggests that nutrition integration into service delivery will be shaped in divergent ways. The patterns of practices adopted by frontline workers are therefore likely to result in different nutrition integration situations.

Further, frontline workers adopt practices to manage the imbalances incurred between demands to act (action prescriptions) and resources available to realise them (action resources) (Hupe and Buffat 2013). It is extensively acknowledged that frontline work is entrenched in vast demands but limited resources. These conditions arise from the micro (individual-focused conditions), meso (institutional conditions) and macro (socio-political conditions) levels (Hupe and Buffat 2013; Rice 2012; Lipsky 2010). The micro-level interactions between the frontline workers and citizens are mediated by (and in turn inform) the institutional conditions; and these are collectively affected by dynamics in the socio-political context. For instance, policy implementation is affected by individual interests and professional norms (Maynard-Moody and Musheno 2012); scarcity of human, financial and information resources (Brodtkin 2015; Hupe 2013; May and Winter 2007); ambiguous policy goals, performance monitoring and inexhaustive demand for services (Lipsky 2010). However, not all demands and available resources are equal. Variation in these demands and resources, coupled with their multifaceted interactions, is expected to activate varied practices among frontline workers employed in similar, as well as different contexts. Disentangling the disparities in resources and demands facilitates tracking the modifications in the practices adopted on the ground.

The next section introduces the research questions based on the gaps explained in Section 1.2 and relevance of the study.

### **1.5 Research questions and relevance**

The general research question of this dissertation is:

*To what extent have the political ambitions to govern nutrition in a more integrated manner proceeded beyond paper realities in Uganda?*

This question is answered in four sub-questions based on the challenges elaborated in Section 1.2. By answering the sub-questions, the research presents empirical and theoretically grounded insights of the actors, explicit (mal)nutrition frames, goals, instruments and practices characterising the governance of nutrition in Uganda. This will permit drawing conclusions about the state of integrated nutrition governance in Uganda. Each of the questions is expanded in separate chapters in this thesis.

*Question 1: How has (mal)nutrition been framed by parliamentarians in Uganda over time?*

The first question disentangles the interpretations of malnutrition used in the political arena over time. The study in Chapter 1 applies the framing perspective discussed in Section 1.4.1 to reveal the linguistic patterns and rhetoric strategies used by politicians to discuss (mal)nutrition and the conditions influencing them. The identified nutrition frames, characteristics of frame sponsors and the expressed policy solutions inform the approaches aiming to strengthen the political capacity to improve nutrition. At the conclusion of the chapter, I suggest an approach to examine and compare the political framing of (mal)nutrition in other African countries.

*Question 2: To what extent have nutrition concerns been integrated into cross-sectoral policy outputs over time?*

This question captures the patterns of integrating nutrition concerns in the policy outputs developed by different ministries. I draw from the policy integration concept explained in Section 1.4.2 to assess the changes in nutrition-related policy goals, instruments and subsystems involved. The research informs nutrition governance literature in two aspects. First, the study provides a

methodological approach to monitor and compare the performance of policies adopted across policy sectors operating in different government levels, country contexts and time horizons. Second, the analysis illustrates the changes in the policy dimensions and the patterns of horizontal nutrition policy integration. The study contributes to policy integration literature in terms of empirical applicability of the concept in an African country, a region that is underrepresented in literature.

*Question 3: What policy mechanisms explain the observed nutrition policy (dis)integration patterns in Uganda?*

This research question builds on question two to elaborate the precise causal pathways through which nutrition integration is promoted or hindered. The question applies the understanding of policy mechanisms described in Section 1.4.2. The analysis highlights how and under what conditions nutrition (dis)integration takes place. Identifying the causal pathways allows better targeting of interventions to facilitate and sustain integrated nutrition governance. The findings contribute to understanding the political processes underlying policy integration. That is, the similarities and differences in the policy mechanisms influencing nutrition decisions making in various ministries over time. The findings enable theorisation about the context-mechanism interactions associated with integrated nutrition governance.

*Question 4: What practices are adopted by frontline workers to enable or obstruct nutrition integration in service delivery?*

The fourth question centres on the nutrition integrative / disintegrative practices of frontline workers. I employ the street-level bureaucracy theory, indicated in section 1.4.4, to identify and compare the nutrition-related demands, resources and practices of different frontline workers. This analysis contributes to nutrition literature that seeks to explain the discrepancies between policy prescriptions and service provision. It highlights the politics in delivering nutrition services, and is therefore not limited to the usual nutrition actions idealised in public health studies. The insights facilitate scholars to make connections between the hierarchical integrated policies and action or inaction in service delivery. The study contributes a bottom-up view of how integrated strategies are experienced on the ground.

Overall, my research advances the nutrition governance literature by providing a whole-of-government understanding of collective public action to improve nutrition. First, the study

identifies the actors engaged in nutrition governance across sectors and government levels, the patterns of nutrition policy integration and the driving mechanisms, as well as the ultimate practices structuring nutrition service delivery. Few studies simultaneously assess and compare the nutrition governance processes and practices in different government levels. Second, the conceptual pluralism used in my research contributes to the much required theory-driven research to progress the concept of nutrition governance. Further, the research contributes to debates seeking to advance the public policy theoretical concepts used in this dissertation by showing insights about their application and relevance in an African context. For example, the top-down and bottom-up researches offer empirical insights about the policy integration mechanisms and practices that are necessary for theorising the concept. In general, the governance processes in African countries are rather absent in public policy research.

The societal relevance of the research lies in the innovative approaches that are suggested to monitor the political commitment to nutrition and the strategies to strengthen integrated nutrition governance. The sustainability of nutrition integration efforts and political commitment is often contentious and requires continuous monitoring. I propose practical ways to concurrently track the performance of different policy sectors towards attaining the set nutrition goals. A greater understanding of the governance processes that affect policy implementation is vital for designing strategies to scale-up and sustain investments in nutrition, and to achieve the targets stipulated in the Sustainable Development Goal 2.

## **1.6 Research approach and methodology**

This section outlines the qualitative research approach, multilevel study design and the data collection methods used in this dissertation. The study focuses on the changes in nutrition governance in the formal government organisations, including the parliament, ministries and implementing departments in the local governments. It does not purpose to understand the parallel operations of non-government organisations or the private sector.

### **1.6.1 Qualitative research approach and multilevel research design**

This dissertation adopts a qualitative research approach because it permits the detailed capture of the diverse meanings, processes and contexts associated with a phenomenon that has limited systematic information (Creswell and Creswell 2018; Cornelissen 2017). Given that nutrition governance is a relatively emerging field, this research approach enables simultaneous exploration of the unfolding policy frames, processes, practices and the actors involved over time. This in-depth understanding is required for a detailed account of developments in nutrition governance. In addition, the qualitative explanatory research enables comprehensive narration of the actual conditions, actors and interactions which causally lead to specific governance outcomes. The explanatory studies focus the causal complexities addressing questions of why, when, how and with what effects. This facilitates separating the interactional patterns and causal relationships which support or counteract the assumptions that are commonly postulated to influence processes (Cornelissen 2017; Hamaker and Wichers 2017). Therefore, the qualitative research approach permits identification of the actors involved, conditions, mechanisms and practices causing the discrepancies in nutrition integration in policies adopted across sectors and in service delivery.

The study is conducted at multiple government levels (i.e. political, sectoral and service delivery) to determine the alterations in nutrition governance across and between these levels. By combining information from different units or levels of analysis, the multilevel strategy aids collection of more dense descriptions about a phenomenon of interest (Hitt et al. 2007; Courgeau 2003). The strategy allows identification and reveals modifications in the societal, organisational and individual conditions, as well as the processes and practices shaping the governance of nutrition. For instance, the time-scale differences enabled meaningful and concurrent studying of the cross-sectoral and longitudinal changes in nutrition integration. In addition, the multilevel approach enables the concurrent exploration and articulation of connections existing within and between government levels to account for divergences in meanings, processes and practices. The multilevel approach supports the use of multiple theoretical concepts (Kozlowski and Klein 2012; Diez-Roux 2000), and was exploited to identify the intricate top-down and bottom-up processes, practices and their outcomes. The multilevel and longitudinal research approach provided both the empirical and theoretical perspectives of the complexities involved in ensuring effective nutrition governance

Case studies were used to determine the policy mechanisms (chapter 4) and for a bottom-up perspective of the practices shaping nutrition services on the ground (chapter 5). Case studies permit in-depth inquiries to be made about a minimally known phenomenon within its real-world context (Bartlett and Vavrus 2017). They facilitate understanding the explicit contextual conditions, actor interactions and practices leading to the occurrence of a phenomenon. The ministries and local governments comprising the cases in this dissertation were strategically selected for appropriate reflection of the influence of contextual variations on the policy mechanism and practices determining (dis)integrated nutrition governance in Uganda. The sectors studied in chapter 4 were selected based on the study showing differences in the nutrition policy integration patterns across the cases over time (Namugumya et al. 2020b). The choice of the local governments was based on variation in nutrition investments by donor projects and childhood stunting indicators (UBOS and ICF 2018; KRSU 2016).

The study analyses changes in nutrition integration in the period between 2001 and 2017 which represents four election cycles in Uganda. This period was selected to enable detection of the modifications in the patterns of integrating nutrition concerns in the political arena and across ministries. Despite Uganda having the same president since the late 1980s, it is one of the African countries leading in public sector reforms (Andrews and Bategeka 2013). That is in terms of changing the political and planning priorities following elections, cabinet reshuffles and general restructuring of public institutions. My analysis, thus, shows the differences in the political frames, degrees of nutrition policy integration and policy mechanism across the election terms.

### **1.6.2 Methods of data collection**

The empirical chapters 2, 3 and 4 in this dissertation are longitudinal studies to gain detailed insights of the changes and the patterns of the frames, policy processes and practices enabling or frustrating integrated nutrition governance. Longitudinal studies enable observation of how and why phenomenon under investigation changes or stagnates across space and time (Hamaker and Wichers 2017; Kozlowski and Klein 2012). I combined various qualitative methods summarised in table 1.1, and further elaborated in the methods sections for the chapters presenting the specific empirical studies.



I conducted a qualitative content analysis in chapter 2 to assess the framing of (mal)nutrition prioritised by politicians. The analysis used the transcribed Parliamentary Hansards which portray the debates conducted by elected officials over time. Dewulf and Bouwen (2012b) express that during conversations people interactively emphasise, downplay or disregard issues as they make sense of societal problems. I applied this by tracing and scrutinising the variations in the language used in discussions to identify the nutrition frames. The analysis focused on the reasoning and framing devices used in parliamentary debates to interpret the meanings of nutrition constructed in the documents.

**Table 1.1 Overview of research methods applied in this dissertation**

Research question	Chapter	Theoretical concepts	Data collection	Data analysis
1. How has (mal)nutrition been framed by parliamentarians in Uganda over time?	2	Policy framing	Parliament Hansards	Qualitative content analysis for policy frames
2. To what extent have nutrition concerns been integrated into cross-sectoral policy outputs over time?	3	Policy integration	Sector policy and program documents; interviews; validation workshop	Qualitative content analysis for nutrition policy integration
3. What policy mechanisms explain the observed nutrition policy (dis)integration patterns in Uganda?	4	Policy mechanisms	Interviews; policy and program documents; validation workshop; expert consultation	Explaining-outcome process-tracing for mechanisms in nutrition (dis)integration
4. What practices are adopted by frontline workers to enable or obstruct nutrition integration in service delivery?	5	Street-level bureaucracy	Interviews; policy and program documents; observations; validation/exit meetings	Qualitative content analysis for frontline workers' nutrition integrative/disintegrative practices

The study in chapter 3 is also based on qualitative content analysis of policy documents and informant interviews which increased credibility of the findings on nutrition policy integration. All ministries are expected to adopt the national priorities in their policy documents specifically the overarching sector policies, the sector development and investment plans and their ministerial policy statements. The latter documents reflect the five-year investment plans and the annual sector

performance and budget expenditures, respectively. Qualitative content analysis reveals facts about unobservable decision making processes (Bowen 2009). Hence, it aids the longitudinal tracking of shifts in policy designs specifically the nutrition goals, subsystems involved and policy instruments adopted across the policy sectors over time. The analytical approach enabled synthesis of the contextually situated policy outcomes and informed the structuring of progressive research questions.

To explain the discrepancies in nutrition policy integration highlighted in chapter 3, I applied the explaining-outcome process tracing case study design in chapter 4. This approach facilitates the reconstruction of complex case-specific causal mechanisms that produce a particular outcome (Beach and Pedersen 2013). In addition, this method permits working backwards iteratively from the outcome to identify how multiple linked processes unfold without only favouring forecasting events (Beach and Pedersen 2013). This facilitates the comparison of the actors involved, their interactions and the mechanisms enabled in varied contexts (Kay and Baker 2015). The mechanisms were identified inductively based on in-depth qualitative interviews with several actors from government and non-government organisations who directly or indirectly participate in the nutrition policy processes. Supporting policy and project documents were also utilised. An inductive approach is adopted to provide detailed analysis of the contextual conditions and the processes that are routinely activated by them which depict the presence of a mechanism (Beach and Pedersen 2013). The case study design enabled identification and comparison of different actors, the sequential occurrence of the phenomenon and distinct driving processes for each policy sector in different time periods (Bartlett and Vavrus 2017). As a result a representation of the processual perspective to policy integration was obtained.

In chapter 5, I used various qualitative inquiry methods to conduct a comparative analysis of the practices of frontline workers in two districts in Uganda— Moroto and Namutumba. The frontline workers considered in the study include the health workers, agriculture extension workers and community development officers. Thematic interviews, observations of daily practices and document analysis were conducted. The analysis followed the same qualitative content analysis steps employed in chapter 4 to identify the demands, resources and the practices of frontline workers.

## **1.7 Organisation of the dissertation**

The thesis is organised into six chapters. The introduction highlights the research gaps and the research questions, and presents the multiple theoretical concepts used in the study. The main body contains four empirical articles that have been published in or submitted to peer-reviewed academic journals. The final chapter is the overall synthesis responding to the main research question.

Chapter 2 analyses the framing of (mal)nutrition by parliamentarians in Uganda over time. The main nutrition frames employed are identified by scrutinising the reasoning and framing devices used by politicians. This chapter discusses the evolution in interpretations of malnutrition and the recommendations that directly or indirectly influence the nutrition policy processes.

Chapter 3 examines the extent of nutrition policy integration in the policy outputs developed by different government ministries. It investigates the changes in the actors involved, policy goals and policy instruments in eight ministries (i.e. health, education, agriculture, local government, trade and industry, social development, finance and Office of the Prime Minister) over time. The discussion reflects on the emerging patterns of nutrition policy integration, which inform the research question addressed in chapter 4.

Chapter 4 builds on the findings of four policy sectors, presented in chapter 3, to analyse the policy mechanisms that explain the observed patterns of nutrition (dis)integration in Uganda. Using a process tracing approach, the analysis compares the emerging context conditions and the policy mechanisms activated in three government ministries of health, agriculture and social development, and the Office of the Prime Minister. The chapter discusses the main policy mechanisms fostering and hampering nutrition integration into sectoral policies across space and time.

Employing a bottom-up viewpoint based on the conceptual underpinnings of street-level bureaucracy, chapter 5 investigates the practices of frontline workers in different departments that impact nutrition service delivery and the conditions galvanising them. It specifically compares the understanding of nutrition services, the perceived nutrition-related demands and resources, and how these determine the practice routinely adopted by frontline workers. The discussion reflects on the practices enabling and hindering nutrition integration in different contexts.

## *Chapter 1*

The final chapter 6 is a synthesis answering the main research question of to what extent have the political ambitions to govern nutrition in a more integrated manner proceeded beyond paper realities in Uganda. The chapter provides empirical and theoretical reflections about integrated nutrition governance, provides the societal relevance of findings, and recommendations for future research.

## **Chapter 2**

### **The framing of malnutrition by parliamentarians in Uganda**

This chapter is published as: Brenda Shenute Namugumya, Jeroen J.L. Candel, Catrien J.A.M. Termeer, Elise F. Talsma (2021). The framing of malnutrition by parliamentarians in Uganda.

*Health Policy and Planning*. doi: 10.1093/heapol/cza009.

## Abstract

The quest for political commitment to reducing malnutrition in Sub-Sahara Africa draws attention to the role of national parliamentarians. Whereas parliamentarians have the authority to ratify legislation, monitor policies and budgets and transform behaviour, to date little is known about how malnutrition is understood and debated in Sub-Saharan African political arenas. This study addresses that gap by exploring how (mal)nutrition has been framed by parliamentarians in Uganda between 2001 and 2017. Applying framing theory we performed a qualitative content analysis of 131 Parliament Hansards transcripts to determine the different meanings of nutrition. Our analysis distinguishes seven co-occurring frames that entail different, sometimes competing, understandings of the drivers and possible solutions of malnutrition. The frames are: (i) the emergency nutrition frame, (ii) the chronic vulnerability frame, (iii) the school feeding frame; (iv) the disease-related frame, (v) the diversification frame, (vi) the delicious poison frame, and (vii) the poverty and inequality frame. These frames are sponsored by different groups of parliamentarians, most notably politicians representing constituencies with high degrees of malnutrition, the president, some ministers and politicians in parliamentary forums concerned with children and women issues. Our analysis helps to understand why policy measures get prioritised or disregarded by policymakers. Overall, we show that frame sponsors prioritise short-term *tangible* solutions, such as food assistance and agricultural inputs, over longer-term solutions. The diversity of nutrition frames revealed in this study is not bad, however, the key gap is that some drivers and manifestations of nutrition have hardly been addressed (or not at all). Because of the desire to foster effective nutrition governance, we suggest that holistic approaches including more systems-based framings are necessary to ensure that the progressive nutrition policy designs enable multisectoral action.

**Key words:** malnutrition; framing; parliaments; leadership; Uganda

## **2.1 Introduction**

Effective nutrition governance is important to accelerate and scale up actions to reduce malnutrition. Malnutrition encompasses the manifestations of undernutrition, overweight and associated diet-related non-communicable diseases arising from imbalances in optimal nutrition (WHO 2018). Nutrition governance refers to the interactive processes of steering various societal actors towards achieving the collectively negotiated targets of ending all forms of malnutrition (Bump 2018; Ansell and Torfing 2016; Peters and Pierre 2016). Governance processes comprise of shared decision making, resource mobilisation, implementation and accountability. Countries in Sub-Saharan Africa (SSA) have been increasingly petitioned to provide sufficient resources to facilitate the concerted and coherent actions of different policy sectors and government levels to sustain reductions in malnutrition (Swinburn et al. 2019; Hawkes 2015; Sunguya et al. 2014). As a result, African nutrition governance research has increased in recent years.

A main insight of this literature is that effective nutrition governance remains vulnerable due to volatile political commitment (Resnick et al. 2018; Nisbett et al. 2014b; T. Benson 2008). Consequently, both scholars and international organisations have called for proactive participation of formal political arenas in nutrition governance (FAO 2018; von Braun 2018). This quest for political involvement draws attention to the role of national parliamentarians in guaranteeing the long-term institutionalisation of nutrition interventions. Parliamentarians have the authority to ascertain nutrition integration through ratifying legislation, monitoring policies and budget expenditures, and creating awareness to transform behaviours (FAO 2018; Chhokar et al. 2015). Consequently, international and local actors have invested in strengthening the capacities of parliamentarians to advance nutrition agendas, e.g. by providing nutrition policy briefs (SUN 2019), trainings (Chhokar et al. 2015), establishing coordination platforms and financing parliament-led projects (FAO 2018).

Despite these efforts, to date there is limited scholarly investigation of the changes in formal political arenas that shape nutrition governance in SSA countries. More specifically, given that malnutrition is a multidimensional problem, involving a range of determinants, manifestations and possible solutions (Babu et al. 2017a; Ruel and Alderman 2013), the question emerges of how parliamentarians make sense and communicate about malnutrition and associated governance interventions. Whereas ambiguity of a societal concern may inspire policy creativity, it can also

impede policy reforms that are considered essential for more effective nutrition governance (Jaspars et al. 2018). We approach this question through a framing approach. Framing is a dynamic process in and through which policy actors perceive and inter-subjectively construct meanings of policy problems (van Hulst and Yanow 2016). Frames are then the distinct and coherent interpretations of an issue containing a problem definition, casual attributions and recommended prescriptions (van Hulst and Yanow 2016; Entman 1993). It is widely acknowledged that policy makers frame societal problems in different ways, which impacts policy decisions, resource allocation and implementation (Knill and Tosun 2012; Dewulf et al. 2009). For instance, Nisbett (2019), Harris (2019b) and Ridgway et al. (2019) show how a multiplicity of nutrition frames at the international level has informed varied, sometimes competing, policy interventions. Based on this observation, we expect that politicians construct different nutrition frames during parliamentary debates. This may promote diverse, and possibly conflicting, policy priorities.

In this study, we aim to investigate *how has (mal)nutrition been framed by parliamentarians in Uganda over time*. Specifically, we focus on the nutrition frames deployed and associated frame sponsors within and across the parliamentary periods between 2001 and 2017. Uganda is an interesting case, as it is generally considered a SSA front-runner in integrated nutrition governance, e.g. as shown by the adoption of the Uganda Nutrition Action Plan 2011-2016. Recent studies show that the Ugandan government has made remarkable progress in integrating nutrition concerns across ministerial and subnational policies (Namugumya et al. 2020b; Turcan and Bene 2017). Still, Uganda continues to face multiple problems related to malnutrition: about 41 percent of the total population is undernourished, while 29 percent is affected by childhood stunting (low height for age), and 24 percent of women are overweight (FAO et al. 2019; UBOS and ICF 2018).

We proceed with a theoretical section that explains our framing approach. Section 3 describes the methodological approach used to perform inductive framing analysis. Section 4 presents the analysis of the nutrition frames used in the Ugandan parliament over time. The paper ends with a critical discussion of current political involvement in Ugandan nutrition governance.



## **2.2 Framing**

Framing has conceptual roots across various disciplines (Borah 2011; Dewulf et al. 2009; Benford and Snow 2000). Moreover, the concept has been applied to understand meaning-making processes in relation to a range of transdisciplinary societal problems, including climate change, health policy, food security and obesity (Faling 2020; Koon et al. 2016; Candel et al. 2014; Kwan 2009). This literature accentuates the multiple perspectives of understanding and evaluating societal problems which inspire action or inaction. Framing theory has been applied to understand the factors driving general health policy making in SSA countries (e.g. Koon et al., 2016, Koduah et al., 2016, Oronje et al., 2011), but there are relatively few applications to comprehend nutrition policy decisions in this context (but see: Okeyo et al., 2020).

From a public policy perspective, framing involves the continuous underscoring of particular aspects of a societal problem and their causal implications to promote preferred policy directions (van Hulst and Yanow 2016). Therefore, policy frames are repeatedly clarified, elaborated or reconceptualised to boost their credibility and persuasiveness, and to expand, limit or obscure policy responses (van Hulst and Yanow 2016; Benford and Snow 2000). Dewulf and Bouwen (2012b) express that during conversations people interactively emphasise, downplay or disregard issues as they make sense of societal problems. As such, changes in the language used by policy makers to describe a societal concern may reflect a shift in comprehension of the issue. Politicians use varied linguistic patterns and rhetorical strategies during interactions to convey different, and sometimes contradictory, representations of reality (Ilie, 2015). This analysis tracks the changes in the language used by politicians, also called expressed political commitment, to describe malnutrition to reveal shifts in framings of the issue. The different ways that policy makers debate a societal problem shape ultimate policy decisions, resource allocation and implementation (Knill and Tosun, 2012), in directions which may facilitate or hinder addressing nutrition through cross-sectoral responses.

In this study, we draw on a framing approach proposed by Van Gorp (2006) and Gamson and Modigliani (1989), which explains that policy frames are constituted of both causal building blocks (reasoning devices) and discursive elements (framing devices) that are used in communicating about an issue (Van Gorp 2006; Pan and Kosicki 1993; Gamson and Modigliani 1989). Assessing the reasoning and framing devices provides insights of the dominant ideas promoted by politicians

to express their priority aspirations or actions and to contest competing notions (Jeffares, 2014). *Reasoning devices* are logically linked argumentative statements about a societal concern, which propose a problem definition, causal attribution, moral evaluation and recommended prescriptions associated with a frame (Van Gorp 2006; Gamson and Modigliani 1989). Conforming with Entman (1993), the problem definition involves how politicians describe the problem of (mal)nutrition, its nature and scope. Causal attribution refers to the determinants that are believed to produce this problem. Moral evaluation signifies the value judgements underpinning a frame. Recommended prescriptions are the articulations of preferred policy actions or inaction.

*Framing devices* are the manifest discursive elements in a message that function as demonstrable indicators of the frame (Van Gorp 2006). We distinguish between three types of framing devices: key concepts, verbal devices and metaphors, which are commonly used to articulate opinions, beliefs and convictions about issues (Van Gorp 2006; Pan and Kosicki 1993; Gamson and Modigliani 1989). Key concepts are repeatedly utilised words that specify the core idea(s) of a frame, e.g. ‘hunger’, ‘food aid’ and ‘diversification’. Verbal devices comprise of catchphrases (expressions that make issues relatable) and depictions (statistics or descriptions for visualising the problem). Metaphors, like ‘starvation is a recipe for insecurity’, strengthen policy arguments about abstract concepts by connecting them to familiar and meaningful ideas (Brugman et al. 2019; van Hulst and Yanow 2016). In this pioneering systematic analysis, we logically extract the framing and reasoning devices used in parliamentary discussions into a framing matrix (table 2.1) to identify the diverse framings of (mal)nutrition.

Specific policy frames are endorsed by particular actors, referred to as frame sponsors (Van Gorp 2006). Besides explaining the differences in policy actions over time, examining frame sponsors provides relevant information about which parliamentarians have the power to shape nutrition legislation and programs. Frame sponsors manoeuvre to problematise policy issues based on their personal interests and background, resource availability, political ideologies, issue-related demands, institutional and socio-political conditions (Russell et al. 2019; Ilie 2015). For example, executive patronage by a majority ruling political party (such as the National Resistance Movement in Uganda) may encourage nutrition framing that is skewed towards its ideologies (cf. Resnick et al. 2018). Likewise, changes in elected officials, global nutrition priorities and regional

discrepancies could lead to variation in interests and language used to discuss nutrition (Nisbett 2019; McIntyre et al. 2018).

**Table 2.1: Nutrition framing analysis strategy** (an adaptation of Russell et al. 2019; Candel et al. 2014)

Nutrition frame	Reasoning devices		Framing devices		
		Guiding questions for coding reasoning devices	Key concepts	Verbal devices	Metaphors
Nutrition frame	Problem definition	What/how is the nutrition problem described by parliamentarians?  What population or policy sector is affected by the problem?	Which words are commonly used in describing the issue?	What expressions and/or facts are used to support the understanding of the issue?	What are the symbolic phrases adopted in explaining the issue ?
	Causal attribution	What/who is identified as the main cause of the problem?			
	Moral evaluation	What policy actors are (not) relevant for resolving the problem?  Which underlying values justify the problem representation?			
	Recommended prescriptions	What are the proposed policy solutions to the problem?			

## 2.3 Methodology

We adopt an interpretive research design to gain an in-depth and context-sensitive understanding of nutrition framing by Ugandan parliamentarians over time. An interpretive approach presumes that societal problems can have different meanings to different actors (Yanow 2014). The analysis aims to construe these multiple unarticulated meanings through inductive examination and (re)organisation of the language used in discussions to identify the varied coherent interpretations (Schwartz-Shea and Yanow 2013). In our case, we aim to identify the different causal narratives related to nutrition based on empirical content.

Nutrition frames are identified from the transcripts of the plenary sessions of parliament conducted between 2001 and 2017, archived in the Uganda Parliamentary Hansards (GOU 2020). During this

period, political interest in nutrition gained traction, as indicated by the high-level endorsement of integrated nutrition strategies – the 2003 Food and Nutrition Policy and the UNAP 2011-2016 (GOU 2011, 2003); a rise in nutrition-related resources and an increase in nutrition integration across ministries (Namugumya et al. 2020b). Despite Uganda’s centralised system, in which the president holds much power and the ruling party’s domination in parliament, there is considerable variation in political representation across parliamentary terms. We focused on four – the seventh, eighth, ninth and tenth – different parliamentary terms between 2001 and 2017.

Transcripts contained textual narrations of ministerial statements, speeches, debates, and question and answer (Q&A) sessions. Ministerial statements are texts summarising government’s past and planned operations for public record. Speeches (e.g. by the president) present facts on events, opinions and political party interests. Debates are formal exchanges of opinions intended to foster collective decision making, while Q&A sessions expose abuses, critique and seek to redress policies to ensure government accountability (Ilie 2015).

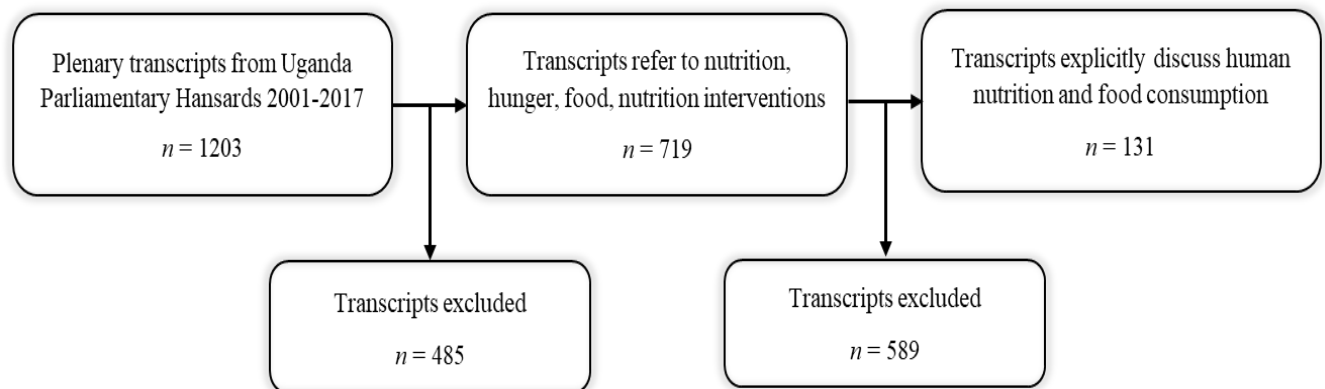
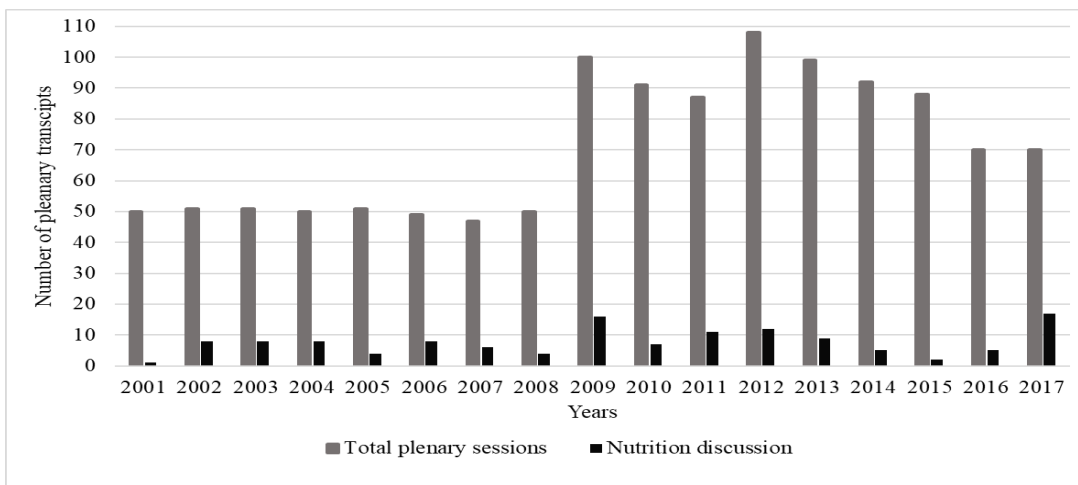


Figure 2.1: Selection criteria for analysed transcripts

Retrieved transcripts ( $n=1203$ ) were systematically searched using keywords acquired from policy documents (e.g. Uganda Nutrition Action Plan 2011-2016) and literature discussing (mal)nutrition forms, causes and possible solutions. To reduce selection biases, a two-step selection was performed to identify eligible documents for analysis (figure 2.1), based on the following criteria: i) documents were selected if they mentioned nutrition-related terms, listed in Supplementary material A1; ii) we selected documents that explicitly discussed human nutrition and food-related

issues ( $n=131$ , see Supplementary material A for a full list of transcripts). The distribution of transcripts containing nutrition concerns over time is indicated in figure 2.2.

We conducted an inductive frame analysis by closely reading the plenary transcripts and coding the relevant text fragments using the qualitative content analysis software *Atlas.ti*. Content analysis was conducted in four steps. First, we identified the causal arguments guided by the questions in table 2.1 to extract quotes signifying the problem definition, causal attributions, moral evaluation and recommended prescriptions. Specific codes were assigned to text material carrying messages related to each reasoning device. The rhetorical connections in the reasoning devices were established following the method of Matthes and Kohring (2008) and Van Gorp (2006), who argue that frame elements coexisting across multiple texts can be thematically linked. For example, excerpts of discussions about increasing hunger and malnutrition (problem) arising from continued drought conditions and crop losses (causes), and proposing investments in improved agricultural inputs (prescribed action), were compared and captured into a single frame matrix. Second, we coded the framing devices associated with the causal arguments (table 2.1). Third, quotations were continually compared for similarities or differences in the causal structure to guide the logical organisation of nutrition frames used across parliament periods. The authors frequently discussed the results to ensure an appropriate delineation and labelling of the frames. Some identified frames do not contain all the devices, e.g. containing a clear problem definition without a solution attached to it.



*Figure 2.2: Parliament plenary transcripts discussing nutrition-related concerns between 2001 and 2017 in relation to the total number of plenary sessions.*

In a last step, we identified the frame sponsors behind each frame, by determining which parliamentarians introduced or contributed to nutrition-related debates (e.g. using the identified frames). We coded and categorised the sponsors of each nutrition frame in each period for their political party affiliation, constituency and gender. Constituency representation was clustered into five broad regions – east, west, north, south and central – to capture regional variation as determinants of malnutrition differ (UBOS and ICF 2018).

## **2.4 Results**

Ugandan politicians proved to use seven distinct, and sometimes competing, nutrition frames in parliamentary debates conducted between 2001 and 2017. We discuss the core of each frame in section 2.4.1 and table 2.2. Section 2.4.2 reflects on how these frames shifted over time, while section 2.4.3 presents our findings about the sponsors behind each frame.

### **2.4.1 (Mal)nutrition frames**

#### ***2.4.1.1 Emergency nutrition frame***

The emergency nutrition frame focuses on the instant need of humanitarian response to curb malnutrition among populations deprived of their self-sustenance. Child undernutrition is viewed as highly prevalent in the regions experiencing armed-conflicts, hosting displaced populations or incurring adverse environmental conditions. From 2001 through 2010, parliamentarians causally connected the armed conflicts prevailing in various regions with increasing food crises, severe nutrition shocks and child mortalities. These causal arguments changed between 2011 and 2017 to emphasise how adverse environmental conditions – e.g. droughts, floods and hailstorms - compromise food availability and access resulting in incidences of hunger and malnutrition across the country. Proponents of this frame reinforced their arguments using citizen feedback and the nutrition stories or statistical updates provided by media sources, the disaster preparedness sector and donors (especially WFP and UNICEF). In terms of framing devices, they continuously underscored the gravity of malnutrition in terms of the cost to human life, e.g. as measured by daily child mortalities in displaced populations and the absolute numbers of citizens requiring humanitarian aid. Overall, both government and donors are implored to urgently and adequately

protect the affected citizens' right to food, life and security. The main recommendation prescribed in the emergency nutrition frame is the provision of food assistance. However, recognising the capacity limitations of the humanitarian organisations involved, proponents of this frame over time advocated for the more proactive participation of the Ministry of Disaster Preparedness and Refugees. Proposed solutions covered developing and financing strategies to manage and coordinate disaster responses, including restoring regional security. Additionally, frame proponents called for nutrition rehabilitation centres, active case finding and funding the basic nutrition services to improve child survival.

#### ***2.4.1.2 Chronic vulnerability frame***

The chronic vulnerability frame depicts malnutrition as a constantly recurring challenge necessitating long-term policy solutions. This frame problematises malnutrition as repetitive spikes in hunger and degenerating famine conditions experienced periodically country-wide. Proponents of the chronic vulnerability frame consistently mention a range of factors perceived to cause or reinstate this fragile situation. These include chronic food insecurity, environmental and climatic disasters, large scale cash crop production (e.g. sugar cane), and widespread unregulated cross border trade in food products. The chronic vulnerability frame morally rationalises that investing resources into long-term solutions is economically beneficial and contributes to attaining national and global targets ratified in the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs). In contrast to the emergency frame, this frame shifts attention from the short-term restorative actions (e.g. food aid) to inspire deliberations on the long-term strategies that are critical for sustainable nutrition improvement. The frame emphasises the need for overarching policies to guide different ministries to integrate food and nutrition as well as environmental protection concerns into sectoral policies. In addition, agricultural technologies, such as drought tolerant crop varieties, water harvesting, irrigation, surveillance techniques and extension services are promoted to sustain production. This was intertwined with suggestions to revise the country's agricultural zoning approach, which promotes regional specialisation in particular crops or animals and may limit food availability for citizens. Furthermore, social protection grants, diversification of farm income and food reserve systems to limit post-harvest losses are championed to stabilise food provisioning.

### ***2.4.1.3 School feeding frame***

The core premise of the school feeding frame is that school meals are key to prevent stunting and hidden hunger among children and to increase school attendance and completion rates. Advocates of this frame explain that the lack of school meals frustrates the government's goal of universal primary education (UPE) for all, especially in rural districts. School feeding is perceived to boost school attendance and thus contributes to increasing the country's literacy levels and curbing malnutrition in future populations. Further, school feeding is believed to contribute to human capital development and the Uganda's Vision 2040 target of becoming a middle-income economy. Although parliamentarians acknowledged the importance of school feeding, they held divergent viewpoints about who was duty-bound to ascertain the availability of school meals. Some proponents of this frame reason that government was obligated by policies — the Constitution and UPE policy — which lack clarity of the school feeding responsibilities in UPE schools after the president prohibited the collection of contributions from parents. Besides, government intervention is expected in communities experiencing social instabilities and adverse food insecurity. Conversely, other proponents argue that 'parents are morally responsible for feeding their children' because feeding programs are expensive and unsustainable strategies. Depending on frame proponents' positions, the frame is characterised by contrasting framing devices, such as 'no financial contribution', 'too costly for government', 'perpetual borrowing' and 'mandatory for parents'. Given the controversies in articulating the school feeding frame, the recommended policy positions differ. In the 2000s, government-led school feeding programs were suggested mostly for regions facing emergencies. During the late 2010s, the Ministry of Education and Sports was instructed to develop a school nutrition policy that clearly mandates parents to provide school meals.

### ***2.4.1.4 Disease-related frame***

The disease-related frame posits malnutrition as a health condition especially affecting women and children. Throughout the analysis period, this frame postulates a two-sided representation of malnutrition: either as an *outcome* of diseases like nodding disease, HIV/AIDS and malaria, or as a *cause* of diseases such as spina bifida, thiamine deficiency and oedematous malnutrition. Proponents of the disease-related frame commonly use alarmist framing devices, for example 'strange disease', '16 women die daily in childbirth', '45 percent child mortality is from



malnutrition’, to stress the urgent need of measures to end preventable childhood and maternal deaths. Using the nutrition-related information from donors (UNICEF) and the national health statistics, the frame proponents legitimise their advocacy for investments in preventive and curative services. It is repeatedly echoed that investment in health services contributes to the realisation of global targets, such as the MDGs, and improved the social economic development index. The disease-related frame largely endorses health-focused recommendations. An often mentioned systemic solution is the integration of nutrition interventions in all health services. This is to be accomplished through financing the preventive services incorporated in the Uganda Minimum Health Care package, recruiting nutrition human resource and curative services for treating and managing malnutrition. The frame proponents emphasise the need for mandatory food fortification regulations, micronutrient supplementation of women and children plus food literacy grants, as the main child survival approaches to prevent morbidities and mortalities associated with malnutrition.

#### ***2.4.1.5 Diversification frame***

The diversification frame describes malnutrition as a problem resulting from reduced diversity in both agricultural production and ‘on the plate’. In contrast to the chronic vulnerability frame which aims to increase agricultural production, the diversification frame is concerned with the declining diversity of food types accessed for household consumption. Advocates of this frame discuss the deteriorating dietary diversity, mainly in terms of decline in meals consumed, reduced food varieties, and reliance on staple commodities such as maize and rice. This was expressed in the corresponding framing devices, such as ‘least food consumption scores’, ‘low meal frequencies’ and ‘poor dietary diversity of less than three food groups’. In both 2006 - 2010 and 2016 - 2017, declining diet diversity is attributed to increasing food prices, agricultural policies that promote large scale cash crop production (e.g. sugar cane), widespread unregulated cross border trade in food products, changing climatic conditions, and inadequate knowledge about nutrient rich foods. Frame proponents perceive the declining dietary diversity as an infringement on the constitutional right to adequate food and nutrition security by poor households. Proponents of the diversification frame prescribe actions to accentuate the integration of nutrition objectives in agricultural strategies and programs and contributing to more diversified agricultural production, e.g. by promoting underutilised indigenous crop varieties and distributing livestock. In addition, investment in value addition (agro-processing, nutrition enterprises) is suggested to increase household income and

improve access to nutritious foods for longer periods. The interventions are to be popularised through awareness campaigns and local capacity development.

#### ***2.4.1.6 Delicious poison frame***

The delicious poison frame is based on the metaphor ‘consuming delicious poison’, which was used by a vocal politician to problematise changing food consumption and lifestyle behaviours as major risk factors for the increasing prevalence of and mortalities associated with diet-related non-communicable diseases (NCDs), such as obesity, hypertension and diabetes type II. Unlike other nutrition framings that focus on undernutrition among women and children, this frame deals with *overnutrition*, especially among the parliamentarians themselves. The delicious poison frame underscores the detrimental repercussions of politicians’ individual lifestyle choices, resulting from their transformed socio-economic status. Many politicians alter their dietary habits towards excessive food consumption coupled with sedentary lifestyles. Advocates of the delicious poison frame often employ framing devices that portray all parliamentarians as potential candidates of fatalities, while cautioning about the high-priced treatment costs and general scarcity of those medical services. To align with the individualised causal associations between lifestyle and NCDs, the predominant solutions suggested between 2006 and 2015 solely place responsibility on individual parliamentarians. Proposals for self-management comprise of restricting dietary intake, early detection and management (e.g. using the body mass index) and physical activity. ‘Taking personal health matters seriously’ is a frequently used framing device. However, this evolves in 2016 to encompass solutions requiring systemic responses, such as dietary guidance, preventive education and health financing earmarked for NCDs.

#### ***2.4.1.7 Poverty and inequality frame***

In the poverty and inequality frame, malnutrition is interpreted as an outcome of increasing income disparities among the population. The frame carries a two-edged meaning: poverty underlies most cases of malnutrition, a poor nutrition status also aggravates poverty. Proponents of this frame reason that expanding poverty levels and wealth inequalities sustain undernutrition because of chronic food insecurity, limited utilisation of basic health services, low school completion rates and increased urban migration. The statement ‘economic growth disproportionately benefits 20 percent of the population’ well emphasises the effect of income inequalities on nutrition outcomes.

### Table 2.2 Frame matrix of seven frames used to communicate (mal)nutrition in parliament

Nutrition Frame	Definition of (mal)nutrition	Reasoning devices			Framing devices		
		<i>Problem definition</i>	<i>Causal attribution</i>	<i>Moral evaluation</i>	<i>Recommended prescriptions</i>	<i>Key concepts</i>	<i>Verbal devices</i>  <i>Metaphors</i>
<i>Emergency frame</i>	Regional, loss of self-sustenance, urgent humanitarian response	Hunger and increasing malnourished children and case mortalities in displaced populations	Regional insecurity; collapsed food acquisition strategies; inadequate basic services; low humanitarian capacity	It is inhumane to watch children die from no food; protect rights to security, food and life	Food assistance; nutrition centres; active surveillance; disaster preparedness financing; restore regional security	Food crisis; protein-energy malnutrition; rehabilitation feeding; dependency syndrome; security	Alarming food shortage'; '1.2 million require food aid'; 'ten malnourished children die daily per camp'; 'horrific conditions'; 'expeditions action'
<i>Chronic vulnerability frame</i>	Recurrent vulnerabilities nationally	Repeated hunger and malnutrition spikes; rising food prices; degenerating famine	Chronic food shortage; post-harvest losses; floods; droughts; intensive plantation agriculture; environmental degradation; climate change; uncontrolled food export	Long-term actions to prevent chronic effects; food relief un-sustainable	Food/nutrition policies; early warning system; social grants; food reserves; improved agriculture technologies; drought resistant varieties; diversify farm income; extension services; water management; value-addition	Persistent food malnutrition; food insecurity; long-term solutions; natural disasters; self-reliance; sustainable livelihood	'Perennial food crisis, long-term measures'; 'proactive'; 'frequent disasters'; 'vulnerable communities'
<i>School feeding frame</i>	Government and parents are duty-bound to provide school meals; contested responsibility	Children lack school meals; stunting and hidden hunger	Conflicting policies; household food insecurity; poor food hygiene; social instability	Improved literacy levels reduce malnutrition; human capital investments to achieve middle income status	Government feeding program; school nutrition policy; mandate parents to contribute school meals; food fortification	Hunger; school feeding; government responsibility; parental obligation; controversial issue	'End perpetual borrowing to feed stunted children'; 'too costly on government'; 'mandatory for parents'; 'financial contribution'

Table 2.2 Frame matrix of seven frames used to communicate (mal)nutrition in parliament

Nutrition Frame	Definition of (mal)nutrition	Reasoning devices				Framing devices		
		Problem definition	Causal attribution	Moral evaluation	Recommended prescriptions	Key concepts	Verbal devices	Metaphors
<i>Disease-related frame</i>	Malnutrition is a disease	Diseases causing maternal/child malnutrition; micronutrient deficiencies worsen diseases; oedematous malnutrition	HIV; malaria; nodding disease; sleeping sickness; ebola; spina bifida; micronutrient deficiencies; thiamine; food shortage	Mothers, wives and sisters should not die from child birth  Improved maternal and child health, increases social economic development index	Integrate nutrition in all health services; finance preventive actions; nutrition rehabilitation; expert human resource; health/nutrition education; mandatory fortification; supplementation; collective action; micronutrient tax incentives	Disease; child survival; maternal mortality; 'strange disease'; enriched food; child survival; thiamine; collective action; therapeutic food	'45 percent child mortality attributable to malnutrition'; 'strange disease'; 'good nutrition is part of treating diseases'	
<i>Diversification frame</i>	Loss of diversity	Deteriorating dietary diversity; high malnutrition	Declining crop varieties; rising food prices; bio-diversity losses; intensive plantation agriculture; unfair export-focused trade; mono-cropping	Suffocating agriculture increases investment in curative health services;  Right to food and nutrition security	Nutrition-sensitive agriculture/trade policies; diversify production; promote indigenous under-utilised foods; surveillance; restock livestock; agro-nutrition enterprises; extension services; diversify farm income; fortification; capacity building	Diversity; innovations; orphan crops, value-addition; expert human resource	'Least consumption scores, meal frequencies and dietary diversity'; 'mixed farming raises homestead incomes'; 'diversify agriculture production'; 'narrow food choice'	

Table 2.2 Frame matrix of seven frames used to communicate (mal)nutrition in parliament

Nutrition Frame	Definition of (mal)nutrition	Reasoning devices			Framing devices			Metaphors
		Problem definition	Causal attribution	Moral evaluation	Recommended prescriptions	Key concepts	Verbal devices	
<i>Delicious poison frame</i>	Risky consumption behaviours, individual affliction	Politicians increasingly distressed and die of non-communicable diseases (NCDs); obesity, diabetes, hypertension	Changing diets; sedentary lifestyle; excessive sugar, alcohol, salt, and fat intake; socio-economic transformation; scarce health services	Everyone is a potential victim; high cost of managing the conditions	Early screening/management; dietary control; physical activity; preventive education; self-management; health budget for NCDs service; diet guidance	Obesity; diabetes, body mass index; modern diseases; risky behaviour; preventive care	'Our diet is killing us'; 'take personal health matters seriously'; 'individual management'; 'loose life ( <i>umalaya</i> ) of excesses	Consuming delicious poison
<i>Poverty and inequality frame</i>	Poor nutrition results from income inequalities and unequal access	High childhood stunting; mal-nutrition costs 5.6 percent annual GDP; expanding wealth disparities	Chronic food insecurity; high poverty levels; low school completion; high fertility; urban migration; unemployment	Development is impossible for populations in abject poverty and hunger; Poverty affects achieving SDGs	Human capital investments; nutrition in development policies; nutrition financing; social safety nets; stimulate rural development	Global hunger index; human capital; poverty; middle income status; social economic distress	'Only 20 percent benefit from economic growth'; 'human development indices'; 'unequal food distribution'; 'malnutrition costs 5.6 percent of annual GDP'	-

The poverty and inequality frame is rhetorically bolstered by making references to the economic costs of malnutrition using information acquired from both donor and government sources. For instance, the annual gross domestic product losses attributed to malnutrition influence achievement of national (i.e. Vision 2040 goals) and global agendas (e.g. SDGs). The poverty and inequality frame proposes investing in long-term solutions as strategies towards becoming a middle-income status country. Frame proponents stress the need of whole-of-government approaches to guarantee collective action across all policy sectors. Suggested solutions include integrating nutrition concerns in all development policies and political agendas, investing in human capital development, supporting social safety nets and stimulating rural development as means of improving income equality and sustainable reduction in hunger and malnutrition.

### 2.4.2 Shifts in nutrition frames over time

The seven nutrition frames discussed in the previous section were simultaneously used during the four parliamentary terms, and a majority persisted throughout the entire study period (figure 2.3). This reflects the cooccurrence of different – and competing– frames, as well as the layering of causal understandings over time.

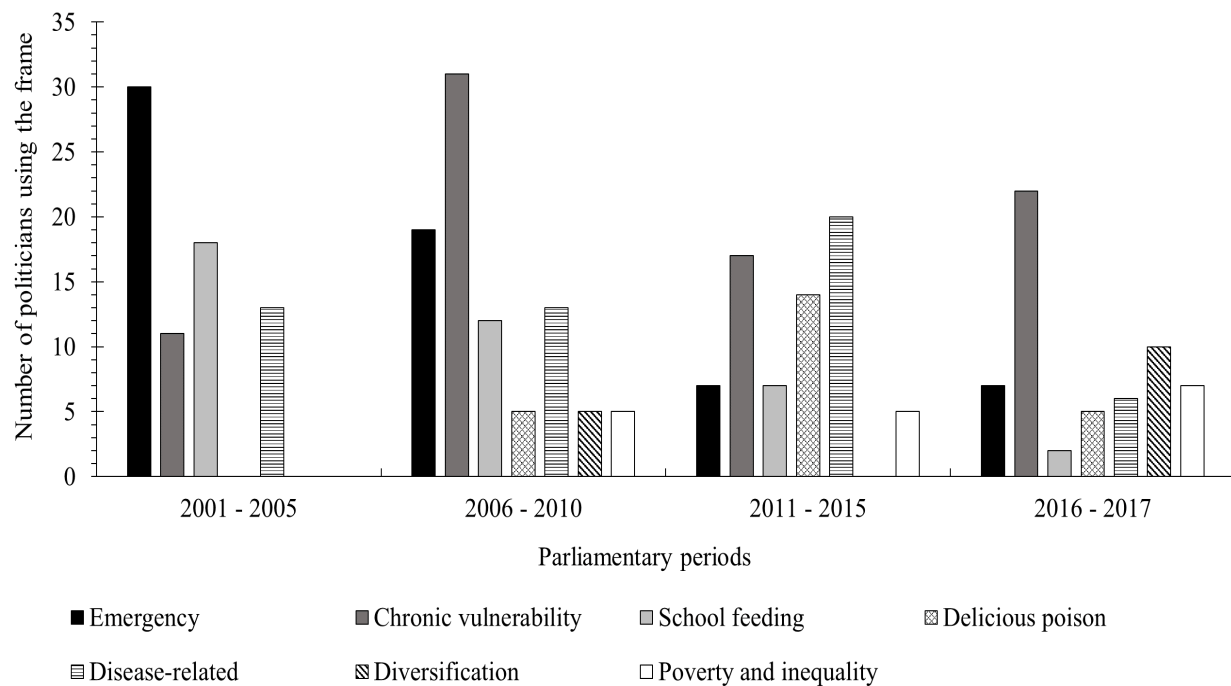


Figure 2.3. Changes in (mal)nutrition framing by Ugandan politicians between 2001 and 2017

The most dominant frames varied across parliamentary periods. Between 2001 and 2005, malnutrition was largely framed as an emergency affecting the populations displaced as a result of armed-conflict. This changed from 2006 onwards, when the chronic vulnerability frame became increasingly used to describe the recurrence of many determinants of undernutrition, including post-conflict challenges, natural disasters (droughts, landslides and floods) and diseases. The disease-related and chronic vulnerability frames were both dominantly used between 2011 and 2015. The former persisted as a result of the oscillating incidences of disease conditions, like HIV/AIDS, spina bifida, nodding diseases, ‘strange disease’ (severe acute malnutrition), and micronutrient deficiencies.

The politicians generally made use of various competing nutrition frames at the same time. For instance, all seven nutrition frames were concurrently utilised in debates conducted in the parliamentary periods of 2006 – 2010 and 2016 – 2017. The number of nutrition frames used generally expanded from 2006 onwards. While the frames used in 2001-2005 remained in place, new meanings - e.g. diversification, delicious poison and poverty and inequality - were constructed in progressive election terms. Nutrition frame application fluctuated across the parliamentary periods. For example, the diversification frame emerged and remerged in different time periods (figure 2.3).

### **2.4.3 Frame sponsors**

Overall, less than a quarter of the total number of parliamentarians across the election terms employed one or more nutrition frames. Nutrition concerns were mostly debated by politicians from four political parties: the National Resistance Movement (NRM), Forum for Democratic Change (FDC), Uganda People’s Congress (UPC) and the Democratic Party (DP), which together have a majority representation in parliament. Despite the domination of parliamentarians of the ruling party, the National Resistance Movement (NRM), there were no perceptible efforts of framing nutrition to advance the party’s political ideologies.

The politicians sponsoring the seven frames evidently changed over the analysis period (Supplementary material A1). Frame sponsors primarily differed based on the constituencies they represented. Nutrition framing was usually initiated and advanced by politicians representing constituencies in the northern, eastern and southern regions of Uganda. Because these regions are

susceptible to the effects of natural and manmade disasters, these politicians repeatedly discussed nutrition as an emergency, a chronic vulnerability or a poverty and inequality issue. The school feeding frame was mainly used by politicians representing the eastern and central constituencies, which registered high enrolment into the government's UPE initiative but had no guidance on school feeding responsibility. Meanwhile, the disease-related frame was mostly used by politicians of the eastern and northern constituencies which registered, high incidences of severe acute malnutrition (initially described as the '*strange disease*' in the Eastern region) and nodding disease, respectively.

Nutrition frames narrations were also regularly introduced or reinforced by sector ministers, the president and some politicians involved in parliamentary forums focused on children and women affairs. The president, in his addresses to Parliament, often elaborated the need of diversifying agricultural production (diversification frame), investments to strengthen the health system to manage diseases (disease-related frame) and cautioned politicians to adopt healthy lifestyles (delicious poison frame). Ministers of agriculture, disaster preparedness, health, education and finance generally used the frames aligned to their sectoral mandates to justify planned investments and account for sector performance. The disease-related frame was upheld by politicians who participate in parliamentary fora focusing on advocacy for children and women concerns, such as maternal health.

## 2.4 Discussion

This study presents the first systematic assessment of how (mal)nutrition is framed by politicians in a Sub-Saharan Africa country. We investigated the construction of nutrition policy frames by parliamentarians in Uganda, their shifts over time (2001 – 2017) and the actors sponsoring specific frames. Overall, our study demonstrates that nutrition concerns in Uganda are politically recognised and acknowledged. As such, we contradict claims that politicians in SSA contexts are not committed to engage in nutrition policy concerns (Natalicchio and Mulder-Sibanda, 2010, Benson, 2008). Our analysis identified seven distinct frames that are deployed to advocate for nutrition concerns in parliament: the emergency frame, chronic vulnerability frame, school feeding frame, disease-related frame, diversification frame, delicious poison frame and poverty and



inequality frame. Apart from the delicious poison frame, all of these frames targeted *undernutrition*, particularly severe acute malnutrition, stunting and micronutrient deficiencies. Moreover, each of the nutrition frames proposes distinct policy recommendations. Overall, we can discern four main insights about the framing of (mal)nutrition in the Ugandan parliament that bear broader relevance.

First, the analysis shows that multiple nutrition frames co-existed across the parliamentary terms which is both beneficial and problematic. Employing diverse nutrition frames is beneficial for ensuring the issue becomes recognised by different politicians and is maintained on political agendas. Frame co-occurrence permits the simultaneous institutionalisation of different policy measures whose combined effects impact multiple drivers of malnutrition (Van Gorp and Vercruysse 2012; Chong and Druckman 2007). Conversely, contrasting interpretations are precursors of competition for resources, conflict and incoherent action resulting from inconsistent policy solutions (Jaspars et al. 2018; Ilie 2015). Even where frames do not necessarily conflict, competition will be fuelled by the inadequate public resources available for implementation. The competition is specifically problematic if only narrowly defined short-term measures receive priority funding at the cost of long-term measures. Focusing on short-term problems intensifies the risk of temporary solutions dominating resource allocation, e.g. procuring food aid, therapeutic foods and agriculture inputs.

Second, the research illustrates that only a few drivers and impacts of malnutrition are considered while others are ignored. Put differently, the frame diversity revealed in this study does not necessarily contribute to fostering a cross-sectoral governance approach. The determinants of undernutrition made salient in most frames are confined to specific sectors (health, agriculture, disaster preparedness), and in some instances, like the delicious poison frame, they are individualised. This perpetuates the compartmentalisation of policy actions, majority of which stress short-term tangible interventions focused on child undernutrition and agricultural production while sustaining the indifference of other government sectors (Harris 2019). The absence of a comprehensive frame to foster collective action across all disciplines has negative consequences on advancing the multisectoral perspective to improve nutrition. Strategies to inculcate a multisector and multidimensional understanding of nutrition are important to foster a whole-of-government approach to nutrition.

Third, we observe that nutrition frame sponsorship is primarily driven by parliamentarians from regions experiencing high prevalence of the drivers of malnutrition. This is logical, given that the concern is prioritised in the development agendas of these regions. However, curbing malnutrition is not only about managing emergencies, but also addressing the structural, socio-economic and political drivers of malnutrition. This requires the proactive engagement of other parliamentarians that oversee committees which handle portfolios focussed on improving the structural determinants, for example, the budget committee and committee on public accounts. Further, our analysis shows the president and sector ministers were important nutrition frame entrepreneurs who can be strategically targeted in advocacy to advance and legitimately institutionalise the policy long-term measures (Russell et al. 2019; Steensland 2008).

Fourth, we find that the frames identified in the Ugandan Parliament to a large extent resonate with the nutrition debates at global level. The frames correspond with the global narratives about public health nutrition (Harris 2019b; Ridgway et al. 2019) and nutrition in emergencies (Jaspars et al. 2018; Webb 2009). This observation suggests that political understandings of nutrition in Uganda's parliament are directly or indirectly influenced by international organisations and donors (e.g. UN agencies) who seem to promote specific nutrition frames in assessment reports and during meetings attended by parliamentarians (Namugumya et al. 2020a). Moreover, some of the nutrition frames used in political deliberations are not unique to Uganda. The disease-related and emergency nutrition interpretations are employed in most African countries (Nott 2018; Scott-Smith 2014), however, these are not explicitly connected with political perceptions. The extent to which the identified nutrition frames are generalisable to the political perceptions of other SSA countries therefore remains an empirical question.

#### **2.4.2 Governance implications and conclusion**

In terms of governance implications, our study suggests that applying different nutrition frames is important to maintain the issue on the political agenda in this constantly evolving environment. However, differences in the nutrition frames can hinder or facilitate multi-sector policy action (cf. Dewulf and Bouwen, 2012, Candel et al., 2014). Specially, where some drivers and manifestations of nutrition are hardly addressed (or not at all). Translating the parliamentary decisions into effective policies and programs by the executive is necessary to institutionalise the decisions. Given the diversity of possible policy actions raised in the nutrition frames, it is necessary to monitor

whether and how political framings influence the design of ministerial policies and programs as well as subsequent service delivery. In addition, comparing and evaluating the multiplicity of the political and technical perceptions of malnutrition remains critical to realign the recommended strategies. Because of the desire to foster effective nutrition governance in Uganda, we suggest that holistic approaches including more systems-based framings are necessary to ensure that progressive nutrition policy designs enable multisectoral action.



## **Chapter 3**

### **Towards concerted government efforts? Assessing nutrition policy integration in Uganda**

This chapter is published as: Brenda Shenute Namugumya, Jeroen J.L. Candel, Elise F. Talsma, Catrien J.A.M. Termeer (2020). Towards concerted government efforts? Assessing nutrition policy integration in Uganda. *Food Security*. <https://doi.org/10.1007/s12571-020-01010-5> (2020) 12:355–368

**Abstract**

To tackle malnutrition more effectively, Sub-Saharan African governments have developed overarching, integrative policy strategies over the past decade. Despite their popularity, little is known about their follow-up and ultimately their success (or failure). Consequently, tracking the progress of such political commitment has gained global importance. Various studies provide insights into changes in nutrition-related policies. Nevertheless, it is generally acknowledged that we have limited understanding of how nutrition concerns are explicitly addressed in policies of different ministries. This study uses a novel policy integration perspective to investigate the extent to which eight ministries in Uganda integrated nutrition concerns across their policy outputs between 2001 and 2017. The approach used assumes nutrition policy integration is a dynamic process occurring in different policy dimensions. We performed a qualitative content analysis to assess 103 policy outputs for changes in subsystems involved, policy goals, and instruments used. Overall, we found a shift towards increased integrated government action on nutrition over time. The 2011–2015 analysis period was a critical juncture where increased integration of nutrition was observed in all policy integration dimensions across all ministries. However, considerable variations in actor networks, goals, and instruments exist across sectors and over time. The sustainability of nutrition integration efforts remains contentious, because of which continuous monitoring will be essential.

**Keywords:** nutrition, policy integration, integrated nutrition strategies, Uganda, governance

### **3.1 Introduction**

To tackle malnutrition more effectively, many Sub-Saharan African (SSA) governments have developed overarching integrative policy strategies over the past decade (Candel 2018). Malnutrition refers to a range of nutrition disorders, whereby a common distinction is made between undernutrition and overnutrition (Webb et al. 2018; WHO 2013). The recent emergence of integrated nutrition strategies (INSs) seems to indicate political commitment to sustain global efforts towards nutrition improvements and sustainable development more broadly (Gillespie et al. 2015; Nisbett et al. 2014a; Acosta and Fanzo 2012). These strategies typically transcend the boundaries of policy sectors (IFPRI 2016; WHO 2013; Fan and Pandya-Lorch 2012; Garrett and Natalicchio 2011) and are often developed in close collaboration with international organisations and donors. The assumption underlying INSs is that such cross-sectoral action is required to tackle the multi-dimensional causes and effects of malnutrition (Reinhardt and Fanzo 2014; Ruel and Alderman 2013). For that reason, INSs generally prescribe the integration of nutrition concerns across the policy outputs of relevant government sectors, such as health, agriculture, social development, education, and trade.

Despite the recent popularity of INSs, to date little is known about their follow-up and, ultimately, success (or failure) over time. Although these overarching policy strategies may be key in putting nutrition on the political agenda, they largely serve a symbolic and agenda-setting function (cf. Candel and Pereira 2017). For integrated government action to occur, their objectives and proposals would have to be integrated into regular policy outputs of relevant ministries (cf. Cejudo and Michel 2017). Policy outputs refer to the programmes, laws, or regulations that result directly from the decision-making processes in these sectors (Knill and Tosun 2012). Food and nutrition security scholars have provided valuable insights into changes in nutrition-related policies and institutions (e.g. Pelletier et al. 2018; Kampman et al. 2017; Hodge et al. 2015; Pomeroy-Stevens et al. 2016; Lachat et al. 2015; Mogues and Billings 2015; T. Benson 2008), but few systematic studies have been performed on the actual integration of nutrition across relevant sectors' policy outputs (but see: Harris et al. 2017). Additionally, most studies have focused on single sectors or interventions (e.g. Lachat et al. 2015; Hodge et al. 2015), and this does not allow for obtaining a comprehensive understanding of the whole of government actions. Consequently, it remains an open question whether the adoption of these ambitious overarching nutrition strategies has been followed up by

genuine policy integration processes. Apart from filling this gap in the scientific literature, such an understanding would be essential to assess the extent to which international calls to sustain nutrition improvement efforts have been followed up.

To address this gap, this study addresses the question of the extent to which nutrition has been integrated into policy outputs developed over time by different ministries. We analyse the case of Uganda, a SSA country with a relatively long tradition of – and a well-established reputation for – developing integrated nutrition policies. Uganda has invested in overarching integrated nutrition strategies since 1996 (FAO 2002; Bachou and Labadarios 2002) to address malnutrition, which remains largely prevalent (UBOS 2012; UBOS and ICF 2018). These strategies include the 1996 Uganda National Plan of Action for Nutrition (UNPAN), the 2003 Uganda Food and Nutrition Policy (UNFP), and the Uganda Nutrition Action Plan (UNAP) 2011–2016. The development and adoption of these strategies were largely driven by various global initiatives (Harris 2019a; Pelletier et al. 2018), such as the World Food Summit (FAO 2002), the Scaling Up Nutrition Movement (SUN) (SUN 2010), and the second International Conference on Nutrition (ICN2) (FAO and WHO 2014). The UNPAN was adopted by the Ministry of Health, the UNFP was jointly adopted by the health and agriculture ministries, and the UNAP was approved with high-level political affirmation from the president and several ministers. This was followed by the assignment of the Office of the Prime Minister to coordinate its implementation – an action that may have resulted in broader policy integration.

To understand whether Uganda's adoption of INSs has indeed been followed up by processes towards integrated government action, we use a modified version of a recently developed policy integration framework that approaches policy integration as a multi-dimensional process (Candel and Biesbroek 2016). The framework allows the systematic tracking of how a crosscutting concern, here (mal)nutrition, has been (dis)integrated across policies over time. In this study, we use the framework to analyse a dataset consisting of policy outputs adopted by eight ministries over four election cycles from 2001 to 2017. Apart from addressing an important gap in the food and nutrition security literature, the study is also of value to the policy sciences, which have only recently turned their attention to policy change in developing country contexts. Importantly, our analysis is restricted to policy integration across policy *outputs*. Whether or not policy integration across



policy outputs results in a change in policy *outcomes*, i.e. policies as implemented, will be assessed in a follow-up study.

The paper proceeds with a concise explanation of the policy integration framework. Section 3 sets out the methodological approach, including data collection, analysis, and limitations. Section 4 presents the study's findings. The paper ends with a discussion, in which we set out various policy recommendations and future research avenues.

### **3.2 A multi-dimensional policy integration framework**

Policy integration refers to the extent to which a governance system addresses a crosscutting concern in a more or less holistic manner across sectors and, possibly, levels (Tosun and Lang 2017). Whereas many policy integration scholars approach the concept as a (desired) outcome or governing principle (e.g. A. Jordan and Lenschow 2010; Persson 2006; Lafferty and Hovden 2003), we adopt a framework recently developed by (Candel and Biesbroek 2016) that considers policy integration as a process over time. This framework starts from four assumptions:

- (i) Policy integration is as much about *disintegration* as it is about advances in integration;
  - (ii) Policy integration is a process that encompasses various dimensions;
  - (iii) These dimensions do not necessarily move at the same pace, or even in the same direction;
  - (iv) At the same time, mutual dependencies and interactions occur between dimensions.
- However, these remain understudied at present.

The four dimensions of policy integration that the framework distinguishes are: *policy frame*, *subsystem involvement*, *policy goals*, and *instruments*. Whereas policy frame refers to the institutionalisation of governance beliefs within a polity, this study is restricted to the latter three, *policy-oriented variables*, which are further divided into two or more indicators. Additionally, although the original framework includes the *coherence* of goals and the *consistency* of instruments as indicators, we did not assess these because currently there are no methods for doing so (Candel and Biesbroek 2016).

The *subsystem involvement* dimension refers to the range of actors and institutions, both public and private, that are actively dealing with a crosscutting policy issue, such as malnutrition (Howlett and Ramesh 2003; Paul A. Sabatier 1998). Different from Candel and Biesbroek (2018, 2016), we approach subsystems involved as the number of ministries involved in nutrition governance as well as associated networks of actors with which they interact. We cluster these interacting actors into (other) ministries, international organisations and donor governments, NGOs, and for-profit organisations. For a low degree of policy integration, one would expect a ‘siloed’ way of working, in which malnutrition is dealt with by only a single ministry and associated subsystem. For a high degree of integration, malnutrition concerns would be integrated into the policy outputs of all relevant ministries, which would have developed, and interacted with, actor networks of their own.

The *policy goals* dimension involves the range of sectoral policies that explicitly incorporate nutrition goals as well as the dimensions of malnutrition that these target. In the former case, the nutrition literature distinguishes between nutrition-specific and nutrition-sensitive policies (Webb et al. 2018; Reinhardt and Fanzo 2014; Ruel and Alderman 2013). We consider a policy output to be either nutrition specific or sensitive only when an explicit reference is made to (mal)nutrition. The second indicator falling under this dimension, which we have added to the framework, relates to the dimensions of malnutrition that are being targeted. As the problem of malnutrition encompasses many aspects at individual, household, and societal level, goals can be either narrow or broad in scope. For a low degree of policy integration, malnutrition concerns would be integrated in only one or a few policies of a dominant ministry. In addition, we would expect only a limited number of determinants of malnutrition to be addressed. For a high degree of policy integration, one would observe policy goals aligned with nutrition concerns in all relevant policies across sectors, whereby all determinants of malnutrition would be addressed by one or more policies.

The *policy instruments* dimension comprises the extent to which sectoral policies include the *means* to realise nutrition objectives. Public policy scholars have developed various frameworks to cluster different types of instruments. Here, we adopt (Hood 1983) popular NATO framework, which clusters instruments based on four ‘governing resources’ that governments may use to steer: nodality (information), authority, treasure, and organisation. In addition, we distinguish between substantive and procedural instruments. Substantive instruments use these governing resources to directly affect the ‘nature, types, quantities and distribution of the goods and services provided in

society’, whereas procedural instruments are designed to ‘indirectly affect outcomes through the manipulation of policy processes’ (Howlett 2000; p. 413). Examples of substantive instruments are food aid, nutrition guidelines, and grants to farmers. Examples of procedural instruments are inter-departmental committees, constitutional provisions, and strengthening human capacity within ministries. As we focus on the integration of nutrition across sectors, we analysed only the use of such procedural instruments within ministries. Importantly, although many instruments may impact nutrition in some way or even be classified as nutrition sensitive, we only consider these nutrition policy instruments if they are explicitly linked to nutrition concerns and/or goals. For a low degree of policy integration, we would expect instruments to be restricted to a single sector and calibrated towards a limited number of nutrition goals. There would be no or few procedural instruments within that sector. A high degree of policy integration is characterised by all relevant sectors explicitly aligning one or more instruments with nutrition goals, so that the governance system as a whole possesses an instrument mix that enables the realisation of overarching objectives. In addition, there would be procedural instruments within ministries that enable coordination, implementation, evaluation, and so forth.

Table 3.1 provides an overview of the dimensions and indicators that we used. This table is adopted from a previous study on the integration of global food security concerns into European Union policies (Candel and Biesbroek 2018) and tailored to the Ugandan nutrition governance context. Thus, the table presents ideal-type manifestations of different degrees of the dimensions in Ugandan nutrition governance. In between no, and the highest degree of, policy integration, we distinguish two intermediate degrees, i.e. low and medium degrees of policy integration.

### **3.3 Methodology**

#### **3.3.1 Data collection**

We performed a qualitative content analysis of policy outputs adopted between 2001 and 2017. The ministries that we considered as relevant are those that signed the UNAP, i.e. the ministries of (i) Health (MOH), (ii) Agriculture, Animal Industry, and Fisheries (MAAIF), (iii) Gender, Labour, and Social Development (MGLSD), (iv) Education and Sports (MoES), (v) Trade, Industry, and

**Table 3.1 Dimensions of policy integration** (Candel and Biesbroek 2018; Candel and Biesbroek 2016)

Policy integration dimensions	<div> <div>Lack of policy integration</div> <div>←</div> <div>→</div> <div>Full policy integration</div> </div>			
		Low degree of policy integration	Medium degree of policy integration	
<b>Subsystem involvement</b>				
Ministries and associated networks involved	One dominant ministry, e.g. health, that governs nutrition independently, while interacting with a range of relevant external actors. Formally, no other ministries are involved, although their efforts may still have an impact on nutrition.	One or more additional ministries start addressing nutrition concerns or dimensions, although they lack formal responsibility for governing (dimensions of) the problem. These ministries may develop relevant actor networks of their own (generally restricted to a small number of actors).	Two or more ministries have formal responsibility for dealing with nutrition and engage with one another and other relevant actors.	All relevant ministries have a formal role in addressing nutrition concerns or dimensions. Ministries interact with one another and external actors.
<b>Policy goals</b>				
Range of policies in which nutrition is embedded	Concerns embedded only within the goals of a dominant ministry's policies (or not even that).	Concerns to some extent adopted in policy goals of an additional ministry. These are likely not to have a prominent position vis-à-vis sectoral priorities.	Further diversification of policy goals across ministries. Some ministries may develop sectoral nutrition strategies.	Policy goals embedded within all potentially relevant policies across ministries. Ministries may have adopted overarching strategies or guidance documents about nutrition integration.
Scope of goals	No or only one determinant of malnutrition is addressed. Goals are sector specific. For example: malnutrition interpreted as a question of increasing agricultural production.	Only some determinants of malnutrition are addressed. Goals are sector specific.	A broad range of determinants of malnutrition are addressed.	All determinants of malnutrition are addressed by one or more policies. There may be redundancy between policies, i.e. policies contributing to the same determinant.
<b>Policy instruments</b>				
Range of policies that include (explicit) nutrition-specific or nutrition-sensitive substantive instruments	No or very few instruments targeted at nutrition exist. If there are any instruments, these are restricted to a dominant ministry's policies, e.g. fortification standards in agricultural policies.	Dominant ministry that has adopted a range of sectoral nutrition instruments in its policies. Additionally, some other nutrition instruments in one or more other sectors.	Nutrition instruments in a range of policies across sectors. These may be newly adopted, or existing instruments may have been retargeted or relabelled towards nutrition.	Full reconsideration of sectoral instrument mixes has resulted in a comprehensive, cross-subsystem instrument mix designed to meet a set of overarching objectives.
Procedural instruments	No procedural instruments.	Some procedural instruments, e.g. coordinating bodies, within a dominant sector.	A range of procedural instruments exist across sectors.	Procedural instruments within and between sectors that allow for coordinating, implementing, and evaluating policy efforts so that they consistently contribute to overarching goals.

Cooperatives<sup>1</sup> (MTIC), (vi) Local Government (MoLG), (vii) Finance, Planning, and Economic Development (MoFPED), and (viii) the Office of the Prime Minister (OPM). The Ugandan 2009 Comprehensive Planning Framework requires all ministries to align their policy outputs with National Development Plans' priorities, including nutrition. We analysed the extent to which they did so by looking at three types of policy outputs: (i) the overarching ministerial policies that set out ministries' strategic objectives over a five-year period, (ii) sector strategic plans that propose interventions to realise each sector's policy objectives, and (iii) ministerial policy statements, which summarise annual sector performance and future expenditure plans. Ministerial policy statements are presented annually to parliament for approval of the budget. Figure 3.1 provides a summary of our study methodology

Policy documents were collected in three ways. First, we performed a comprehensive online search of ministry websites and global databases covering nutrition policies, including the World Health Organisation Global Database on the Implementation of Nutrition Action (GINA) and the Nutrition Policy Landscape Information System (NLiS). Second, we searched the archives of ministries. Third, we interviewed people working in ministries, non-governmental organisations, and academia between December 2017 and April 2018 to access additional documents. In total, we analysed 103 policy documents, listed in Supplementary material B. Because the actors with which ministries interacted over time were not consistently included in policy outputs, we used the interviews and a workshop (see below) to complement these.

### **3.3.2 Data analysis**

We clustered the policy documents into four periods between 2001 and 2017 based on Uganda's election cycles (2001–2005; 2006–2010; 2011–2015; 2016–2017). Even though Uganda has had the same president since the late 1980s, elections *are* usually followed by cabinet reshuffles, a restructuring of institutions and changes of political prioritisations (cf. B. D. Jones and Baumgartner 2004).

This allowed comparison of changes in degrees of policy integration over time. Documents were coded using the program *Atlas.ti*. We developed codes deductively, drawing upon discussions of nutrition-specific and nutrition-sensitive interventions in the nutrition literature (Webb et al. 2018;

---

<sup>1</sup> Until 2010, this ministry was called the Ministry of Tourism, Trade, and Industry.

Ruel and Alderman 2013; Black et al. 2013), and supplemented these with inductively developed codes. Coding of policy documents was done by the first author and a research assistant.

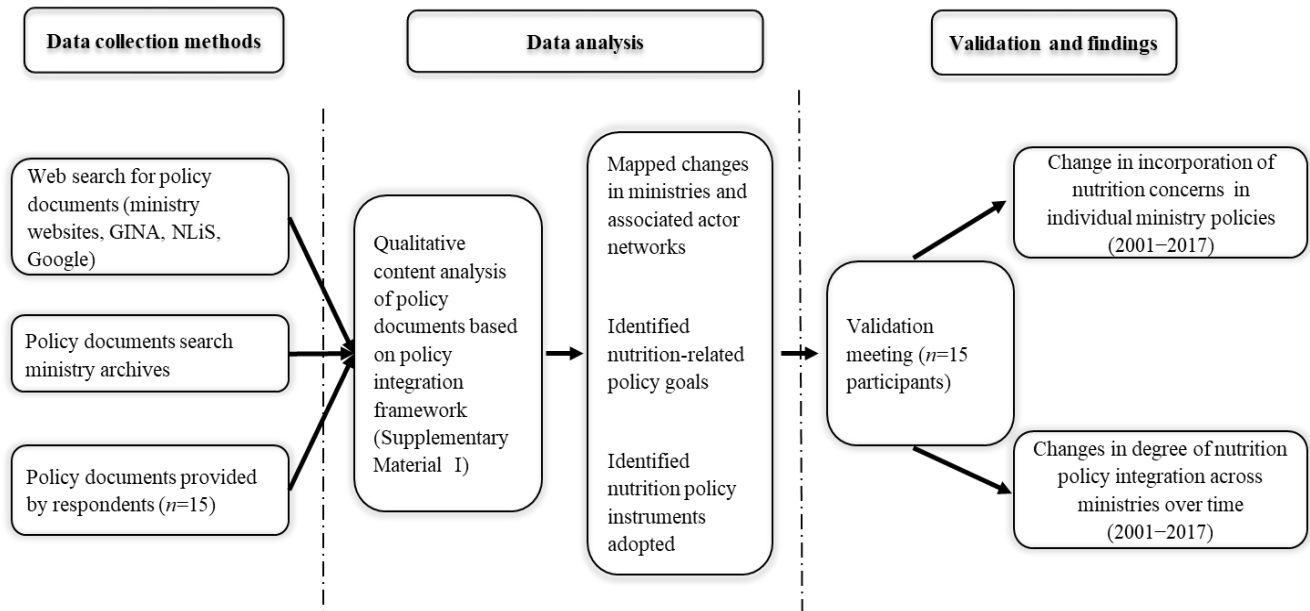


Figure 3.1: Summary of method

The other authors were involved in the coding process to resolve different possible interpretations. For subsystems, we identified the actors interacting with the ministries from references made to these actors in policy documents and interview data. We only coded goals that made explicit reference to nutrition or malnutrition to allow for comparison across ministries and time periods. For instruments, we only coded the interventions that had the explicit aim of improving (mal)nutrition. Subsequently, we clustered similar types of interventions into nine broad instrument categories (Supplementary material B). Whereas the nutrition-related goals and associated actors were mentioned in all three types of policy outputs, information about policy instruments was primarily presented in ministerial policy statements. We extracted relevant quotations into a data extraction matrix (Supplementary material B). The table served as point of departure for writing the synthesis, for which we analysed it along the dimensions and indicators provided in table 3.1. To validate our findings, a workshop was organised in Kampala in May 2018. The workshop was attended by 15 participants representing government, NGOs, and academic

staff. We asked participants to provide feedback on: (i) whether we had missed any relevant documents, (ii) the actors involved in nutrition governance, and (iii) our preliminary synthesis.

### **3.3.3 Limitations**

Our research design is subject to various limitations. First, as government documents are not systematically digitalised, we may have missed documents. We minimised this risk by using different methods for document collection and consultation with stakeholders in a workshop to validate the inclusion of all critical documents. Second, some policy documents, such as strategic plans and overarching sector policies, overlapped across the election analysis cycles. We considered the year of adoption as informing placement in the election cycle. For example, as the National Agriculture Policy is the only overarching policy adopted by the ministry, its year of adoption (2013) informed its placement in the election cycle for analysis. Third, our focus on policy outputs explicitly linked to nutrition implies that we did not look into unintentional policies that may indirectly affect nutrition outcomes (cf. Dupuis and Biesbroek 2013).

## **3.4 Results**

The study findings are presented in two sections. The first section provides a detailed account of nutrition integration within each ministry over time. The underlying data are provided in Supplementary material B for each ministry. In the second section, we synthesise these insights to distil the overarching patterns of nutrition integration.

### **3.4.1 Integration of nutrition in specific ministries**

#### ***3.4.1.1 Office of the Prime Minister (OPM)***

OPM participation in the nutrition agenda started in 2006. This was followed by an increase in external actors interacting with the sector, especially during cycle 3 (2011–2015), see figure 3.2. Whereas the ministries collaborating with OPM remained similar throughout the analysis period, we observed a rise in the number of international agencies and partner countries between 2011 and 2017. These actors contributed both technical ideas and financial assistance to advance OPM's nutrition policy coordination efforts.

The number of nutrition-related goals in OPM policy outputs increased somewhat in the period 2011–2015, before declining in 2016. Improving food and nutrition security in disaster-prone regions was the prevailing goal since 2006; this is attributable to the specific region-focused programmes managed by OPM. From 2011 onwards, goals expanded to the coordination of the scaling up of nutrition interventions and developing an enabling nutrition policy environment.

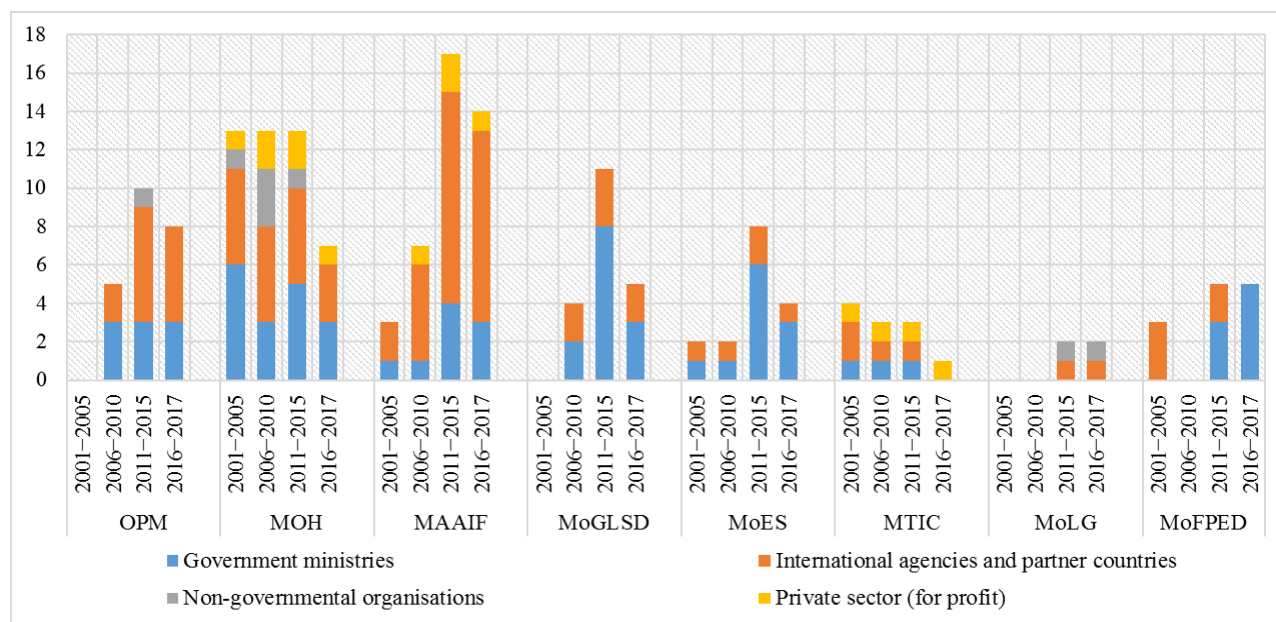


Figure 3.2: Actors involved in nutrition governance between 2001 and 2017

For instruments, a similar trend can be observed: the range of instruments used by OPM increased considerably in the period 2011–2015, but decreased again in 2016–2017 (table 3.2). The provisioning of food aid during disasters was a key substantive instrument used throughout the analysis period. From 2011 onwards, we observed the emergence of various procedural instruments, including the multisector nutrition committee, national nutrition forum, and capacity building for sector and district nutrition committees. The creation of a UNAP coordination desk in OPM’s Policy Implementation and Coordination department in 2012 reinforced its engagement in nutrition. OPM mainly compiled reports that monitored and evaluated government performance for the period 2001–2005. We could not reconstruct OPM’s sectoral goals and instruments.

#### 3.4.1.2 Ministry of Health (MOH)

Prior to 2011, nutrition policy in Uganda was dominated by MOH. During this period, MOH developed a wide actor network, which remained largely similar in size (figure 3.2). However, the



types of actors with which the ministry interacted varied over time. For example, MOH collaborated with many international agencies or partner countries (e.g. UNICEF, USAID, WHO, GAIN) and non-government organisations during the 2006–2010 period compared to other years. The period 2016–2017 saw a decline in the number of actors interacting with the ministry.

Between 2001 and 2015, MOH's nutrition-related policy goals increased in number and scope of determinants addressed. However, these decreased again in 2016–2017 policy outputs. The sector consistently aimed to reduce maternal and child undernutrition. The scope of specific objectives to realise these goals included addressing micronutrient deficiencies and nutrition response in emergencies (2001–2005), which expanded to integration into health service delivery (2006–2010) towards scaling up coverage and diversity of nutrition services offered in health delivery systems (2011–2015).

In terms of instruments, MOH deployed a diverse mix between 2001 and 2015. These spread across the majority of category types highlighted in table 3.2. MOH continuously broadened the scope of nutrition concerns addressed with these instruments. Some key instruments deployed include nutritionist positions in hospitals, upgrading the nutrition unit to a division, expanding nutrition indicators in the health information system, and various technical guidelines that became redefined in this period to strengthen MOH nutrition efforts. Until 2011, only MOH made use of nutrition working groups. As was the case with goals, the number of instruments declined considerably in the last cycle.

#### ***3.4.1.3 Ministry of Agriculture, Animal Industry, and Fisheries (MAAIF)***

MAAIF has traditionally been actively engaged in Uganda's food and nutrition security policies. We observed an incremental growth in MAAIF's actor network across the analysis period, especially during 2011–2015. Whereas growth occurred across all actor categories, figure 3.2 shows that it was most evident among international agencies and partner countries from 2006–2010 onwards. Recurring liaisons existed with traditional agencies such as USAID, FAO, the World Bank, and the European Union, complemented with new types of actors, e.g. for-profit organisations, after 2011.

The overarching nutrition-related aim incorporated in MAAIF policy outputs since 2001 is improved household food and nutrition security, but explicit nutrition-focused goals increased numerically and diversified in scope from 2011–2015 onwards. For example, goals in 2011–2015

focused on food and nutrition security surveillance, proactive nutrition planning, and research on nutrient-dense crops, and after 2016 expanded to include food safety, value addition, and nutrition training for extension workers. Almost all explicit nutrition goals in MAAIF policy outputs concentrate on micronutrient density in crops and associated value chains.

The nutrition instruments applied in MAAIF increased in number, especially between 2011 and 2017. Traditionally used instruments, e.g. commissioned research on nutrient-dense crops and information fora, were complemented with seven new instruments in 2011–2015. These included information instruments (technical guidelines, information systems, accredited training of agriculture officers); organisation instruments (nutrition division, coordination committee), and financial instruments (GAFSP grant). Instruments incorporated in 2016–2017 policy outputs remained comparable to those in 2011–2015.

#### ***3.4.1.4 Ministry of Gender, Labour, and Social Development (MGLSD)***

MGLSD started participating in nutrition agendas in 2006–2010. Its involvement became particularly prominent from 2011–2015 onwards. Figure 3.2 shows that the external actors assisting the sector broadened in this period to include other ministries and international agencies, including UNICEF, USAID, Irish Aid, and ICEIDA.

This ministry's policy outputs did not integrate explicit nutrition goals until 2011–2015. During this period, the number nutrition goals increased substantially and also expanded in terms of their scope. In addition to the consistent goals of improving household food and nutrition security, we observed that the usual MGLSD programmes like community mobilisation, early childhood development, and social protection also began to include nutrition objectives.

The range of nutrition instruments used increased from 2006–2010 onwards. MGLSD deployed seven new instruments between 2011 and 2017. The ministry also introduced the Employment Act 2006, which permitted maternity and paternity leave to promote child care and protection. Table 3.2 shows that this ministry used a mix of substantive and procedural instruments with nutrition goals, including information instruments (technical guidelines, training community development officers, and media campaigns); financial instruments (social protection grants); and organisation instruments (sector nutrition coordination committee).

#### **3.4.1.5 Ministry of Education and Sports (MoES)**

MoES was involved in nutrition agendas throughout the whole analysis period. The sector's external actor network remained the same until 2011–2015, when the number of actors increased. However, this decreased again in 2016–2017, see figure 3.2. Our analysis shows that the World Food Programme (WFP) supported MoES' school feeding programme in 2001–2010. The main actors supporting the ministry's nutrition initiatives in recent years are UNICEF and the World Bank/GAFSP. MoES collaborated with MOH and MAAIF over the whole period. Explicit nutrition-related goals emerged in MoES policy outputs only from 2006–2010 onwards. Whereas the number of goals remained largely the same, variation existed in the scope addressed. During the 2006–2010 period, the emphasis was on the general nutrition and health status of school children and developing novel food processing and nutrition enterprises. The latter goal prevailed in 2011–2015 alongside the requirement for a school feeding policy. Sensitising communities on school feeding was the only goal targeted during the period 2016–2017.

We observed that MoES incorporated nutrition instruments throughout the whole analysis period. The number of instruments increased slightly between 2006 and 2015, followed by a reduction in 2016–2017. Instruments used across the entire study period include the accreditation of programmes and training grants for nutrition cadres. MoES deployed various information instruments over time, e.g. research and pilot studies (2006–2010), technical guidelines on school feeding (2011–2015), and mass media campaigns (2016–2017). The majority of the 2006–2010 instruments were dropped by 2016–2017, except for accredited programmes and the training of nutrition cadres.

#### **3.4.1.6 Ministry of Trade, Industry, and Cooperatives (MTIC)**

MTIC has participated in Uganda's nutrition policies, especially the food fortification agenda, from before 2001. Despite this long-standing engagement in nutrition, its associated actor network remained small across the study period (see figure 3.2). The MTIC nutrition network comprised mainly for-profit organisations and MOH. Over time, various international organisations have given financial and technical assistance to undertake the fortification mandate, including UNICEF (2001–2005), GAIN (2006–2010), and USAID (2011–2015). Unlike other ministries, the MTIC policy outputs did not include any explicit (mal)nutrition-related goals. The ministry *did* deploy various nutrition instruments, which remained similar in type and number across the study period.

Instruments consistently deployed throughout this period include the Food and Drugs (food fortification) regulations 2005 (amended in 2011), capacity building for inspectors, and various food standards focusing on food safety, quality, and public health standards.

#### ***3.4.1.7 Ministry of Local Government (MoLG)***

MoLG was the last sector to attend to the nutrition improvement agenda, joining in 2011–2015 (see figure 3.2). The sector’s external actor network in nutrition remained small, despite its mandate to coordinate district level operations. USAID and the Islamic Development Bank supported MoLG between 2011 and 2015. For the most recent years, only the latter was mentioned.

The first explicit nutrition goal emerged in MoLG policy during 2011–2015. The goals slightly increased in number in 2016–2017 policy outputs. We observed that the goals expanded from integrating nutrition concerns in district plans and budgets (2011–2015) to more abstract aims such as implementing the food and nutrition policy (2016–2017). Similar to the goals, MoLG’s nutrition instruments were first introduced in 2011–2015 and diversified in 2016–2017. Between 2011 and 2015, the sector established an interdepartmental nutrition committee and trained districts in nutrition planning. Instruments broadened in 2016–2017 to include the provisioning of nutrient-dense planting materials and mass media campaigns and outreaches.

#### ***3.4.1.8 Ministry of Finance, Planning, and Economic Development (MoFPED)***

Despite MoFPED being among the nutrition actors during 2001–2005, figure 3.2 indicates that efforts to re-engage in nutrition actions only resurfaced from 2011 onwards. Generally, the external actors supporting nutrition in MoFPED increased in 2011–2015 but reduced considerably afterwards. During the period 2011–2015, MoFPED spearheaded the processes of developing the UNAP and the national nutrition planning guidelines in liaison with international agencies like USAID, WFP, and the International Food Policy Research Institute. However, the actor network in 2016–2017 comprised only other ministries. Halving malnutrition by 2015 was the only nutrition-related goal incorporated in the MoFPED Poverty Eradication Action Plans compiled in 2001–2005. Our analysis revealed a considerable rise in the number and scope of nutrition goals in the national development plans (NDPs) endorsed between 2011 and 2017, despite their absence from the policy outputs for the period 2006–2010. MoFPED is responsible for compiling and

Table 3.2 Development of nutrition-related policy instrument per ministry between 2001 and 2017

Election cycle	2001-2005								2006-2010							
	OPH	MOH	MAAIF	MGLSD	MoES	MTIC	MoLG	MoFPED	OPH	MOH	MAAIF	MGLSD	MoES	MTIC	MoLG	MoFPED
Capacity and skills development <sup>1</sup>	++	+++			+							+	+	+		
Knowledge generation <sup>2</sup>		++								++	+		+			
Information dissemination <sup>3</sup>		++								++	++					
Legislation, regulations, and standards			+			+		+				+				
Tax incentives																
Nutrition financing <sup>4</sup>		+			+					++			+			
Nutrition services <sup>5</sup>		++			+				++	++			+	+		
Institution reform <sup>6</sup>		+	+							++	++					
Partnerships & working committees <sup>7</sup>		+								++	+		+			
Nutrition commodities <sup>8</sup>		+							+							
Certification		+								+						
Human resources		+							+		+					
Election cycle	2011-2015								2015-2017							
Instrument category	OPH	MOH	MAAIF	MGLSD	MoES	MTIC	MoLG	MoFPED	OPH	MOH	MAAIF	MGLSD	MoES	MTIC	MoLG	MoFPED
Capacity and skills development <sup>1</sup>	++	+++		+	+	+	+	+		++	++	++	+		+	
Knowledge generation <sup>2</sup>	+	++	++		+						++	+				
Information dissemination <sup>3</sup>	+	++	+++	+					+	++	+++	+	+		+	
Legislation, regulations, and standards						++								+		
Tax incentives								+								
Nutrition financing <sup>4</sup>		+	++	+	+						+	+	+			
Nutrition services <sup>5</sup>	++	++		+				+	++	+		+				
Institution reform <sup>6</sup>	++	+	++		+						+					
Partnerships & working committees <sup>7</sup>	+	++	+	+			+	+	+	+					+	
Nutrition commodities <sup>8</sup>		+	+							+	+	+				
Certification																
Human resources		+	+									+				

The '+' icon indicates the number of instrument types – as part of broader instruments categories - identified. '+' implies only one type of instrument is used; '++' means two different types of instruments are used; '+++' implies three different types of instruments are used. The types under each instrument category are provided below and detailed in Online Resource 2.

<sup>1</sup>Capacity and skills development includes four types of instrument types: accredited education and training, in-service cadre training, support supervision/mentorship, technical guidelines.

<sup>2</sup> Knowledge generation includes two types of instrument: nutrition information systems, research and pilot studies.

<sup>3</sup> Information dissemination includes three types of instrument: mass media campaigns and outreach, information sharing fora, demonstration plots.

<sup>4</sup> Nutrition financing includes two types of instruments: agriculture financing, nutrition funds and grants.

<sup>5</sup> Nutrition services includes three types of instruments: routine health-related nutrition services, institutional feeding, humanitarian assistance (food aid).

<sup>6</sup> Institution reforms covers two types of instruments: reorganisation within ministries, physical infrastructure development.

<sup>7</sup> Partnerships and working committees includes two types of instruments: technical working groups, private-public partnerships.

<sup>8</sup> Nutrition commodities consists three types of instruments: therapeutic foods, nutrition equipment, planting materials, and input

monitoring the NDPs. The nutrition goals in the NDPs generally reflected those promoted in the policy outputs of MOH, MAAIF, MGLSD, and MoES.

The MoFPED instruments explicitly targeting nutrition were first mentioned in 2011–2015. The ministry deployed a mix of financial and information instruments, such as tax exemptions on food fortification inputs, declared nutrition a crosscutting planning and budgeting issue, and developed the nutrition planning guidelines. In the same period, a key procedural instrument applied was the multisector nutrition forum that developed the UNAP. No specific instruments were identified in MoFPED’s policy outputs of 2016–2017. This may be attributable to the fact that nutrition goals in the NDP are addressed mainly by the technical sectors, which already elaborate specific instruments in their policy outputs.

### **3.4.2 Overall patterns of nutrition integration**

Table 3.3 shows the overarching patterns of nutrition policy integration in Uganda between 2001 and 2017 based on the findings per ministry presented in section 3.4.1. The assessment revealed a gradual shift towards higher degrees of nutrition policy integration in all the dimensions. However, there are fundamental differences in the degrees of policy integration realised among the dimensions over time. Over the period 2001–2005, the degree of policy integration for nutrition was generally low across all the dimensions. Regarding the subsystems involved, the nutrition policy agenda was primarily dominated by MOH, which collaborated with an extensive external actor network. Other sectors, especially MAAIF and MTIC, made some minimal policy contributions. Three sectors (MOH, MAAIF, and MoFPED) highlighted at least one goal to improve undernutrition. The range of instruments was restricted and mainly embedded within the dominant subsystem surrounding MOH, which addressed some but not all determinants of nutrition.

Between 2006 and 2010, we observe some shifts towards higher degrees of policy integration for subsystems involved, but low degrees persisted for the goals and instruments. Policies of all ministries, except MoLG and MoFPED, highlighted nutrition concerns. MOH continued to be the dominant subsystem in nutrition and liaised with a range of other ministries, international agencies, and partner countries. However, the increase in subsystems in nutrition policy was not matched with substantial changes in the scope of nutrition goals. Conversely, the number of nutrition instruments increased slightly and their scope expanded somewhat. Yet, similar to the period 2001–

2006, a majority of the instruments remained embedded within the dominant subsystem and addressed some but not all determinants of nutrition. There were no cross-sector coordinating instruments.

All ministries analysed deliberately strove to advance the nutrition policy agenda in some way between 2011 and 2015. Full policy integration was realised for subsystems involved, and shifts towards higher degrees of integration were found for the goals and instruments. During this period, nutrition became a crosscutting planning concern, a result of which an expansion to all eight ministries occurred. Each ministry received technical and financial support from one or more international agencies or partner countries. Nutrition goals increased in number and diversified in scope, although they addressed mainly determinants of maternal and child undernutrition or food and nutrition insecurity (see Supplementary material B) and often appeared as parallel project initiatives in most ministries. MTIC did not integrate explicit nutrition goals. Goals related to overweight and diet-related non-communicable diseases were absent. In terms of the instruments targeting nutrition, this period was characterised by the largest introduction of new tools. Most of these tools drew upon information and organisation, whereas the use of financial and regulatory instruments remained limited. In addition, procedural instruments to coordinate across sectors came into use with OPM at the helm.

For the last analysis period (2016–2017), the degree of policy integration realised across the dimensions was largely similar to that in the previous period. However, there was a general decline in support from international agencies and partner countries. Further, the number and scope of goals and instruments decreased in some ministries, such as MOH, MoES, and OPM.

### **3.5 Discussion**

This paper started with the observation that tracking political commitment to malnutrition has gained global interest and various approaches have been applied to understand progress across countries (e.g. HANCI 2017; IFPRI 2016; Fox et al. 2015; WHO 2013). Our analysis adds to this debate by using a novel policy integration approach to address the question of *the extent to which nutrition has been integrated into cross-sectoral policy outputs over time*. We observed an overall shift towards increased policy integration for nutrition in Uganda: nutrition goals and instruments

Table 3.3: Patterns of nutrition policy integration between 2001 and 2017

Policy integration dimensions	2001–2005	2006–2010	2011–2015	2016–2017
<b>Subsystem involvement</b>				
<i>Ministries and associated networks involved</i>	<b>Level II</b> MOH, MAAIF, MoES, MTIC, MoFPED	<b>Level III</b> MOH, MAAIF, MGLSD, MoES, MTIC, OPM	<b>Level IV</b> Nutrition issues in OPM↓, MOH↓, MAAIF↑, MGLSD↑, MoES, MTIC↓, MoLG, MoFPED↓	<b>Level IV</b> Nutrition issues in OPM↓, MOH↓, MAAIF↑, MGLSD↑, MoES, MTIC↓, MoLG, MoFPED↓
<b>Policy goals</b>				
<i>Range of policies in which nutrition is embedded</i>	<b>Level II</b> Nutrition goals in MOH, MAAIF, MoFPED. Only MOH specific nutrition goals	<b>Level II</b> Nutrition goals in MOH, MAAIF, OPM, MoES. Only MOH specific nutrition goals	<b>Level III</b> Goals included in all ministries OPM↑, MOH↑, MAAIF↑, MGLSD↑, MoES↓, MoLG, MoFPED↑, except MTIC	<b>Level III</b> Goals included in all ministries OPM↓, MOH↓, MAAIF↑, MGLSD↑, MoES↓, MoLG↓, MoFPED, except MTIC
<i>Scope of goals</i>	<b>Level I</b> Some determinants of undernutrition covered in MOH	<b>Level II</b> Some determinants of undernutrition in MOH, MAAIF	<b>Level II</b> Some determinants of undernutrition specific to sectors covered	<b>Level II</b> Some determinants of undernutrition specific to sectors covered
<b>Policy Instruments</b>				
<i>Range of policies that include substantive instruments</i>	<b>Level II</b> Mainly in MOH, few instruments in MAAIF, MoES, MTIC, MGLSD, MoFPED	<b>Level II</b> Mainly in MOH, few instruments in MAAIF, MoES, MGLSD, OPM, MTIC	<b>Level III</b> Instruments in OPM, MoH, MAAIF, MGLSD, MoES, MTIC, MoFPED  New instruments and relabelling some existing ones	<b>Level III</b> Instruments in OPM, MoH, MAAIF, MGLSD, MoES, MTIC  New instruments adopted
<i>Range of policies that include procedural instruments</i>	<b>Level II</b> Nutrition working group in MOH	<b>Level II</b> Nutrition working groups in MOH, MAAIF	<b>Level III</b> OPM assigned overall nutrition coordination mandate  Sector committees for nutrition MOH, MAAIF, MGLSD, MoLG	<b>Level III</b> OPM assigned overall nutrition coordination mandate  Sector committees for nutrition MOH, MAAIF, MGLSD, MoLG
<i>Notes: Level I denotes no policy integration; Level II denotes low degree of policy integration; Level III denotes medium degree of policy integration; Level IV denotes full policy integration.</i>				
<i>↑ denotes an increase in either number of external actors or number of goals; ↓ denotes a decrease in either number of external actors or number of goals</i>				



gradually increased in number and diversified, and ministries developed relatively extensive networks of actors with whom they collaborate, especially international agencies and partner countries (table 3.3). This process was very gradual, with an acceleration in the period 2011–2015, after the adoption of the UNAP. Importantly, the emergence of substantive and procedural instrument mixes shows that Uganda’s integrated nutrition strategies, especially the UNAP, seem to have moved beyond symbolic policy, meaning that strategies were not adopted merely to satisfy donors but were accompanied by substantial measures to support their implementation (cf. Dupuis and Biesbroek 2013). These findings align with various earlier studies, which have found similar increases in sector engagement in nutrition policy (e.g. Turcan and Bene 2017; Pomeroy-Stevens et al. 2016; Hodge et al. 2015).

That said, considerable differences exist across the policy integration dimensions and time periods, and among ministries. Consequently, nutrition integration did not develop along a linear pattern, and for some ministries we also found phases of *disintegration*. Moreover, we found that the government’s financial and regulatory commitments remained largely elusive; this raises questions about the durability and outcomes of interventions. Consistent with this finding, earlier literature stresses that, although SSA governments are increasingly aware of malnutrition, they are often preoccupied with bureaucratic sector arrangements and do not allocate nutrition finances effectively in their resource allocation patterns (cf. Fox et al. 2015; T. Benson 2008). Inadequate attribution of malnutrition causes (Mogues and Billings 2015) and low budgetary outlays allocated to sectors (Fox et al. 2015) are mentioned as impeding the use of financial instruments.

Our study shows the merits of using the policy integration framework to assess nutrition integration more systematically. Although our insights are country specific, this approach has the potential of comparing efforts across (SSA) governments as well as over time and thus provides more rigour compared to previous approaches. This type of research is important, as the presence of integrated nutrition strategies has been shown not to be a guarantee of actual policy changes (cf. Cejudo and Michel 2017; Nordbeck and Steurer 2016). For the specific Ugandan context, this approach provides an opportunity to strengthen the systematic monitoring of different ministries and thus hold the government accountable with respect to its commitments to improving nutrition.

### 3.5.2 Future research

Our findings give rise to various follow-up questions. An obvious follow-up question is, what *explains* our findings? The nutrition literature proposes a plethora of malnutrition-related, institutional, and socio-political factors that may impel or impede nutrition policy integration (e.g. Gillespie and van den Bold 2017; Balarajan and Reich 2016; Nisbett et al. 2014b; Rukundo et al. 2014; Drimie and Ruysenaar 2010). However, the precise causal pathways or mechanisms through which these factors affect nutrition integration patterns remain underexplored. A more contextualised exploration of nutrition policy processes to unpack the causal mechanisms explaining why variations exist across ministries and over time is imperative for identifying strategies and opportunities to inform future continuity of such efforts (cf. Biesbroek and Candel 2019; Sieber et al. 2018).

Second, more work is needed on assessing how instruments within and across ministries interact with one another, i.e. whether ultimate instrument mixes are consistent with the nutrition agenda. Additionally, it is important to gain a better understanding of how the different types of instruments that are commonly distinguished in Public Policy literature, i.e. information-, authority-, treasure-, and organisation-based instruments (Hood 1983), can be combined to create synergies (cf. Daugbjerg and Sønderskov 2012). Such research would allow for making the step from analyses of policy *outputs* to how these affect *outcomes* on the ground.

Third, although the governance of nutrition involves different levels, our analysis was restricted to policy efforts at national level. Given Uganda's decentralised system however, our observations of shifts towards horizontal policy integration at national level do not necessarily guarantee similar developments at local level (cf. Casado-Asensio and Steurer 2016). Therefore, exploring the interactions across governance levels as well as how integrated nutrition services are ultimately delivered on the ground would be important avenues of further research (cf. Harris et al. 2017).

### 3.5.3 Governance implications and conclusion

To ensure that the trend of nutrition integration is not reversed, scaling up the tracking of nutrition policy across countries would be an important step for domestic and international stakeholders to take (cf. Harris et al. 2017). Second, our analysis shows that various aspects of nutrition remain under addressed in Uganda. For example, our analysis shows that overweight and diet-related non-

communicable diseases were largely non-existent in policy outputs (cf. Ngaruiya et al. 2017; Schwartz et al. 2014). In addition, the commitment of various ministries seemed to decrease in the most recent years of the analysis. For example, nutrition goals seemingly reduced in MOH, OPM, and MoES.

Third, the continuity of nutrition integration will benefit from governments normalising it as part of sectors' regular mandates. Our analysis shows that nutrition is currently mostly integrated in the form of ad hoc programmes. Such programmes may have put nutrition on ministry policy agendas but are vulnerable to changes in administrative and political leadership. This approach to integration may be a reflection of weak ownership, variation in priorities, or inadequate capacity within sectors to incorporate such issues into their regular programmes (cf. Leiderer 2015). This is not to say that ad hoc programmes cannot be effective, but we want to caution that this type of integration may not be conducive to the long-term continuity of nutrition policy integration processes.

Fourth, the Ugandan government should consider expanding the types of instruments deployed for improving nutrition. It currently uses primarily information- and organisation-based instruments. Although these have their advantages, a more balanced instrument mix that also includes substantial financial and regulatory tools may prove more effective (Daugbjerg and Sønderskov 2012).

Ultimately, improved nutrition governance in Uganda will rely on whether the government and international agencies manage to harness the current awareness of malnutrition across sectors. This would require scaled-up investments in a diverse mix of instruments as well as the development of an integrated monitoring system to evaluate how interactions between interventions play out on the ground.

## **Acknowledgement**

We express our gratitude to Robert K. N. Mwadime for the stimulating discussions and comments on earlier versions of this manuscript. An earlier version of this paper was presented at the general conference of the European Consortium for Political Research (ECPR) in Hamburg, 22–25 August

2018. We acknowledge the valuable feedback provided by Stefan Ewert of the University of Greifswald; the respondents that attended P501 Trends in Organisational Cross-Overs of Food, Energy, Health and Agriculture and the anonymous reviewer.

**Supplementary material**

To view the supplementary material for this article online, please visit <https://doi.org/10.1007/s12571-020-01010-5>

## **Chapter 4**

### **A mechanisms-based explanation of nutrition policy (dis)integration processes in Uganda**

This chapter is published as: Brenda Shenute Namugumya, Jeroen J.L. Candel, Elise F. Talsma, Catrien J.A.M. Termeer (2020). A mechanisms-based explanation of nutrition policy (dis)integration processes in Uganda. *Food Policy*. 92 (2020) 101878.

## Abstract

Many African governments have recently invested in strengthened nutrition policy integration to address malnutrition; as a step towards realising the targets of the Sustainable Development Goal 2. Previous studies have identified various factors that enable or constrain how nutrition integration occurs across policy sectors. However, the explanatory value of these studies has remained relatively limited, as the causal processes through which independent variables affect policy outcomes remain unelucidated. This paper addresses this gap by applying a causal mechanisms approach to investigate the processes that explain observed patterns of nutrition policy (dis)integration in different ministries in Uganda. We employed a process-tracing research design to reconstruct the context-mechanism configurations that explain the observed patterns of nutrition integration in Uganda between 2000-2017. Data was collected from interviews with 34 respondents, various policy and programming documents, and a focus group discussion. Our analysis reveals that *increases* of nutrition policy integration are explained by four causal mechanisms: 1) internal policy promotion, 2) issue promotion by international actors, 3) issue promotion by domestic policy entrepreneurs, and 4) instrumental policy learning. Conversely, two mechanisms led to policy *disintegration*: 1) leadership contestation and 2) turf wars. All mechanisms proved activated by configurations of contextual conditions that were time- and organisation-specific. This study showed how a mechanisms approach can provide a more refined understanding of policy successes and failures in nutrition governance. Whereas integration-fostering mechanisms cannot be automated, both government and international actors working to scale up investments in nutrition need to consider and invest in the contextual conditions that allow for sustained nutrition policy integration and, ultimately, a more effective delivery of nutrition services. These include developing leadership for nutrition at different governance levels, domestic ownership and integration-fostering capacity, and fostering policy-oriented learning.

**Key words:** Uganda; malnutrition; integrated nutrition strategies; policy integration; causal mechanisms; governance

## 4.1 Introduction

The multiple burdens of malnutrition remain a major challenge across African countries. In spite of progress being made in many countries, undernutrition and, increasingly also overnutrition, affect millions of Africans (FAO et al. 2019). To deal with these challenges more effectively, many African governments have recently invested in cross-sectoral governance approaches, e.g., in the form of integrated nutrition strategies (Candel 2018; WHO 2013). Integrated nutrition strategies (INSs) are explicit attempts of governments to align nutrition-related policy goals, instruments and capacities that transcend the boundaries of individual policy sectors (cf. Candel and Pereira 2017). The core assumption behind these strategies is that the horizontal integration of nutrition concerns across relevant sectoral policies will increase the likelihood of attaining nutrition-related goals.

In spite of the considerable efforts that governments and non-governmental actors have put in pursuing horizontal nutrition integration (cf. Pelletier et al. 2018; Turcan and Bene 2017; T. Benson 2008; Gillespie and van den Bold 2017), a steady stream of research since the 1970s has shown that the success of these efforts is mixed at best (Fields 1987; Berg 1987; Berg and Austin 1984). At the same time, relatively little is known about what impels or impedes these policy integration processes. Whereas recent nutrition scholarship has identified a wide range of institutional and socio-political *factors* that may enable or constrain horizontal nutrition policy integration (Gillespie and van den Bold 2017; Balarajan and Reich 2016; Acosta and Fanzo 2012), we argue that the explanatory value of these factors remains relatively limited. More specifically, while many of these factors provide valuable indications of key conditions that matter, they do not allow for a more sophisticated understanding of the causal *mechanisms* through which dependent (nutrition (dis)integration outcomes) and independent (factors) variables are linked. To address this gap, we draw on the Policy Sciences, which *have* considered these mechanisms, but so far have given relatively limited attention to Sub-Saharan governance in general, and nutrition governance specifically (but see: Harris 2019a; Pelletier et al. 2018).

The mechanistic approach that we propose to explain nutrition policy integration focuses on interaction patterns that, under specific contextual conditions, produce particular policy (dis)integration outcomes. Whereas there is an extensive literature on broader *social* mechanisms (Biesbroek et al. 2017; Falleti and Lynch 2009; Bunge 1997), we are thus primarily interested in *policy* mechanisms, i.e. those that affect policymaking (Capano and Howlett 2019). Obtaining a

better understanding of these mechanisms is not only crucial from a scholarly point of view, but also to allow for better targeted interventions to strengthen current nutrition governance arrangements.

In this study, we explore policy mechanisms compelling and hampering horizontal policy integration through an in-depth case study of nutrition governance in Uganda. Although, the country witnessed a ten percent decline in stunting from 39 percent in 2006 to 29 percent in 2016 (UBOS and ICF 2018), which is below is East African average of 35 percent (UNICEF et al. 2019), 41 percent of the total population remains undernourished i.e. unable to meet their minimum calorie requirement regularly (FAO et al. 2019). At the same time, overweight among women consistently increased from 8 percent in 1995 to 24 percent in 2016 (UBOS and ICF 2018). Uganda was one of the first sub-Saharan African countries to embrace integrated nutrition governance approaches propagated by international donors, such as UNICEF, USAID, and the Scaling Up Nutrition (SUN) Movement, to realise the Sustainable Development Goals (SDGs), in particular the target 2.2 on ending all forms of malnutrition among children, adolescents, women and elderly. The country has adopted three integrated nutrition strategies since the 1990s. In a previous study (Namugumya et al. 2020b), we examined whether these INSs proceeded beyond symbolic policy – policies adopted to cope with a problem without being backed by concrete measures and programs to be translated into action on the ground (Dupuis and Biesbroek 2013) – by assessing the extent to which nutrition-related goals and instruments were integrated across sectoral policy outputs at national level. We concluded that there was a general shift towards increased integration of nutrition-focused goals and instruments, but that considerable variations existed across sectors and overtime (see Sections 4.3 and 4.4). In *this* study, we are primarily interested in what *explains* the shifts in policy integration that we observed. Therefore, the central research question that this paper aims to address is: *what policy mechanisms explain the observed nutrition policy (dis)integration patterns in Uganda?*

To address this question, we adopted a process-tracing research design. Process-tracing is a methodological approach that “attempts to identify the intervening causal process – the causal chain and policy mechanism – between an independent variable (or variables) and the outcome of the dependent variable” (George and Bennett 2005, p.206-p.207), in this case shifts of policy integration. By combining insights from various data sources, process-tracing studies seek to make



*within*-case inferences about these policy mechanisms (Kay and Baker 2015; Beach and Pedersen 2013). We applied these methods to reconstruct the mechanisms explaining policy (dis)integration within Ugandan ministries between 2000 and 2017. Our prime focus is thus on explaining policy integration *within* sectors, while taking the broader context into account to explain the activation of mechanisms. Importantly, this paper does not aim to explain *all* changes in Ugandan nutrition governance. Instead, its objective is to identify the policy mechanisms responsible for nutrition (dis)integration over time, which may be relevant to other (African) contexts as well.

The paper proceeds with an elaboration of the theoretical approach underpinning this study, discussing both the concepts of policy integration and causal mechanisms. The methodological approach of the study is discussed in Section 3.3. The empirical analysis of the causal pathways are presented in Section 4.4. This section also integrates the main insights from our preceding study to clarify the dependent variable we aim to explain, that is changes in the degrees of policy integration across the four ministries included. The final section draws conclusions from the analysis and reflects on the broader academic and policy implications.

## **4.2 Theoretical approach**

### **4.2.1 Policy integration**

Following on the complex, multilevel and crosscutting nature of most of today's most pressing societal problems, policy scholars have taken considerable interest in policy integration. Policy integration refers to the extent to which a governance system addresses a crosscutting concern in a more or less holistic manner across sectors and, possibly, levels (Tosun and Lang 2017). The core assumption in this literature is that better integrated governance arrangements are expected to be more effective in attaining desired outcomes. Whereas it goes beyond the scope of this paper to discuss the whole policy integration literature (for overviews, see: Tosun and Lang 2017; Cejudo and Michel 2017), recent theorization has attempted to move beyond simple conceptualizations of policy integration as a desired outcome or governing principle, towards more refined approaches of policy integration as a process of change over time.

In this study, we adopt the processual approach developed by one of the authors (Candel and Biesbroek 2016), in which policy (dis)integration is conceptualised as a process encompassing various dimensions that may move at different paces, or even in opposing directions. A common example is that governments often adopt integrated goals, but lag behind in terms of instruments (Candel and Biesbroek 2016). In our previous study, we assessed three of these integration dimensions for nutrition governance in Uganda: subsystem involvement, policy goals, and policy instruments (Namugumya et al. 2020b). *Subsystem involvement* refers to the range of ministries engaged in nutrition governance. The dimension of *policy goals* refers to the range of sectoral policies that explicitly incorporate nutrition *specific* or *sensitive* goals. The dimension of *policy instruments* – the means or techniques governments adopt to pursue policy goals (Knill and Tosun 2012)– identifies the degree to which the different sectoral policies have incorporated actual interventions to pursue the more or less integrated set of goals.

#### 4.2.2 Policy mechanisms

A second conceptual innovation in the policy integration literature involves the turn towards mechanism-based explanations. This approach emerged out of criticism on existing ‘shopping lists’ of political and institutional factors that were argued to affect policy integration, without clarifying the causal processes through which independent variables came to affect the dependent variable of (shifts in) policy integration (Candel 2018). Various factors are able to explain both strengthened integration and *disintegration*, depending on their specific calibrations and the contextual conditions under which they become activated (Peters 2015b).

Many definitions of causal mechanisms exist across the social sciences. (see: Capano and Howlett 2019; Gerring 2008; Mayntz 2004; Hedström and Swedberg 1998; Bunge 1997). What these have in common is that mechanistic approaches move beyond correlational analyses and attempt to uncover the specific processes through which independent variables (X) shape a dependant variable (Y) under specific conditions (Beach and Pedersen 2013). We adopt Biesbroek et al. (2017)’s definition of mechanisms as unobservable but empirically traceable processes that act as causes in generating an outcome in a given context; and principally do not need further elaboration as the mechanism is self-evident and self-explanatory. Whereas, this concept may be new in nutrition governance studies, the underlying logic has been implicitly applied in many nutrition sciences interventions. A classic causal mechanism example is the vicious cycle linking malnutrition and

HIV: HIV impairs the immune system which favours the occurrence of opportunistic infections thereby leading to further altered metabolism and malabsorption resulting in malnutrition (Piwoz and Greble 2000). This refined understanding contributed to advancing nutrition interventions in HIV/AIDS prevention, management and treatment.

For this study, we use the ‘Context-Mechanism-Outcome’ (CMO) approach to explain changes in horizontal nutrition policy integration. The CMO approach articulates that **O**bserved patterns of (un)intended outcomes can be explained by identifying the plausible causal set of **M**echanisms within the situational **C**ontext of the process (Falleti and Lynch 2009) (see figure 4.1).

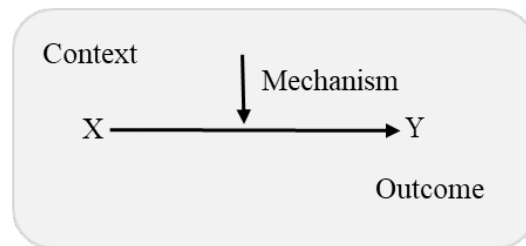


Figure 4.1. CMO model (Pawson and Tilley 1997, p.58).

The **Outcome (O)** refers to the phenomenon that is to be explained, i.e. the observed patterns of (un)intended effects of interest (Sieber et al. 2018). In this study, the outcomes of interest are the changes in the degrees of policy (dis)integration across ministries over time, as conceptualised by Candel and Biesbroek (2016); and assessed in our previous study of nutrition policy integration in Uganda. For the sake of clarity, we elaborate these policy integration outcomes in the results section; directly connecting them with the mechanisms and contextual conditions.

Policy **mechanisms (M)** are understood as recurring patterns of actor-interactions that bring about changes in nutrition policy (dis)integration (Biesbroek et al. 2014). The analysis of mechanisms thus requires identifying the actors involved, their activities, and relationships; and needs to go beyond the reconstruction of events observed, to recognising the causal forces at play (Sieber et al. 2018). The relational character of causal mechanisms makes them portable, meaning that changes in context may trigger similar mechanisms across space and over time (Falleti and Lynch 2009). In addition, policy mechanisms can operate at different levels, e.g., at individual, network, or institutional level (Kay and Baker 2015). An interaction pattern is only considered a mechanism when it can be plausibly argued, using process-tracing methods, that the observed outcome would

not have occurred without its presence (Hedström and Ylikoski 2010). Some examples of causal mechanisms in the Public Administration and Policy literatures include “blame game” (Hinterleitner 2017), “making one’s mark” (Biesbroek and Candel 2019) and “turf protection” (Peters 2015b).

The **Context (C)** involves the configurations of socio-political, institutional, and agency-based variables that trigger or activate a mechanism (Falleti and Lynch 2009; Pettigrew 1992). These contextual conditions may originate from *within* ministries involved in nutrition policy, e.g., in the form of existing organisational rules and norms, as well as from the broader socio-political environment. Apart from that, different contextual configurations may activate different mechanisms, accounting for contextual conditions helps to explain the *directionality* of mechanisms, as the same mechanisms may yield dissimilar outcomes in different contexts (Falleti and Lynch 2009, p.1151).

### 4.3. Methodological approach

#### 4.3.1 Research design

To identify the mechanisms shaping nutrition policy (dis)integration, we employed an ‘explaining-outcome process tracing’ case study design (Beach and Pedersen 2013). This type of process-tracing combines various data sources to reconstruct the complex case-specific causal mechanisms that produced a particular outcome, here, changes in degrees of nutrition policy integration. Explaining-outcome process tracing is particularly helpful in exploratory, theory-developing studies; allowing for generating hypotheses based on careful empirical investigation. Using process tracing in this case study has two advantages; first, working backwards from the outcome permits identification of how multiple linked processes unfold without only favouring forecasting events (Beach and Pedersen 2013; Beach 2016). Second, process tracing supports comparison of actor relations and emerging mechanisms in varied contexts (Falleti and Lynch 2009).

In a previous study, we assessed the extent of nutrition policy integration across policy outputs of different sectors in Uganda between 2001 and 2017 (Namugumya et al. 2020b). In that study, we distinguished between four time periods corresponding with Uganda’s election cycles (2001-2005;

2006-2010; 2011-2015; 2016-2017). Despite having the same president since the 1980s, the study found that policies and degrees of policy integration *did* change after cabinet reshuffles, resulting from a restructuring of institutions and changes of political prioritisations. For this reason, we adopted a similar election cycle-based approach in the present study. Based on this previous study, we selected four ministries for our explanatory ambitions: the ministries of Health (MoH); Agriculture, Animal Industry and Fisheries (MAAIF); Gender Labour and Social Development (MGLSD) and the Office of the Prime Minister (OPM). Prior to 2011, nutrition policy was dominated by the MoH and MAAIF, whereas the OPM and MGLSD are fairly recent entrants into this area.

#### **4.3.2 Data collection methods**

Various types of data were collected between December 2017 and July 2018. We conducted 34 informant interviews with actors currently or previously engaged in nutrition policy and programming processes in the ministries of Health, Agriculture, community development, and the Office of the Prime Minister. The informants worked for government ministries (16), non-government organisations (11), donors (4), and academia (3) (Supplementary material C). Interviewees were identified from policy reports and through snowball sampling. Respondents were asked about their professional backgrounds, roles in nutrition policy, and the events and processes that influenced nutrition policy integration, including the actor interactions they perceived most decisive. Interviews lasted between 60 and 200 minutes. Documents were obtained from interview respondents and through searching government archives and NGO project websites to facilitate the reconstruction of key events and milestones for each sector. These included background policy documents, project reports of donor initiatives, meeting reports and some newspaper reports. Prior to pursuing this study, the lead author of this study participated in the policy processes of each sector between 2008 and 2016. She worked with an organisation that provided nutrition technical assistance across government sectors. The direct participation in formal and informal operations of the ministries not only provided direct insights into the sectoral policy processes, but also helped to access respondents and documents, policy discussions as well as interpret these.

### 4.3.3 Data analysis

Transcribed interviews were anonymised and coded using the program *Atlas.ti*. For each period, the primary author independently coded data providing insights into the prevailing contextual conditions considered essential in nutrition policy; and the key actors, activities and relationships to distil the policy mechanisms. The identification and labelling of mechanisms occurred in an abductive manner, constantly moving back and forth between the empirical observations and relevant theories from the Policy Sciences (Timmermans and Tavory 2012). This abductive process was organised through frequent meetings of the authors team, in which mechanisms emerging from the empirical material were discussed in relation to existing theorization. Preliminary results were shared and discussed during a workshop in Kampala in May 2018, in which 15 participants from academia, government and international agencies. The notes made during this workshop were used to finalise the analysis.

## 4.4 Results

### 4.4.1 Ministry of Health (MoH)

*Outcome:* The Ministry of Health has for a long time been the dominant sector in Ugandan nutrition governance. The degree of nutrition integration in health policies significantly increased between 2000 and 2015. This showed in an increase and diversification of policy goals covering the various determinants of (mal)nutrition, as well as in the adoption of diverse instrument mixes. Instruments deployed include nutritionist positions in hospitals, various technical guidelines, upgrade the nutrition unit to division, expand nutrition indicators in the health information system. More recently, however, a period of *disintegration* followed. In spite of the MoH's continued focus on reducing maternal and child undernutrition, the years 2016-2017 witnessed a decline in both numbers of goals and instruments.

*Contextual conditions:* The late 1990s showed increased commitment by the Ugandan parliament and international actors to reduce maternal and child undernutrition; resulting in the creation of a nutrition unit in the MoH, more comprehensive nutrition assessments, and an influx of resources to fund globally recommended interventions. These commitments culminated in the early 2000s,

amidst concerns of increasing malnutrition resulting from HIV/AIDS and the armed conflict in Northern Uganda (2, 3, 5, 8)<sup>2</sup>. Internationally, the publication of the Lancet Series on Maternal and Child Undernutrition in 2008 proved a key event in drawing attention to a broader range of nutrition-specific interventions, resulting in calls to update existing national protocols. Concurrently, the MoH appointed an experienced senior bureaucrat to lead its nutrition unit (1, 7, 9, 11). Following the UNAP adoption in 2011, nutrition leadership in the MoH changed repeatedly (8, 6, 13, 14).

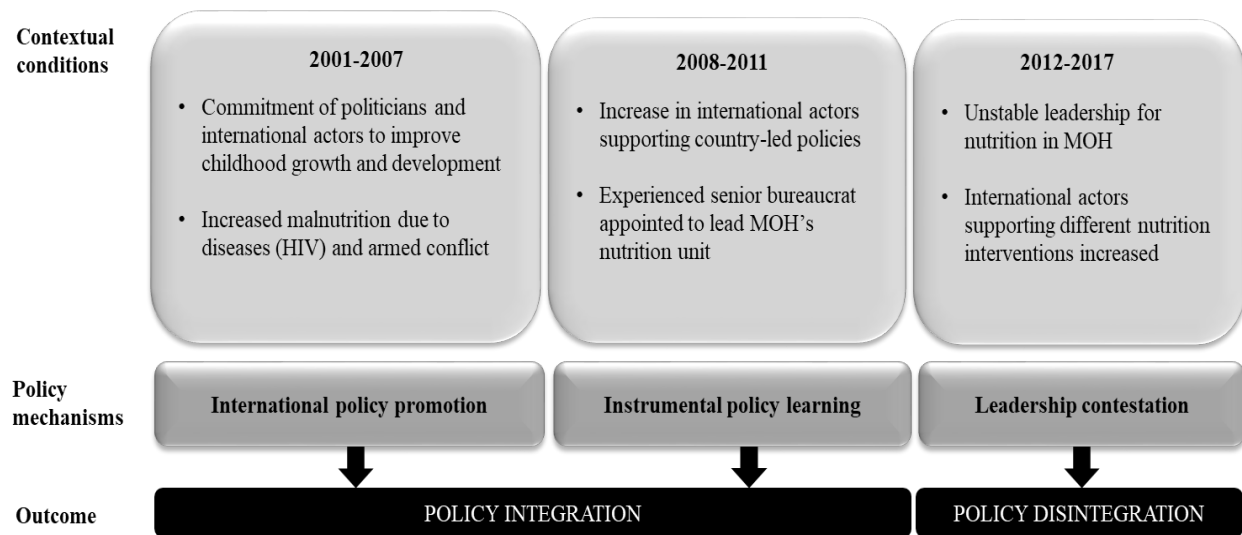


Figure 4.2: contextual conditions, policy mechanism and nutrition integration outcomes in MoH

*Mechanisms:* The two mechanisms that were found to explain the initial increases in nutrition integration are *international policy promotion*, and *instrumental policy learning*. Recent disintegration is attributed to a *leadership contestation mechanism*, see figure 4.2.

The *international policy promotion mechanism* refers to the process whereby international actors intentionally promote the transfer of distinctive policy approaches that they consider particularly promising (Holzinger and Knill 2005). As such, existing policy templates and associated knowledge are being transferred across governance levels and contexts by international policy entrepreneurs (Minkman et al. 2018; Dolowitz and Marsh 2000). The occurrence of this mechanism particularly showed in the actions of UNICEF, the World Bank, and USAID, who repeatedly promoted globally prioritised nutrition programs to politicians and MoH bureaucrats, conditioned

<sup>2</sup> The numbers between parentheses refer to the respondents underpinning an empirical observation.

budget support (5, 8, 12), and monitored country performance over time (2, 9). The mechanism was activated by the co-occurrence of two related contextual conditions: the rapid increase of malnutrition due to diseases and armed conflict, and increased commitments of politicians and international actors to realise more effective policy interventions (3, 5, 8, 22). International organisations started to promote international protocols, e.g., on micronutrient supplementation and managing acute malnutrition. They did so by hiring consultants to assist the MoH with translating generic policy templates to the Ugandan context, as well as by managing commissioned programs, e.g., Nutrition in Early Childhood Development project (NECDP) (2, 9, 12, 31). Considering that the sector's nutrition budget was for a large part funded by international actors, various respondents described the pressure exerted on MoH for performance updates and financial accountability as an important catalyst for policy change (3, 8, 11, 12).

A second mechanism that was found to explain policy integration is the occurrence of *instrumental policy learning*, particularly in the period 2008-2011. This mechanism refers to the deliberate attempt to use evidence and lessons from past experiences to modify policy instruments or calibrations for more effective goal attainment (Cashore et al. 2019; Rietig and Perkins 2018; Nilsson 2005; Hall 1993). This mechanism showed in the efforts of bureaucrats and international actors who collectively reflected on service delivery experiences and used these insights to adjust health policies. This mechanism co-occurred with and was activated by the international policy promotion mechanism, which only proved possible following the appointment of an experienced expert bureaucrat to lead nutrition in the MoH. An international emphasis on country-owned policies presented opportunities for both USAID's Food and Nutrition Technical Assistance project (FANTA) and MoH nutrition leadership to collaborate in securing consensus from various nutrition actors to jointly reflect on their implementation experiences and update sectoral policies. Respondents stated that the frequent interactions among the nutrition actors contributed to group learning and collective lesson drawing (1); and strengthened the capacity of the bureaucrats to participate in high-level policy discussions and present on the identified gaps (7). To illustrate, the leader of the nutrition unit continually used the insights obtained in the technical working groups to lobby the ministry's leadership to explicitly adopt nutrition in overarching strategic policies and budgets; which, for example, happened with the 2010-2011 health sector strategic and investment plan (3, 31, 34).



The policy disintegration phase observed post-2015 is explained by the occurrence of a *leadership contestation mechanism*, which already started in 2011. This mechanism involves the emergence of competition and conflicts among bureaucrats as they seek to maximise power and control of public office benefits, even if it means sacrificing policy objectives (Pedersen 2012; Bowornwathana and Poocharoen 2010; Strøm and Müller 1999). This mechanism was triggered by the unstable leadership within MOH nutrition division. Almost six bureaucrats were appointed to lead the nutrition division between 2011 and 2017. The quick succession of leaders resulted in conflicts among bureaucrats competing to attain this authority. As such, leaders continually endeavoured to establish their authority; either by drawing on professional expertise, alliances with international actors, or backing from higher-level bureaucrats (1, 6, 10, 13). The leadership struggles caused contestations and nurtured the pursuit of personal interests, e.g., resulting in frequent competitions over donor resources and jurisdictions, and refusals to share information. These practices undermined collective policy deliberations. Furthermore, international actors increasingly liaised with individual bureaucrats, which reinstated stove-piped operations and disaggregated decision-making (5, 14). Whereas, this ensured that nutrition persisted in annual policies, the persistent battles for leadership meant that no one prioritised the high-level strategic policy discussions; thus leading to nutrition disintegration (6, 13, 34).

#### **4.4.2 Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)**

*Outcome:* Whereas initially, the MAAIF's role in Ugandan nutrition governance was relatively small, it grew considerably over the 2000s. This showed in an increased number of goals explicitly focusing on household food and nutrition security, an expanding network of nutrition actors with which the ministry interacted, as well as the adoption of a diverse range of nutrition-sensitive instruments between 2001 and 2017. Instruments adopted included technical guidelines, information systems, accredited training of agriculture officers; creation of a nutrition division and coordination committee, and nutrition-focused grants.

*Contextual conditions:* Starting in the late 1990s, capacity building in nutrition resulted in a growing number of nutrition experts (20). These experts and other influential actors in NGOs and the private sector, formed an advocacy coalition: the Uganda Action for Nutrition (UGAN). Alongside this, international actors, especially FAO and USAID, increased investments to strengthen the linkages between agriculture and nutrition (8, 12, 21). Following the global food

price crisis of 2007-2008, the African Union's New Economic Partnership for Africa Development (AU-NEPAD) pressured countries to make a start with transposing the Comprehensive Africa Agriculture Development Program (CAADP), which was already signed in 2003, into national policies (20, 23). Moreover, international donors started to precondition nutrition integration for agricultural development aid, which continued in more recent years. In 2010, the MAAIF hired a senior nutrition expert to lead the upgraded food and nutrition security division (4, 17, 23).

*Mechanisms:* The nutrition policy integration process in the MAAIF can be explained as resulting from the occurrence of three mechanisms: *issue promotion by international actors*, *international policy promotion* and *issue promotion by domestic policy entrepreneurs* (figure 4.3).

The mechanism of *issue promotion* applies to both the periods between 2001-2005 and from 2011 onwards. The mechanism refers to the consistent actions of either international or domestic policy entrepreneurs to increase attention to an issue of concern; here malnutrition (Tanner et al. 2019; Faling et al. 2018b). Policy entrepreneurs are change agents who possess knowledge, power, tenancy and/or luck to exploit opportunities so as to maximise their impact in complex and unpredictable policy environments (Cairney 2018; Mintrom and Norman 2009; Kingdon 1984).

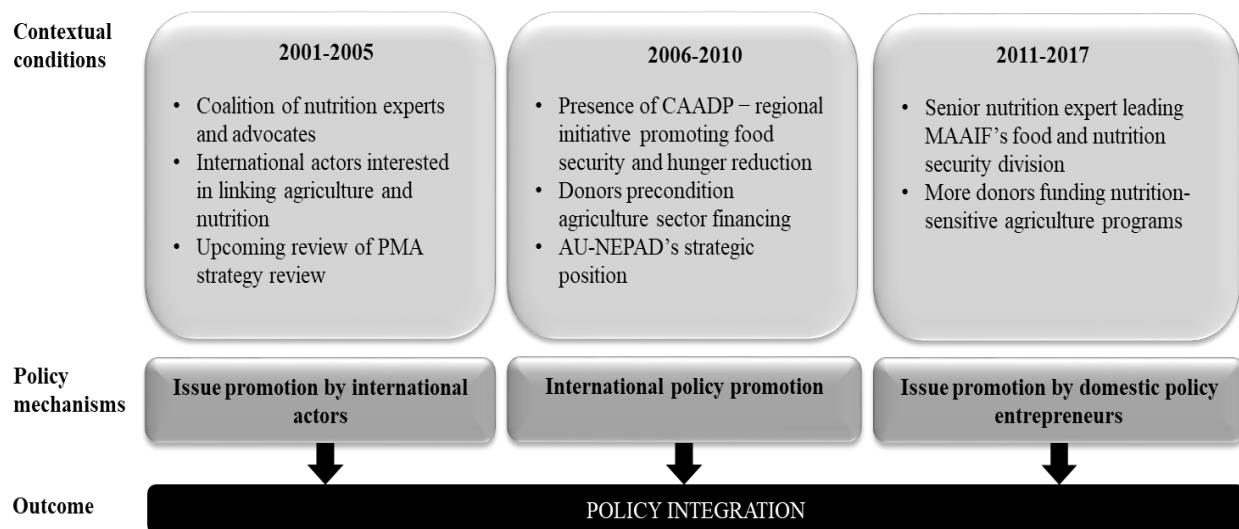


Figure 4.3: Contextual conditions, policy mechanisms and nutrition integration outcomes in MAAIF

The issue promotion mechanism differs from *international policy* promotion, which involves the transfer of *existing* programs across countries; usually with preconditioned aid. The first instance

of issue promotion showed between 2001 and 2005 in the efforts of an international actor, the USAID funded Agriculture Advantage project (TANA), to create a critical mass of influential advocates to inspire and support MAAIF to integrate nutrition in its agricultural policies. Three co-existing conditions activated this mechanism: donor interest in linking agriculture and nutrition, the presence of a coalition of nutrition experts, and the emerging opportunity to revise the Plan for Modernization of Agriculture (PMA) strategy. The emphasis on linking agriculture and nutrition created an opportunity for TANA to facilitate advocacy trainings for coalition members; and to jointly reflect on Uganda's nutrition data to design messages. Respondents mentioned that influential advocates emerged from the empowered coalition (3, 8, 20). These, frequently leveraged their relationships with the decision makers in MAAIF's PMA secretariat, to accentuate the effects of undernutrition on productivity and poverty alleviation during deliberations (5, 22, 23). As such, champions, including the MAAIF's minister, arose and urged PMA to appoint a food and nutrition security subcommittee, while also ensuring the provision of technical input in the PMA strategy during its review (T. Benson 2008; Johnson-Welch et al. 2005). Moreover, the advocates utilised the trust created with MAAIF to further negotiate for a standalone integrated nutrition policy. The policy formulation process, championed by the empowered minister and supported by FAO, culminated in the launch of the food and nutrition policy in 2003 (22).

The second instance of issue promotion, happening from 2011 onwards, is attributed to the entrepreneurial actions of a senior bureaucrat who strived to broaden perspectives vis-à-vis nutrition within the ministry. This mechanism was activated by the appointment of this experienced nutrition expert to lead the food security and nutrition division, and by increased donor support for nutrition-sensitive agriculture programs that he could draw from, such as the Global Agriculture Food Security Programme (15, 17, 23). Leveraging on past interactions with other MAAIF managers, the bureaucrat regularly articulated nutrition concerns to them; using frames that aligned with the mandates of different departments and informed by the content of the overarching MAAIF policies, which strengthened issue legitimacy (23). Additionally, the bureaucrat drafted nutrition technical briefs to inform sectoral policies and lobbied the ministry's leadership to ascertain conformity across units (15, 16, 17, 19).

In the interlaying period 2006-2010, nutrition policy integration resulted from the mechanism of *international policy promotion*. However, unlike in the MoH, the mechanism occurred in a more

indirect manner: international actors promoted nutrition policy efforts through an intermediary regional organisation, the AU-NEPAD. Such intermediary organisations are often locales for joint dialogues among countries about “international” policy ideas; and present a platform to pressure states to emulate desired policy models for legitimacy (Stone 2012; D. Benson and Jordan 2011). The mechanism was activated by the emphasis donors put on making real work of the CAADP after the 2008 World Development report and 2007-2008 food price crises. Within the AU-NEPAD, senior agriculture bureaucrats met in interactive sessions to deliberate on CAADP, distribute program templates, and monitor progress, as such contributing to the adoption of these principles in sectoral policies (17, 18, 22). International actors, like FAO, World Bank, and IFPRI technically and financially facilitated these interactions. The PMA Secretariat, a member of the CAADP country technical committee, played a particularly important role in transferring these ideas back to the ministry. An important event was the 2009 pre-CAADP roundtable workshop, where donors affirmed their willingness to contribute to the MAAIF’s budget. A respondent stated that this “financial incentive immensely hastened MAAIF policies featuring the ‘correct nutrition language’” (20). Apart from such relabelling, a food and nutrition division was created within the MAAIF, and nutrition experts were recruited. The latter further articulated nutrition actions in consecutive policy consultations (19, 20).

#### **4.4.3 Ministry of Gender Labour and Social Development (MGLSD)**

*Outcome:* Whereas the ministry enacted the Employment Act, which promotes child care and protection at birth, in 2006, it only became more prominently involved in nutrition policy from 2011 onwards. This was shown by a substantial growth in explicit nutrition-focused goals and instruments. Between 2011 and 2017, the MGLSD adopted seven new nutrition-sensitive interventions. The mix of instruments explicitly addressing nutrition include: technical guidelines, training of community development officers, and media campaigns, social protection grants and a nutrition coordination committee.

*Contextual conditions:* The early 2000s witnessed renewed commitment from political and international actors to promote child growth and development, which resulted in the enactment of the Employment Act in 2006. Moving forward to the UNAP process in 2011, MGLSD was represented by senior bureaucrats who committed to this agenda, and whose proposals would strengthen ongoing efforts to reposition MGLSD to realise the mandate of mobilizing communities

for development (25, 27, 33). Equally important was the rise in international actors interested in facilitating nutrition integration into ‘new’ sectors, and an increase in donor financing of nutrition-sensitive programs (26, 28).

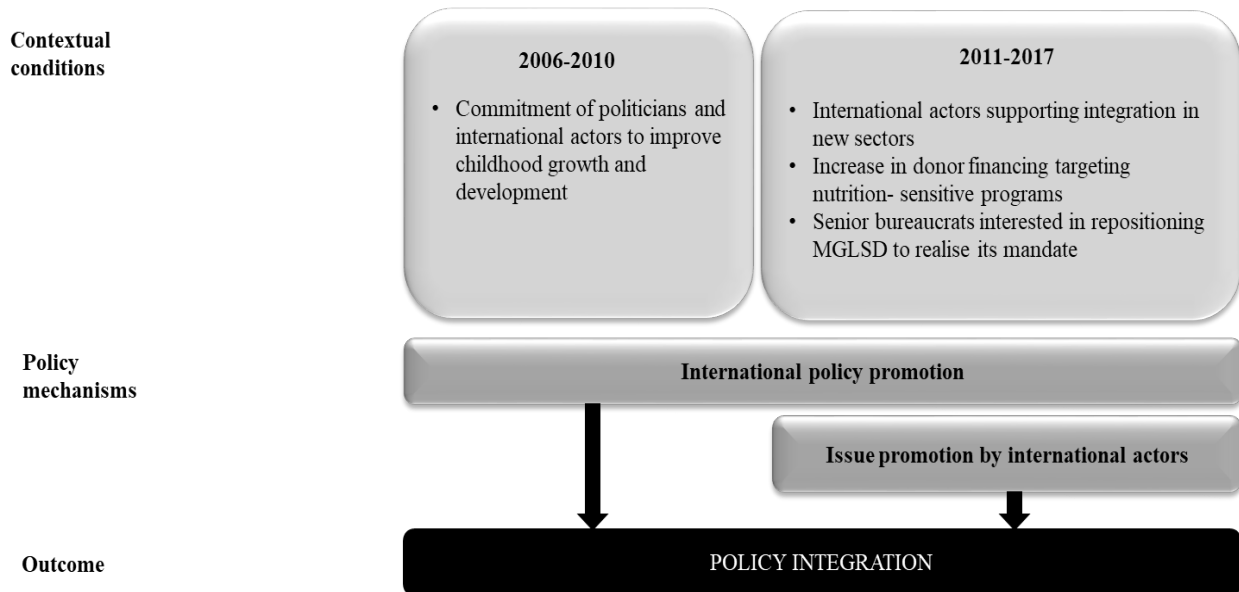


Figure 4.4: Contextual conditions, policy mechanism and nutrition integration outcomes in MGLSD

*Mechanisms:* Increased nutrition integration in MGLSD resulted from two co-existing mechanisms: *international policy promotion* and *issue promotion by international actors*, see figure 4.4.

The mechanism of *international policy promotion* explains nutrition integration in the period between 2006 and 2010, and from 2011 onwards. Respondents stated that UNICEF continually advanced financial assistance to MGLSD to implement various predefined nutrition-related programs. This mechanism was initially activated by politicians and international actors pledging to improve childhood development. However, from 2011 onwards, it was triggered by donor-interest in nutrition-sensitive programs, the co-occurrence of the issue promotion mechanism which sensitised senior MGLSD bureaucrats on nutrition; and a prevailing agenda to revive the sector’s community mobilisation policies (16, 25, 33). Respondents stated that policy integration resulted from UNICEF expanding its preconditioned funds to MGLSD to include explicit nutrition programs focussed on early childhood (25, 26, 27). Understanding the international interest in nutrition sensitive policies and the opportunity it presented to revive MGLSD’s community

development policies, a senior bureaucrat utilised the support from UNICEF to mobilise officers across sector departments and districts to participate in the nutrition program. These officers participated in various consultant assisted workshops and field activities, where they adapted generic templates on nutrition in early childhood to the Ugandan context. A respondent said that “involving different departments not only boosted ownership, it motivated the integration of nutrition integration in various long-term MGLSD programs; which contributed to elevating the status of the community development department” (25).

Beside the policy promotion mechanism, respondents mentioned that from 2011 onwards USAID’s FANTA repeatedly engaged senior MGLSD bureaucrats in advocacy dialogues and workshops to sensitise them on nutrition (5, 16, 27); and inspire action within the ‘new’ sector. This process depicts the mechanism of *issue promotion by international actors*. The mechanism was activated by two conditions: international actors supporting nutrition integration into ‘new’ sectors; and the presence of senior bureaucrats who were enthusiastic about repositioning the MGLSD to achieve its community mobilisation mandate. Respondents stated that the senior bureaucrats frequently joined the FANTA supported nutrition discussions, where they participated in designing messages aligned to MGLSD’s community mobilisation mandate (5, 25, 33). Consequently, “the informed bureaucrats requested FANTA– which was seeking new policy venues requiring technical assistance– to provide technical reviews and integrate nutrition into selected MGLSD policies” (25). This presented openings for additional deliberations with the sector staff to further increase attention to nutrition. For instance, the bureaucrats requested support to orient its intra-departmental nutrition committee and liaised with FANTA to develop the other nutrition related instruments (26, 27).

#### **4.4.4 Office of the Prime Minister (OPM)**

*Outcome:* The OPM traditionally only dealt with nutrition concerns during emergency situations. This changed with the adoption of UNAP in 2011, after which the OPM’s goals and instruments broadened to creating an enabling policy environment and coordinating cross-sector nutrition interventions across government. The new instruments deployed comprised; the multisector nutrition committee, a national nutrition forum, and capacity building for sector and district nutrition committees. From 2016, this was followed by a process of disintegration, shown by a reduction of both goals and instruments.

*Contextual conditions:* The OPM nutrition coordination desk was created in 2012, informed by a presidential decree and accompanying cabinet memo, following from an appeal by international actors. The adoption of UNAP was followed by increased support from international actors for nutrition coordination and pressure on OPM to demonstrate credibility in executing the “new” duties, despite lacking nutrition technical expertise. However, whereas funding for nutrition coordination increased in 2016, OPM continued to lack precise action plans and experienced tensions with other sectors and international actors (13, 28,31).

*Mechanisms:* The initial increase in nutrition policy integration is explained by the occurrence of the mechanism of *issue promotion by international actors*. The subsequent decline can be attributed to a *turf war mechanism* (figure 4.5).

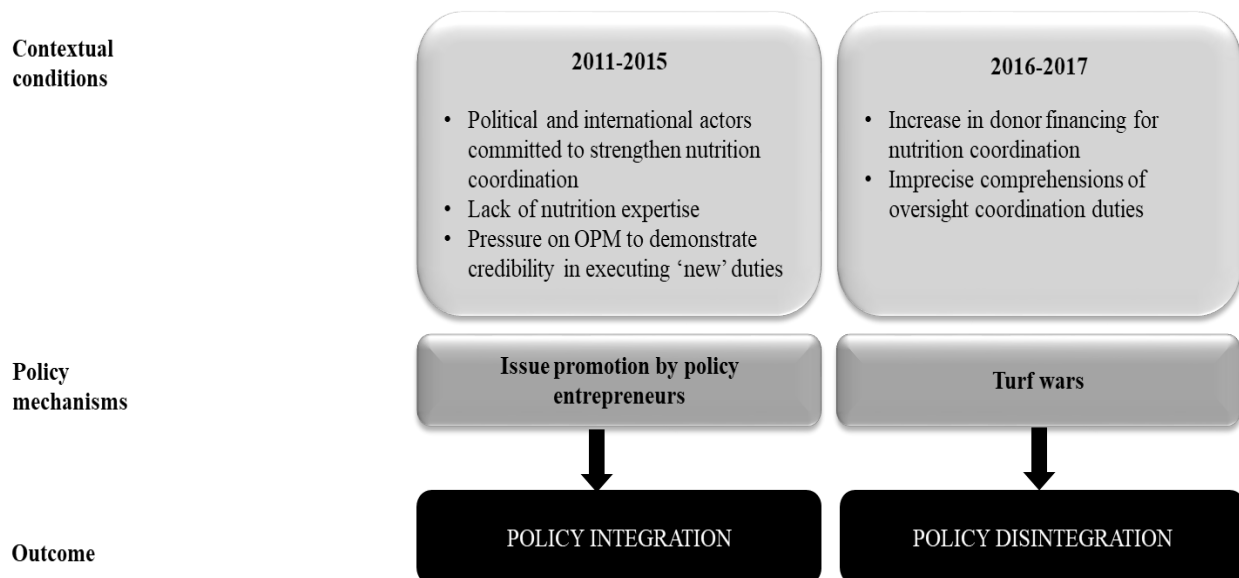


Figure 4.5: Contextual conditions, policy mechanism and nutrition integration outcomes in OPM

The growth in nutrition integration between 2011 and 2015 resulted from the *issue promotion by international actors mechanism*. Three international actors – UN-REACH, USAID’s FANTA and UNICEF – simultaneously and competitively strove to kindle OPM’s interest; and strengthen its capacity to prioritise and coordinate the UNAP implementation across sectors. The mechanism was activated by the presence of international actors devoted to increasing the capacity of OPM to coordinate nutrition policy; and the pressure on the sector to show credibility in executing its ‘new’ duties. The absence of nutrition expertise in OPM enabled the international actors to concurrently

promote varied coordination perspectives drawing from their separate workplans. All of these ideas were adopted to avoid frustrating any of the international partners. For example, the international actors either seconded expert personnel, provided technical assistance or financial facilitation for nutrition activities (3, 10, 30, 31). Besides, donors through the SUN Movement Secretariat regularly pressured OPM to provide coordination reports. The regular request for reports, combined with the tremendous improvement in the administrative and technical capacities, catalysed the policy integration, which in turn reinforced its authority to coordinate the sectors involved.

The *disintegration* process that started in 2016 can be attributed to the occurrence of a *turf war mechanism*. Turf wars refer to conflictual, unproductive interactions between organisations (or sub-entities) in response to perceived threats regarding resources, competences or credit taking (Peters 2015b; Herrera et al. 2014). As these interaction patterns undermine collaboration, they typically have adverse policy integration effects (Herrera et al. 2017). The turf war mechanism was activated by the simultaneous increase of donor funding for nutrition governance, without the presence of a clear coordination plan. This situation meant that international actors bypassed the technical sectors, notably MoH and MAAIF, and engaged directly with OPM to ascertain government ownership of their programs. As technical sectors feared that the OPM would overstep administrative boundaries and monopolise donor initiatives, conflicts between departments arose. These conflicts were reinforced by the secondment of personnel from international organisations to OPM. Respondents indicated that seconded personnel prioritised the interests of the organisations to whom performance accountability was expected and rewarded (30, 31). As a result, tensions arose from perceptions of actors' activities being subordinated to priorities of highly funded agencies (5, 14, 31), insufficient information sharing and exclusion of some from strategic dialogues (22, 30, 32, 34). The management of these tensions required most of the OPM's capacity, and resulted in reduced attention to nutrition integration across strategic policies.

## 4.5 Discussion

This paper started with the question of what causal mechanisms explain the observed patterns of nutrition policy (dis)integration in Uganda. Our analysis reveals that six distinct policy mechanisms shaped nutrition (dis)integration processes across sectors between 2001 and 2017, (see table 4.1).



Increases of policy integration are explained by four mechanisms: *international policy promotion*, *issue promotion by international actors*, *issue promotion by domestic policy entrepreneurs* and *instrumental policy learning*. Conversely, two mechanisms led to policy disintegration: *leadership contestation* and *turf wars*. All mechanisms proved to be activated by different configurations of contextual conditions that were time- and organisation-specific. Of these mechanisms, the policy entrepreneurship types, particularly international policy promotion and issue promotion by international actors, proved to be the most frequent explanation for increases in nutrition integration. These donor-driven mechanisms occurred across sectors and over varied time periods.

Comparing the policy mechanisms in the four sectors (MoH, MAAIF, MGLSD, OPM) allows us to distil three new key insights about nutrition policy processes in Uganda and beyond. First, most policy integration observed in the ministries resulted from various entrepreneurial activities of international actors, especially UNICEF, USAID and the World Bank. This finding resonates with previous observations in the nutrition governance literature of international agencies as key precursors of malnutrition-centred policy change (Harris 2019a; Pelletier et al. 2018; FAO 2017b). We show that these international actors exert their influence through distinct types of mechanisms: both transferring pre-existing programs through the use of financial incentives (*policy promotion*), and a looser, more flexible mechanism of providing technical assistance to empower domestic actors to strengthen nutrition integration (*issue promotion*).

**Table 4.1: Summary of the policy mechanisms explaining nutrition policy (dis)integration in Uganda**

	Type of mechanism	Category	Time duration			
			2001-2005	2006-2010	2011-2015	2016-2017
Policy integration mechanisms	Policy entrepreneurship	International policy promotion	MoH	MAAIF	MGLSD	
		Issue promotion by international actors	MAAIF	-	MGLSD, OPM	
		Issue promotion by bureaucrats	-	-	MAAIF	
	Instrumental policy learning		-	MoH	-	
Policy disintegration mechanisms	Leadership contestation		-	-	MoH	
	Turf wars		-	-	-	OPM

Whichever of these mechanisms was triggered, proved to be influenced by the donor organisations' interests and development philosophies (cf. Balarajan and Reich 2016; Morris et al. 2008). Donor organisations often make their support conditional on the adoption of policies that are in line with their preferences. Given that ministries usually require financial assistance (cf. Hoey and Pelletier 2011), international agencies apportioning funds directly into sectoral budgets proved a key incentive for policy change. Similarly, new global agendas, e.g., the Scaling Up Nutrition initiative (SUN 2016), presented opportunities to these actors to deploy entrepreneurship activities to reduce sectoral nutrition gaps. In spite of the heavy reliance on external actors, these activities often resulted in some form of long-term spin-offs, such as instrumental policy learning among domestic policymakers.

Second, whereas these international actors operated across most sectors, surprisingly few substantive exchanges emerged between the bureaucrats of the different ministries. This suggests that policy-related interactions among sectors have been fragmented and outwardly oriented. This was different for the Office of the Prime Minister, which invested considerably in managing intersectoral relations; though this did not prevent the emergence of *turf wars* leading to disintegration. This observation is paradoxical, considering that policy integration is ideally expected to foster linkages and learning processes across sectors (cf. M. D. Jones and Jenkins-Smith 2009). Turf wars mainly arose from the absence of an explicit cross-sectoral coordination plan, imbalances in donor resources, and the struggle to secure government ownership of implemented programs. These findings are consistent with observations of organisational power struggles in previous nutrition governance studies; suggesting that well-functioning coordination regimes remain an important point of concern (Balarajan and Reich 2016; Morris et al. 2008). Interestingly, these turf wars were restricted between the OPM and the ministries of Health and Agriculture; we did not observe noticeable struggles between the latter two.

Third, despite of the key role of international actors, not *everything* depended on their activities. We identified examples of change being realised by domestic actors, through the *issue promotion by domestic policy entrepreneurs* and *instrumental policy learning* mechanisms, especially in the Ministries of Agriculture and Health. Even though these mechanisms occurred less frequently, they provide important leverage points for more sustained nutrition integration within sectors. The availability of integrative capacities and leadership are generally considered essential for genuine

and sustained shifts towards strengthened policy integration (Candel 2019). Our analysis shows that the presence of bureaucrats with considerable nutrition expertise and experience of participating in high-level sectoral policy processes was a vital stimulus for these mechanisms. The existence of overarching policy frameworks, like investment strategies that included nutrition, provided opportunities for these entrepreneurial actors to link nutrition concerns to sectoral policy efforts. This finding suggests that although international efforts remain crucial, the importance of sectoral champions should not be underestimated (Hoey and Pelletier 2011). Interventions that foster the emergence of such domestic entrepreneurs include: training nutritionists and seconding them to occupy strategic positions across sectors; strengthening their capacities to negotiate, mobilise resources and develop networks with different audiences; and creating specialised nutrition units in sectors. These findings correspond with previous suggestions by Faling et al. (2018a) and Stone (2019) that fostering policy change depends on the reputation and adaptability of entrepreneurs, their ability to gain access to policy communities and the presence of organisational resources. As synthesised by Baker et al. (2018), such enabling conditions reinforce the organisational and leadership capacities of nutrition networks, and consequently contribute to sustaining actions to reduce malnutrition.

#### **4.5.2 Future research**

Based on our analysis, the immediate question for further research is how policy integration works out during the *implementation* phase. Many nutrition studies have shown that considerable discrepancies between policy design and the delivery of nutrition services can occur (Tumilowicz et al. 2018). Similarly, research on integrated policy strategies has shown that these often do not proceed beyond paper realities (Casado-Asensio and Steurer 2016). It would therefore be valuable to complement the current body of knowledge with bottom-up perspectives of how and to what extent collective government action to improve malnutrition is ultimately reached during implementation.

Additionally, concerted government action for nutrition is not solely a technocratic effort (cf. Candel 2019), and is determined by a range of other actors. For example, the influence of politicians and formal political institutions on nutrition policies remains underexplored (but see: Natalicchio et al. 2009; Haddad et al. 2014). Future studies can provide a better understanding of why

politicians engage in nutrition policy processes in the first place; possibly resulting in leverage points for strengthening political commitment and policy continuity.

Lastly, we encourage the development of a comparative research agenda, to study whether nutrition policy integration processes in other (Sub-Saharan African) countries can be explained through similar policy mechanisms. Our exploratory study may provide a good starting point for formulating hypotheses about context-mechanism interactions in nutrition governance.

#### **4.5.3 Governance implications and conclusion**

In terms of governance implications, three key recommendations can be distilled from our study. First, currently, Uganda's nutrition policy processes are mainly shaped by international actors, as a result of which policy integration remains highly unpredictable and prone to instability given the disparities among actors involved, their interests and resources (cf. Baker et al. 2019; Morris et al. 2008). Developing both the administrative and political leadership for nutrition at various governance levels would enhance country-driven policy initiatives. Strengthening domestic leadership would also make the prioritisation of malnutrition concerns over competing interests more likely in cases of conflicting objectives.

A second recommendation is to strengthen domestic ownership and integration-fostering capacity within and across sectors. Our study uncovered various conditions activating integration-fostering mechanisms, that would therefore be worth strengthening, including: recruiting nutrition experts in sectors, securing explicit nutrition financing, technical and policy training in nutrition for bureaucrats and developing clear cross-sector accountability systems. Establishing these conditions, though resource intensive, is a necessary step towards sustaining nutrition integration at system level (cf. Candel 2019; Babu et al. 2017b).

Third, we recommend investing in policy-oriented learning processes to enable multiple departments to share their information, support the collective identification of policy gaps and build consensus on desired course of action. Our analyses showed that such interactions across sectors remain sparse.

Altogether, this study showed how a mechanistic approach can provide a more refined understanding of policy successes and failures in nutrition governance. Whereas integration-

fostering mechanisms cannot be automated, both government and international actors working to scale up investments in nutrition need to consider and invest in the contextual conditions that allow for sustained nutrition policy integration and, ultimately, a more effective delivery of nutrition services. Only by following such a course of action, long-term global nutrition goals, such as SDG2, stand a chance of becoming more than paper realities.



## **Chapter 5**

### **Integrating/disintegrating nutrition actions in service delivery: The practices of frontline workers**

This chapter is submitted to a journal as: Brenda Shenute Namugumya, Jeroen J.L. Candel, Elise F. Talsma, Catrien J.A.M. Termeer, Jody Harris (sub). Integrating/disintegrating nutrition actions in service delivery: The practices of frontline workers.

**Abstract**

Integrating nutrition actions into service delivery in different policy sectors is an increasing concern. There exists discrepancies between policies as adopted and actual service delivery. This study applies a street-level bureaucracy perspective to understand frontline workers' practices that enact or impede nutrition integration in services and the conditions galvanizing them. This exploratory study examines the practices of 45 frontline workers employed by different departments in two Ugandan districts. The workers incur different demands and resources arising at societal, organisational, and individual level. Hence, they adopt nine co-existing practices that ultimately shape nutrition service delivery. Nutrition integration is accomplished through: 1) ritualizing task performance; 2) bundling with established services; 3) scheduling services on specified days; and 4) piggybacking on services in other domains. Disintegration results from 5) non-involvement and 6) shifting blame to other entities. Other practices display both integrative and disintegrative effects: 7) creaming off citizens; 8) down prioritisation by fixating on a few nutrition actions; and 9) following the bureaucratic 'jobsworth'. Integrative practices are driven mostly by donors. Sustaining services beyond timebound projects necessitates institutionalizing demands and resources within government systems. Understanding frontline workers' practices is crucial for identifying policy solutions to sustain nutrition improvements.

**Keywords:** Nutrition practices; Street-level bureaucracy; nutrition policy; policy integration; Uganda



## 5.1 Introduction

There is global consensus on the need to integrate nutrition-related actions into the service delivery systems of different policy sectors as a measure toward the sustainable reduction of malnutrition and its effects (Development-Initiatives 2018; WHO 2013). Following the Scaling Up Nutrition Movement agenda, governments and international actors have invested in developing integrated nutrition strategies (INSs), which aim to foster an enabling policy environment that: i) inspires the continued incorporation of nutrition objectives and instruments into the policies of different sectors (e.g. health, education, agriculture); ii) facilitates government organisations to prioritise nutrition actions in service delivery, and iii) enables the convergence of goods and services from different sectors in the same households and individuals (Menon et al. 2019).

Despite these ambitions, there exists considerable discrepancies between nutrition policies as adopted and the ultimate delivery of nutrition services (Tumilowicz et al. 2018), with potential consequences for the attainment of policy goals. Policy science studies show that integrated policy strategies often fail to be delivered as intended (Casado-Asensio and Steurer 2016), and call for more refined understanding of how integrative demands are experienced and moulded into action on the ground (Candel 2019). Currently, limited nutrition studies exemplify what *actually* happens during implementation. This specifically concerns the dynamics of integrating nutrition actions into the daily operations of frontline workers (Nsiah-Asamoah et al. 2019; Fanzo et al. 2015). Frontline workers are employees of public and private sector entities who interact directly with citizens and have wide discretion over the allocation or sanctioning of benefits associated with their daily work (Lipsky 2010). Additionally, there are minimal insights about how frontline workers of the sectors considered as *new* entrants (e.g. agriculture, social development, education) to this policy issue deliver services. Though, the frontline workers' actions are affected by various contextual conditions (Salam et al. 2019; Nisbett et al. 2017), few systematic studies compare these conditions across policy sectors and implementation contexts.

There is increasing pressure on countries to implement multi-sectoral strategies at scale to sustain the positive changes in their nutrition situation. It is therefore important to examine how integrated nutrition action materialises in service delivery. One way to expand our understanding is to reflect on the practices of frontline workers offering services to citizens. Thus, this research investigates: *the practices adopted by frontline workers to either enact or impede nutrition integration during*

*service delivery, and the contextual conditions that galvanise them.* Recognizing these practices and their activating conditions is important for monitoring the effectiveness of nutrition policies and focusing efforts on designing strategies to sustain achievements in integrating nutrition interventions into service delivery.

We adopt a bottom-up implementation perspective by applying the street-level bureaucracy (SLB) approach to explore frontline workers' everyday practices. The SLB approach argues that frontline workers confront various pressures from multifaceted settings that influence them to make decisions discretionarily and establish coping routines; and these decisions effectively become the policies that they implement (Lipsky 2010). This implies that variations in the implementation context shapes services in different ways (Hupe and Buffat 2013). Hence, we study frontline workers' practices and the conditions influencing them for insights about nutrition integration/disintegration on the ground. We identify and compare the practices of the workers expected to deliver nutrition services in Uganda.

Uganda loses approximately 5.6 percent of annual Gross Domestic Product because of undernutrition (Hoddinott 2016). Despite childhood stunting decreasing to 29 percent, regional variations range between 14 percent and 41 percent. Other nutrition indicators show similar regional disparities (UBOS and ICF 2018). The country has endorsed INSs since 1996 to guide concerted actions of different actors tackling malnutrition. Recent studies indicate some shifts toward increased nutrition policy integration across ministries (Namugumya et al. 2020b; Turcan and Bene 2017), making Uganda a good case to explore how integrative demands to improve nutrition are enacted or impeded by frontline workers.

The next section operationalises integrated government action and SLB and elaborates the contextual demands and resources. Section 3 presents the methodological design and analytical approach. Results on the conditions enabling or constraining nutrition services and the frontline workers' practices are detailed section 4. Lastly, we reflect on how integrative nutrition governance is realised on the ground.

## 5.2 Operationalizing integrated government action and street-level bureaucracy

Theoretically, successful policy integration processes is expected to result in *integrated government action* during service delivery (Candel 2019; Cejudo and Michel 2017). This implies that the presence of INSs inspires interactions across actors, policy sectors and governance levels to continuously translate these policies into objectives and interventions that contribute to a common goal, i.e. reduce malnutrition. The concept is discussed under different labels, including joined-up government (Barling et al. 2002), whole-of-government (Christensen and Lægreid 2007), and multisectoral action (S. Bennett et al. 2018). We define integrated government action as the continuous efforts of actors in different policy sectors to holistically improve the responsiveness and effectiveness of services provided to citizens to reduce malnutrition (Singer et al. 2018).

Most studies on integrated government action have focused on the top-down alignment and coherence of policies, institutions, and administrative operations (Casado-Asensio and Steurer 2016; Pomeroy-Stevens et al. 2016), inferring governments' capacity to realise policy goals. However, it is extensively argued that the practices observed during implementation are determined by various multifaceted interactions in a given context, rather than by policy prescriptions alone (Lipsky 2010). Therefore, INSs are not automatically adequate to galvanise nutrition integration in service delivery. Thus the need for bottom-up approaches to identify the actual practices of frontline workers.

We apply the SLB perspective to examine how and why integrative demands are or are not realised on the ground. This perspective suggests that frontline workers encounter varying conditions during service delivery that lead them to establish routine practices which determine how citizens perceive policies (Lipsky 2010 pp. 13-25). We define practices as the habitual actions and behaviour efforts employed by frontline workers during their day-to-day work interactions with citizens, that is, ways in which they negotiate work circumstances to allocate – or withdraw – nutrition services (cf. Lipsky 2010). On the one hand, ideal practices for frontline workers may be identified from the nutrition literature, which distinguishes several nutrition-specific and nutrition-sensitive interventions (FAO 2017a; Ruel and Alderman 2013; Bhutta et al. 2013). Briefly, nutrition-specific interventions address the immediate determinants of foetal and child nutrition and development; and nutrition-sensitive interventions focus on the underlying determinants of

good nutrition. However, focusing on these idealised interventions only is too constricted to represent the dynamic interactions determining policy implementation.

On the other hand, Lipsky (2010 pp. 83) differentiates three main patterns of practices developed by frontline workers to avert confrontations associated with encountered work pressures. These are: first practices that limit citizens' demands and maximise the use of available resources, such as queuing citizens, withholding information, and limiting access to personnel. These strategies enable the structuring of how services are distributed (Tummers et al. 2015). Second, practices that modify frontline workers' understanding of their job so as to align with available resources to achieve targets, like preferential selection of citizens and favouring speed over need (Brodkin 2011; Lipsky 2010). These practices potentially control the supply of services. Third, practices that modify citizens' perceptions, to favour making gaps between accomplishments and objectives acceptable, including rubber stamping judgements and drawing boundaries (Belabas and Gerrits 2017). Generally, this categorization implies that nutrition integration into service delivery is shaped in divergent ways.

Several SLB studies rationalise that frontline workers adopt practices to manage the imbalances usually incurred between demands to act (action prescriptions) and resources available to realise them (action resources) (Hupe and Buffat 2013). These studies synthesise various multidimensional contextual conditions, depicting the demands and resources that interact at individual, organisational, and societal level to determine services. The conditions with potential to influence nutrition integration emerge from this body of literature, as highlighted in table 5.1.

Regarding individual-related conditions, frontline workers have varied job descriptions, attitudes toward citizens, expertise, and perceptions of appropriate behaviour. These may be influenced by professional and social networks (Hill 2003). Each condition is important in explaining the response to integrative demands. Increasing frontline workers' knowledge of integrative demands, and the associated professional gains, may facilitate service delivery (Ling et al. 2012).

Organisation-related conditions are determined by the administrative and management structures to which frontline workers are obligated to account. An organisation's capacity to influence its workers to integrate an issue depends on its mandate, collective beliefs, structure, and resources required (Evans et al. 2016). Organisational measures contribute to legitimizing or excluding

certain practices of frontline workers (Fuertes and Lindsay 2016; Brodtkin 2011; Tummers et al. 2015). That is, whereas guidelines may increase similarities in adopted practices, and managerial supervision strengthens abiding by rules (integrative demands), resource constraints are associated with reduced task prioritisation (disintegration) (Hupe and Buffat 2013).

**Table 5.1: Conditions shaping how frontline workers integrate/disintegrate nutrition services**

<i>Levels</i>	<i>Action prescriptions (demands)</i>	<i>Action resources</i>
Society (sub-county, district, national socio-political)	Policies (e.g. integrated nutrition strategies)	Information
	Development actors (ideologies, expectations)	Nutrition budgets
	Citizens' expectations	Training (knowledge)
	Performance measures	
Organisation (department, ministry)	Policies (guidelines)	Training (knowledge)
	Performance measures	Information (guidelines)
	Professional norms and conduct	Nutrition budgets
	Supervision	Management
Individual	Competing job tasks (time)	Education (competences)
	Expertise of frontline worker	Professional experience
	Client numbers	Freedom to decide (discretion)
	Personal beliefs and values	Incentives for working

Adapted from Hupe and Buffat (2013), modified by the current authors based on the nutrition literature.

Societal-related conditions comprise prerequisites from international actors and administrative superiors, policy ideologies, and client caseload. These influences inevitably affect both individual- and organisation-related factors (Brodtkin 2011; Mosse 2004). Nutrition policies are largely determined by international actors (Namugumya et al. 2020a; Harris 2019a; Pelletier et al. 2018). However, these actors have different modalities for realising development that affect practices. High investment is expected to motivate nutrition integrative practices.

We specifically explore the individual-, organisation-, and societal-related conditions that explain the nutrition integrative/disintegrative practices of frontline workers. These conditions are expected to differ within and across policy jurisdictions and geographic boundaries, thereby enabling comparison of the practices of different frontline workers. Identifying the actual conditions propelling the emergence of desired and undesired practices is crucial for determining strategies to facilitate the persistence of nutrition integration in service delivery systems.

### 5.3 Study design

#### 5.3.1 Research design

Few empirical studies investigate the daily experiences of frontline workers who implement INSs in low-income countries (Tumilowicz et al. 2018). Therefore, the design of this study is exploratory. This approach ascertains comprehensive details about the contextual conditions and practices leading to nutrition services provision. Using qualitative inquiry methods, we conduct a comparative analysis of the services offered in two districts in Uganda – Moroto and Namutumba. We specifically pay attention to the practices shaping nutrition (dis)integration and their contextual determinants.

#### *Research context*

We selected the districts based on the prevalence of malnutrition measured by stunting and investment in nutrition programs reflected in the presence of international actors. Since the 1960s, Moroto has continually hosted a high number of international actors because of the persistently high prevalence of undernutrition. The childhood stunting rate for Moroto is 33 percent (WFP and UNICEF 2017). In addition to the government budget, Moroto hosts several active nutrition projects supported by donors, especially UN agencies and USAID (KRSU 2016). In Namutumba, the childhood stunting rate is 28 percent (Kuziga et al. 2017). District operations are funded mainly by government, and minimal nutrition-focused projects supported by World Bank and USAID. Our focus is limited to the frontline workers in the government departments of health, agriculture, and community development that are necessary for implementing policies at sub-county level (GOU 2011).

#### 5.3.2 Data Collection

#### *Respondents*

The primary respondents comprise frontline workers in the departments of health, agriculture, and community development representing all the sub-counties in each district (table 5.2). Prioritisation of the departments was informed by Namugumya et al. (2020b), who illustrate a general shift toward increased nutrition integration in the policies of their corresponding ministries at national level. To ensure that the typical practices of frontline workers on the ground are captured, we

purposively selected health workers operating in the lowest units in Uganda's health system structure; agriculture extension workers (AEWs); and community development officers (CDOs). To gain additional insights into the contextual factors shaping the nutrition services, we interviewed the sub-counties and districts management officials, and NGOs staff supporting the nutrition-related projects.

**Table 5.2: Summary of respondents**

Level of operation	Categories of respondents	Respondents per district		Area of focus
		Moroto	Namutumba	
Frontline workers (Service delivery)	Health workers	12	14	Practices and contextual factors
	Agriculture extension workers	5	4	
	Community development officers	5	5	
Administration (government)	Sub-county	6	5	Contextual factors
	District	4	4	
Non-government actors (donors, INGO, CBO)		4	3	(organisation and societal)
Total respondents		36	35	

### *Methods*

We conducted face-to-face thematic interviews between February and June 2018 in Moroto and Namutumba. The interviews with frontline workers focused on four broad areas, synthesised from both nutrition and SLB literature (table 5.1): 1) understanding of (mal)nutrition; 2) job descriptions, including nutrition actions; 3) individual experiences of providing nutrition services; and 4) nutrition-associated work demands and resources. Interviews with sub-county and district management and NGO actors prioritised the demands and resources issued and the frontline workers' practices. This method enabled exploration of the workers' experiences in their operational context and confirmation of findings that were challenging to understand. We conducted exit meetings with the district nutrition officers and NGO actors to verify the preliminary insights about the nutrition actions, work conditions and established routines. To clarify the demands and resources, interview data was complemented with local government policy reports.

### 5.3.3 Data analysis

We transcribed and translated into English all the interviews to organise and analyse them using *Atlas.ti*. Data were coded based on the three thematic sensitizing ideas – nutrition actions, conditions, practices – described in section 5.2 (Supplementary material C). First, we coded the nutrition actions, using the categorization of specific and sensitive actions to identify the perceived services provided. Second, we coded the work conditions specifying action prescriptions and resources at individual, organisation, and societal level. Third, we coded for practices if the data reflected our description of the patterns of practice. Additional codes emerged inductively from the data e.g. ‘pre-existing relationships’ and ‘non-involvement’. Recurring subthemes were identified for each thematic area for progressive analysis. Practices were identified abductively. Authors continuously interpreted the empirical descriptions of the frontline and compared and embedded them in the language theorised in relevant implementation literature (Timmermans and Tavory 2012).

## 5.4 Results

### 5.4.1 Nutrition services in frontline workers’ everyday work

Frontline workers’ perception of what constitutes nutrition work in their everyday activities was not necessarily aligned with the conceptualization of nutrition-specific and nutrition-sensitive actions in the nutrition literature. Most workers perceived nutrition services as the activities following from *explicit* nutrition projects of donors or government. Although their daily activities often comprised actions that are either nutrition-specific or nutrition-sensitive according to the literature (table 5.3), the workers did not always perceive them as nutrition work.

The nutrition services varied mainly among frontline workers in different departments. Additionally, the scope of these services differed depending on geographic boundaries, departments’ historical involvement, and present efforts to address malnutrition. Moroto proved to have a larger diversity of services than Namutumba. In both districts, health workers provided most nutrition services; this can be attributed to the fact that nutrition initiatives were traditionally delivered through the health system. Various AEWs and CDOs expressed uncertainty about their



nutrition work and considered their departments' activities to be ambiguous. Most of their everyday tasks did not have explicit nutrition objectives.

**Table 5.3: Nutrition services as perceived by frontline workers**

<b>Frontline workers</b>	<b>Nutrition services</b>	<b>Other nutrition-specific/nutrition-sensitive services (but not perceived as such)</b>
Health workers	<ul style="list-style-type: none"> <li>- Anthropometric assessments</li> <li>- Health and nutrition education</li> <li>- Micronutrient supplementation</li> <li>- Supplementary feeding programs</li> <li>- Prescribing ready-to-use therapeutic foods</li> <li>- Nutrition-related administrative actions (reporting)</li> </ul>	<ul style="list-style-type: none"> <li>- Iron folate supplementation (women)</li> <li>- Anthelmintic control</li> </ul>
Agriculture extension workers	<ul style="list-style-type: none"> <li>- Promoting micronutrient-rich foods</li> <li>- Distributing livestock</li> <li>- Distributing planting material</li> </ul>	<ul style="list-style-type: none"> <li>- Distributing labour-saving technologies</li> <li>- Demonstrating food-security production systems</li> <li>- Distributing fruit trees</li> <li>- Educating on post-harvest handling practices</li> </ul>
Community development officers	<ul style="list-style-type: none"> <li>- Community awareness of nutrition services</li> <li>- Distributing dry food rations</li> <li>- Distributing planting material</li> </ul>	<ul style="list-style-type: none"> <li>- Public works for food purchase</li> <li>- Household income support</li> <li>- Women empowerment grants</li> <li>- Grants for the elderly</li> </ul>

## **5.4.2 Work conditions shaping nutrition service delivery**

### **5.4.2.1 Society-related conditions**

Respondents emphasised the pivotal role of development actors, especially UNICEF, WFP, and USAID, in shaping nutrition services in Uganda. These organisations use different ideational and material resources to prescribe actions and support their implementation. This influence is asserted through three main mechanisms. First, donors provide technical support to district leadership to transpose national/international policies (e.g. UNAP) into local programs and develop activities for implementation (M34<sup>3</sup>). Second, donors issue directives stipulating procedures for implementing projects to standardise services, including selection of targeted citizens, interventions and approaches used. Third, they constantly monitor specific performance indicators to catalyse

<sup>3</sup> The parenthesised numbers refer to respondents' empirical observations in Moroto (M...) or Namutumba (N...).

responsiveness and ensure compliance by frontline workers. Donors employ different tactics to achieve compliance, including performance-based financing, supervision by contracted NGOs, and involving district management (M28, 34, 39).

As a consequence of the donors' dominant role in nutrition governance, there are similarities in nutrition services provided on the ground. Health workers, for example, explained that donors facilitate capacity building, print education materials, procure nutrition supplies (e.g. therapeutic and supplementary foods) and equipment to ensure services availability (M28). Actors, such as UNICEF, facilitate regular knowledge-sharing activities to foster collective learning and develop partnerships to realise mutually reinforcing objectives (M39). Given the high dependency on donor investments, nutrition service may be discontinued when this support stops, as observed in Namutumba. Other societal-related influences resulted from citizens' increasing demands for, and expectations about, nutrition services. Historically, nutrition supplies and incentives (e.g. farming inputs) have been distributed to manage malnutrition and encourage agriculture production, respectively. However, the free supplies have resulted in dependency among citizens, increased the demand for these 'tangible' services (N5, 17, 22, M11, 19).

#### ***5.4.2.2 Organisation-related conditions***

In addition to donor conditionalities, frontline workers are increasingly issued action prescriptions and resources focused on nutrition from their ministries and associated departments especially health. Health workers identified two key action prescriptions from their superiors: 1) standardised guidelines for the management of acute malnutrition and 2) nutrition indicators integrated in the health management information system (HMIS). To realise these integrative demands, respondents stated that the ministry collaborates with development actors to continuously build their capacities, conduct mentorships, and monitor nutrition services in health centres. Furthermore, pre-existing funded programs like the immunization program, provide avenues for providing nutrition actions (N20, 32). These strategies explained the homogeneity of services provided across the health centres in both districts. Yet, health workers mentioned various ministry pitfalls that frustrate nutrition services, including the lack of explicit nutrition-focused budgets, continuous revision of the HMIS nutrition indicators without follow-up training (N32, M38, 40), constant human resources and skills transfers (N1, 21, 26), and inadequate feedback from superiors (N1, 20). Both

AEWs and CDOs explained that their respective ministries lacked clear nutrition-linked performance indicators or guidelines.

The leadership's efforts to promote intra- and inter-departmental interactions proved an important resource enabling nutrition integration. The CDOs and AEWs in Moroto clarified that some sub-county leaders encouraged exchanges among departments and with NGOs, hence presenting opportunities to network, learn about nutrition activities, and implement workplans (M13, 40). Health workers stated that the nutrition focal person facilitated quarterly learning meetings, funded by donors, where collective decisions were taken about nutrition services (M2, 7, 16, 25). Not all of such interactions supported integration. In Namutumba, some CDOs and AEWs expressed discontent about the unclear allocation of duties in the multisector projects and the conflicting organisation structures, which frustrated the nutrition objectives (N11, 15, 18).

#### ***5.4.2.3 Individual-related conditions***

Most demands experienced by frontline workers stemmed from the societal and organisational levels. Health workers repeatedly described the high workload and competing job tasks as determining prioritisation. This undermined nutrition services in favour of 'pressing issues that have budgets and are incentivised' (N15). In terms of resources, apart from existing expertise in managing undernutrition, nutrition services provision was influenced by expectation of auxiliary benefits, especially financial incentives. Nutrition was often considered an add-on activity, incentivised through project work (M34, N23). Hence, 'the wide spread attitude of nutrition is a business is affecting integration' (M33). Others indicated that their professional values, religious beliefs, and collaborations with colleagues (M1, 11, 25, N1, 20) were important drivers for providing nutrition interventions. That said, almost all AEWs and CDOs claimed not to have attended formal nutrition-focused training and thus typically derived any knowledge from work experiences (N8, M8) and learning from contemporaries in health and NGOs (M13).

#### **5.4.3 Frontline workers' practices enacting and inhibiting nutrition integration**

To deal with the demands and resources discussed in section 4.2, frontline workers adopted various street-level practices that ultimately shaped nutrition service delivery. These practices reflect how nutrition action services are generally organised and integrated into frontline workers' everyday

tasks. Each worker employed at least one practice (table 5.4). The presentation of these practices is clustered along three categories: practices structuring access to nutrition services; practices controlling the supply of services; and practices modifying demand for services (table 5.4 and Supplementary material C).

#### ***5.4.3.1 Practices structuring access to nutrition services***

##### ***i) Ritualizing nutrition tasks performance***

The practice of ritualizing performance connotes following specific procedures and set routines, uniform decision making, and compliance with performance expectations in delivering nutrition actions (cf. Boin et al. 2016; Brodtkin 2011; Lyth 1988). All health workers mentioned that they adhere to the prescribed procedures for identifying and managing acute malnutrition. These include ‘screening and categorizing children for malnutrition is based set anthropometric cut-off points; enrolment into outpatient care to receive therapeutic food, or hospital referral for inpatient care’ (M16). This practice resulted from following the sector guidelines articulating instructions about management of acute malnutrition. The practice is reinforced by NGOs through continuous capacity building and monitoring (N5, 20, M11, 22, 28). Ritualization of nutrition tasks is described as having standardised (and restricted) decision making and contributed to normalizing such services across health centres.

##### ***ii) Bundling nutrition actions with established services***

Bundling involves aggregating nutrition actions with established services to leverage their resources and enhance simultaneous realisation of complementary objectives (cf. Harrison and Kostka 2014; Ickovics 2008). Although predominantly in Moroto, most health workers routinely bundled nutrition services with other daily tasks. This practice was generally spontaneous among AEWs and CDOs in Moroto. The main reasons for bundling by health workers include; i) HMIS nutrition indicators being linked with pre-existing funded and regularly monitored programs (N34); ii) development actors financing the implementation of particular combined services, i.e. nutrition and HIV (M22); and iii) donors, such as WFP, directives to ‘use the food rations to incentivise utilisation of health service by pregnant women and lactating mothers’ (M38). Lastly, bundling by AEWs and CDOs serves to comply with instructions from the ministries (M8) and is compelled by their professional values.

***iii) Scheduling nutrition services on specified days***

Scheduling refers to assigning a specific day on which citizens receive services for treating acute malnutrition (cf. Gupta and Denton 2008). This practice was mainly mentioned by health workers in Moroto. Here, outpatient care (OTC) services for malnutrition are offered on Thursdays (OTC or nutrition clinic day) (M2, 28). The OTC day incorporates screening citizens using stipulated criteria, dispensing therapeutic foods, and providing required health services. This way of organizing services helped to address the challenges of misappropriation of nutrition supplies, focus health workers' prioritisation of nutrition services and address pressure to achieve the donor performance benchmarks. Health workers explained that scheduling was collectively agreed to prevent citizens from 'double-deal and misusing therapeutic foods' (M7, 16, 25). The practice became formalised through directives from UNICEF, which restructured OTC services. Despite the high workload experienced on OTC day, scheduling is beneficial in regularizing nutrition in health services, increasing malnourished case identification, and freeing-up health workers' time to attend to other activities (M2, 11, 18).

***iv) Piggybacking onto services offered by other domains***

Piggybacking refers to frontline workers depending on services already established by other actors to realise their nutrition objectives. It involves strategic collaborations, either between frontline workers in different sectors or with NGOs, to realise mutual benefits (Robinson 2010), such as implementing workplans and securing the legitimacy of nutrition projects. The practice was demonstrated by AEWs and CDOs in both Moroto and Namutumba. Whereas piggybacking is a means of coping with disparities in – and often lack of – nutrition budgets, this practice was promoted by sub-county leaders to strengthen synergies across departments and with NGOs (M13); and by donors requiring NGOs to partner with government during project implementation (N22). Piggybacking is perceived to have improved the legitimacy of NGO activities (N30), enhanced the frontline workers' understanding of nutrition (M13, 40, N14), and has financial benefits (M13, 8).

**Table 5.4: Practices shaping nutrition service delivery in Moroto and Namutumba districts**

Practices	Moroto			Namutumba		
	HW <sup>1</sup>	AEW <sup>2</sup>	CDO <sup>3</sup>	HW	AEW	CDO
<b>Structuring access to nutrition services</b>						
Ritualizing performance of nutrition tasks	•			•		
Bundling nutrition actions with established services	•	•	•	•		
Scheduling nutrition services on a specific day	•					
Piggybacking onto other actors' nutrition services		•	•		•	•
<b>Controlling the supply of nutrition services</b>						
Creaming off citizens	•		•	•		
Down prioritisation of some nutrition services						
<i>fixating on a few nutrition actions</i>	•			•		
<i>non-involvement</i>					•	•
<b>Modifying demand for nutrition services</b>						
Shifting blame to other entities					•	•
Following the bureaucratic 'jobsworth'				•		

<sup>1</sup> Health worker; <sup>2</sup> agriculture extension worker; <sup>3</sup> community development officer; • The dot indicates the frontline workers adopting the practice

#### 5.4.3.2 Practices controlling the supply of nutrition services

##### v) Creaming off citizens

Creaming off means the prioritisation of citizens to benefit from specified nutrition services, thereby restricting access by nonconforming ones (Lipsky 2010). Although the practice was mentioned by most health workers, it was predominantly exhibited in Moroto. In addition to aligning with the criteria specified by the ministry for screening citizens with acute malnutrition, another reason for organizing services in this way was that most nutrition trainings emphasise particular citizen categories (N28, M25). Further, the frontline workers are strictly monitored by NGOs to ensure compliance with donor instructions (M38, 12, 16). Although nutrition assessments are conducted across all health facilities, there is priority focus on pregnant and lactating women, children and HIV or tuberculosis clients. For CDOs, creaming off is sporadic arising from one-off instructions, from the Office of the Prime Minister, which prioritise vulnerable community members to receive food rations.

**vi) Down prioritisation of some nutrition actions**

Down prioritisation signifies the tactics employed to resist instructions issued to structure service delivery (Høiland and Willumsen 2018). This practice manifested in two distinct coping strategies. First, *fixating on a few nutrition actions* was common to health workers in both districts. The practice was expressed through varied behaviours, including restricting nutrition assessment to regularly monitored indicators; conducting group education sessions or encouraging citizens to read displayed information compared to individual counselling; and non-completion of administrative tasks. Incomplete nutrition data frustrates accounting for nutrition investments (M36, 38, N20, 34); and partly influenced donors to use performance-based financing to enforce compliance. Health workers explained that down prioritising is inevitable because of the low staffing numbers (M19, N15). To manage the workload, they multitask or shift tasks to colleagues to offer – and often prioritise some – nutrition actions which compromises service completeness. Continual updates of HMIS nutrition indicators without follow-up training (M34, N8), perceived duplication of tasks done by NGOs (M12), and nutrition incentives (N26) also enabled down prioritisation.

Second, *non-involvement* signifies withdrawal from participation in nutrition services because frontline workers perceive that their professional expertise and contribution are undermined and meaningless (Organ and Greene, 1981). The CDOs and AEWs were reluctant to engage in the nutrition activities implemented under the government-managed project in Namutumba. The majority of them indicated that this was a strategy to cope with the ambiguities in task allocation in this project and being side-lined in implementing services under their jurisdictions (N6, 19, 22). Although the practice is known to district management, they explained its existence as arising from grievances over who controls the budget expenditures and the lack of performance incentives (N37). Conversely, through networking with colleagues in education, some AEWs supported the project activities whenever invited.

**5.4.3.3 Practices modifying the demand for nutrition services**

**vii) Shifting blame to other entities**

The practice of shifting blame indicates that the frontline workers blame their inability to continually provide nutrition services on other actors (Hood 2011). Some AEWs, especially in

Namutumba, described feeling incapacitated to provide nutrition services for reasons relating to delays in receiving farming inputs coupled with the mismatch between citizens' demands and what is supplied. The discrepancies were blamed mainly on the perceived 'inadequately designed bureaucratic procurement structure' (N6), which undermines AEWs' professional expertise. The AEWs often reminisced about the past when they planned, procured, and distributed inputs based on farmers' requirements. Additionally, the AEWs mentioned feeling demoralised by the citizens' dependency on government for farming inputs compared to becoming self-reliant (N28, 33). An AEW explained that 'many citizens are used to being given all farming inputs and only attend awareness-creation sessions if they know planting materials are to be distributed' (N17).

***viii) Following the bureaucratic 'jobsworth'***

The 'jobsworth' practice refers to frontline workers rigidly following set rules to avoid confrontations with, and blame from, clients when their decisions result in negative effects (Hood 2011). Health workers normally refer acutely malnourished citizens according to the ministry guidelines. However, this referral for upward management is a preferred action to limit pressure from citizens demanding 'tangible services' (e.g. therapeutic foods) and to minimise perceptions of negligent treatment. This practice was employed mainly to cope with the lack of nutrition supplies (e.g. therapeutic foods, micronutrient supplements). Health workers in Namutumba were frustrated by the perceived 'reduced authenticity of nutrition services' caused by lack of supplies, which they blamed on the turnover in donor projects and insufficient clarity on how nutrition support is organised (N4, 9, 20). Hence, by pushing citizens presenting with any severe malnutrition to the general hospital, they transfer the 'responsibility of resulting repercussions back to the citizens and upward to the health system' (N10). Moreover, the number of citizens seeking and accessing these nutrition services is unascertainable.

## **5.5 Discussion**

We started with the observation that integrating nutrition actions into service delivery in different policy sectors is a continuous concern (Tumilowicz et al. 2018). We proposed that adopting the street level bureaucracy approach offers novel bottom-up viewpoints about *what practices are adopted by frontline workers to enact or impede nutrition integration in service delivery, and the*



*contextual conditions galvanizing them.* This study indicates that nutrition integration into service delivery is predominantly perceived by health workers compared to AEWs and CDOs. Nutrition services are described as standalone activities or combined with other services. Frontline workers are evidently subjected to various demands and resources, originating from several societal, organisational, and individual sources. Our analysis uncovered nine practices adopted by frontline workers that ultimately affect the ways that nutrition services are delivered to citizens. Nutrition integration into delivery systems is commonly accomplished through ritualizing task performance; bundling with established services; scheduling services on specified days; and piggybacking onto services offered by other domains. Disintegration results from non-involvement and shifting blame to other entities. Three of the identified practices potentially have both integrative and disintegrative effects: creaming off citizens; down prioritisation by fixating on a few nutrition actions; and following the bureaucratic ‘jobsworth’.

This study illustrates that the integrative/disintegrative practices co-exist and potentially bolster and/or inhibit one another’s effects. For example, ritualizing task performance underlies the bundling of nutrition actions with established services; while shifting blame to others reinforces non-involvement. This implies that frontline workers’ practices are shaped not only by contextual demands and resources, but also by their ongoing interactions (Embuldeniya et al. 2018). Further, there are similarities and differences in the practices of frontline workers in comparable departments, but located in different contexts. All health workers use bundling to incorporate nutrition services. However, scheduling of nutrition actions and creaming off citizens were demonstrated only in Moroto. Equally, piggybacking was common among all AEWs and CDOs, but non-involvement only happened in Namutumba. This can possibly be explained by the disparities in resources, ambiguities in roles, and variation in demands between the districts. This finding echoes Salam et al. (2019) and Fanzo et al. (2015) observations that advances in integrating nutrition activities in health and agriculture services are predisposed to contextual differences.

The individual, organisation, and society demands and resources influencing frontline workers are cited in other nutrition literature (for example: Salam et al. 2019; Gillespie and van den Bold 2017), although these conditions are seldom patently linked to integrative/disintegrative practices. This analysis provides three main insights about the circumstances influencing nutrition services. First, integrative practices are mainly driven by donors (e.g. UNICEF, WFP, USAID). In Moroto, donors

concurrently used varied ideational and material resources to structure nutrition services aligned with their ideologies and interests, financed capacity development, and ensured compliance using different ‘carrot and stick’ tactics like performance-based financing. These strategies resulted in all health workers specializing in and standardizing services for managing undernutrition. This finding is consistent with Asad and Kay (2014)’s suggestion that NGOs leverage different resources – including problem framing, rulemaking, brokering alliances, and financial and political resources – as they negotiate and manoeuvre to institutionalise services to attain project objectives. Donor conditionalities may continue to structure services beyond the funding period, as observed in Namutumba; nonetheless, the sustainability of integrative practices remains unascertainable.

Second, demands and resources institutionalised in the government systems are necessary to sustain nutrition service delivery, beyond short-term donor projects. The finding is consistent with recent literature which emphasises the need to specify intervention pathways and performance measures per sector, strengthen capacities, and foster effective leadership to facilitate nutrition policy implementation (Sodjinou et al. 2014). Conversely, this analysis also suggests that unclear allocation of responsibilities and narrowly defined objectives and performance indicators restrict the scope of nutrition services, thereby facilitating down prioritisation practices (Lipsky 2010 pp.164). There were no services focused on managing overnutrition. Further, the findings demonstrate that workers operating in resource-constrained environments (i.e. limited government funding, inadequate technical capacities, ambiguous nutrition-sensitive actions and reporting systems) will manoeuvre to redirect responsibilities to other actors (Hood 2011; Brodtkin 2011), hence shifting blame to others.

Third, the frontline workers’ professional relationships and performance rewards are equally as important as their expertise in persuading them to provide nutrition services. Besides the workload and labour-intensive tasks associated with integrative demands (Ling et al. 2012), disintegrative practices, like down prioritisation, were associated with the negative impact of financial incentives. Most frontline workers perceived ‘*nutrition as a business*’ that rewards good performance. Nonetheless, financial incentives are not a sufficient condition to maintain their commitment, partly due to variation in donors’ facilitation approaches (cf. Lipsky 2010 pp. 204-207). That said, professional collaborations presented beneficial opportunities for AEWs and CDOs to learn

informally about nutrition services, and this supported integrative practices such as piggy-backing and scheduling of activities.

#### **5.4.1 Future research**

The intricacies involved in integrating nutrition into service delivery raises some questions for further research. First, the identified practices are for frontline workers in government bureaucracies; however, nutrition services are also provided by employees of non-governmental and private sector organisations. Understanding their nutrition integrative/disintegrative practices is essential to comprehend the internal dynamics (i.e. demands, resources, strategies, and practices) of how nutrition integration is realised across all actors involved; and inform efforts to translate policy statements into real action and impact on the ground (cf. Storeng et al. 2019; Asad and Kay 2014).

Second, the practices identified are not static; thus, future research could explore the changes in frontline workers' practices over time and space. This synthesis provides preliminary insights into integrative/disintegrative practices beyond the health sector (but see: Fanzo et al. 2015). Additional research employing a similar SLB perspective is necessary to highlight the extent to which and how contextual changes – in terms of different timescales, technical and geographic boundaries – shape frontline workers' practices and the resultant effect on nutrition service delivery.

Third, using the SLB perspective reveals new aspects of micro-contextual interactions and how they shape nutrition policies as practiced on the ground. However, this analysis is restricted to Uganda. It would be worthwhile to use this public policy lens to perform comparative analyses across other low-income countries. This could provide further insights into what needs to be done to generate the desired policy outcomes that ensure that nutrition services are available to citizens that need them.

Lastly, the analysis suggests that nutrition integration/disintegration on the ground is a dynamic and nonlinear process (cf. Evans et al. 2013); however, identified practices may become ingrained norms over time. These practices *have* considerable, possibly detrimental, implications for citizens. For instance, there are differences in scope of services and what citizens consider to be useful

nutrition actions. Research should examine the effects of frontline workers' practices from the citizens' perspective.

#### **5.4.2 Governance implications and conclusion**

From this study's findings, three recommendations for improved nutrition integration during service delivery can be made. First, there is a need to harness the integrative-fostering capacity of all frontline workers, beyond the health sector. This analysis identifies various strategies that generated positive practices among frontline workers, and these are potentially transferable for application in different contexts (Embuldeniya et al. 2018). Strategies such as identifying interventions, collective learning and consensus building, shadowing during service provision, developing integrative leadership, and collaborations among frontline workers – when appropriately understood – provide insights into how to strengthen integration on the ground in different policy sectors.

Second, similar to national level policy processes (Namugumya et al. 2020b; Harris 2019a), nutrition integration in service delivery is propelled mainly by the presence and push of donors. However, these actors have varied interests and thus prescribe unilateral directives to frontline workers that may increase discrepancies in integrative demands during service delivery. This does not imply that the strategies should be rejected, but rather that it is necessary to continuously develop capacity and invest in state-driven service delivery systems to facilitate and sustain nutrition policy implementation. Despite government institutions being characterised by constraints that limit integration in the short term, these domestic systems contribute to sustaining nutrition integration in the long term.

Third, our analysis shows that there are variations in what AEWs and CDOs label as nutrition services. Some services perceived as usual government business (table 5.3) are in fact potential opportunities for integrating nutrition services. The fact that there are ambiguities in articulating nutrition-sensitive actions and in the roles of AEWs and CDOs demonstrates the necessity of generating consensus around key strategic actions in these policy areas, with explicitly defined pathways linking them to nutrition outcomes (Webb and Kennedy 2014). Elaboration of what integrated government action on the ground actually means is essential for the propagation and sustainability of nutrition activities across workers in different ministries.

This study started with the question of what practices frontline workers in different departments adopt to enact or impede nutrition integration in service delivery and the contextual conditions galvanizing them. The SLB approach, which is underutilised in integrated policy action studies, provided essential insights about the micro-dynamics defining integrated government action for nutrition. Examining the diverse demands and resources arising from diverse individual, organisational, and societal contexts demonstrates that frontline workers adopt varied practices; which possibly explains the inconsistencies between policy goals and actual outcomes (Tumilowicz et al. 2018). Donor initiatives are essential in facilitating nutrition integration into service delivery. However, the study emphasises that negotiation and collective understanding of demands, legitimising responsibilities, matching performance accountability with equivalent support (resources), developing integrative capacity at subnational level, and fostering professional collaboration are vital to sustain these efforts. These are long-term endeavours – not easily sustained through short-term funded projects – that necessitate going beyond tracking the adoption of integrated strategies and checking off performance indicators. As governments and international actors continue to make commitments to effectively improve nutrition outcomes and to develop sustainable food systems, understanding the integrative practices of frontline workers provides an essential starting point to identify effective policy solutions.



## **Chapter 6**

### **General discussion and conclusion**

## **6.1 Introduction**

Many African governments have expressed ambitions to govern nutrition in a more integrated manner as specified in the overarching integrated nutrition strategies. Integrated nutrition governance is expected to foster collective action of actors in different sectors and government levels to facilitate more effective reduction of malnutrition and its impacts on health, human capital and socio-economic development. This dissertation has focused on assessing and explaining to what extent the political ambitions to govern nutrition in a more integrated manner have proceeded beyond paper realities in Uganda. Identifying the processes, interactions and practices of the different actors is necessary to understand the changes in nutrition governance over time. By understanding the shifts towards more or less integrated nutrition governance, I generate new insights that are relevant to design strategies for scaling up investments and sustain commitments to improve nutrition.

In this last chapter, I synthesise the response to the general research question. The question was investigated using four public policy theoretical lenses (i.e. policy framing, policy integration, policy mechanisms and street-level bureaucracy) and analysed in four sub-questions:

1. How has (mal)nutrition been framed by parliamentarians in Uganda over time?
2. To what extent have nutrition concerns been integrated into cross-sectoral policy outputs over time?
3. What policy mechanisms explain the observed nutrition policy (dis)integration patterns in Uganda?
4. What practices are adopted by frontline workers to enable or obstruct nutrition integration in service delivery?

The main findings of each research question are highlighted in section 6.2. Reflections emphasise the changes (or lack thereof) towards integrated nutrition governance and their implications. Section 6.3 presents the main theoretical contributions to the nutrition governance and the general public policy literatures. The areas for future research are covered in section 6.4. The implications and limitations of my methodological choices are presented in section 6.5, while the last section 6.6 discusses the recommendations for practice to strengthen the integrated governance of nutrition.



## 6.2 Assessment of integrated nutrition governance in Uganda

### 6.2.1 Framing malnutrition by parliamentarians in Uganda

---

*Research question 1: How has (mal)nutrition been framed by parliamentarians in Uganda over time?*

---

The way (mal)nutrition is interpreted and discussed indicates why certain policy measures are prioritised or disregarded in policy making. The study presented in chapter 2 identified seven distinct frames used by parliamentarians to maintain (mal)nutrition concerns in the political agendas through different election terms. First, the *emergency nutrition frame* emphasises humanitarian response to curb malnutrition among citizens affected by conflict, environment and climate disasters. Second, the *chronic vulnerability frame* depicts the repetitive spikes in hunger and deteriorating famine conditions and promotes the proactive investment in long-term policy solutions. Third, the *disease-related frame* postulates malnutrition either as an outcome or a cause of diseases necessitating treatment and preventive health services. Fourth, the *school feeding frame* promotes school meals to reduce hidden hunger and stunting so as to boost school attendance and human capital development. Fifth, the *delicious poison frame* problematises overnutrition among parliamentarians and the detrimental repercussions of excessive food consumption habits and sedentary lifestyles. Sixth, the *poverty and inequality frame* postulates malnutrition as an outcome and a cause of increasing income disparities among citizens. Seventh, the *diversification frame* underscores the declining diversity of both agriculture production and ‘on the plate’. Thus, advocates for diversification of agriculture production and farm income. Whereas majority of the nutrition frames persisted across the four election terms, the dominant interpretations varied over time.

The study revealed that the political frames emphasised a few determinants of nutrition. The main causes emphasised internal shocks (e.g. armed conflicts, diseases, environment and climate disasters) and external events (e.g. global agendas like the MDGs and SDGs). As a result, the recommended policy solutions reinstated the compartmentalised responses by the ministries of health, agriculture, education and disaster preparedness. Although both long-term and short-term policy solutions were mentioned in debates, the longitudinal studies revealed that parliamentarians emphasised the short-term ‘tangible’ interventions, including food assistance, distributing

agricultural inputs and providing school meals. As such, the multiplicity of nutrition frames did not promote collective action involving several ministries. In terms of the actors propagating the various frames, nutrition policy ideas were primarily championed by the ministers whose sectors oversee explicit nutrition-related mandates, the parliamentarians of regions affected by internal shocks, and, to a limited degree, by self-acclaimed nutrition advocates.

### **6.2.2 The state of horizontal nutrition policy integration in Uganda**

---

*Research question 2: To what extent have nutrition concerns been integrated into cross-sectoral policy outputs over time?*

---

In chapter 3, I studied how the overarching nutrition ambitions were integrated across sectoral policies at national level. The study showed an overall shift towards increased horizontal nutrition policy integration. There was an increase in the number and scope of nutrition-related policy goals, instruments and subsystems involved incorporated in ministerial policies specifically during the period 2011-2015. In addition to the sectors of health and agriculture which demonstrated a long tradition of integrating nutrition, relatively ‘new’ subsystems – like gender and social development, finance and planning, trade and industry, local government and the Prime Minister’s Office – introduced measures to address undernutrition.

Nutrition policy integration was a non-linear process characterised by fluctuations and discontinuities in the ministries and the policy dimensions over time. That is, the nutrition-related goals, policy instruments and subsystems involved altered at different paces, in comparable and dissimilar directions. This resulted in the coexistence of varying patterns of nutrition (dis)integration in the ministries. To illustrate this phenomenon, the high degrees of nutrition integration observed during 2011-2015 were transient for the health sector and the Prime Minister’s Office. Furthermore, the analysis revealed that the goals adopted in policies focused on a few determinants of undernutrition. Unlike the political arena, ministries overlooked the concerns of overnutrition.

The ministries prioritised informational and organisational types of policy instruments. These include nutrition capacity and skills development, information dissemination and coordination

committees. Apart from the services to manage severe malnutrition, ministries rarely devoted financial and regulatory instruments to facilitate effective policy implementation. The adopted policy instruments mirrored part of the policy solutions proposed in the political arena (chapter 2) and the conditions impacting nutrition services delivery (chapter 5).

### 6.2.3. Policy mechanisms explaining horizontal (dis)integrated nutrition governance

---

*Research question 3: What policy mechanisms explain the observed nutrition policy (dis)integration patterns in Uganda?*

---

The research presented in chapter 4 identified six coexisting policy mechanisms that explain the nutrition integrative / disintegrative outcomes observed in chapter 3 in the ministries of health, agriculture, social development and the Prime Minister's Office. I showed that nutrition policy integration resulted from four policy mechanisms. First, *international policy promotion* by international actors who intentionally transferred and financed particular policy approaches that they considered promising to manage undernutrition. Second, *issue promotion by international actors* who frequently advocated to domestic actors to increase attention to nutrition and provided technical assistance to strengthen its integration. The third was *issue promotion by domestic policy entrepreneurs*.

The mechanism portrayed the consistent entrepreneurial actions of strategically positioned bureaucrats to broaden the nutrition aspects addressed in sector policies. Fourth, *instrumental policy learning mechanisms* reflected the deliberate attempts to use evidence and lessons from past experiences to modify the policy instruments adopted to improve nutrition. On the other hand, nutrition disintegration emerged through two key policy mechanisms, namely: first, *leadership contestation* which denoted the competition and conflicts among bureaucrats as they struggled to maximise power and control of associated office benefits. Second, the *turf war mechanism* characterised by conflictual and unproductive interactions as organisations respond to perceived threats regarding resources, competences and finances (Peters 2015b; Herrera et al. 2014).

The longitudinal analysis identified different configurations of conditions, specific to individuals, organisations and time periods that activated the nutrition (dis)integration policy mechanisms (table 6.1). The conditions that facilitated nutrition integration were the strategic position of

nutrition advocates in the organisation structures, bureaucrats' knowledge of and access to high-level policy dialogues, presence of nutrition-sensitive overarching policy frameworks, high-level political and global interest as well as explicit nutrition finances. Conversely, the disintegrative policy processes were enabled by the influx of nutrition-related finances in absence of adequate nutrition technical expertise, struggles to achieve project targets, leadership turnover and insufficient articulation of nutrition coordination plans.

**Table 6.1. Policy mechanisms shaping integrated nutrition governance in Uganda**

Categories processes and practices	Context conditions		Nutrition Outcomes Integration (+) Disintegration (-)	Ministry / Frontline workers
	Demands	Resources		
International policy promotion	-	Political & donor commitment to improve child nutrition Poor nutrition indicators from diseases & conflict Presence of CAADP AU-NEPAD's strategic position in CAADP Donor precondition agriculture financing Donor financing for nutrition-sensitive programs	+	MOH <sup>1</sup> , MAAIF <sup>2</sup> , MGLSD <sup>3</sup>
Issue promotion by international actors	-	Coalition of nutrition experts & advocates International actors supporting agriculture-nutrition linkages Review of PMA strategy Nutrition technical assistance targeting 'new' sectors Senior bureaucrats repositioning MGLSD to fulfil mandates Political & donor commitment to support nutrition coordination Pressure on OPM to demonstrate credibility Lack of nutrition expertise in OPM	+	MAAIF, MGLD, OPM <sup>4</sup>
Issue promotion by bureaucrats	-	Experienced senior bureaucrat leading MAAIF's food & nutrition security division Donors funding nutrition-sensitive agriculture projects	+	MAAIF
Instrumental policy learning	-	International actors supporting country-led policies Experienced senior bureaucrat leading MOH's nutrition unit	+	MOH
Leadership contestation	-	Unstable leadership for nutrition in MOH Donor projects with similar & different nutrition actions	-	MOH
Turf wars	-	Increased number of donors financing nutrition coordination Lack of precise nutrition coordination plans	-	OPM

Government Ministries: <sup>1</sup>MOH-Ministry of Health; <sup>2</sup>MAAIF – Ministry of Agriculture, Animal Industry and Fisheries;  
<sup>3</sup>MGLSD -Ministry of Gender, Labour and Social Development;

#### 6.2.4 Practices facilitating or inhibiting nutrition service provision

---

*Research question: What practices are adopted by frontline workers to enable or obstruct nutrition integration in service delivery?*

---

The analysis in chapter 5 complemented the aforementioned top-down insights with a bottom-up viewpoint of the conditions and practices determining what and how nutrition services were delivered. The comparative analysis applied a street-level bureaucracy perspective to identify the practices of frontline workers (the health workers, agriculture extension workers and community development officers) in Karamoja and Namutumba districts.

Frontline workers perceived nutrition services as tasks mandated to health workers. The agriculture extension and community development workers provided minimal to almost no nutrition services. This finding contradicted the high degree of horizontal nutrition policy integration realised at sectoral level (chapter 4). The findings in chapter 5 indicated that nutrition services delivery is ascertained, constrained or deterred through nine co-existing practices of frontline workers. The practices reinforce and undermine one another's effects. Nutrition integration is accomplished through four practices: (i) ritualizing nutrition task performance, (ii) bundling nutrition interventions with established services (e.g. HIV, immunisation, agriculture extension), (iii) scheduling nutrition services on specified days, and (iv) piggybacking nutrition activities on funded services offered in other sectors (e.g. agronomy practices and nutrition education). Disintegration resulted from the practices of non-involvement and shifting blame to other entities. The analysis showed that some practices produced both integrative and disintegrative effects, including: the creaming-off of citizens, down prioritisation by fixating on a few nutrition actions, and following the bureaucratic 'jobsworth' (i.e. rigid rule following to evade backlash in case of negative effects).

The study revealed the different combinations of context-specific demands and resources which structured the nutrition integrative / disintegrative practices. The demands and resources emerged from different donor projects, government authorities, the citizens and from the frontline workers themselves. In table 6.2, I summarise the policy practices and conditions showing whether they facilitate, hinder or have indefinite effects on integrated nutrition governance. For instance, donor projects transposed nutrition policies, contributed the financial and technical resources, nutrition supplies and proactively monitored the integration of nutrition actions into health services.

**Table 6.2. Practices structuring nutrition integration or disintegration in service delivery**

Categories processes and practices	Context conditions Demands (●) Resources (∞)	Nutrition Outcomes	Ministry / Frontline workers
		Integration (+) Disintegration (-)	
Ritualizing nutrition tasks performance	<ul style="list-style-type: none"> <li>- MOH guidelines for screening, diagnosing &amp; managing acute malnutrition ●</li> <li>- Performance monitoring of specific nutrition status indicators ●</li> <li>- Continuous training in management of acute malnutrition ∞</li> <li>- Nutrition equipment &amp; supplies ∞</li> </ul>	+	HW <sup>5</sup>
Bundling nutrition actions with established services	<ul style="list-style-type: none"> <li>- Nutrition indicators integrated in pre-existing HMIS programs ●</li> <li>- Donor projects' directives on maternal &amp; child nutrition ●</li> <li>- Integrative leadership (line ministry and district) ●</li> <li>- Financing for integrated programs ∞</li> </ul>	+	HW, AEW <sup>6</sup> , CDO <sup>7</sup>
Scheduling nutrition services on a specific day	<ul style="list-style-type: none"> <li>- Directive from donor projects &amp; district health administration ●</li> <li>- High demand for nutrition supplies by citizens ●</li> </ul>	+	HW
Piggybacking onto other actors' nutrition services	<ul style="list-style-type: none"> <li>- Donors require NGOs to partner with government ●</li> <li>- Integrative leadership (district) ●</li> <li>- Professional alliances among colleagues ∞</li> <li>- Financial benefits ∞</li> </ul>	+	AEW, CDO
Creaming off citizens	<ul style="list-style-type: none"> <li>- Protocols for management of malnutrition ●</li> <li>- Instructions of OPM disaster response ●</li> <li>- Focused training in management of malnutrition ∞</li> <li>- Nutrition and agriculture supplies ∞</li> </ul>	+ / -	HW, CDO
Following the bureaucratic 'jobsworth'	<ul style="list-style-type: none"> <li>- Lack of nutrition supplies ∞</li> <li>- Demand for nutrition supplies by citizens ●</li> <li>- Protocols for management of malnutrition ●</li> </ul>	+ / -	HW
Down prioritisation of some nutrition services <i>fixating on a few nutrition actions</i>	<ul style="list-style-type: none"> <li>- Performance based financing ●</li> <li>- Monitoring specific HMIS nutrition indicators ●</li> <li>- High workload &amp; duplicated tasks ∞</li> </ul>	+ / -	HW
<i>non-involvement</i>	<ul style="list-style-type: none"> <li>- Unclear task allocation ●</li> <li>- Side-lining in project implementation ●</li> </ul>	-	AEW, CDO
Shifting blame to other entities	<ul style="list-style-type: none"> <li>- High demand for nutrition supplies by citizens ●</li> <li>- Parallel bureaucratic procurement structures ●</li> </ul>	-	AEW, CDO

Government Ministries: <sup>1</sup>MOH -Ministry of Health; <sup>2</sup>MAAIF – Ministry of Agriculture, Animal Industry and Fisheries;

<sup>3</sup>MGLSD -Ministry of Gender, Labour and Social Development;

Frontline workers: <sup>5</sup> Health workers; <sup>6</sup> Agriculture extension workers; <sup>7</sup> Community development officers

However, the frontline workers operating in resource-constrained environments (i.e. limited government funding, inadequate technical capacities, ambiguous nutrition-sensitive actions and reporting systems) manoeuvred to deliver or redirect responsibilities to other actors (Hood 2011; Brodtkin 2011).

### **6.2.5 Answering the overarching research question**

---

*Research question:* To what extent have the political ambitions to govern nutrition in a more integrated manner proceeded beyond paper realities?

---

Taken together, the studies presented in this dissertation provide a mixed picture of the extent to which nutrition governance in Uganda has become more integrated. On the one hand, I found evidence of strengthened nutrition integration in political discussions, the policies adopted by different ministries and in service delivery. There was considerable expressed political commitment focused on reducing hunger, managing undernutrition and, to a limited extent, addressing poverty, inequality and overnutrition. At sectoral level, there was inclination towards increased nutrition policy integration involving different ministries. More ministries developed nutrition-related actor networks and adopted a range of new and/or relabelled policy instruments. The creation of a nutrition coordination desk in the Office of the Prime Minister was one of the new procedural instruments adopted to foster collective action. Furthermore, all frontline workers exhibited at least one practice which supported nutrition integration, i.e. bundling nutrition services with existing funded programs. These findings suggest that the Ugandan nutrition governance has shifted towards a higher degree of policy integration, implying the integrated nutrition strategies were not just symbolic paper realities.

On the other hand, in spite of some promising practices of integrating nutrition concerns, implementation deficits were evident at service delivery level. Implied discontinuity exists between nutrition integration in sectoral policies and the actual operationalisation on the ground. The integrated nutrition strategies persevered as paper realities at service delivery generating limited cross-sector involvement and hence resulting in negligible (or non-existent) integrated governance. To elaborate, nutrition services remained fragmented and largely compartmentalised under the job tasks of health workers. Frontline workers, offering agricultural and community

development services, perceived integration by their line ministries to be figurative – devoid of distinct nutrition-focused budgets and clear job tasks (chapters 3, 5). Another important insight was the variation and discontinuity in nutrition integration within and across ministries over time, suggesting that integrated nutrition governance was not a static outcome. For instance, while horizontal nutrition integration gained momentum between 2011 and 2015, prioritisation of nutrition issues declined in some ministries in progressive years. Ministries such as trade incorporated policy instruments (e.g. regulation on fortification) without adopting explicit nutrition-related goals; and majority of the sectors lacked clear government budgets (financial instruments). Moreover, nutrition integration in ministerial policies primarily persisted in the form of ad hoc funded projects (chapters 3, 4, 5), which are prone to continuous modifications (Jaspars et al. 2018; Natalicchio and Mulder-Sibanda 2010).

The contrasting findings about integrated nutrition governance resulted from the combined and or parallel actions of donor projects and some domestic actors. The varied actions coexisted in an environment of continually evolving configurations of organisations, resources, capacities, influence and motivations. Donor projects (funded by UNICEF, USAID, WFP, World Bank) used various strategic approaches, technical and financial resources as well as political relations to influence the nutrition policy decisions made across sectors and government levels (chapters 2, 3, 4, 5). To illustrate, donor projects enabled nutrition integration directly by transposing international/national nutrition agendas and financing targeted interventions. The projects indirectly shaped the political frames through their nutrition assessment reports which mainly focused on food assistance programs to manage severe undernutrition. These donor actions guaranteed that the integrated nutrition strategies advanced beyond the ambitious paper policies. Conversely, the projects also facilitated disintegrated nutrition governance because of their targeted interventions which reinstated the siloed operations of sector. Disintegration also resulted from the short-term funding, constant changing interests and competition among the donor projects to realise specified targets. Similarly, both nutrition integration and disintegration resulted from the actions of bureaucrats holding strategic positions in the ministries and districts. Attention to nutrition in the policies of some ministries (e.g. health, agriculture and social development) was boosted by the bureaucrats' capacity to gain access to strategic policy dialogues and to frame the issue in line with their sectoral interests. Other capacities that facilitated integration included knowledge of the implementation processes, leadership directives to collaborate and professional networks. On the



contrary, leadership struggles, competition for nutrition finances and unclear responsibilities reduced the integrative capacity of bureaucrats.

### **6.3 Theoretical contributions**

My dissertation links to various scholarly debates in the nutrition governance and public policy literatures. Insights about the state of integrated nutrition governance in Uganda provide novel contributions to advance these debates in a number of ways, which are discussed in this section.

#### **6.3.1 Contributions to nutrition governance literature**

The main contributions to the nutrition governance literature are the insights provided into (i) the nutrition policy processes and practices at different government levels, (ii) the political framings of (mal)nutrition, and (iii) extending public policy concepts to understand policies in an African context.

##### ***6.3.1.1 Nutrition policy processes and practices at different government levels***

Food and nutrition security scholars provide valuable insights into the changes in the overarching nutrition policies and institutions in African countries (e.g. Mogues and Billings 2019; Hodge et al. 2015; Lachat et al. 2015; Drimie and Ruysenaar 2010; T. Benson 2008). However, the scope of the studies has remained fragmented often focused on single sectors or interventions, which does not offer comprehensive understanding of the concerted actions of government to improve nutrition. The dissertation addressed this gap by providing explicit accounts of the interpretations, processes and practices which promote increased or decreased nutrition integration in different ministries and government levels in Uganda. The findings revealed that integrated nutrition strategies have the potential to mobilise collective action across ministries. Nonetheless, the achieved sectoral policy reforms were not necessarily followed by similar advances on the ground. My research contributes to the debates on strengthening and sustaining the food, nutrition and health systems in low and middle income countries (Brouwer et al. 2020; Leach et al. 2020; Turner et al. 2018). The research disentangled the inside manoeuvres of different policy actors (i.e. bureaucrats, donors projects, frontline workers) and elucidated the specific contextual conditions interacting to foster or hinder integrated nutrition governance (chapters 2, 4, 5). The main conditions that promoted (and on the contrary hampered) nutrition integration included: the tactical

interactions of donor projects and civil servants, presence of integrative capacities and leadership, explicit nutrition finances and technical expertise, issue salience in the global/national political agendas and access to strategic policy negotiations. Further, the analysis suggests that the expectation of benefits and incentives enhanced the interest of different actors to integration nutrition in different policies and services. I conclude that nutrition was perceived as a business by all actors involved (parliamentarians, donor projects, bureaucrats, frontline workers, citizens) because of the extrinsic motivations such as votes to political office, project targets, financial incentives and food assistance, respectively.

### ***6.3.1.2 Political framings of (mal)nutrition***

The analysis in chapter 2 is the first to study the political framings of (mal)nutrition in Sub Saharan Africa. I discussed multiple ways of how elected officials deliberated on the nutrition-related challenges, thereby contradicting the conventional assumption that African parliamentarians are not committed to engage in nutrition policy (Natalicchio and Mulder-Sibanda 2010; T. Benson 2008). Moreover, the results proved that the politicians underlined similar nutrition frames as those established by previous parliaments (cf. Ilie 2015); which meanings could lag behind advances in scientific knowledge (Cullerton et al. 2016). Furthermore, the research complements the literature which monitors the political commitments in nutrition (te Lintelo and Pittore 2020; Baker et al. 2019; FAO 2018) by relating the characteristics of the politicians engaged in nutrition advocacy and the conditions compelling this action. For instance, parliamentarians who hold positions in the Executive (i.e. ministers) have more influence in sponsoring the nutrition frames related to their sectoral mandates compared to those participating in the legislature alone. I also conclude that politicians prioritise the policy solutions (e.g. food assistance, agricultural inputs) that are visible, easily credited and offer high returns on investment attainable within the short election cycle (cf. Collord 2016; Awortwi and Helmsing 2014; Batley and McLoughlin 2015). Multiple interpretations of a policy problem are indicated to maintain issues in political agendas (Halpin et al. 2018) and to mobilise different actors to participate in the follow on policy processes (Baker et al. 2019; Fox et al. 2015). However, my analysis resonated with the scholarly arguments that multiple frame occurrence undermines integrated nutrition governance because of lack of a shared holistic interpretation to nurture cross-sector collaboration (cf. Okeyo et al. 2020; Harris 2019b).

### ***6.3.1.3 Extend public policy concepts to understand the public policies in an African context***

This dissertation extended various public policy concepts (framing, policy integration, policy mechanism, street-level bureaucracy) to understand the policy processes and practices in an African context. There is limited exploitation of the public policy theories to study nutrition governance in low and middle income countries (Harris 2019a; Reich and Balarajan 2014). By combining the different public policy concepts, the dissertation presents an innovative analytical approach for assessing and comparing the patterns in nutrition governance across government levels, geographic boundaries and time horizons. The empirical results exemplified the inadequacies of monitoring nutrition integration using a country level or implementation lens alone. The individual perspectives alone disguise the fluctuations and discontinuities existing in individual ministries and local governments, thus providing misleading information about policy performance (cf. Brodtkin 2011). My study contributes to the literature advocating for clear theory-driven nutrition policy research (Nisbett 2019; Cullerton et al. 2018; Gilson and Raphaely 2008), and to the initiatives that develop tools for monitoring changes in nutrition investments (e.g. Development-Initiatives 2020; Fracassi et al. 2019; WHO 2018; Fox et al. 2015). The dissertation presented and demonstrated the use of explicit policy dimensions to understand cross-sector nutrition governance. Furthermore, chapter 2 showed the authenticity of the Parliamentary Hansards of an African country as an alternate source of data necessary to investigate the political commitments in nutrition in similar African contexts (cf. Fox et al. 2015). This research emphasised that realising and sustaining nutrition integration is contentious and necessitates constant monitoring. Improving our understanding of the actors, ideas, policy processes and practices enables more refined tracking of the commitments, investments and the critical conditions facilitating and constraining integrated nutrition governance. My findings can be leveraged to strengthen the integrated governance of food and nutrition security in similar African contexts.

### **6.3.2 Contributions to the public administration and policy literature**

The field of public policy, including the scholarly debates on the theoretical concepts used in this dissertation, has largely neglected the policymaking process in African countries (Peters 2015b; Howlett 2009). This research provided insights into the governance processes and practices in Uganda, which are pertinent to adjust these public policy concepts. The main contributions to the public policy literatures are the insights into (i) the role of donor projects in shaping the nutrition

policy processes, (ii) the policy (dis) integration mechanism, and (iii) a bottom-up perspective of the integration / disintegration practices of frontline workers.

### ***6.3.2.1 Role of donor projects in shaping the nutrition policy process***

The results added value to the literature in terms of emphasising the central role of donor involvement in setting the agenda and drafting policy designs. This significant role of donors projects in nutrition governance corresponds with what Lund (2006) describes as twilight institutions. Twilight institutions are non-state actors who actively exercise public authority to define, enforce or deter collectively binding rules to shape the governance of an issue (Lund 2006). This dissertation found that donor projects nurtured nutrition integration in specific sectors and by particular frontline workers through distinct mechanisms, which included transferring pre-existing programs using financial incentives (*policy promotion*) and providing technical assistance to empower domestic actors to respond (*issue promotion*). The projects concurrently facilitated nutrition integration in different sectors, governance levels and across geographic boundaries over time. Hence, I argue that without the donor projects putting pressure on government, Uganda's integrated nutrition strategies would remain paper realities. Nevertheless, the influence of donor projects was double-edged. For example, the projects discourage long-term government financing, and their narrow objectives and time-bound interests encourage turf wars (cf. Natalicchio and Mulder-Sibanda 2010; Shiffman and Smith 2007), all of which result in unascertainable and unsustainable nutrition integration outcomes.

Further, the study also contributes to the street-level bureaucracy literature focused on non-state actors. Street-level studies emphasise the impact of government contracts on the coping practices of non-profit organisations engaged in policy implementation (Bode and Brandsen 2014; Brodtkin 2011). My case showed the reverse by illustrating how donor projects used their financial and information resources to entice, and even compel, government organisations and frontline workers to integrate nutrition services. In line with Mosse (2005) and Nielsen (2006), I recommend that street-level studies conducted in African countries consider the influence of high resourced non-state actors on coping practices in policy implementation.

### ***6.3.2.2 Policy (dis)integration mechanisms***

The second contribution to this literature is to elaborate various policy mechanisms which explain nutrition policy integration and disintegration outcomes. So far, very few studies clarify these mechanisms (Trein et al. 2020; Biesbroek et al. 2014). This dissertation showed that international actors and strategically positioned bureaucrats adopt distinct policy entrepreneurship strategies to facilitate nutrition policy integration. Studies have emphasised the importance of policy learning and feedback in shaping effective policy change (Capano and Howlett 2019; Hogl et al. 2016; Paul A Sabatier 2014). However, my research revealed that, with the exception of the Ministry of Health in 2006-2010, the mechanisms had minimal application in fostering nutrition policy integration in Uganda. Instead, the financial assistance allotted by donor projects, on condition that ministries adopt specified policies, proved to be an important incentive for policy change. I conclude that nutrition policy adoption in Uganda is in part driven by the anticipation of benefits compared to learning from implementation. Further, the findings underlined the focal role of sectoral and district nutrition champions in fostering nutrition integration, suggesting that integrative leadership is vital at all government levels. In determining the nutrition integration patterns over time this dissertation also contributes to debates on the mechanisms influencing policy design choices (Capano and Lippi 2017; Howlett et al. 2015). The analysis in chapter 3 showed the layering of policy measures (i.e. new policy instruments introduced to complement existing ones) to meet the nutrition objectives in the health and agriculture sectors; and policy conversion tendencies (i.e. relabelling of existing policy measures) by some of the new ministries like social development and the Office of the Prime Minister.

### ***6.3.2.3 Bottom up perspective of the integration / disintegration practices of frontline workers***

Policy integration literature has so far paid scant attention to the experiences and consequences of integrative demands during implementation (Candel 2019; Tosun and Lang 2017; Hogl et al. 2016). The contribution to policy integration and street-level literatures is a bottom-up perspective showing the patterns of practice that frontline workers developed to ascertain or hinder implementation of cross-cutting policies. The research found evidence of the simultaneous existence of routine practices which structured the nutrition services (e.g. ritualised nutrition task performance), and the down prioritisation or avoidance of difficult and un-incentivised tasks (e.g. non-involvement) by frontline workers (cf. Brodtkin 2011). In addition, frontline workers, without

resources, coped by using their professional networks to deliver nutrition services (e.g. piggybacking on other actors' nutrition services). My analysis proved that frontline workers adopt different coping mechanisms (cf. Lipsky 2010) in response to the contextual variations and interactions existing in the societal, organisational and individual conditions (table 6.1). Examples are integrative facilitation (e.g. earmarked resources, integrative leadership, clear monitoring systems, and timely technical support) and political interference contributed to both structuring and modifying nutrition service delivery; as well as sustaining the siloed approaches. Hence, the conditions both enabled and frustrated the collective action goals. These insights also contribute to the literature about the effectiveness of the types of instruments adopted to realise policy objectives (Capano and Howlett 2020). This is especially the case with regard to integrative leadership (organisational instrument) and continuous nutrition capacity building for health workers (informational instrument) which aided the integration of nutrition actions into service delivery. The policy mechanisms and practices identified in this study are important first steps for general conceptualisation of causal processes shaping nutrition integration and the occurrence of cross-cutting policy designs in African countries.

#### **6.4 Future research**

Further research is necessary to advance the comparative analyses about the state of integrated nutrition governance in other African countries, and to assess whether it can be explained by similar policy mechanisms and practices (chapters 4, 5). This is more so timely given the growing advocacy for African countries to adopt and implement policies which contribute to nurturing more nutritious, all-inclusive and sustainable food systems (Brouwers et al. 2020). Future studies can draw and build on the public policy theories applied in this dissertation to examine the trajectories and sharpen the understanding of nutrition governance in other low and middle income contexts. The researches could investigate the coherence of adopted nutrition policy instruments (Thow et al. 2018; Hawkes 2015), the manifestation of policy mechanisms and practices in different contexts (Harris 2019a; Cullerton et al. 2018; Pelletier et al. 2018), and the changes in nutrition policy ideas (te Lintelo and Pittore 2020; Jaspars et al. 2018). Such refined understanding from different contexts will permit comparison and enable theory-building about the policy processes determining increased and decreased integrated nutrition governance in Africa.

Understanding of the explicit conditions triggering the policy (dis)integration outcomes in other low and middle income contexts is important. This is crucial to redesign the interventions for strengthening the policy and analytical capacity of African governments (Capano and Howlett 2019; Frisch-Aviram et al. 2018). Combining the top-down, horizontal and bottom-up dimensions generated rich evidence of the main conditions affecting integrated nutrition governance in Uganda. Employing a similar research design for integration-oriented analyses in other contexts will offer important information to guide policymakers how to develop effective policy designs. Further, there is need to accrue service delivery research to explain the discrepancies in nutrition policy implementation in other contexts (Tosun and Treib 2018; Tumilowicz et al. 2018). This will be beneficial to identify what works and why, and the systemic challenges of developing concerted action to improve nutrition.

This dissertation has assessed the framing of (mal)nutrition by elected officials based on the Hansard transcripts. There is need to investigate the incentives and micro-decisions made by individual politicians which influence their understanding of nutrition, as this research can further explain the political prioritization of policy recommendations. For instance, future studies can evaluate the impact of the rising parliament-focused capacity building strategies in African countries on the political framing of nutrition and policy response (cf. te Lintelo and Pittore 2020; Chhokar et al. 2015).

Although outside the scope of the current study, the results in chapter 5 suggested that discrepancies exist between what citizens considered to be useful nutrition services and how the projects were designed. Frontline workers echoed that the citizens seeking nutrition-related services increased considerably during the distribution of food rations and agriculture inputs compared to those that only created awareness on nutrition. Batley and McLoughlin (2015) suggest that the extent to which services are tangible and easily credited affects their popularity among citizens. Thus, citizens' perceptions of nutrition and their experiences with the nutrition policies warrant further investigation. Further, investigating the parallel policy processes and practices by non-state actors and their effects on nutrition integration remains important. Donor and private-sector projects are ever more investing in public organisations to cultivate country ownership and sustenance of their nutrition commitments (Busse et al. 2020; IFPRI 2016; Sunguya et al. 2014). Detailed account of the specific policy ideas, motivations, processes and practices of international and private-sector

actors is necessary to broaden understanding of the actions or inactions of all actors participating in nutrition policy. Combining the data acquired from actors with different interests, capacities and resources will permit generation of actionable knowledge to fast track the integrated nutrition governance ambitions.

### **6.5 Methodological reflection**

In this section I reflect on my positionality as a researcher and the decision to focus on government agencies.

Prior to this research, I participated in the nutrition policy processes in Uganda. My position as both an ‘insider’ and as a perceived ‘outsider’ in the nutrition policy process was beneficial to increasing the accuracy, credibility and validity of the study. As an ‘insider’ with a good professional network and work relationships, I was trusted by the study respondents. This enabled me to circumvent various typical challenges in policy studies, including, difficulties of accessing policy documents and respondents, observing high level policy processes, understanding coded and implied language, and conceptualizing relevant research guides (R. Berger 2015; Walt et al. 2008). This position allowed me to question the established explanations of the actors and factors determining nutrition integration in different ministries at national and district level in Uganda. Likewise, being viewed as an ‘outsider’ motivated the study participants to engage in critical discussions about the developments and obstructions in the nutrition policy environment since I was no longer regarded as ‘part of the system’ later on. Research guides were (re)adapted to probe for commonalities and differences in our (my own and the respondents’) perceptions, to navigate non-response challenges arising from respondents presuming I was already familiar with the processes. This provided nuanced insights and expanded comprehension of the intricate dynamics in the nutrition policy environment in Uganda.

Further, reflexivity was maintained through four strategies which align with the approaches identified in other comparable qualitative studies (R. Berger 2015; Smith and Stirling 2007). First, elucidation of the specific theory-driven dimensions (e.g. policy ideas, policy goals and instruments, practices) which facilitated assessing and comparing the patterns in integrating nutrition across sectors, government levels and time. The different theoretical concepts enabled me



to ask diverse questions throughout the study and acquisition of information about varied aspects of nutrition governance. Second, diversification of study respondents and comparing insights obtained through various data collection methods, such as, the policy documents and implementation reports, key informant and group interviews and observing nutrition services. Insights from finalized studies were used to inform the design of progressive research steps. The exploratory study of the changes in nutrition policy integration (chapter 3) informed the selection of the theoretical concepts (policy mechanism and street-level bureaucracy) and the design of the assessments in chapters 4 and 5. Detailed descriptions of and rationale for the respondent categories and the methods are provided in chapters 2, 3, 4 and 5.

Third, validation and exit meetings were conducted with study respondents to share the preliminary findings. Continuous peer reviews were provided by the persons familiar with the nutrition policy and public administration operations in Uganda as well as my supervision team to validate the reconstructed processes. Fourth, identification and labelling of the nutrition frames, policy mechanisms and practices occurred in an abductive approach. I constantly (re)interpreted the empirical observations and embedded them in the relevant theories in public policy literature, in consultation with my PhD supervision team. The continued reflection on emerging findings increased my understanding of the changes in nutrition governance and helped me to distil the main political frames, patterns of nutrition (dis)integration, policy mechanisms and frontline workers' practices described in the empirical chapters. Thus, my results may be generalizable to the ministries, local governments and frontline workers experiencing comparable contextual conditions, such as, those receiving donor support. It would be useful to compare my findings with studies in other low and middle income countries.

It was difficult to study the diversity of actors from the different sectors participating in Uganda's nutrition policies. Hence, my dissertation concentrated on the nutrition policy processes in government institutions. My emphasis on government actions alone may attract criticisms about the accuracy of the findings given that nutrition policies in Africa are susceptible to external decisions and actions of non-state actors, including, non-governmental and private sector organisations (Natalicchio and Mulder-Sibanda 2010; Walt et al. 2008). Nonetheless, even without the direct targeting of non-state actors, the exploratory study design enabled me to adapt the research questions to probe into the role of donor projects. The findings in chapter 4 emphasised

the need to pay attention to the interactions between donor projects, government organisations and frontline workers during nutrition policy implementation. My analysis revealed the explicit and implicit influences of donor projects on nutrition integration in government systems.

## **6.6 Recommendations for practice**

Based on the insights obtained in this dissertation, various recommendations for policy practice in Uganda and beyond can be made to achieve and sustain effective integrated nutrition governance.

### **6.6.1 Make the nutrition governance system more resilient**

The Ugandan government should become more proactive and step up their responsibilities in ensuring that the nutrition governance system is resilient and continues functionality beyond time-bound projects. This dissertation illustrated the central role of donor influence in Uganda's nutrition governance, which both bolstered and undermined the legitimacy of the policy processes. Although donor project support is necessary, these interventions are short-lived and compromise government's capacity to make serious investments in nutrition. Resilience refers to the capacity of a system to adapt or maintain its functions following conditions of uncertainty or transformation (Buitenhuis et al. 2020; Capano and Woo 2017). Based on my findings, two strategies could be considered to contribute to the resilience of integrated nutrition governance. First, government needs to develop robust policy designs that intentionally facilitate the continued articulation and integration of nutrition objectives and policy measures at different administrative levels. The process should include consensus building and active promotion of a shared national nutrition agenda; (re)framing nutrition concerns aligned to sectoral mandates and contexts; mandatory incorporation of nutrition objectives into the overarching development, sectoral and district investment policies; earmarking explicit human and financial resources; and identifying clear indicators to assess nutrition governance. Such enabling conditions will reinforce the capacities of organisations, leadership and individuals to engage in nutrition policy (Baker et al. 2018). Since beginning this research, Uganda has endorsed another national multi-sector nutrition policy and also registered an increase of nutrition focused finances and presidential commitment to address under- and over-nutrition. However, it remains to be seen whether this will result in increased integrated nutrition governance.

Second, achieving and sustaining nutrition integration necessitates the presence of integrative leadership at all government levels. The Ugandan government and international actors should strengthen the nutrition integrative capacities of politicians and bureaucratic leadership across sectors and local governments. Integrative leadership and capacity remains important to influence policy decisions, advocate for nutrition investments, monitor policy implementation, reflect on results and ensure the continued prioritisation of nutrition in future updated policy processes (Candel 2019; Peters 2015a; Pelletier et al. 2011; Crosby and Bryson 2010). As shown in this dissertation, some local leadership enabled nutrition integration through the mechanisms of issue promotion, policy learning and push for collaboration during service provision. Despite Ugandan universities training high numbers of nutritionists annually (Kikomeko et al. 2020), the majority are inadequately equipped to access and participate in the strategic policy decision making arenas. There is an urgent need to continue building the capacity of nutritionists and resource persons; second them to occupy strategic positions in different ministries and local governments; and strengthen their ability to negotiate, develop networks with different audiences and mobilize resources.

Although there are merits in government ministries specialising on specific policy objectives, how to implement the cross-cutting policy objectives will always prove challenging for both the sectors and their frontline workers. That is why integrative leadership is vital at different government levels to champion the nutrition integration ambitions. The empowered leadership can utilise the latest scientific knowledge and implementation experiences to develop shared long-term nutrition plans; and to circumvent discontinuities in the policy process that may arise from the effect of the constantly changing donor interests. Even then, I caution that some government (in)actions, such as high leadership turn over, rather expedite nutrition disintegration. This phenomenon underlays the turf wars and leadership contestation mechanisms.

#### **6.6.2 Facilitate frontline workers from different sectors to be able to implement nutrition policies**

As long as the integrated nutrition strategies are not implemented on the ground, they will remain paper realities in another format (e.g. sector policies). Chapter 5 showed the urgency for the government ministries and international actors to clarify what integrated government action in nutrition means on the ground. A majority of the frontline workers viewed nutrition as exclusively

a health concern, a perception fostered by the persistent health-focused interventions of government and donor projects. Different government ministries should make deliberate efforts to address the knowledge gaps and strengthen the implementation capacities of frontline workers in all sectors to support and sustain the nutrition services in their daily activities. This can be realised by a clear definition of the nutrition-related actions and responsibilities of the different frontline workers. The actions should be framed in line with the technical mandates of the various departments, for example agriculture, community development and education. It is also recommended that government, in consultation with all state and non-state actors, articulates and integrates explicit nutrition indicators into the government performance monitoring systems of the different sectors at national and district levels. This requires clear elaboration of the casual pathways linking the nutrition actions by different frontline workers to the impact indicators (Gillespie et al. 2019). Match the performance accountability with explicit resources to support implementation by various sectors and frontline workers.

Another recommendation is to incentivise the delivery of nutrition services by frontline workers in all sectors involved in nutrition policy. This study identified some non-monetary incentives which motivated nutrition service provision, such as: legitimised nutrition task allocation (i.e. nutrition focal person), guaranteed technical assistance, performance rewards, feedback from line ministries, specific nutrition finances, continued capacity strengthening, improved professional collaborations and increasing community relationships. I also recommend the conclusion of Lipsky (2010) and Bhattacharyya et al. (2001) to use multiple incentives which could inspire positive motives in the frontline workers, thereby deterring the disintegrative practices. To illustrate, the health workers in Karamoja received regular mentorship, nutrition supplies and participated in service quality improvement competitions and coordination meetings. This reduced uncertainties in implementing interventions to manage acute malnutrition.

### **6.6.3 Adjust current systems of monitoring nutrition governance**

This dissertation draws attention to the importance of a more refined multi-dimensional system of monitoring nutrition governance within and across country contexts to expand our understanding and facilitate appropriate targeting of interventions. In spite of being informative in some areas, the current global databases and checklists (for example, the Global database on Implementation of Nutrition Actions, Global Nutrition Report, Global Hunger Index) monitoring changes in

nutrition governance have a narrow focus on ambiguous country-level variables which do not necessarily reflect the diversity and disparities existing across sectors and government levels as identified in this research. By tracking the presence of integrated strategies, nutrition finances, coordination structures and change in impact indicators (Development-Initiatives 2020; WHO 2018), the variables provide abstract information and contribute to the misinterpretation and misrepresentation of the variances within national contexts.

My analysis stipulates the need to rethink the monitoring function and adjust the dimensions and government levels considered in tracking the changes in nutrition governance. New norms and standards are necessary for appropriate monitoring of the performance of the multi-sector nutrition policies and projects. However, rather than the international/national nutrition communities developing wholly new parallel systems, the current ones can be reviewed and upgraded to ensure they are comprehensive. This process requires that governments, international and private sector actors collaborate to develop inclusive monitoring systems which incorporate dimensions that capture different interventions, processes and practices in nutrition at different government levels, their impacts and contextual specificities. Such deliberations should be informed by data, such as the processes, mechanisms and practices identified in this dissertation, to develop more meaningful indicators. For instance, a country's state of nutrition policy (dis)integration could be aggregated based on the policy frames, goals, instruments and subsystems involved at the political, sectoral and service delivery levels. Further, the monitoring system should be more than checking boxes and data summaries to capture the relevant processes and practices driving the governance of nutrition. Continuous capacity building of all actors on how, why and when to collect the nutrition indicators is important to improve the data quality and utilisation in future policy processes.

#### **6.6.4 Create space and time for integrative policy-oriented learning**

Chapter 4 showed that instrumental policy learning mechanism increased nutrition integration in the health sector policies. However, this was sector-specific and short lived. If government and international actors want to foster integrated nutrition governance, they should intentionally invest, create space and time to formalise the integrative policy-oriented learning. This learning approach deliberately brings together actors – from different sectors, government levels and contexts – to reflect on their multidisciplinary experiences, and use the evidence and lessons to modify the policies and practices for effective goal attainment (Cashore et al. 2019; Rietig and Perkins 2018;

Walshe et al. 2013). The findings in this dissertation draw attention to the need to develop domestic capacities to facilitate integrative policy learning and to institutionalise local implementation knowledge. It is important that the Ugandan government, international actors and private sector, first, prioritise cross-sector learning when designing policies and projects. This involves identifying explicit cross-cutting learning objectives, creating strategies to accumulate different data types, and nurturing capacities to analyse and utilise the varied evidence in policy and implementation decisions (cf. Walshe et al. 2013). Second, develop integrative leadership at different government levels to facilitate learning, information mobilisation and promote use of new knowledge in decision making. For example, the insights of this dissertation have already been used to advocate for nutrition integration in the agriculture sector policies. Third, establish regular platforms to enable collective learning by actors from all sectors. This call not only requires the design of multi-sector nutrition monitoring systems, it also emphasises the need to create forums to enable dialogue, build trust and meaningful connections among nutrition actors (cf. Cashore et al. 2019). My study identified some platforms that could be improved to become more integrative learning oriented, e.g., the national nutrition forum and the quarterly nutrition partners' meetings. Fostering integrative learning might incur challenges in the beginning because it crosses sector, government and donor project boundaries. Thus the need for continuous dialogue about what comprises and enables integrative learning, who facilitates and leads the processes, what data is important and what motivates policy actors to utilise new knowledge.

## **6.7 Conclusion**

This dissertation investigated and explained to what extent the ambitions to govern nutrition in a more integrated manner proceed beyond paper realities. The focus on integrated nutrition governance is important because many African governments are embracing overarching integrated nutrition strategies as the main approach to effectively improve nutrition. The overall conclusion of the dissertation is that there is progress towards increased nutrition integration in political commitments and the policies adopted in different sectors. However, these commitments are rarely followed up with actual cross-sector services on the ground. The study has provided new insights about the political interpretations, the policy mechanisms and practices fostering and hampering integrated nutrition governance; as well as better understanding of the context-specific dynamics

and drivers of nutrition (dis)integration. Donor involvement was a key determinant in ensuring that the endorsed integrated nutrition strategies proceeded beyond paper realities.

Both the Ugandan government and international actors working to scale up investments in nutrition need to invest in the contextual conditions that allow for sustained nutrition policy integration and, ultimately, a more effective delivery of nutrition services. Investing in the domestic integrative capacities at different government levels is important to make the nutrition governance system resilient and retain its functions after external support is phased out. However, this is a long-term endeavour – not easily sustained through short-term funded projects – that necessitates going beyond tracking nutrition integration in sectoral policies and checking off performance indicators. Ultimately, only by following such a course of action will long-term global nutrition goals, such as the Sustainable Development Goal 2, stand a chance of becoming more than paper realities.





## References

## References

- Acosta, A. M., & Fanzo, J. (2012). Fighting maternal and child malnutrition: Analysing the political and institutional determinants of delivering a national multisectoral response in six countries. Institute of Development Studies, Brighton, UK.
- Ampaabeng, S. K., & Tan, C. M. (2013). The long-term cognitive consequences of early childhood malnutrition: The case of famine in Ghana. *Journal of Health Economics*, 32(6), 1013-1027, doi:<https://doi.org/10.1016/j.jhealeco.2013.08.001>.
- Anderson, J. D., Bagamian, K. H., Muhib, F., Amaya, M. P., Laytner, L. A., Wierzbza, T., et al. (2019). Burden of enterotoxigenic *Escherichia coli* and shigella non-fatal diarrhoeal infections in 79 low-income and lower middle-income countries: a modelling analysis. *The Lancet Global Health*, 7(3), e321-e330, doi:[https://doi.org/10.1016/S2214-109X\(18\)30483-2](https://doi.org/10.1016/S2214-109X(18)30483-2).
- Andrews, M., & Bategeka, L. (2013). Overcoming the limits of institutional reform in Uganda. In UNU-WIDER (Ed.): World Institute for Development Economics Research.
- Ansell, C. K., & Torfing, J. (2016). Handbook on theories of governance. In C. Ansell, & J. Torfing (Eds.), (pp. 592). Cheltenham: Edward Elgar Publishing.
- Asad, A. L., & Kay, T. (2014). Theorizing the relationship between NGOs and the state in medical humanitarian development projects. *Soc Sci Med*, 120, 325-333, doi:<https://doi.org/10.1016/j.socscimed.2014.04.045>.
- Awortwi, N., & Helmsing, A. H. J. (2014). Behind the façade of bringing services closer to people. The proclaimed and hidden intentions of the government of Uganda to create many new local government districts. *Canadian Journal of African Studies / Revue canadienne des études africaines*, 48(2), 297-314, doi:10.1080/00083968.2014.905260.
- Awortwi, N., & Helmsing, A. H. J. (2015). Behind the façade of bringing services closer to the people. The proclaimed and hidden intentions of the government of Uganda to create many new government district. *Canadian Journal of African studies*, 48(2), 297-314.
- Babu, S. C., Gajanan, S. N., & Hallam, J. A. (2017a). Chapter 3 - A Conceptual Framework for Investing in Nutrition: Issues, Challenges, and Analytical Approaches. In *Nutrition Economics* (pp. 25-40). San Diego: Academic Press.
- Babu, S. C., Gajanan, S. N., & Hallam, J. A. (2017b). Chapter 17 - Future Directions for Nutrition Policy Making and Implementation. In *Nutrition Economics* (pp. 345-352). San Diego: Academic Press.
- Bachou, H., & Labadarios, D. (2002). The nutrition situation in Uganda. *Nutrition*, 18(4), 356-358, doi:10.1016/s0899-9007(01)00722-5.
- Baker, P., Brown, A. D., Wingrove, K., Allender, S., Walls, H., Cullerton, K., et al. (2019). Generating political commitment for ending malnutrition in all its forms: A system dynamics approach for strengthening nutrition actor networks. *Obesity Reviews*, 20(S2), 30-44, doi:10.1111/obr.12871.
- Baker, P., Hawkes, C., Wingrove, K., Demaio, A. R., Parkhurst, J., Thow, A. M., et al. (2018). What drives political commitment for nutrition? A review and framework synthesis to inform the United Nations Decade of Action on Nutrition. *BMJ Global Health*, 3(1), e000485-e000485, doi:10.1136/bmjgh-2017-000485.
- Balarajan, Y., & Reich, M. R. (2016). Political economy challenges in nutrition. *Globalization and Health*, 12(1), 70, doi:10.1186/s12992-016-0204-6.
- Barling, D., Lang, T., & Caraher, M. (2002). Joined-up food policy? The trials of governance, public policy and the food system. *Social Policy and Administration*, 36(6), 556-574.
- Bartlett, L., & Vavrus, F. (2017). *Rethinking Case Study Research*. New York: Routledge: Taylor & Francis

- Batley, R., & McLoughlin, C. (2015). The Politics of Public Services: A Service Characteristics Approach. *World Development*, 74, 275-285, doi:<https://doi.org/10.1016/j.worlddev.2015.05.018>.
- Beach, D. (2016). It's all about mechanisms – what process-tracing case studies should be tracing. *New Political Economy*, 21(5), 463-472, doi:10.1080/13563467.2015.1134466.
- Beach, D., & Pedersen, R. B. (2013). *Process-Tracing Methods: Foundations and Guidelines*: University of Michigan Press.
- Belabas, W., & Gerrits, L. (2017). Going the extra mile? How street-level bureaucrats deal with the integration of immigrants. *Social Policy & Administration*, 51(1), 133-150, doi:10.1111/spol.12184.
- Benford, R. D., & Snow, D. A. (2000). Framing Processes and Social Movements: An Overview and Assessment. *Annual Review of Sociology*, 26(1), 611-639, doi:10.1146/annurev.soc.26.1.611.
- Bennett, A. (2018). The mother of all isms: Causal mechanisms and structured pluralism in International Relations theory. *European Journal of International Relations*, 19(3), 459-481, doi:10.1177/1354066118495484.
- Bennett, S., Glandon, D., & Rasanathan, K. (2018). Governing multisectoral action for health in low-income and middle-income countries: unpacking the problem and rising to the challenge. *BMJ Global Health*, 3(Suppl 4), e000880, doi:10.1136/bmjgh-2018-000880.
- Benson, D., & Jordan, A. (2011). What Have We Learned from Policy Transfer Research? Dolowitz and Marsh Revisited. *Political Studies Review*, 9, 366-378, doi:10.1111/j.1478-9302.2011.00240.x.
- Benson, T. (2008). Improving nutrition as a development priority: Addressing undernutrition within national policy processes in Sub-Saharan Africa. *Research report 156*: International Food Policy Research Institute.
- Berg, A. (1987). Nutrition planning is alive and well, Thanks you. *Food Policy*, ~ yol. · 12,. no.: 4 · (November· 1987), · pp. 365--ZS., 12(4), pp. 365-ZS.
- Berg, A., & Austin, J. (1984). Nutrition Policies and Programmes: a decade of redirection. *Food Policy*.
- Berger, G., & Steurer, R. (2010). Horizontal Policy Integration and Sustainable Development: Conceptual remarks and governance examples. In E. S. D. Network (Ed.), *ESDN Quarterly Reports*.
- Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative research*, 15(2), 219-234.
- Bhattacharyya, K., Winch, P., LeBan, K., & Tien, M. (2001). *Community health worker incentives and disincentives: how they affect motivation, retention, and sustainability*: BASICS II Arlington.
- Bhutta, Z. A., Das, J. K., Rizvi, A., Gaffey, M. F., Walker, N., Horton, S., et al. (2013). Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? *The Lancet*, 382(9890), 452-477, doi:[http://dx.doi.org/10.1016/S0140-6736\(13\)60996-4](http://dx.doi.org/10.1016/S0140-6736(13)60996-4).
- Biesbroek, R., & Candel, J. J. L. (2019). Mechanisms for policy (dis)integration: explaining food policy and climate change adaptation policy in the Netherlands. [journal article]. *Policy Sciences*, doi:10.1007/s11077-019-09354-2.
- Biesbroek, R., Dupuis, J., & Wellstead, A. (2017). Explaining through causal mechanisms: resilience and governance of social–ecological systems. *Current Opinion in Environmental Sustainability*, 28, 64-70, doi:10.1016/j.cosust.2017.08.007.

## References

- Biesbroek, R., Termeer, C. J. A. M., Klostermann, J. E. M., & Kabat, P. (2014). Rethinking barriers to adaptation: Mechanism-based explanation of impasses in the governance of an innovative adaptation measure. *Global Environmental Change*, 26, 108-118, doi:<https://doi.org/10.1016/j.gloenvcha.2014.04.004>.
- Black, R. E., Victora, C. G., Walker, S. P., Bhutta, Z. A., Christian, P., de Onis, M., et al. (2013). Maternal and child undernutrition and overweight in low-income and middle-income countries. *The Lancet*, 382(9890), 427-451, doi:[http://dx.doi.org/10.1016/S0140-6736\(13\)60937-X](http://dx.doi.org/10.1016/S0140-6736(13)60937-X).
- Bode, I., & Brandsen, T. (2014). State-third Sector Partnerships: A short overview of key issues in the debate. *Public Management Review*, 16(8), 1055-1066, doi:10.1080/14719037.2014.957344.
- Boin, A., Hart, P., Stern, E., & Sundelius, B. (2016). *The Politics of Crisis Management: Public Leadership under Pressure*: Cambridge University Press.
- Borah, P. (2011). Conceptual Issues in Framing Theory: A Systematic Examination of a Decade's Literature. *Journal of Communication*, 61(2), 246-263, doi:10.1111/j.1460-2466.2011.01539.x.
- Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9(2), 27-40, doi:10.3316/qrij0902027.
- Bowornwathana, B., & Poocharoen, O.-o. (2010). Bureaucratic politics and administrative reform: Why politics matters. *Public Organiz Rev*, 10, 303-321, doi:10.1007/s11115-010-0129-0.
- Braun, J. v. (2018). Chapter 8 Governance reform for food, nutrition, and agriculture. In IFPRI (Ed.), *2018 Global Food Policy Report*. Washington, DC: International Food Policy Research Institute.
- Briassoulis, H. (2017). *Policy Integration for Complex Environmental Problems: The Example of Mediterranean Desertification*: Taylor & Francis.
- Brodkin, E. Z. (2011). Policy work: Street-level organisations under new managerialism. *Journal of Public Administration Research and Theory*, 21(2), i253-i277, doi:10.1093/jopart/muq093.
- Brodkin, E. Z. (2015). Street-Level organisations and the "real world" of workfare: Lessons from the US. *Social Work & Society*, 13(1), 1-16.
- Brouwer, I. D., McDermott, J., & Ruben, R. (2020). Food systems everywhere: Improving relevance in practice. *Global Food Security*, 26, 100398, doi:<https://doi.org/10.1016/j.gfs.2020.100398>.
- Brugman, B. C., Burgers, C., & Vis, B. (2019). Metaphorical framing in political discourse through words vs. concepts: a meta-analysis. *Language and Cognition*, 11, 41-65, doi:10.1017/langcog.2019.5.
- Buitenhuis, Y., Candel, J. J. L., Termeer, K. J. A. M., & Feindt, P. H. (2020). Does the Common Agricultural Policy enhance farming systems' resilience? Applying the Resilience Assessment Tool (ResAT) to a farming system case study in the Netherlands. *Journal of Rural Studies*, doi:<https://doi.org/10.1016/j.jrurstud.2020.10.004>.
- Bump, J. B. (2018). Undernutrition, obesity and governance: a unified framework for upholding the right to food. *BMJ Global Health*, 3(Suppl 4), e000886, doi:10.1136/bmjgh-2018-000886.
- Bunge, M. (1997). Mechanism and explanation. *Philosophy of the Social Sciences*, 27(4), 410-465.

- Bunge, M. (2004). How Does It Work? *Philosophy of the Social Sciences*, 34(2), 182-210, doi:10.1177/0048393103262550.
- Busse, H., Covic, N., Aakesson, A., & Jogo, W. (2020). What Is the Role of Civil Society in Multisectoral Nutrition Governance Systems? A Multicountry Review. *Food Nutr Bull*, 41(2), 244-260, doi:10.1177/0379572119877348.
- Cairney, P. (2018). Three habits of successful policy entrepreneurs. *Policy & Politics*, 46(2), 199-215, doi:10.1332/030557318X15230056771696.
- Candel, J. J. L. (2018). Diagnosing integrated food security strategies. *NJAS - Wageningen Journal of Life Sciences*, 84, 103-113, doi:<https://doi.org/10.1016/j.njas.2017.07.001>.
- Candel, J. J. L. (2019). The expediency of policy integration. *Policy Studies*, 1-16, doi:10.1080/01442872.2019.1634191.
- Candel, J. J. L., & Biesbroek, R. (2016). Toward a processual understanding of policy integration. *Policy Sciences*, 49(3), 211-231, doi:10.1007/s11077-016-9248-y.
- Candel, J. J. L., & Biesbroek, R. (2018). Policy integration in the EU governance of global food security. [journal article]. *Food Security*, 10(1), 195-209, doi:10.1007/s12571-017-0752-5.
- Candel, J. J. L., Breeman, G. E., Stiller, S. J., & Termeer, C. J. A. M. (2014). Disentangling the consensus frame of food security: The case of the EU Common Agricultural Policy reform debate. *Food Policy*, 44, 47-58, doi:<https://doi.org/10.1016/j.foodpol.2013.10.005>.
- Candel, J. J. L., & Pereira, L. (2017). Towards integrated food policy: Main challenges and steps ahead. *Environmental Science & Policy*, 73, 89-92, doi:10.1016/j.envsci.2017.04.010.
- Capano, G., & Howlett, M. (2019). Causal logics and mechanisms in policy design: How and why adopting a mechanistic perspective can improve policy design. *Public Policy and Administration*, 0952076719827068, doi:10.1177/0952076719827068.
- Capano, G., & Howlett, M. (2020). The Knowns and Unknowns of Policy Instrument Analysis: Policy Tools and the Current Research Agenda on Policy Mixes. *SAGE Open*, 10(1), 2158244019900568, doi:10.1177/2158244019900568.
- Capano, G., Howlett, M., Ramesh, M., & Virani, A. (2019). *Making Policies Work: First- and Second-order Mechanisms in Policy Design*: Edward Elgar Publishing.
- Capano, G., & Lippi, A. (2017). How policy instruments are chosen: patterns of decision makers' choices. *Policy Sciences*, 50(2), 269-293, doi:10.1007/s11077-016-9267-8.
- Capano, G., & Woo, J. J. (2017). Resilience and robustness in policy design: a critical appraisal. *Policy Sciences*, 50(3), 399-426, doi:10.1007/s11077-016-9273-x.
- Casado-Asensio, J., & Steurer, R. (2014). Integrated strategies on sustainable development, climate change mitigation and adaptation in Western Europe: Communication rather than coordination. *Journal of Public Policy*, 34(3), 437-473, doi:10.1017/S0143814X13000287.
- Casado-Asensio, J., & Steurer, R. (2016). Mitigating climate change in a federal country committed to the Kyoto Protocol: How Swiss federalism further complicated an already complex challenge. *Policy Sciences*, 49(3), 257-279, doi:10.1007/s11077-016-9247-z.
- Cashore, B., Bernstein, S., Humphreys, D., Visseren-Hamakers, I., & Rietig, K. (2019). Designing stakeholder learning dialogues for effective global governance. *Policy and Society*, 38(1), 118-147, doi:10.1080/14494035.2019.1579505.
- Cejudo, G., M., & Michel, C. L. (2017). Addressing fragmented government action: Coordination, coherence, and integration. *Policy Sciences*, 50(4), 745-767, doi:10.1007/s11077-017-9281-5.

## References

- Chhokar, J. S., Babu, S. C., & Kolavalli, S. (2015). Understanding food policy change in Ghana. *Development in Practice*, 25(8), 1077-1090, doi:10.1080/09614524.2015.1082977.
- Chong, D., & Druckman, J. N. (2007). Framing public opinion in competitive democracies. *American Political Science Review*, 101(4), doi:10.1017/S0003055407070554.
- Christensen, T., & Lægreid, P. (2007). The whole-of-government approach to public sector reform. *Public Administration Review*, 67(6), 1059-1066, doi:10.1111/j.1540-6210.2007.00797.x.
- Collord, M. (2016). From the electoral battleground to the parliamentary arena: understanding intra-elite bargaining in Uganda's National Resistance Movement. *Journal of Eastern African Studies*, 10(4), 639-659, doi:10.1080/17531055.2016.1272279.
- Cornelissen, J. P. (2017). Preserving theoretical divergence in management research: Why the explanatory potential of qualitative research should be harnessed rather than suppressed. *Journal of Management Studies*, 54(3), 368-383.
- Courgeau, D. (2003). *Methodology and Epistemology of Multilevel Analysis: Approaches from Different Social Sciences* (Vol. 2, Methodological Prospects in the Social Sciences): Springer.
- Creswell, J. W., & Creswell, D. J. (2018). *Research design: qualitative, quantitative, and mixed methods approaches* (5th ed.). United States of America.
- Crosby, B. C., & Bryson, J. M. (2010). Integrative leadership and the creation and maintenance of cross-sector collaborations. *The Leadership Quarterly*, 21(2), 211-230, doi:<https://doi.org/10.1016/j.leaqua.2010.01.003>.
- Cullerton, K., Donnet, T., Lee, A., & Gallegos, D. (2016). Exploring power and influence in nutrition policy in Australia. *Obesity Reviews*, 17(12), 1218-1225, doi:10.1111/obr.12459.
- Cullerton, K., Donnet, T., Lee, A., & Gallegos, D. (2018). Effective advocacy strategies for influencing government nutrition policy: a conceptual model. *International Journal of Behavioral Nutrition and Physical Activity*, 15(1), 83, doi:10.1186/s12966-018-0716-y.
- Daugbjerg, C., & Sønderskov, K. M. (2012). Environmental policy performance revisited: Designing effective policies for green markets. *Political Studies*, 60, 399-418, doi:10.1111/j.1467-9248.2011.00910.x.
- Development-Initiatives (2018). 2018 Global Nutrition Report: Shining a light to spur action on nutrition. *Global Nutrition Reports*. Bristol, UK Development Initiatives Poverty Research Ltd.
- Development-Initiatives (2020). 2020 Global Nutrition Report: Action on equity to end malnutrition. In D. Initiatives (Ed.), *Global Nutrition Report*. Bristol, UK: Development Initiatives Poverty Research Ltd.
- Dewulf, A., & Bouwen, R. (2012a). Issue framing in conversations for change: Discursive interaction strategies for "doing differences". *The Journal of Applied Behavioral Science*, 48(2), 168-193, doi:10.1177/0021886312438858.
- Dewulf, A., & Bouwen, R. (2012b). Issue Framing in Conversations for Change: Discursive Interaction Strategies for "Doing Differences". *The Journal of Applied Behavioral Science*, 48(2), 168-193, doi:10.1177/0021886312438858.
- Dewulf, A., Gray, B., Putnam, L., Lewicki, R., Aarts, N., Bouwen, R., et al. (2009). Disentangling approaches to framing in conflict and negotiation research: A meta-paradigmatic perspective. *Human Relations*, 62(2), 155-193, doi:10.1177/0018726708100356.
- Diez-Roux, A. (2000). Multilevel analysis in public health research *Annual Review Public Health*(21), 171-192, doi:10.1146/annurev.publhealth.21.1.171.

- Dolowitz, D., & Marsh, D. (2000). Learning from abroad: The role of policy transfer in contemporary policy-making. *Governance*, 13(1), 5, doi:10.1111/0952-1895.00121.
- Drimie, S., & Ruysenaar, S. (2010). The Integrated Food Security Strategy of South Africa: An institutional analysis. *Agrekon*, 49(3), 316-337, doi:10.1080/03031853.2010.503377.
- Dupuis, J., & Biesbroek, R. (2013). Comparing apples and oranges: The dependent variable problem in comparing and evaluating climate change adaptation policies. *Global Environmental Change*, 23(6), 1476-1487, doi:<http://dx.doi.org/10.1016/j.gloenvcha.2013.07.022>.
- Embuldeniya, G., Kirst, M., Walker, K., & Wodchis, W. P. (2018). The generation of integration: The early experience of implementing bundled care in Ontario, Canada. *The Milbank Quarterly*, 96(4), 782-813, doi:10.1111/1468-0009.12357.
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, 43(4), 51-58, doi:0021-9916/93/\$5.00.
- Evans, J. M., Baker, R. G., & Berta, W. (2013). The evolution of integrated health care strategies. 15, 125-161, doi:10.1108/s1474-8231(2013)0000015011.
- Evans, J. M., Grudniewicz, A., Baker, G. R., & Wodchis, W. P. (2016). Organisational context and capabilities for integrating care: A framework for improvement. *International Journal of Integrated Care*, 16(3), 15-15, doi:10.5334/ijic.2416.
- Faling, M. (2020). Framing agriculture and climate in Kenyan policies: a longitudinal perspective. *Environmental Science & Policy*, 106, 228-239, doi:<https://doi.org/10.1016/j.envsci.2020.01.014>.
- Faling, M., Biesbroek, R., & Karlsson-Vinkhuyzen, S. (2018a). The strategizing of policy entrepreneurs towards the Global Alliance for Climate-Smart Agriculture. *Global Policy*, doi:10.1111/1758-5899.12547.
- Faling, M., Biesbroek, R., Karlsson-Vinkhuyzen, S., & Termeer, K. (2018b). Policy entrepreneurship across boundaries: a systematic literature review. *Journal of Public Policy*, 1-30, doi:10.1017/s0143814x18000053.
- Falleti, T. G., & Lynch, J. F. (2009). Context and causal mechanisms in political analysis. *Comparative Political Studies*, 42(9), 1143-1166, doi:10.1177/0010414009331724.
- Fan, S., & Pandya-Lorch, R. (2012). *Reshaping agriculture for nutrition and health: An IFPRI 2020 Book*. Washington, DC: International Food Policy Research Institute.
- Fanzo, J., Marshall, Q., Dobermann, D., Wong, J., Merchan, R. I., Jaber, M. I., et al. (2015). Integration of nutrition into extension and advisory services: A synthesis of experiences, lessons, and recommendations. *Food Nutr Bull*, 36(2), 120-137, doi:10.1177/0379572115586783.
- FAO (2002). World Food Summit follow-up strategy update for national agricultural development horizon 2010 Uganda. Uganda: FAO.
- FAO (2017a). *Nutrition-sensitive agriculture and food systems in practice Options for intervention*. Rome: FAO.
- FAO (2017b). Strengthening sector policies for better food security and nutrition results In FAO (Ed.), *Political economy analysis*. Rome: FAO.
- FAO. Parliamentary alliances against hunger and malnutrition. In FAO (Ed.), *First Global Parliamentary Summit, Madrid, October 2018 2018*: FAO
- FAO, IFAD, UNICEF, WFP, & WHO (2019). The State of Food Security and Nutrition in the World 2019. Safeguarding against economic slowdowns and downturns. In FAO (Ed.), (pp. 239). Rome.

## References

- FAO, IFAD, UNICEF, WFP, & WHO (2020). The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets. In FAO (Ed.), *The State of Food Security and Nutrition in the World*. Rome: FAO.
- FAO, & WHO. Second International Conference on Nutrition: Report of the Joint FAO/WHO Secretariat on the Conference. In *ICN2, Rome, 2014*
- Field, J. O., & Levinson, F. J. (1975). Nutrition and development: Dynamics of political commitment. *Food Policy*, 1(1), 53-61, doi:[https://doi.org/10.1016/0306-9192\(75\)90008-1](https://doi.org/10.1016/0306-9192(75)90008-1).
- Fields, J. O. (1987). Multisectoral nutrition planning: a post-mortem. *Food Policy*, 15-28.
- Fink, G., Peet, E., Danaei, G., Andrews, K., McCoy, D. C., Sudfeld, C. R., et al. (2016). Schooling and wage income losses due to early-childhood growth faltering in developing countries: national, regional, and global estimates. *The American Journal of Clinical Nutrition*, 104(1), 104-112, doi:10.3945/ajcn.115.123968.
- Fox, A. M., Balarajan, Y., Cheng, C., & Reich, M. R. (2015). Measuring political commitment and opportunities to advance food and nutrition security: Piloting a rapid assessment tool. *Health Policy Plan*, 30(5), 566-578, doi:10.1093/heapol/czu035.
- Fracassi, P., Siekmans, K., & Baker, P. (2019). Galvanizing political commitment in the UN Decade of Action for Nutrition: Assessing commitment in member-countries of the Scaling Up Nutrition (SUN) Movement. *Food Policy*, 101788, doi:<https://doi.org/10.1016/j.foodpol.2019.101788>.
- Frisch-Aviram, N., Cohen, N., & Beeri, I. (2018). Low-level bureaucrats, local government regimes and policy entrepreneurship. *Policy Sciences*, 51(1), 39-57, doi:10.1007/s11077-017-9296-y.
- Fuertes, V., & Lindsay, C. (2016). Personalization and street-level practice in activation: The case of the UK's work programme. *Public Administration*, 94(2), 526-541, doi:10.1111/padm.12234.
- Gamson, W. A., & Modigliani, A. (1989). Media discourse and public opinion on nuclear power: A constructionist approach. *American Journal of Sociology*, 95(1), 1-37.
- Garrett, J., & Natalichio, M. (2011). *Working multisectorally in nutrition: Principles, practices, and case studies*. Washington, D.C.: International Food Policy Research Institute.
- George, A. L., & Bennett, A. (2005). *Case Studies and Theory Development in the Social Sciences*: MIT Press.
- Gerring, J. (2008). Review article: The mechanistic worldview: Thinking inside the box. *British Journal of Political Science*, 38(1), 161-179.
- Gillespie, S., Menon, P., & Kennedy, A. L. (2015). Scaling up impact on nutrition: What will it take? *Advances Nutrition*, 6(4), 440-451, doi:10.3945/an.115.008276.
- Gillespie, S., Poole, N., van den Bold, M., Bhavani, R. V., Dangour, A. D., & Shetty, P. (2019). Leveraging agriculture for nutrition in South Asia: What do we know, and what have we learned? *Food Policy*, 82, 3-12, doi:<https://doi.org/10.1016/j.foodpol.2018.10.012>.
- Gillespie, S., & van den Bold, M. (2015). *Stories of change in nutrition: A tool pool*.
- Gillespie, S., & van den Bold, M. (2017). Stories of change in nutrition: An overview. *Global Food Security*, 13, 1-11, doi:<https://doi.org/10.1016/j.gfs.2017.02.004>.
- Gilson, L., & Raphaely, N. (2008). The terrain of health policy analysis in low and middle income countries: a review of published literature 1994-2007. *Health Policy Plan*, 23(5), 294-307, doi:10.1093/heapol/czn019.



- Golooba-Mutebi, F., & Hickey, S. (2013). Investigating the links between political settlements and inclusive development in Uganda: towards a research agenda. Manchester: Effective States and Inclusive Development Research Centre.
- GOU (2003). The Food and Nutrition Policy. (pp. 29). Kampala, Uganda: Government of Uganda.
- GOU (2011). Uganda\_Nutrition Action Plan 2011-2016. Scaling up multi-sectoral efforts to establish a strong nutrition foundation for Uganda's development. In N. P. Authority (Ed.). Kampala: Government of Uganda
- Parliament of the Republic of Uganda (2020). Government of Uganda <https://www.parliament.go.ug/documents/hansards>.
- Green, E. (2015). Decentralization and Development in Contemporary Uganda. *Regional & Federal Studies*, 25(5), 491-508, doi:10.1080/13597566.2015.1114925.
- Gupta, D., & Denton, B. (2008). Appointment scheduling in health care: Challenges and opportunities. *IIE Transactions*, 40(9), 800-819, doi:10.1080/07408170802165880.
- Haddad, L. (2013). How should nutrition be positioned in the post-2015 agenda? *Food Policy*, 43, 341-352, doi:<http://dx.doi.org/10.1016/j.foodpol.2013.05.002>.
- Haddad, L., Nisbett, N., Barnett, I., & Valli, E. (2014). Maharashtra's Child Stunting Declines: What is Driving Them? Findings of a Multidisciplinary Analysis,. [Institute of Development Studies and UNICEF Report 2014]. 129.
- Hagelund, A. (2010). Dealing with the Dilemmas: Integration at the Street-level in Norway. *International Migration*, 48(2), 79-102, doi:10.1111/j.1468-2435.2008.00497.x.
- Hall, P. (1993). Policy Paradigms, Social Learning, and the State: The Case of Economic Policymaking in Britain. *Comparative Politics*, 25(3), 275-296.
- Halpin, D. R., Fraussen, B., & Nownes, A. J. (2018). The balancing act of establishing a policy agenda: Conceptualizing and measuring drivers of issue prioritisation within interest groups. *Governance*, 31(2), 215-237, doi:10.1111/gove.12284.
- Hamaker, E. L., & Wichers, M. (2017). No Time Like the Present: Discovering the Hidden Dynamics in Intensive Longitudinal Data. *Current Directions in Psychological Science*, 26(1), 10-15, doi:10.1177/0963721416666518.
- HANCI (2017). Key data for Uganda <http://africa.hancindex.org/files/2017/africa/EN/UG.pdf>. Accessed 22 November 2019.
- Harris, J. (2019a). Advocacy coalitions and the transfer of nutrition policy to Zambia. *Health Policy Plan*, 34(3), 207-215, doi:10.1093/heapol/czz024.
- Harris, J. (2019b). Narratives of nutrition: Alternative explanations for international nutrition practice. *World Nutrition*, 10(4), 99-125, doi:<https://doi.org/10.26596/wn.201910499-125>.
- Harris, J., Drimie, S., Roopnaraine, T., & Covica, N. (2017). From coherence towards commitment: Changes and challenges in Zambia's nutrition policy environment. *Global Food Security*, doi:<http://dx.doi.org/10.1016/j.gfs.2017.02.006>.
- Harrison, T., & Kostka, G. (2014). Balancing Priorities, Aligning Interests: Developing Mitigation Capacity in China and India. *Comparative Political Studies*, 47(3), 450-480, doi:10.1177/0010414013509577.
- Hawkes, C. (2015). Enhancing coherence between trade policy and nutrition action. In U. N. S. C. o. Nutrition (Ed.): City University of London.
- Hedström, P., & Swedberg, R. (1998). Social Mechanisms. *Acta Sociologica*, 39(3), 281-308.
- Hedström, P., & Ylikoski, P. (2010). Causal Mechanisms in the Social Sciences. *Annual Review of Sociology*, 36(1), 49-67, doi:10.1146/annurev.soc.012809.102632.

## References

- Herrera, H., Reuben, E., & Ting, M. M. (2014). Turf wars. *IZA discussion papers* Institute for the Study of Labor (IZA), Bonn.
- Herrera, H., Reuben, E., & Ting, M. M. (2017). Turf wars. *Journal of Public Economics*, 152, 143-153, doi:<https://doi.org/10.1016/j.jpubeco.2017.06.002>.
- Hill, H. C. (2003). Understanding Implementation: Street-Level Bureaucrats' Resources for Reform. *Journal of Public Administration Research and Theory*, 13(3), 265-282, doi:10.1093/jopart/mug024.
- Hinterleitner, M. (2017). Policy failures, blame games and changes to policy practice. *Journal of Public Policy*, 38(02), 221-242, doi:10.1017/s0143814x16000283.
- Hitt, M., Beamish, P., Jackson, S., Zurich, G., & Mathieu, J. (2007). Building theoretical and empirical bridges across level: Multilevel research in management. *Academy of Management Journal*, 50, doi:10.5465/AMJ.2007.28166219.
- Hoddinott, J. (2016). The economics of reducing malnutrition in Sub-Saharan Africa. [Global Panel on Agriculture and Food Systems for Nutrition Working Paper]. 21.
- Hodge, J., Herforth, A., Gillespie, S., Beyero, M., Wagah, M., & Semakula, R. (2015). Is there an enabling environment for nutrition-sensitive agriculture in East Africa? Stakeholder perspectives from Ethiopia, Kenya, and Uganda. *Food Nutrition Bulletin*, 36(4), 503-519, doi:10.1177/0379572115611289.
- Hoey, L., & Pelletier, D. L. (2011). Bolivia's multisectoral Zero Malnutrition Program: Insights on commitment, collaboration, and capacities. *Food Nutr Bull*, 32(2).
- Hogl, K., Kleinschmit, D., & Rayner, J. (2016). Achieving policy integration across fragmented policy domains: Forests, agriculture, climate and energy. *Environment and Planning C: Government and Policy*, 34(3), 399-414, doi:10.1177/0263774x16644815.
- Høiland, G., & Willumsen, E. (2018). Resistance-driven innovation? frontline public welfare workers' coping with top-down implementation. *Nordic Journal of Working Life Studies*, 8(2), 1-20.
- Holdsworth, M., Kruger, A., Nago, E., Lachat, C., Mamiro, P., Smit, K., et al. (2015). African stakeholders' views of research options to improve nutritional status in sub-Saharan Africa. *Health Policy Plan*, 30(7), 863-874, doi:10.1093/heapol/czu087.
- Holzinger, K., & Knill, C. (2005). Causes and conditions of cross-national policy convergence. *Journal of European Public Policy*, 12(5), 775-796, doi:10.1080/13501760500161357.
- Hood, C. (1983). *The Tools of Government*. London, UK.: Chatham House Publishers.
- Hood, C. (2011). *The blame game: Spin, bureaucracy, and self-preservation in government*: Princeton University Press.
- Houts, P. S., Doak, C. C., Doak, L. G., & Loscalzo, M. J. (2006). The role of pictures in improving health communication: A review of research on attention, comprehension, recall, and adherence. *Patient Education and Counseling*, 61(2), 173-190, doi:10.1016/j.pec.2005.05.004.
- Howlett, M. (2000). Managing the "hollow state": Procedural policy instruments and modern governance. *Canadian Public Administration*, 43(4), 412-431.
- Howlett, M. (2009). Governance modes, policy regimes and operational plans: A multi-level nested model of policy instrument choice and policy design. *Policy Sciences*, 42(1), 73-89, doi:10.1007/s11077-009-9079-1.
- Howlett, M., Mukherjee, I., & Woo, J. J. (2015). From tools to toolkits in policy design studies: the new design orientation towards policy formulation research. *Policy & Politics*, 43(2), 291-311, doi:<https://doi.org/10.1332/147084414X13992869118596>.

- Howlett, M., & Ramesh, M. (2003). *Studying public policy: Policy cycles and policy subsystems* (2nd ed.). Toronto: Oxford University Press.
- Hupe, P. (2013). Dimensions of Discretion: Specifying the Object of Street-Level Bureaucracy Research. *dms—der moderne staat—Zeitschrift für Public Policy, Recht und Management*, 6(2), 425-440.
- Hupe, P. (2019). *Research handbook on street-level bureaucracy: the ground floor of government in context* (Handbooks of research on public policy). Cheltenham, UK: Edward Elgar Publishing.
- Hupe, P., & Buffat, A. (2013). A Public Service Gap: Capturing contexts in a comparative approach of street-level bureaucracy. *Public Management Review*, 16(4), 548-569, doi:10.1080/14719037.2013.854401.
- Huttunen, S. (2015). Farming practices and experienced policy coherence in agri-environmental policies: The case of land clearing in Finland. *Journal of Environmental Policy & Planning*, 17(5), 573-592, doi:10.1080/1523908X.2014.1003348.
- Ickovics, J. R. (2008). “Bundling” HIV prevention: Integrating services to promote synergistic gain. *Preventive Medicine*, 46(3), 222-225, doi:<https://doi.org/10.1016/j.ypmed.2007.09.006>.
- IDS (2019). Hunger and Nutrition Commitment Index Global. <http://www.hancindex.org/hanci/>. Accessed 9 December 2019.
- IFPRI (2016). *Global Nutrition Report 2016: From promise to impact: Ending malnutrition by 2030*. Washington, DC, USA: International Food Policy Research Institute.
- Ilie, C. (2015). Parliamentary discourse. *The International Encyclopedia of language and social interaction*, 1-15.
- Jaffar, S., & Gill, G. (2017). The crisis of diabetes in sub-Saharan Africa. *The lancet. Diabetes & endocrinology*, 5(8), 574-575, doi:10.1016/s2213-8587(17)30219-x.
- Jaspars, S., Scott-Smith, T., & Hull, E. (2018). Contested evolution of nutrition for humanitarian and development ends.
- Jeffares, S. (2014). *Interpreting Hashtag Politics: Policy Ideas in an Era of Social Media*: Palgrave Macmillan UK.
- Jochim, A. E., & May, P. J. (2010). Beyond subsystems: Policy regimes and governance. *Policy Studies Journal*, 38(2), 303-327, doi:10.1111/j.1541-0072.2010.00363.x.
- Johnson-Welch, C., MacQuarrie, K., & Bunch, S. (2005). A leadership strategy for reducing hunger and malnutrition in Africa: The Agriculture-Nutrition Advantage. In I. C. f. R. o. Women (Ed.). Washington, DC 20036, USA: International Center for Research on Women.
- Jones, B. D., & Baumgartner, F. R. (2004). Representation and Agenda Setting. *Policy Studies Journal*, 32(1), 1-24, doi:10.1111/j.0190-292X.2004.00050.x.
- Jones, M. D., & Jenkins-Smith, H. C. (2009). Trans-subsystem dynamics: Policy topography, mass opinion, and policy change. *Policy Studies Journal*, 37(1), 37-58, doi:10.1111/j.1541-0072.2008.00294.x.
- Jordan, A., & Lenschow, A. (2010). Environmental policy integration: a state of the art review. *Environmental Policy and Governance*, 20(3), 147-158, doi:10.1002/eet.539.
- Jordan, G., & Halpin, D. (2006). The Political Costs of Policy Coherence: Constructing a Rural Policy for Scotland. *Journal of Public Policy*, 26(01), 21, doi:10.1017/s0143814x06000456.

## References

- Kampman, H., Zongrone, A., Rawat, R., & Becquey, E. (2017). How Senegal created an enabling environment for nutrition: A story of change. *Global Food Security*, doi:<http://dx.doi.org/10.1016/j.gfs.2017.02.005>.
- Kay, A., & Baker, P. (2015). What Can Causal Process Tracing Offer to Policy Studies? A Review of the Literature. *Policy Studies Journal*, 43(1), 1-21, doi:10.1111/psj.12092.
- Kikomeko, P. K., Ochola, S., Kaaya, A. N., Ogada, I., Birungi, T. L., & Nakitto, P. (2020). Stakeholders' Perceptions of the Nutrition and Dietetics Needs and the Requisite Professional Competencies in Uganda: A Cross-Sectional Mixed Methods Study.
- Kingdon, J. W. (1984). *Agendas, alternatives, and public policies*: Little, Brown.
- Knill, C., & Tosun, J. (2012). *Public Policy: A New Introduction*. Basingstoke: Palgrave Macmillan.
- Koduah, A., Van Dijk, H., & Agyepong, I. A. (2016). Technical analysis, contestation and politics in policy agenda setting and implementation: the rise and fall of primary care maternal services in Ghana's capitation policy. *BMC Health Services Research*, 16, 323.
- Koon, A. D., Hawkins, B., & Mayhew, S. H. (2016). Framing and the health policy process: a scoping review. *Health Policy Plan*, 31(6), 801-816, doi:10.1093/heapol/czv128.
- Kozlowski, S., & Klein, K. (2012). A multilevel approach to theory and research in organisations: Contextual, temporal, and emergent processes. *Multi-level theory, research, and methods in organisations: Foundations, extensions, and new directions*.
- KRSU (2016). Karamoja NGO mapping report. Uganda Karamoja Resilience Support Unit, USAID/Uganda, Kampala.
- Kuziga, F., Adoke, Y., & Wanyenze, R. (2017). Prevalence and factors associated with anaemia among children aged 6 to 59 months in Namutumba district, Uganda: a cross-sectional study. *BMC Pediatrics*, 17(25), doi:10.1186/s12887-017-0782-3.
- Kwan, S. (2009). Framing the Fat Body: Contested Meanings between Government, Activists, and Industry\*. *Sociological Inquiry*, 79(1), 25-50, doi:10.1111/j.1475-682X.2008.00271.x.
- Lachat, C., Nago, E., Ka, A., Vermeylen, H., Fanzo, J., Mahy, L., et al. (2015). Landscape analysis of nutrition-sensitive agriculture policy development in Senegal. *Food Nutrition Bulletin*, 36(2), 154-166, doi:10.1177/0379572115587273.
- Lafferty, W., & Hovden, E. (2003). Environmental policy integration: Towards an analytical framework. *Environmental Politics*, 12(3), 1-22, doi:10.1080/09644010412331308254.
- Leach, M., Nisbett, N., Cabral, L., Harris, J., Hossain, N., & Thompson, J. (2020). Food politics and development. *World Development*, 134, 105024, doi:<https://doi.org/10.1016/j.worlddev.2020.105024>.
- Leiderer, S. (2015). Donor coordination for effective government policies? *Journal of International Development*, 27, 1422-1445.
- Ling, T., Brereton, L., Conklin, A., Newbould, J., & Roland, M. (2012). Barriers and facilitators to integrating care: experiences from the English Integrated Care Pilots. *International Journal of Integrated Care*, 12(5), doi:<http://doi.org/10.5334/ijic.982>.
- Lipsky, M. (2010). *Street-level bureaucracy: Dilemmas of the individual in public service* (30th Anniversary Expanded Edition ed.). New York: Russell Sage Foundation.
- Lubienski, C., Brewer, T. J., & La Londe, P. G. (2016). Orchestrating policy ideas: philanthropies and think tanks in US education policy advocacy networks. *Australian educational researcher*, 43(1), 55-73.

- Lund, C. (2006). Twilight Institutions: Public Authority and Local Politics in Africa. [http://lst-iiiep.iiiep-unesco.org/cgi-bin/wwwi32.exe/\[in=epidoc1.in\]/?t2000=023654/\(100\)](http://lst-iiiep.iiiep-unesco.org/cgi-bin/wwwi32.exe/[in=epidoc1.in]/?t2000=023654/(100)), 37, doi:10.1111/j.1467-7660.2006.00497.x.
- Lyth, M. (1988). The functioning of social systems as a defence against anxiety: A report on a study of a general hospital In M. Lyth (Ed.), *Containing anxiety in institutions: Selected Essays* (Vol. 1, Vol. 269). University of Michigan: Free Association Books.
- Matthes, J., & Kohring, M. (2008). The Content Analysis of Media Frames: Toward Improving Reliability and Validity. *Journal of Communication*, 58(2), 258-279, doi:10.1111/j.1460-2466.2008.00384.x.
- Maxwell, D., Khalif, A., Hailey, P., & Checchi, F. (2020). Determining famine: Multi-dimensional analysis for the twenty-first century. *Food Policy*, 101832.
- May, P. J., & Winter, S. C. (2007). Politicians, managers, and street-level bureaucrats: Influences on policy implementation. *Journal of Public Administration Research and Theory*, 19(3), 453-476, doi:10.1093/jopart/mum030.
- Maynard-Moody, S., & Musheno, M. (2012). Social equities and inequities in practice: Street-level workers as agents and pragmatists. *Public Administration Review*, 72(1), S16-S23, doi:10.1111/j.1540-6210.2012.02633.x.
- Mayntz, R. (2004). Mechanisms in the analysis of social macro-phenomena. *Philosophy of the Social Sciences*, 34(2), 237-259, doi:10.1177/0048393103262552.
- McIntyre, L., Patterson, P. B., & Mah, C. L. (2018). A framing analysis of Canadian household food insecurity policy illustrates co-construction of an intractable problem. *Critical Policy Studies*, 12(2), 149-168, doi:10.1080/19460171.2016.1253491.
- Menon, P., Avula, R., Pandey, S., Scott, S., & Kumar, A. (2019). Rethinking effective nutrition convergence: An analysis of intervention co-coverage data. *Economic & Political Weekly*, 54(24).
- Menon, P., Frongillo, E. A., Pelletier, D. L., Stoltzfus, R. J., Ahmed, A. M. S., & Ahmed, T. (2011). Assessment of epidemiologic, operational, and sociopolitical domains for mainstreaming nutrition. *Food Nutr Bull*, 32(2 (supplement)).
- Metz, F., Angst, M., & Fischer, M. (2020). Policy integration: Do laws or actors integrate issues relevant to flood risk management in Switzerland? *Global Environmental Change*, 61, 101945, doi:<https://doi.org/10.1016/j.gloenvcha.2019.101945>.
- Minkman, E., Buuren, A. v., & Bekkers, V. (2018). Policy transfer routes: an evidence-based conceptual model to explain policy adoption. *Policy Studies*, 39(2), 222-250, doi:10.1080/01442872.2018.1451503.
- Mintrom, M., & Norman, P. (2009). Policy Entrepreneurship and Policy Change. *Policy Studies Journal*, 37(4), 649-667, doi:10.1111/j.1541-0072.2009.00329.x.
- Mogues, T., & Billings, L. (2015). The making of public investments: Champions, coordination, and characteristics of nutrition interventions. (pp. 32). Washington:DC: International Food Policy Research Institute.
- Mogues, T., & Billings, L. (2019). The making of public investments: The role of champions, coordination, and characteristics of nutrition programmes in Mozambique. *Food Policy*, 83, 29-38, doi:<https://doi.org/10.1016/j.foodpol.2018.11.001>.
- MOH (2014). Non- Communicable Disease Risk Factor Baseline Survey. Uganda: Ministry of Health.
- Morris, S. S., Cogill, B., & Uauy, R. (2008). Effective international action against undernutrition: why has it proven so difficult and what can be done to accelerate progress? *The Lancet*, 371(9612), 608-621, doi:[https://doi.org/10.1016/S0140-6736\(07\)61695-X](https://doi.org/10.1016/S0140-6736(07)61695-X).

## References

- Mosse, D. (2004). Is Good Policy Unimplementable? Reflections on the Ethnography of Aid Policy and Practice. *Development and Change*, 35(4), 639-671, doi:10.1111/j.0012-155X.2004.00374.x.
- Mosse, D. (2005). Cultivating development: An ethnography of aid policy and practice (anthropology, culture and society series).
- Mushemeza, E. D. (2019). Decentralisation in Uganda: Trends, achievements, challenges and proposals for consolidation. In ACODE (Ed.), *ACODE policy research paper*. Kampala.
- Namugumya, B. S., Candel, J. J. L., Talsma, E. F., & Termeer, C. J. A. M. (2020a). A mechanisms-based explanation of nutrition policy (dis)integration processes in Uganda. *Food Policy*, 92, 101878, doi:<https://doi.org/10.1016/j.foodpol.2020.101878>.
- Namugumya, B. S., Candel, J. J. L., Talsma, E. F., & Termeer, C. J. A. M. (2020b). Towards concerted government efforts? Assessing nutrition policy integration in Uganda. *Food Security*, 12(2), 355-368, doi:10.1007/s12571-020-01010-5.
- Natalicchio, M., Garrett, J., Mulder-Sibanda, M., Ndegwa, S., & Voorbraak, D. (2009). Carrots and Sticks: The Political Economy of Nutrition Policy Reforms. [World Bank HNP Discussion Paper].
- Natalicchio, M., & Mulder-Sibanda, M. (2010). Making nutrition a development priority in Africa: What does it take. *Submitted to Journal of Development Studies*.
- Ng, M., Fleming, T., Robinson, M., Thomson, B., Graetz, N., Margono, C., et al. (2014). Global, regional, and national prevalence of overweight and obesity in children and adults during 1980–2013: a systematic analysis for the Global Burden of Disease Study 2013. *The Lancet*, 384(9945), 766-781, doi:[https://doi.org/10.1016/S0140-6736\(14\)60460-8](https://doi.org/10.1016/S0140-6736(14)60460-8).
- Ngaruiya, C., Hayward, A., Post, L., & Mowafi, H. (2017). Obesity as a form of malnutrition: Over-nutrition on the Uganda "malnutrition" agenda. *Pan Africa Medical Journal*, 28:49, doi:10.11604/pamj.2017.28.49.11176.
- Nielsen, V. L. (2006). Are street-level bureaucrats compelled or enticed to cope? *Public Administration*, 84(4), 861-889, doi:10.1111/j.1467-9299.2006.00616.x.
- Nilsson, M. (2005). Learning, Frames, and Environmental Policy Integration: The Case of Swedish Energy Policy. *Environment and Planning C: Government and Policy*, 23(2), 207-226, doi:10.1068/c0405j.
- Nisbett, N. (2019). Understanding the nourishment of bodies at the centre of food and health systems – systemic, bodily and new materialist perspectives on nutritional inequity. *Soc Sci Med*, 228, 9-16, doi:<https://doi.org/10.1016/j.socscimed.2019.02.041>.
- Nisbett, N., Gillespie, S., Haddad, L., & Harris, J. (2014a). Why worry about the politics of childhood undernutrition? *World Development*, 64, 420-433, doi:10.1016/j.worlddev.2014.06.018.
- Nisbett, N., van den Bold, M., Gillespie, S., Menon, P., Davis, P., Roopnaraine, T., et al. (2017). Community-level perceptions of drivers of change in nutrition: Evidence from South Asia and sub-Saharan Africa. *Global Food Security*, 13, 74-82, doi:<https://doi.org/10.1016/j.gfs.2017.01.006>.
- Nisbett, N., Wach, E., Haddad, L., & Arifeen, S. E. (2014b). What are the factors enabling and constraining effective leaders in nutrition? A four country study. *IDS Working Paper*, 2014(447).
- Nordbeck, R., & Steurer, R. (2016). Multi-sectoral strategies as dead ends of policy integration: Lessons to be learned from sustainable development. *Environment and Planning C: Government and Policy*, 34(4), 737-755, doi:10.1177/0263774x15614696.

- Nordhagen, S., Thiam, K., & Sow, S. (2019). The sustainability of a nutrition-sensitive agriculture intervention: a case study from urban Senegal. *Food Security*, 11(5), 1121-1134, doi:10.1007/s12571-019-00948-5.
- Nott, J. (2018). "How Little Progress"? A Political Economy of Postcolonial Nutrition. *Population and Development Review*, 44(4), 771-791.
- Nsiah-Asamoah, C., Pereko, K. K. A., & Intiful, F. D. (2019). Nutritional counselling interactions between health workers and caregivers of children under two years: observations at selected child welfare clinics in Ghana. *BMC Health Services Research*, 19(1), 817, doi:10.1186/s12913-019-4692-y.
- Ojambo, H. (2012). Decentralisation in Africa: A critical review of Uganda's experience. *Potchefstroom Electronic Law Journal/Potchefstroomse Elektroniese Regsblad*, 15(2), doi:10.4314/pelj.v15i2.4.
- Okeyo, I., Lehmann, U., & Schneider, H. (2020). Policy Adoption and the Implementation Woes of the Intersectoral First 1000 Days of Childhood Initiative, In the Western Cape Province of South Africa. *International Journal of Health Policy and Management*, -, doi:10.34172/ijhpm.2020.173.
- Onyach-Olaa, M. (2003). The challenges of implementing decentralisation: Recent experiences in Uganda. *Public Administration and Development*, 23, 105-113, doi:10.1002/pad.264.
- Oronje R. N., Crichton, J., Theobald, S., Lithur, N. O., Ibisomi, L. (2011). Operationalising sexual and reproductive health and rights in sub-Saharan Africa: constraints, dilemmas and strategies. *BMC International Health and Human Rights*. 11(3)S8.
- Pan, Z., & Kosicki, G. M. (1993). Framing analysis: An approach to news discourse. *Political Communication*, 10, 55-75, doi:1058-4609/93.
- Pawson, R., & Tilley, N. (1997). *An introduction to scientific realist evaluation* (Evaluation for the 21st century: A handbook). Thousand Oaks, CA, US: Sage Publications, Inc.
- Pedersen, H. H. (2012). What do parties want? Policy versus office. *West European Politics*, 35(4), 896-910, doi:10.1080/01402382.2012.682350.
- Pelletier, D., Gervais, S., Hafeez-ur-Rehman, H., Sanou, D., & Tumwine, J. (2018). Boundary-spanning actors in complex adaptive governance systems: The case of multisectoral nutrition. *The International Journal of Health Planning and Management*, 33(1), e293–e319, doi:<https://doi.org/10.1002/hpm.2468>.
- Pelletier, D., Menon, P., Ngo, T., Frongillo, E. A., & Frongillo, D. (2011). The nutrition policy process: The role of strategic capacity in advancing national nutrition agendas. *Food Nutr Bull*, 32(2).
- Persson, Å. (2006). *Environmental Policy Integration: An Introduction* (PINTS – Policy Integration for Sustainability). Stockholm: Stockholm Environment Institute.
- Peters, B. G. (2015a). Policy capacity in public administration. *Policy and Society*, 34(3-4), 219-228, doi:10.1016/j.polsoc.2015.09.005.
- Peters, B. G. (2015b). *Pursuing horizontal management : the politics of public sector coordination* (Studies in government and public policy). Lawrence, Kansas: University Press of Kansas.
- Peters, B. G., & Pierre, J. (2016). *Comparative Governance: Rediscovering the Functional Dimension of Governing*: Cambridge University Press.
- Pettigrew, A. M. (1992). The character and significance of strategy process research. *Strategic Management Journal*, 13(Special issue: fundamental themes in strategy process research), 5-16.

## References

- Pinstrup-Andersen, P. (1993). *The political economy of food and nutrition policies*: Johns Hopkins University Press.
- Piwoz, E., & Greble, E. (2000). *HIV/AIDS and nutrition: A review of the literature and recommendations for nutritional care and support in Sub-Saharan Africa* (SARA project). Washington DC: Academy for Education Development.
- Pomeroy-Stevens, A., D'Agostino, A., Adero, N., Merchant, H. F., Muzoora, A., Mupere, E., et al. (2016). Prioritising and funding the Uganda Nutrition Action Plan. *Food Nutrition Bulletin*, 37(4 suppl), S124-S141, doi:10.1177/0379572116674554.
- Potts, M. J., & Nagujja, S. (2007). A Review of Agriculture and Health Policies in Uganda with Implications for the Dissemination of Biofortified Crops. In H. W. P. No.1 (Ed.), (Vol. Working Paper No.1, pp. 92). Washington, DC: HarvestPlus
- Rayner, J., & Howlett, M. (2009). Introduction: Understanding integrated policy strategies and their evolution. *Policy and Society*, 28(2), 99-109, doi:<http://dx.doi.org/10.1016/j.polsoc.2009.05.001>.
- Reich, M. R., & Balarajan, Y. (2012). *Political economy analysis for food and nutrition security. HNP Discussion Paper*. Washington, DC: World Bank.
- Reich, M. R., & Balarajan, Y. (2014). Political economy analysis for nutrition policy. *Lancet Global Health*, 2, doi:10.1016/s2214-109x(14)70350-x.
- Reinhardt, K., & Fanzo, J. (2014). Addressing chronic malnutrition through multi-sectoral, sustainable approaches: A review of the causes and consequences. *Frontiers Nutrition*, 1, 13, doi:10.3389/fnut.2014.00013.
- Resnick, D., Haggblade, S., Babu, S., Hendriks, S. L., & Mather, D. (2018). The Kaleidoscope Model of policy change: Applications to food security policy in Zambia. *World Development*, 109, 101-120, doi:<https://doi.org/10.1016/j.worlddev.2018.04.004>.
- Rice, D. (2012). Street-level bureaucrats and the welfare state: Toward a micro-institutionalist theory of policy implementation. *Administration & Society*, 45(9), 1038-1062, doi:10.1177/0095399712451895.
- Ridgway, E., Baker, P., Woods, J., & Lawrence, M. (2019). Historical Developments and Paradigm Shifts in Public Health Nutrition Science, Guidance and Policy Actions: A Narrative Review. *Nutrients*, 11(3), 531, doi:10.3390/nu11030531.
- Rietig, K., & Perkins, R. (2018). Does learning matter for policy outcomes? The case of integrating climate finance into the EU budget. *Journal of European Public Policy*, 25(4), 487-505, doi:10.1080/13501763.2016.1270345.
- Robinson, T. N. (2010). Save the world, prevent obesity: Piggybacking on existing social and ideological movements. *Obesity*, 18(S1), S17-S22, doi:10.1038/oby.2009.427.
- Ruel, M. T., & Alderman, H. (2013). Nutrition-sensitive interventions and programmes: How can they help to accelerate progress in improving maternal and child nutrition? *The Lancet*, 382(9891), 536-551, doi:[http://dx.doi.org/10.1016/S0140-6736\(13\)60843-0](http://dx.doi.org/10.1016/S0140-6736(13)60843-0).
- Rukundo, P. M., Iversen, P. O., Oshaug, A., Omuajuanfo, L. R., Rukooko, B., Kikafunda, J., et al. (2014). Food as a human right during disasters in Uganda. *Food Policy*, 49, 312-322, doi:<https://doi.org/10.1016/j.foodpol.2014.09.009>.
- Russell, C., Lawrence, M., Cullerton, K., & Baker, P. (2019). The political construction of public health nutrition problems: a framing analysis of parliamentary debates on junk-food marketing to children in Australia. *Public Health Nutrition*, 1-12, doi:10.1017/S1368980019003628.
- Sabatier, P. A. (1998). The advocacy coalition framework: Revisions and relevance for Europe. *Journal of European Public Policy*, 5(1), 98-130, doi:10.1080/13501768880000051.



- Sabatier, P. A. (2014). *Theories of the Policy Process* (Third Edition ed.). Colorado: WestView Press.
- Salam, R. A., Das, J. K., & Bhutta, Z. A. (2019). Integrating nutrition into health systems: What the evidence advocates. *Matern Child Nutr*, 15(S1), e12738, doi:10.1111/mcn.12738.
- Sandholtz, J. H. (2001). Learning to Teach with Technology: A Comparison of Teacher Development Programs. *Journal of Technology and Teacher Education*, 9(3), 349-374.
- Schneider, H., van der Merwe, M., Marutla, B., Cupido, J., & Kauchali, S. (2019). The whole is more than the sum of the parts: establishing an enabling health system environment for reducing acute child malnutrition in a rural South African district. *Health Policy Plan*, doi:10.1093/heapol/czz060.
- Schwartz-Shea, P., & Yanow, D. (2013). *Interpretive Research Design: Concepts and Processes*: Taylor & Francis.
- Schwartz, J., Guwatudde, D., Nugent, R., & Kiiza, C. (2014). Looking at non-communicable diseases in Uganda through a local lens: An analysis using locally derived data. *Global Health*, 19(10), 77, doi:10.1186/s12992-014-0077-5.
- Scott-Smith, T. (2014). Control and Biopower in Contemporary Humanitarian Aid: The Case of Supplementary Feeding. *Journal of Refugee Studies*, 28(1), 21-37, doi:10.1093/jrs/feu018.
- Shiffman, J., & Smith, S. (2007). Generation of political priority for global health initiatives: a framework and case study of maternal mortality. *The Lancet*, 370(9595), 1370-1379, doi:[https://doi.org/10.1016/S0140-6736\(07\)61579-7](https://doi.org/10.1016/S0140-6736(07)61579-7).
- Sibbing, L., Candel, J., & Termeer, K. (2019). A comparative assessment of local municipal food policy integration in the Netherlands. *International Planning Studies*, 1-14, doi:10.1080/13563475.2019.1674642.
- Sieber, I. M., Biesbroek, R., & de Block, D. (2018). Mechanism-based explanations of impasses in the governance of ecosystem-based adaptation. *Regional Environmental Change*, doi:10.1007/s10113-018-1347-1.
- Singer, S. J., Kerrissey, M., Friedberg, M., & Phillips, R. (2018). A comprehensive theory of intergation *Medical Care Research and Review*, 1 - 23, doi:10.1177/1077558718767000.
- Smith, A., & Stirling, A. (2007). Moving outside or inside? Objectification and reflexivity in the governance of socio-technical systems. *Journal of Environmental Policy & Planning*, 9(3-4), 351-373.
- Sodjinou, R., Bosu, W. K., Fanou, N., Déart, L., Kupka, R., Tchibindat, F., et al. (2014). A systematic assessment of the current capacity to act in nutrition in West Africa: cross-country similarities and differences. *Global Health Action*, 7(1), 24763, doi:10.3402/gha.v7.24763.
- Steensland, B. (2008). Why Do Policy Frames Change? Actor-Idea Coevolution in Debates over Welfare Reform. *Social Forces*, 86(3), 1027-1054.
- Stone, D. (2012). Transfer and translation of policy. *Policy Studies*, doi:10.1080/01442872.2012.695933.
- Stone, D. (2019). Transnational policy entrepreneurs and the cultivation of influence: individuals, organisations and their networks AU - Stone, Diane. *Globalizations*, 1-17, doi:10.1080/14747731.2019.1567976.
- Storeng, K. T., Palmer, J., Daire, J., & Kloster, M. O. (2019). Behind the scenes: International NGOs' influence on reproductive health policy in Malawi and South Sudan. *Global Public Health*, 14(4), 555-569, doi:10.1080/17441692.2018.1446545.

## References

- Strøm, K., & Müller, W. C. (1999). *Policy, Office, or Votes?: How Political Parties in Western Europe Make Hard Decisions* (Cambridge Studies in Comparative Politics). Cambridge: Cambridge University Press.
- SUN (2010). Scaling Up Nutrition: A framework for action September 2010. [https://scalingupnutrition.org/wp-content/uploads/2013/05/SUN\\_Framework.pdf](https://scalingupnutrition.org/wp-content/uploads/2013/05/SUN_Framework.pdf) Accessed 30 October 2017.
- SUN (2016). *SUN Movement Strategy and Roadmap (2016-2020)*: <http://scalingupnutrition.org/about-sun/the-sun-movement-strategy/> Accessed on October 30 2017.
- SUN (2019). Nourishing people and the planet together. Scaling up Nutrition movement progress report.
- Sunguya, B. F., Ong, K. I. C., Dhakal, S., Mlunde, L. B., Shibanuma, A., Yasuoka, J., et al. (2014). Strong nutrition governance is a key to addressing nutrition transition in low and middle-income countries: review of countries' nutrition policies. *Nutrition Journal*, 13(1), 65, doi:10.1186/1475-2891-13-65.
- Swinburn, B. A., Kraak, V. I., Allender, S., Atkins, V. J., Baker, P. I., Bogard, J. R., et al. (2019). The Global Syndemic of Obesity, Undernutrition, and Climate Change: The Lancet Commission report. *The Lancet*, 393(10173), 791-846, doi:[https://doi.org/10.1016/S0140-6736\(18\)32822-8](https://doi.org/10.1016/S0140-6736(18)32822-8).
- Swinnen, J., & Vandemoortele, T. (2009). Are food safety standards different from other food standards? A political economy perspective. *European Review of Agricultural Economics*, 36(4), 507-523.
- Tanner, T., Zaman, R. U., Acharya, S., Gogoi, E., & Bahadur, A. (2019). Influencing resilience: the role of policy entrepreneurs in mainstreaming climate adaptation. *Disasters*, 43(S3), S388-S411, doi:10.1111/disa.12338.
- te Lintelo, D. J. H., & Pittore, K. (2020). Evaluating Parliamentary Advocacy for Nutrition in Tanzania. *The European Journal of Development Research*, doi:10.1057/s41287-020-00291-y.
- Termeer, C. J. A. M., & Dewulf, A. (2012). Towards theoretical multiplicity for the governance of transitions: the energy-producing greenhouse case. *International Journal of Sustainable Development*, 15(1/2), 37-53, doi:10.1504/IJSD.2012.044033.
- Thow, A. M., Greenberg, S., Hara, M., Friel, S., duToit, A., & Sanders, D. (2018). Improving policy coherence for food security and nutrition in South Africa: a qualitative policy analysis. [journal article]. *Food Security*, 10(4), 1105-1130, doi:10.1007/s12571-018-0813-4.
- Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological Theory*, 30(3), 167-186, doi:10.1177/0735275112457914.
- Tosun, J., & Lang, A. (2017). Policy integration: Mapping the different concepts *Policy Studies*, 38(6), 553-570, doi:DOI: 10.1080/01442872.2017.1339239.
- Tosun, J., & Treib, O. (2018). Linking policy design and implementation styles. *Routledge handbook of policy design*, 316-330.
- Trein, P. (2016). A New Way to Compare Horizontal Connections of Policy Sectors: "Coupling" of Actors, Institutions and Policies. *Journal of Comparative Policy Analysis: Research and Practice*, 1-16, doi:10.1080/13876988.2016.1225342.

- Trein, P., Biesbroek, R., Bolognesi, T., Cejudo, G. M., Duffy, R., Hustedt, T., et al. (2020). Policy Coordination and Integration: A Research Agenda. *Public Administration Review*, n/a(n/a), doi:10.1111/puar.13180.
- Tumilowicz, A., Ruel, M. T., Peltó, G., Pelletier, F., Monterrosa, E. C., Lapping, K., et al. (2018). Implementation science in nutrition: Concepts and frameworks for an emerging field of science and practice. *Current Developments in Nutrition*, 3(3), doi:<https://doi.org/10.1093/cdn/nzy080>.
- Tummers, L., Bekkers, V., Vink, E., & Musheno, M. (2015). Coping during public service delivery: A conceptualization and systematic review of the literature. *Journal of Public Administration Research and Theory*, 25(4), 1099-1126, doi:10.1093/jopart/muu056.
- Turcan, L., & Bene, T. (2017). A review of policies for improving human nutrition in Uganda and the use of evidence for making policy. Montpellier, France: Agropolis International: Global Support Facility for the National Information Platforms for Nutrition Initiative.
- Turner, C., Aggarwal, A., Walls, H., Herforth, A., Drewnowski, A., Coates, J., et al. (2018). Concepts and critical perspectives for food environment research: A global framework with implications for action in low- and middle-income countries. *Global Food Security*, 18, 93-101, doi:<https://doi.org/10.1016/j.gfs.2018.08.003>.
- UBOS (2012). Uganda Demographic and Health Survey 2011. (pp. 139-165). Kampala: Kampala, Uganda: UBOS; Calverton, Maryland: ICF International Inc.
- UBOS, & ICF (2018). Uganda Demographic and Health Survey 2016. Kampala, Uganda and Rockville, Maryland, USA: UBOS and ICF.
- UNICEF (2020). The state of the world's children 2019. Children, food and nutrition: Growing well in a changing world. . In UNICEF (Ed.). New York.
- UNICEF, WHO, & Group, W. B. (2019). Levels and trends in child malnutrition: key findings of the 2019 edition In U. W. W. B. G. J. C. M. Estimates (Ed.), *Global Database on Child Growth and Malnutrition*: WHO
- van der Heijden, J., Kuhlmann, J., Lindquist, E., & Wellstead, A. (2019). Have policy process scholars embraced causal mechanisms? A review of five popular frameworks. *Public Policy and Administration*, 0(0), 0952076718814894, doi:10.1177/0952076718814894.
- Van Gorp, B. (2006). The Constructionist Approach to Framing: Bringing Culture Back In. *Journal of Communication*, 57(1), 60-78, doi:10.1111/j.0021-9916.2007.00329.x.
- Van Gorp, B., & Vercruysse, T. (2012). Frames and counter-frames giving meaning to dementia: A framing analysis of media content. *Soc Sci Med*, 74(8), 1274-1281, doi:<https://doi.org/10.1016/j.socscimed.2011.12.045>.
- van Hulst, M., & Yanow, D. (2016). From Policy "Frames" to "Framing": Theorizing a More Dynamic, Political Approach. *The American Review of Public Administration*, 46(1), 92-112, doi:10.1177/0275074014533142.
- Vink, M. J., Boezeman, D., Dewulf, A., & Termeer, C. J. A. M. (2013). Changing climate, changing frames: Dutch water policy frame developments in the context of a rise and fall of attention to climate change. *Environmental Science & Policy*, 30, 90-101, doi:<https://doi.org/10.1016/j.envsci.2012.10.010>.
- Vos, T., Abajobir, A. A., Abate, K. H., Abbafati, C., Abbas, K. M., Abd-Allah, F., et al. (2017). Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *The Lancet*, 390(10100), 1211-1259, doi:[https://doi.org/10.1016/S0140-6736\(17\)32154-2](https://doi.org/10.1016/S0140-6736(17)32154-2).

## References

- Walshe, N., O'Brien, S., Murphy, S., & Hartigan, I. (2013). Integrative Learning Through Simulation and Problem-Based Learning. *Clinical Simulation in Nursing*, 9(2), e47-e54, doi:<https://doi.org/10.1016/j.ecns.2011.08.006>.
- Walt, G., Shiffman, J., Schneider, H., Murray, S. F., Brugha, R., & Gilson, L. (2008). 'Doing' health policy analysis: methodological and conceptual reflections and challenges. *Health Policy Plan*, 23(5), 308-317, doi:10.1093/heapol/czn024.
- Webb, P. (2009). Malnutrition in Emergencies: The Framing of Nutrition Concerns in the Humanitarian Appeals Process, 1992 to 2009. *Food Nutr Bull*, 30(4), 379-389, doi:10.1177/156482650903000409.
- Webb, P., & Kennedy, E. (2014). Impacts of agriculture on nutrition: Nature of the evidence and research gaps. *Food Nutr Bull*, 35(1), 126-132.
- Webb, P., Stordalen, G. A., Singh, S., Wijesinha-Bettoni, R., Shetty, P., & Lartey, A. (2018). Hunger and malnutrition in the 21st century. *BMJ*, 361, doi:10.1136/bmj.k2238.
- WFP (2013). The Cost of Hunger in Africa: Uganda implications on national development and prosperity. In U. World Food Programme and National Planning Authority (Ed.).
- WFP, & UNICEF (2017). Food security and nutrition assessment in Karamoja sub-region (pp. 102). Kampala.
- WHO (2013). Global nutrition policy review: What does it take to scale up nutrition action? (pp. 124). Geneva, Switzerland: World Health Organisation.
- WHO (2018). *Global nutrition policy review 2016-2017: country progress in creating enabling policy environments for promoting healthy diets and nutrition*. Geneva: World Health Organisation; 2018. Licence: CC BY-NC-SA 3.0 IGO.
- Yanow, D. (2014). Interpretive analysis and comparative research. In I. Engeli, & C. Rothmayr Allison (Eds.), *Comparative policy studies: Conceptual and methodological challenges* (pp. 131-159). Houndsmill, Basingstoke: Palgrave Macmillan.
- Zahariadis, N. (2008). Ambiguity and choice in European public policy. *Journal of European Public Policy*, 15(4), 514-530, doi:10.1080/13501760801996717.

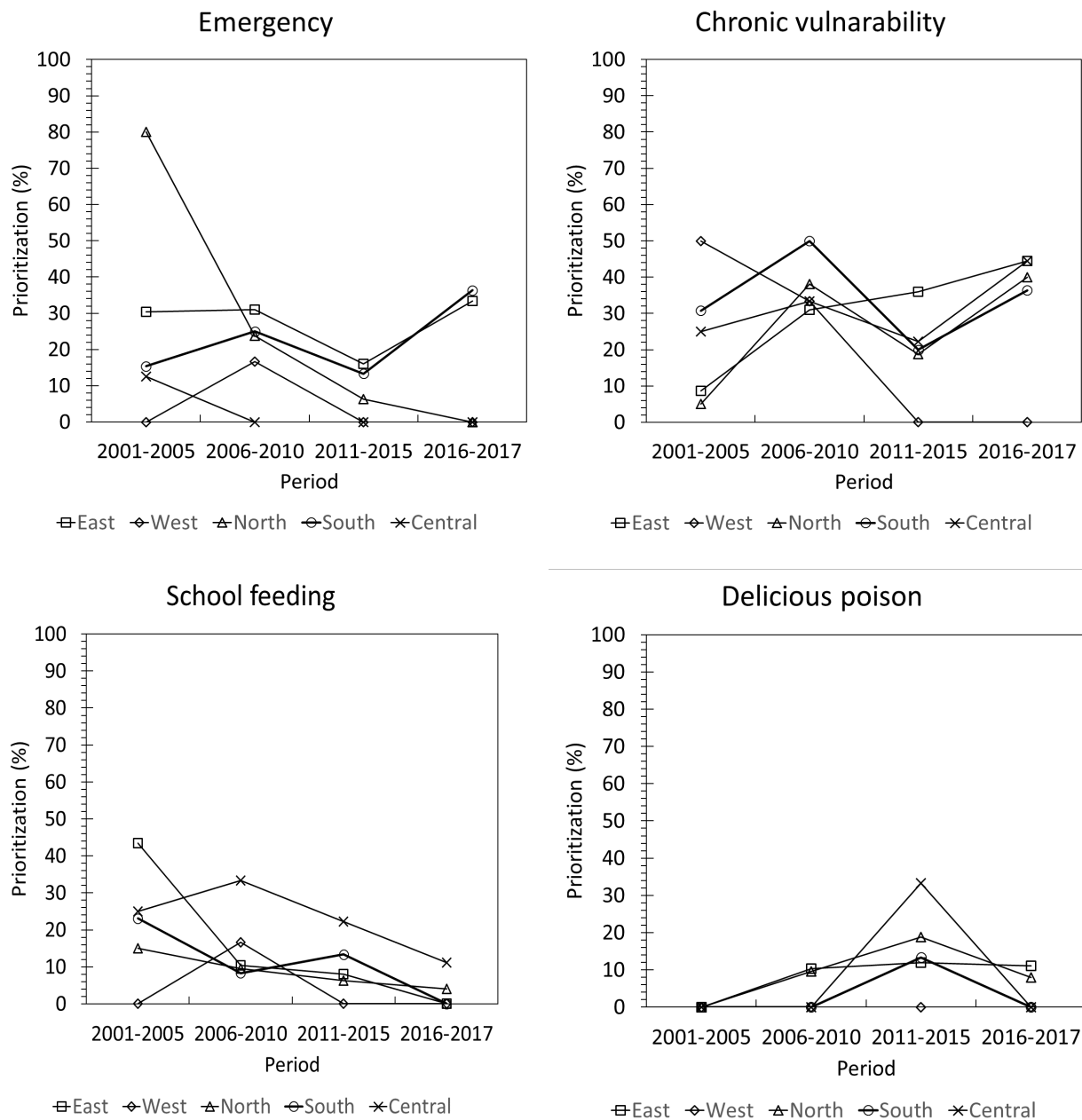
## **Supplementary materials**

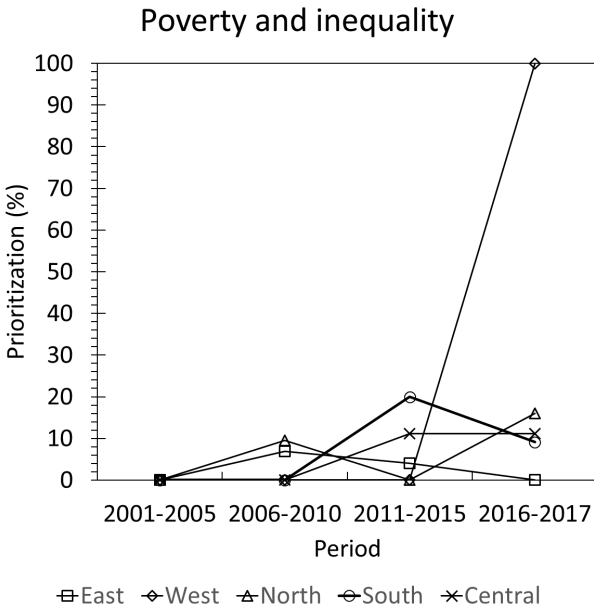
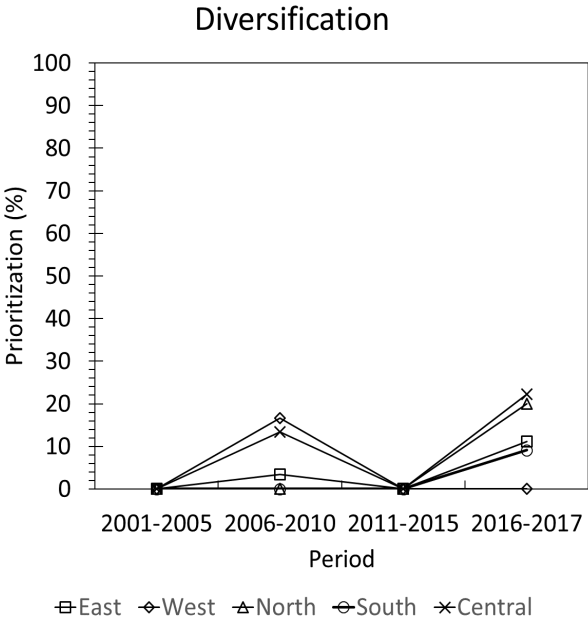
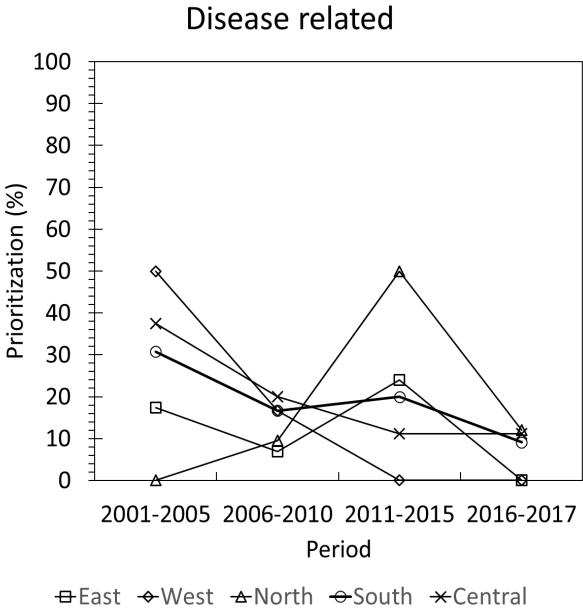
**Supplementary materials A (belongs to Chapter 2 Framing malnutrition by parliamentarians)**

**Table A1. List of Parliamentary Hansard containing nutrition related information**

2001-2005	2006-2010	2011-2015	2016-2017
August 09 2001	June 15 2006	April 12 2011	March 22 2016
	July 04 2006	April 14 2011	July 14 2016
July 03 2002	July 07 2006	April 21 2011	August 11 2016
July 10 2002	July 11 2006	July 05 2011	September 22 2016
July 17 2002	July 24 2006	July 06 2011	September 15 2016
July 18 2002	July 25 2006	July 12 2011	October 06 2016
August 22 2002	December 05 2006	July 13 2011	
December 11 2002	December 07 2006	July 20 2011	January 18 2017
December 17 2002		August 16 2011	February 01 2017
December 19 2002	February 01 2007	August 29 2011	February 10 2017
	April 19 2005	September 01 2011	February 14 2017
February 19 2003	June 14 2007	December 07 2011	February 15 2017
February 27 2003	August 21 2007	December 13 2011	February 21 2017
April 17 2003	August 30 2007		February 22 2017
August 21 2003	December 11 2007	February 08 2012	February 28 2017
August 22 2003		March 06 2012	May 10 2017
August 26 2003	June 05 2008	May 15 2012	May 17 2017
December 03 2003	July 03 2008	June 04 2012	May 25 2017
December 19 2003	August 07 2008	June 27 2012	June 6 2017
	August 27 2008	July 31 2012	June 8 2017
February 18 2004		August 16 2012	June 21 2017
February 19 2004	February 05 2009	August 28 2012	June 28 2017
February 24 2004	April 07 2009	August 29 2012	August 02 2017
July 01 2004	May 07 2009	September 6 2012	September 12 2017
July 08 2004	June 16 2009	September 18 2012	September 13 2010
August 23 2004	June 17 2009	November 08 2012	September 14 2017
August 24 2004	June 18 2009		
December 16 2004	June 24 2009	March 18 2013	
	July 02 2009	May 21 2013	
	July 08 2009	June 06 2013	
February 16 2005	July 14 2009	July 11 2013	
August 23 2005	July 15 2009	July 24 2013	
August 24 2005	August 19 2009	September 13 2013	
August 29 2005	August 20 2009	September 25 2013	
	September 01 2009	October 01 2013	
	September 23 2009	November 20 2013	
	October 14 2009		
		April 3 2014	
	February 23 2010	April 15 2014	
	March 02 2010	July 23 2014	
	April 20 2010	October 01 2014	
	June 10 2010	November 13 2014	
	August 05 2010		
	September 28 2010	April 05 2015	
	October 13 2010	August 19 2015	
	November 02 2010		

**Figure A1: Distribution of nutrition frame sponsors by region**







## Supplementary materials B (belongs to Chapter 3 Assessing nutrition policy integration in Uganda)

Table B1: Overview of the ministry policy documents analysed

Ministry	2000 – 2005	2006 - 2010	2011 - 2015	2016 -2017
<b>MoFPED</b>	<ul style="list-style-type: none"> <li>- Poverty Eradication Action Plan (PEAP) 2001-2003</li> <li>- Poverty Eradication Action Plan (PEAP) 2004-2008</li> </ul>	<ul style="list-style-type: none"> <li>- National Development Plan (NDP) I 2010/11-2014/15</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Uganda Nutrition Action Plan 2011-2016</b></li> <li>- The Uganda Vision 2040</li> <li>- The Local Government Development Planning guidelines (2014)</li> <li>- The National Nutrition Planning Guidelines 2014 Sector Development Planning Guidelines (2015)</li> </ul>	<ul style="list-style-type: none"> <li>- National Development Plan (NDP) II 2015/16-2019/20</li> </ul>
<b>MAAIF</b>	<ul style="list-style-type: none"> <li>- Plan for Modernisation of Agriculture (PMA)</li> <li>- NAADS Act 2001</li> <li>- <b>Food and Nutrition Policy (FNP 2003)</b></li> <li>- Food and Nutrition Bill (draft)</li> <li>- Ministerial Policy Statements (3)</li> </ul>	<ul style="list-style-type: none"> <li>- Agriculture Sector Development Strategy and Investment Plan (DSIP) 2010/11-2014/15</li> <li>- Ministerial Policy Statements (5)</li> </ul>	<ul style="list-style-type: none"> <li>- National Agriculture Policy 2013</li> <li>- Ministerial Policy Statements (5)</li> </ul>	<ul style="list-style-type: none"> <li>- Agriculture Sector Strategic Plan (ASDP) 2015/16-2019/20</li> <li>- Guidelines for integrating nutrition into agriculture enterprise mixes June 2016</li> <li>- National Agriculture Extension Strategy 2016</li> <li>- Ministerial Policy Statements (2)</li> </ul>
<b>MOH</b>	<ul style="list-style-type: none"> <li>- Health Sector Strategic and Investment Plan (HSSIP) I 2000/01-2004/05</li> <li>- National Guidelines on Planning and Implementation of Vitamin A Supplementation (2001)</li> <li>- National Anaemia Policy</li> <li>- Integrated Management of Acute Malnutrition Guidelines 2003</li> <li>- National adolescent health policy 2004</li> <li>- Guidelines for implementation of Baby Friendly Hospital Initiative (BFHI)</li> <li>- Health Sector Strategic Plan (HSSP) II 2005/06-2009/10</li> <li>- Ministerial Policy Statements (5)</li> </ul>	<ul style="list-style-type: none"> <li>- Zinc supplementation guidelines (2008)</li> <li>- Uganda policy guidelines on infant and young child feeding (2009)</li> <li>- Second National Health Policy 2010</li> <li>- Health Sector Strategic and Investment Plan (HSSIP II) 2010/11-2015/16</li> <li>- Integrated Management of Acute Malnutrition Guidelines (2010)</li> <li>- Ministerial Policy Statements (5)</li> </ul>	<ul style="list-style-type: none"> <li>- Comprehensive micronutrient guidelines (2013 draft)</li> <li>- Food based dietary guidelines (2013 draft)</li> <li>- Ministerial Policy Statements (5)</li> </ul>	<ul style="list-style-type: none"> <li>- Health Sector Development Plan (HSDP) 2015/16-2019/20</li> <li>- Ministerial Policy Statements (2)</li> </ul>

**Table B1: Overview of the ministry policy documents analysed**

Ministry	2000 – 2005	2006 - 2010	2011 - 2015	2016 -2017
<b>MGLSD</b>	<ul style="list-style-type: none"> <li>- Social Development Sector Strategic Investment Plan (SDIP) 2003</li> <li>- The National Orphans and Other Vulnerable Children Policy, (2004)</li> <li>- Ministerial Policy Statements (5)</li> </ul>	<ul style="list-style-type: none"> <li>- The Uganda National Culture Policy, (2006)</li> <li>- Employment Act No. 6 (2006)</li> <li>- The National HIV/AIDS and The World of Work Policy (2007)</li> <li>- Social Development Sector Strategic Investment Plan (SDIP) 2011/12-2015/16</li> <li>- The National Policy for Older Persons, (2009)</li> <li>- Ministerial Policy Statements (5)</li> </ul>	<ul style="list-style-type: none"> <li>- The Uganda National Employment Policy, (2011)</li> <li>- The National Community Development Policy for Uganda (2015)</li> <li>- The National Social Protection Policy, (2015)</li> <li>- Ministerial Policy Statements (5)</li> </ul>	<ul style="list-style-type: none"> <li>- Social Development Sector Plan (SDSP) 2015/16-2019/20</li> <li>- The Integrated Early Childhood Development Policy, (2016)</li> <li>- Ministerial Policy Statements (2)</li> </ul>
<b>MoES</b>	<ul style="list-style-type: none"> <li>- Education Sector Investment Plan 1997-2003</li> <li>- Education Sector Strategic Plan 2004-2015</li> <li>- Ministerial Policy Statements (2)</li> </ul>	<ul style="list-style-type: none"> <li>- Revised Education Sector Strategic Plan 2007 – 2015</li> <li>- Ministerial Policy Statements (4)</li> </ul>	<ul style="list-style-type: none"> <li>- Guidelines on School Feeding and Nutrition Intervention Programme for use in Universal Primary Education and Universal Post Primary Education and Training School Systems. 2015</li> <li>- Ministerial Policy Statements (5)</li> </ul>	<ul style="list-style-type: none"> <li>- Ministerial Policy Statements (2)</li> </ul>
<b>MTIC</b>	<ul style="list-style-type: none"> <li>- Food and Drugs (Food Fortification) Regulations, 2005</li> <li>- Ministerial Policy Statements (MTTI) (1)</li> </ul>	<ul style="list-style-type: none"> <li>- US 701-4:2008, Disaster management — Part 4: Standard specification for handling disasters</li> <li>- Ministerial Policy Statements (3)</li> </ul>	<ul style="list-style-type: none"> <li>- National Sanitary and Phytosanitary (SPS) Policy (draft)</li> <li>- US EAS 72:2013, Processed cereal-based foods for infants and young children – Specification</li> <li>- US EAS 4:2013, Infant formula – Specification</li> <li>- US 908:2013, Nutrient-concentrated foods for therapeutic uses – Specification</li> <li>- Mandatory Food Fortification Regulation 2014</li> <li>- US EAS 803:2014, Nutrition labelling — Requirements</li> <li>- US EAS 805:2014, Use of nutrition and health claims — Requirements</li> <li>- US CAC/RCP 75-2015, Code of practice for low-moisture foods</li> <li>- Food and Drugs (Food Fortification) Regulations, 2005 (revised)</li> <li>- Ministerial Policy Statements (5)</li> </ul>	<ul style="list-style-type: none"> <li>- Ministerial Policy Statements (2)</li> </ul>

**Table B1: Overview of the ministry policy documents analysed**

Ministry	2000 – 2005	2006 - 2010	2011 - 2015	2016 -2017
<b>MoLG</b>		- Ministerial Policy Statements (4)	- Local Government Sector Strategic Plan (LGSSP) 2013-2023 - Ministerial Policy Statements (5)	- Ministerial Policy Statements (2)
<b>OPM</b>		- Ministerial Policy Statements (5)	- Ministerial Policy Statements (5)	- Ministerial Policy Statements (2)

MoFPED: Ministry of Finance Planning and Economic Development; MAAIF: Ministry of Agriculture Animal Industries and Fisheries; MOH: Ministry of Health; MGLSD: Ministry of Gender Labour and Social Development; MWE: Ministry of Water and Environment; MoES: Ministry of Education and Sports; MTIC: Ministry of Trade, Industry and Cooperatives; MoLG: Ministry of Local Government; OPM: Office of the Prime Minister. The list excludes annual sector workplans (Ministerial Policy Statements)

Table B2: Codes for nutrition specific and sensitive instruments

Category	Instrument types	Definition
<b>Capacity and skills development</b>	Accredited education and training	Accredited training programs offered at tertiary institutions to impart knowledge and develop skills necessary for provision of specialised nutrition services.
	In-service skills development	Structured professional development targeting service providers to strengthen their skills and competencies in nutrition (Sandholtz 2001), such as structured courses on malnutrition case management, community mobilisation and planning for nutrition, training farmer field schools/networks in production of nutrient dense schools.
	Nutrition skills development (beneficiaries)	Skills development targeting beneficiaries to strengthen their competencies in use or delivery of a specified service, such as, cultivation of nutrient dense foods.
	Support supervision and mentorship	Localised or onsite capacity needs assessment and provision of technical support to service providers to address identified nutrition gaps (technical backstopping )
<b>Knowledge generation</b>	Technical guidelines	Protocols developed by specific sectors to guide and/ or standardise nutrition information and services provided by their frontline workers.
	Nutrition information systems	Routine tracking, analysis and interpretation of specified nutrition indicators to inform policy and programming decisions. For example nutrition status, infant feeding practices, nutrition services coverage and availability, domestic food production, price information, among others.
	Research and pilot studies	Studies (surveys and experiments) commissioned by government and partners to inform nutrition policy and programming decisions
	Baseline and evaluation assessments	Baseline and evaluation assessment of nutrition services and projects, usually specific for a project
<b>Information sharing</b>	Mass media campaigns and outreach	Commissioned campaigns using different mass media communication channels to change the behaviour of actors and mobilise communities to act (health, agriculture, social protection)
	Nutrition education and counselling (one on one)	Teaching beneficiaries importance of changing nutrition behaviours and information on what behaviour to change (Houts et al. 2006).
	Information sharing fora	Awareness creation and sharing of nutrition related information with and among actors in a formalised approach such as the annual nutrition forum, quarterly nutrition partner's meeting and FNS bulletins, to influence their practices.
	Conference participation	Participation or hosting conferences and fora at national, regional and global level addressing nutrition issues
	Commemorate nutrition events	Organise or step up efforts to create awareness and advocate for a specific issues, for example, infant feeding practices, elimination of mother to child transmission of HIV

Table B2: Codes for nutrition specific and sensitive instruments

Category	Instrument types	Definition
<b>Nutrition legislation</b>	Regulations, Laws or Acts	Law enacted by a legislative body (parliament) to allocate responsibilities or enable other instruments used to improve maternal and child nutrition, such as the Employment Act 2003 (MoGLSD), Food fortification regulations
	Food safety standards	Food standards that ensure consumers get safe food (Swinnen and Vandemoortele 2009)
	Public standards	Food standards regulating social and environmental issues based on ethical values of society (Swinnen and Vandemoortele 2009) such as marketing of infant foods, nutrition claims, response during disasters.
	Food quality standards	Food standards ensure certain product quality characteristics for the consumers (Swinnen and Vandemoortele 2009)
<b>Tax incentive</b>	Tax exemption /Financial incentive	Tax subsidies or no taxations on specified commodities or services to facilitate engagement in implementation of nutrition interventions
<b>Nutrition financing</b>	Agriculture microfinancing	Access to finances to facilitate engagement in implementation of nutrition interventions. For example purchase for progress provides guaranteed market for agriculture commodities (MAAIF MPS 2016/2017)
	Grants	Finances earmarked for programs aimed at improving the nutrition situation. For example, research grants, nutrition innovations and publication, special groups grants (conditioned grants) (MoES MPS 2010/2011), social protection grants (MoGLSD)
<b>Nutrition services (direct funding of nutrition programs)</b>	Nutrition funds raising	Mobilises finances, outside of available government resources, to facilitate nutrition policy implementation. For example multisector nutrition program (MAAIF MPS 2015/2016), nutrition in early childhood development project (MoH MPS 2001/2002)
	Nutrition interventions in Primary Health Care	Financing nutrition actions, e.g. nutrition is a component prioritised in Uganda Minimum Health Care Package (PHC conditional grant), Commissioned programs e.g. Food fortification program, Biannual Child Days, Nutrition in Early Childhood Development projects
	Institutional feeding	Provision of food rations to special population groups to prevent malnutrition. For example school feeding programs (MOH, 2006/2010)
	Agriculture research and technology development	Commodities prioritised for increased production and productivity to improve food and nutrition security
	Humanitarian assistance	Schemes, both food and non-food, provided to reduce effect of disasters on food and nutrition security
	Priority and Strategic commodity enterprises	Agriculture commodities to be developed to contribute to food and nutrition security, that is bananas, beans, rice, matooke, cassava, potatoes, tea, coffee, fruits and vegetables, dairy, fish, meat and animal/insect based products, cocoa, cotton, oil seeds, oil palm

Table B2: Codes for nutrition specific and sensitive instruments

Category	Instrument types	Definition
<b>Institution reform</b>	Physical infrastructure	Construction of physical infrastructures or creation of space to be utilised in provision of nutrition services
	Reorganisation within sectors	Reorganisation and or formation of organisation structure to provide oversight roles for implementation of nutrition interventions
	Private Public partnerships	Brokering new relationships among ministries and private sector organisations to provide nutrition services, for example, partnership forged with food industries to carry out fortification of oil and maize flour with micronutrients Fortification, local production of RUTF
	Working Groups	Create linkages within sector and among sectors to implement nutrition strategies. For example the multi-sectoral task force for coordination of nutrition interventions in emergencies and to the harmonise management protocols and nutrition assessment tools
	Subscription	Membership subscription to regional and international agendas and conventions that address nutrition issues
<b>Nutrition commodities</b>	Procurement	Nutrition objectives included in the supply chain of goods and services provided to target population
<b>Certification</b>	Certification	Award excellent delivery of nutrition services
	Recruit nutritionists (create nutritionist position)	Create positions, scholarships and recruitment of specialised nutrition human resources

**Table B3: Data extraction matrix of changes in nutrition-related goals, instruments and subsystem adopted per ministry from 2001 to 2017**

Ministry	Dimensions	2001-2005	2006-2010	2011-2015	2016- 2017
Office of the Prime Minister (OPM)	Goals		1. Improve nutritional and food security condition in disaster areas	1. Improve food and nutrition security for the poor and vulnerable households 2. Improving access to health care, nutrition and education in rural areas recovering from disasters 3. Coordinate implementation of the Uganda Nutrition Action Plan 4. Scale up community based nutrition programs in other regions of the country	1. Implement the nutrition policy 2. Coordinate timely response to disasters and provide food and non-food relief to disaster victims
	Instruments		1. Institutional feeding (F) 2. Humanitarian assistance (food aid) (F)	1. Institutional feeding (F) 2. Humanitarian assistance (food aid) (F) 3. In-service personnel capacity and skills development (I) 4. Support supervision and mentorship (I) 5. Information sharing fora (I) 6. Baseline assessments and evaluation (I) 7. Physical infrastructure (F) 8. Reorganisation within sector (UNAP coordination desk) (O) 9. Technical working group (O) 10. Nutrition commodities and planting materials (F)	1. Humanitarian assistance (food aid) (F) 2. Information sharing fora (I) 3. Technical working group (O)
	Categories				
	Information (I) Authority (A) Finance (F) Organisation (O)				
	Actors	-	MOH, MAAIF, MoES,	MOH, MAAIF, MoES	MOH, MAAIF, MoES
	Government	-	FAO, UNICEF	REACH, USAID, UNICEF, World Bank, World Bank, (DFID, the Royal Netherlands Government), FAO, European Development Fund,	USAID, UNICEF, World Bank (DFID, the Royal Netherlands Government), China, European Union
	International agencies & partner countries	-			
	Non-governmental Organisations	-	-	World Vision	-
	Private sector	-	-	-	-

**Table B3: Data extraction matrix of changes in nutrition-related goals, instruments and subsystem adopted per ministry from 2001 to 2017**

Ministry	Dimensions	2001-2005	2006-2010	2011-2015	2016- 2017
<b>Ministry of Health (MoH)</b>	<b>Goals</b>	1. Improve the nutrition status of the population with special emphasis on mothers and children	1. To reduce fertility; malnutrition; and the burden of HIV/AIDS, tuberculosis and malaria	1. Improving the nutritional status of the population with special emphasis on mothers and children	1. Strengthen inter-sectoral collaboration and partnerships for effective implementation of food and nutrition services
		2. Provide policies and guidelines in conjunction with the National Food and Nutrition Council	2. Improving the nutritional status of the population with special emphasis on mothers and children	2. Scale up delivery of nutrition services	2. Establish comprehensive programs (with dedicated budgets) targeting factors including nutrition that contribute to disease burden.
		3. Support capacity building at central and district levels for reduction of malnutrition	3. Building partnerships for improving nutrition, gender sensitivity and humanitarian assistance to internally displaced persons	3. Improve people's awareness to prevent and control major health and nutrition problems	3. Scale up and sustain effective coverage of a priority package of cost-effective preventive child survival interventions
		4. Promote nutrition programs at different levels to reduce micro-nutrient deficiencies	4. Provision of essential care during pregnancy and post-partum	4. Strengthen inter-sectoral collaboration and partnerships for effective implementation of food and nutrition services	4. Create awareness at community level on right foods to eat for good nutrition status and promote their production
		5. Formulate and enforce nutrition related legislation in conjunction with other relevant sectors	5. Promote infant and young child feeding	5. Reduce the incidence and prevalence macro- and micro-nutrient deficiencies and associated mortality among vulnerable groups	
		6. Support nutrition response in emergency	6. Increase integration into different programs and appropriate guidelines development	6. Strengthen maternal nutrition programs to ensure optimal pregnancy outcomes	
		7. Promote basic health services including nutrition in schools	7. Support nutrition programs implemented by NGOs in northern Uganda	7. Integrate infant and young child nutrition interventions into maternal and child services	
		8. Intensify public awareness determinants of health including nutrition	8. Scale up the implementation of community growth monitoring initiatives	8. Scale up micronutrient initiatives	
				9. Prioritise nutrition services in the treatment and prevention of communicable diseases.	
				10. Integrate management of malnutrition into the health delivery system	
				11. Improve access to and quality of nutrition services at facility and community level	
				12. Review, formulate, enforce and coordinate nutrition related policies, regulations, standards and programmes	



**Table B3: Data extraction matrix of changes in nutrition-related goals, instruments and subsystem adopted per ministry from 2001 to 2017**

Ministry	Dimensions	2001-2005	2006-2010	2011-2015	2016- 2017
				13. Strengthen nutrition information management systems to monitor interventions	
	<b>Instruments</b>	1. In-service personnel capacity and skills development (I)	1. In-service personnel capacity and skills development (I)	1. In-service personnel capacity and skills development (I)	1. Support supervision and mentorship (I)
	<i>Categories</i>	2. Technical guidelines (I)	2. Support supervision and mentorship (I)	2. Support supervision and mentorship (I)	2. Information sharing fora (I)
	<i>Information (I)</i>	3. Research and pilot studies (I)	3. Technical guidelines (I)	3. Technical guidelines (I)	3. Health related nutrition services (F)
	<i>Authority (A)</i>	4. Mass media campaigns and outreach (I)	4. Nutrition information systems (I)	4. Nutrition information systems (I)	4. Mass media campaigns and outreach (I)
	<i>Finance (F)</i>	5. Health related nutrition services (F)	5. Research and pilot studies (I)	5. Research and pilot studies (I)	5. Humanitarian assistance (food aid)
	<i>Organisation (O)</i>	6. Humanitarian assistance (food aid) (F)	6. Mass media campaigns and outreach (I)	6. Mass media campaigns and outreach (I)	6. Working Groups / Committees (O)
		7. Physical infrastructure (F)	7. Information sharing fora (I)	7. Information sharing fora (I)	
		8. Private Public partnerships (O)	8. Health related nutrition services (F)	8. Nutrition funds raising (F)	
		9. Working Groups / Committees (O)	9. Humanitarian assistance (food aid)	9. Health related nutrition services (F)	
		10. Nutrition commodities and planting materials (F)	10. Physical infrastructure (F)	10. Humanitarian assistance (food aid) (F)	
		11. Certification (BFHI) (I)	11. Private Public partnerships (O)	11. Institutional reorganisation (O)	
		12. Human resources (nutritionists) (O)	12. Working Groups / Committees (O)	12. Private Public partnerships (O)	
			13. Nutrition commodities and planting materials (F)	13. Working Groups / Committees (O)	
			14. Human resources (nutritionists) (O)	14. Nutrition commodities and planting materials (F)	
				15. Human resources (nutritionists) (O)	
	<b>Actors</b>	MTTI, MAAIF, MoES, MoGLSD, MoWE, MoPS	MoES, MAAIF, MTTI	MoES, MAAIF, OPM, MTIC, MoJCA	MoES, MAAIF, OPM
	<i>Government</i>				
	<i>International agencies &amp; partner countries</i>	WFP, World Bank, UNICEF, DFID, USAID	GAIN, UNICEF, USAID, WFP, WFP, WHO	UNICEF, WHO, USAID, WFP, GAFSP	UNICEF, USAID, GAFSP
	<i>Non-governmental Organisations</i>	MSF	MSF, GTZ ,World Vision,	World Vision	
	<i>Private sector</i>	Media (audio & visual)	Media (audio & visual), Fortifying industries	Media (audio & visual)	Media (audio & visual)

**Table B3: Data extraction matrix of changes in nutrition-related goals, instruments and subsystem adopted per ministry from 2001 to 2017**

Ministry	Dimensions	2001-2005	2006-2010	2011-2015	2016- 2017
<b>Ministry of Health (MoH)</b>	<b>Goals</b>	9. Improve the nutrition status of the population with special emphasis on mothers and children	9. To reduce fertility; malnutrition; and the burden of HIV/AIDS, tuberculosis and malaria	14. Improving the nutritional status of the population with special emphasis on mothers and children	5. Strengthen inter-sectoral collaboration and partnerships for effective implementation of food and nutrition services
		10. Provide policies and guidelines in conjunction with the National Food and Nutrition Council	10. Improving the nutritional status of the population with special emphasis on mothers and children	15. Scale up delivery of nutrition services	6. Establish comprehensive programs (with dedicated budgets) targeting factors including nutrition that contribute to disease burden.
		11. Support capacity building at central and district levels for reduction of malnutrition	11. Building partnerships for improving nutrition, gender sensitivity and humanitarian assistance to internally displaced persons	16. Improve people's awareness to prevent and control major health and nutrition problems	7. Scale up and sustain effective coverage of a priority package of cost-effective preventive child survival interventions
		12. Promote nutrition programs at different levels to reduce micro-nutrient deficiencies	12. Provision of essential care during pregnancy and post-partum	17. Strengthen inter-sectoral collaboration and partnerships for effective implementation of food and nutrition services	8. Create awareness at community level on right foods to eat for good nutrition status and promote their production
		13. Formulate and enforce nutrition related legislation in conjunction with other relevant sectors	13. Promote infant and young child feeding	18. Reduce the incidence and prevalence macro- and micro-nutrient deficiencies and associated mortality among vulnerable groups	
		14. Support nutrition response in emergency	14. Increase micronutrient supplementation during biannual child days	19. Strengthen maternal nutrition programs to ensure optimal pregnancy outcomes	
		15. Promote basic health services including nutrition in schools	15. Support nutrition programs implemented by NGOs in northern Uganda	20. Integrate infant and young child nutrition interventions into maternal and child services	
		16. Intensify public awareness determinants of health including nutrition	16. Scale up the implementation of community growth monitoring initiatives	21. Scale up micronutrient initiatives	
				22. Prioritise nutrition services in the treatment and prevention of communicable diseases.	
				23. Integrate management of malnutrition into the health delivery system	
				24. Improve access to and quality of nutrition services at facility and community level	
				25. Review, formulate, enforce and coordinate nutrition related policies, regulations, standards and programmes	

**Table B3: Data extraction matrix of changes in nutrition-related goals, instruments and subsystem adopted per ministry from 2001 to 2017**

Ministry	Dimensions	2001-2005	2006-2010	2011-2015	2016- 2017
				26. Strengthen nutrition information management systems to monitor interventions	
	<b>Instruments</b>	13. In-service personnel capacity and skills development (I)	15. In-service personnel capacity and skills development (I)	16. In-service personnel capacity and skills development (I)	7. Support supervision and mentorship (I)
	<i>Categories</i>	14. Technical guidelines (I)	16. Support supervision and mentorship (I)	17. Support supervision and mentorship (I)	8. Information sharing fora (I)
	<i>Information (I)</i>	15. Research and pilot studies (I)	17. Technical guidelines (I)	18. Technical guidelines (I)	9. Health related nutrition services (F)
	<i>Authority (A)</i>	16. Mass media campaigns and outreach (I)	18. Nutrition information systems (I)	19. Nutrition information systems (I)	10. Mass media campaigns and outreach (I)
	<i>Finance (F)</i>	17. Health related nutrition services (F)	19. Research and pilot studies (I)	20. Research and pilot studies (I)	11. Humanitarian assistance (food aid)
	<i>Organisation (O)</i>	18. Humanitarian assistance (food aid) (F)	20. Mass media campaigns and outreach (I)	21. Mass media campaigns and outreach (I)	12. Working Groups / Committees (O)
		19. Physical infrastructure (F)	21. Information sharing fora (I)	22. Information sharing fora (I)	
		20. Private Public partnerships (O)	22. Health related nutrition services (F)	23. Nutrition funds raising (F)	
		21. Working Groups / Committees (O)	23. Humanitarian assistance (food aid)	24. Health related nutrition services (F)	
		22. Nutrition commodities and planting materials (F)	24. Physical infrastructure (F)	25. Humanitarian assistance (food aid) (F)	
		23. Certification (BFHI) (I)	25. Private Public partnerships(O)	26. Institutional reorganisation (O)	
		24. Human resources (nutritionists) (O)	26. Working Groups / Committees (O)	27. Private Public partnerships (O)	
			27. Nutrition commodities and planting materials (F)	28. Working Groups / Committees (O)	
			28. Human resources (nutritionists) (O)	29. Nutrition commodities and planting materials (F)	
				30. Human resources (nutritionists) (O)	
	<b>Actors</b>	MTTI, MAAIF, MoES, MoGLSD, MoWE, MoPS	MoES, MAAIF, MTTI	MoES, MAAIF, OPM, MTIC, MoJCA	MoES, MAAIF, OPM
	<i>Government</i>				
	<i>International agencies &amp; partner countries</i>	WFP, World Bank, UNICEF, DFID, USAID	GAIN, UNICEF, USAID, WFP, WFP, WHO	UNICEF, WHO, USAID, WFP, GAFSP	UNICEF, USAID, GAFSP
	<i>Non-governmental Organisations</i>	MSF	MSF, GTZ ,World Vision,	World Vision	
	<i>Private sector</i>	Media (audio & visual)	Media (audio & visual), Fortifying industries	Media (audio & visual)	Media (audio & visual)

**Table B3: Data extraction matrix of changes in nutrition-related goals, instruments and subsystem adopted per ministry from 2001 to 2017**

Ministry	Dimensions	2001-2005	2006-2010	2011-2015	2016- 2017
<b>Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)</b>	<b>Goals</b>	<ol style="list-style-type: none"> <li>1. Household food and nutrition security improved</li> <li>2. Development of the food and nutrition policy including food security, nutrition, standards for implementation during Plan for Modernisation of Agriculture</li> </ol>	<ol style="list-style-type: none"> <li>1. To improve food and nutrition security of farming households</li> <li>2. Assist LGs to prioritise food and nutrition security in their budgets</li> <li>3. Improve the household income for farmers with HIV/AIDS and nutrition improvement</li> </ol>	<ol style="list-style-type: none"> <li>1. Ensure household and national food and nutrition security for all Ugandans</li> <li>2. Ensure nutrition activities are an integral part of MAAIF's work plans</li> <li>3. Operationalise the Uganda Food and Nutrition Policy, notably the institutional arrangements</li> <li>4. Develop nutrient dense crops and innovative farming systems for improved household food security and nutrition</li> <li>5. Enhance collaboration with the other key stakeholders to jointly address the nutrition security challenge</li> <li>6. Promote appropriate agricultural technologies and crops that provide significant nutritional advantages</li> <li>7. Develop and utilise early warning systems to prevent and/or mitigate shocks affecting nutrition and food security</li> <li>8. Expand food markets by assisting the private sector, to improve food storage, value addition, marketing and distribution</li> <li>9. Advocate for integration of food and nutrition security in relevant government frameworks</li> <li>10. Support local governments to enact and force by-laws and ordinances to promote household food security</li> </ol>	<ol style="list-style-type: none"> <li>1. Ensure household and national food and nutrition security for all Ugandans</li> <li>2. Operationalise and implement the MAAIF interventions under the National Food and Nutrition Strategy</li> <li>3. Enhance collaboration with the other key stakeholders to jointly address the nutrition security challenge</li> <li>4. Promoting appropriate agricultural technologies and crops that provide significant nutritional advantages in food stressed areas</li> <li>5. Promote agriculture enterprises that enable households earn regular income for food purchase</li> <li>6. Develop nutrient dense crops and innovative farming systems for improved household food security and nutrition</li> <li>7. Promote appropriate agro-processing and storage infrastructure to improve post-harvest handling and marketing</li> <li>8. Improve food and nutrition security by enhancing consumption of diverse diets at household level</li> <li>9. Develop and utilise early warning systems to prevent and/or mitigate shocks affecting nutrition and food security</li> </ol>

**Table B3: Data extraction matrix of changes in nutrition-related goals, instruments and subsystem adopted per ministry from 2001 to 2017**

Ministry	Dimensions	2001-2005	2006-2010	2011-2015	2016- 2017
				11. Increase household incomes of small scale farmers through food purchases 12. Build capacity in food and nutrition security	10. Assist districts to prioritise food and nutrition security in development plans and budgets 11. Improve food storage, food safety, value addition, marketing and distribution by the private sector 12. Integrate food and nutrition packages in schools 13. Improve the food and nutrition security of all Ugandans through raising critical mass of agricultural professionals
<b>Instruments</b> <i>Categories</i> <i>Information (I)</i> <i>Authority (A)</i> <i>Finance (F)</i> <i>Organisation (O)</i>	1. Legislation (Food and Nutrition Bill) (A) [never approved] 2. Reorganisation within sectors (O) 3. Legislation (NAADS Act) (A) 4. Information sharing fora (I)	1. Legislation (Food and Nutrition Bill) (A) [never approved] 2. Information sharing fora (I) 3. Research and pilot studies (I) 4. Demonstration plots (I) 5. Human resources (nutritionists) (O) 6. Working Groups / Committees 7. Mass media campaigns and outreach (I)	1. Information sharing fora (I) 2. Research and pilot studies (F) 3. Demonstration plots (I) 4. Human resources (nutritionists) (O) 5. Working Groups / Committees (O) 6. In-service personnel capacity and skills development (I) 7. Support supervision and mentorship (I) 8. Technical guidelines (I) 9. Nutrition information systems (I) 10. Mass media campaigns and outreach (I) 11. Agriculture microfinancing (F) 12. Nutrition funds raising (F) 13. Physical infrastructure (O) 14. Nutrition commodities and planting materials (F) 15. Reorganisation within sector (O) 16. Accredited education and training (I)	1. Information sharing fora (I) 2. Research and pilot studies (F) 3. Demonstration plots (I) 4. In-service personnel capacity and skills development (I) 5. Human resources (nutritionists) (O) 6. Working Groups / Committees (O) 7. Support supervision and mentorship (I) 8. Technical guidelines (I) 9. Nutrition information systems (I) 10. Agriculture microfinancing (F) 11. Physical infrastructure (O) 12. Nutrition commodities and planting materials (F) 13. Mass media campaigns and outreach (I) 14. Human resources (nutritionists) (O) 15. Accredited education and training (I)	
<b>Actors</b> <i>Government</i>	MOH	MOH	MOH, MoES, OPM, MTIC	MOH, MoES, OPM	

**Table B3: Data extraction matrix of changes in nutrition-related goals, instruments and subsystem adopted per ministry from 2001 to 2017**

Ministry	Dimensions	2001-2005	2006-2010	2011-2015	2016- 2017
	<i>International agencies &amp; partner countries</i>	USAID, FAO	EU, WB and DANIDA (ATAAS Grant)- International Development Association (IDA); USAID, FAO, WFP	USAID, FAO, WFP, Japanese International Development Agency (JICA), European Union (EU), Danish Government (DANIDA), Africa Development Bank, the Arab Bank for Economic Development in Africa, MOA-China, DFID, <b>GAFSP</b>	Japanese International Development Agency (JICA), World Bank, USAID/DAI, WFP, MOA-China, DFID, the Royal Netherlands Government, European Union (EU), Danish Government (DANIDA), <b>GAFSP</b>
	<i>Non-governmental Organisations</i>	-	-	-	-
	<i>Private sector</i>		Media (audio & visual),	Private sector grain industry, Media (audio & visual)	Media (audio & visual)

**Table B3: Data extraction matrix of changes in nutrition-related goals, instruments and subsystem adopted per ministry from 2001 to 2017**

Ministry	Dimensions	2001-2005	2006-2010	2011-2015	2016- 2017
<b>Ministry of Gender, Labour and Social Development (MoGLSD)</b>	<b>Goals</b>			1. Promote household food and nutrition security improvement 2. Promote community maternal and paternal protection systems 3. Promote information flow on existing opportunities, products, markets and uptake of nutrition services 4. Provide social assistance in form of cash transfers to those deemed eligible on the basis of their vulnerability, disability and old age to meet immediate needs 5. Monitor access to quality and affordable basic services (nutrition and shelter) to children especially the vulnerable 6. Build the capacity of community development officers and stakeholders to promote FNS improvement 7. Promote increased awareness of household and community on food security and nutrition issues	1. Promote household food and nutrition security improvement 2. Promotion of integrated early childhood development and community based care for vulnerable children 3. Increase access to information, knowledge and functional skills to communities to initiate, plan, manage and monitor development initiatives 4. Build the capacity of community development officers and stakeholders to promote FNS improvement 5. Provision of social care and protection services to children and other vulnerable groups 6. Promote increased awareness of household and community on food security and nutrition issues 7. Promote and increase access to quality and affordable basic services (education, health, nutrition, shelter, safe water) to children, especially the vulnerable 8. Monitor access to quality and affordable basic services (nutrition and shelter) to children especially the vulnerable
	<b>Instruments</b>		1. Technical guidelines (I) 2. Legislation (Maternity and Paternity protection act) (A)	1. In-service personnel capacity and skills development (I) 2. Technical guidelines (I) 3. Mass media campaigns and outreach 4. Grants (F)	1. In-service personnel capacity and skills development (I) 2. Support supervision and mentorship (I) 3. Technical guidelines (I)
	<i>Categories</i>				
	<i>Information (I)</i>				
	<i>Authority (A)</i>				
	<i>Finance (F)</i>				
	<i>Organisation (O)</i>				

**Table B3: Data extraction matrix of changes in nutrition-related goals, instruments and subsystem adopted per ministry from 2001 to 2017**

Ministry	Dimensions	2001-2005	2006-2010	2011-2015	2016- 2017
				5. Institutional feeding (rehabilitation centres) (F) 6. Working Groups / Committees (O)	4. Mass media campaigns and outreach (I) 5. Grants (F) 6. Institutional feeding (rehabilitation centres) (F) 7. Working Groups / Committees (O) 8. Certification (community awards) (O)
	<b>Actors</b>	-	MOH, LGs	MLHUD, MoJCA, MoIA, LGs, MoH, MoAAIF, MoFPED, UHRC	MOH, MAAIF, LGs,
	<i>Government</i>				
	<i>Donor</i>	-	UNICEF, DFID	USAID, UNICEF, ICEIDA	USAID, UNICEF
	<i>International agencies &amp; partner countries</i>	-	-	-	-
	<i>Private sector</i>	-	-	-	-



**Supplementary Material C (belongs to Chapter 4 Policy (dis)integration mechanisms)****Table C1: Category of interview respondents**

<b>Ministry</b>	<b>Code</b>	<b>Type of institution</b>	<b>Respondent #</b>
Ministry of Health (MOH)	Int 001_MOH	Government/NGO	1
	Int 002_MOH	Government/NGO	2
	Int 003_MOH	Donor	3
	Int 004_MOH	Government	4
	Int 005_MOH	Government/NGO	5
	Int 006_MOH	Government	6
	Int 007_MOH	Government/NGO	7
	Int 008_MOH	Academia	8
	Int 009_MOH	NGO	9
	Int 010_MOH	NGO	10
	Int 011_MOH	Government	11
	Int 012_MOH	Government	12
	Int 013_MOH	Government	14
	Int 014_MOH	NGO	13
Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)	Int 001_MAAIF	Government	15
	Int 002_MAAIF	NGO	16
	Int 003_MAAIF	Government	17
	Int 004_MAAIF	Government	18
	Int 005_MAAIF	Donor	19
	Int 006_MAAIF	NGO	20
	Int 007_MAAIF	Government	21
	Int 008_MAAIF	Academia	22
	Int 009_MAAIF	Government	23
	Int 010_MAAIF	NGO	24
Ministry of Gender, Labour and Social Development (MGLSD)	Int 001_MoGLSD	Government	25
	Int 002_MoGLSD	Government	26
	Int 003_MoGLSD	Government	27
Office of the Prime Minister (OPM)	Int 001_OPM	Government	28
	Int 002_OPM	Government	29
	Int 003_OPM	NGO	30
	Int 004_OPM	Donor	31
	Int 005_OPM	Academia	32
	Int 006_OPM	Government/NPA	33
	Int 007_OPM	Donor	34

Table C2. Illustrative quotations

Duration/Quotations	Policy integration mechanisms			Policy disintegration mechanisms	
	International policy promotion	Instrumental Policy learning	Issue promotion by entrepreneurial actors	Leadership contestation	Turf wars
2001-2005	MOH		MAAIF		
2006-2010	MAAIF	MOH			
2011-2015	MGLSD		MAAIF, MGLSD, OPM	MOH	
2016-2017					OPM
Illustrative Quotations	<p>Around 2000s, we focused on virtual elimination of micronutrients so supplementation with vitamin A and iron, and salt iodization a was in full gear mainly supported by UNICEF. Also, there was MCHN in some regions funded by WFP' MOH012.</p> <p>Our strategic plan was supposed to implement CAADP, thus policy had to reflect CAADP priorities. For the case of the agriculture policy, the process was through the PMA, it was instrumental in highlighting nutrition' MAAIF009.</p> <p>You know our nutrition activities are especially UNICEF supported activities. We have resource persons and trainers, we constituted these ones across the board, to do the trainings, field monitoring. So we have sustained the engagement through their activities they're involved in' MGLSD001.</p>	<p>MOH had meetings where we learnt that we were many nutritionists and nutrition partners doing many activities. That is how technical working groups for nutrition came into play and it was through these groups that uniform policy guidelines and training packages today were formed' MOH002.</p> <p>The best written 2010 HSSIP is the best written strategic document with a nutrition theme. International actors supported the head of nutrition, and together they sat with the Minister of Health to lobby for nutrition. It was exciting for a person like me that we secured a full chapter to highlight nutrition' MOH004.</p>	<p>Transferring the responsibility (nutrition coordination) to OPM, which lacked nutrition expertise was such fertile ground for actors. OPM depended on various actors with different mandates and these tended to defend their interests and resources' OPM040.</p> <p>UNAP adopt in Uganda drew global attention and we still maintain that position; so you find that OPM increasingly participates in different discussions and this came with benefits. More donors shifted focus to support nutrition coordination' OPM007</p> <p>The TANA project built advocacy capacity of different actors who lobbied and nutritionalised PMA. Once PMA understood nutrition, it was possible to incorporate it in the strategy' MAAIF009</p> <p>Food and nutrition is a key output of MAAIF. So it provided ground for the department head to lobby other departments and constructively engage with them to understand and integrate nutrition' MAAIF001.</p>	<p>'Nutrition got lost in the recent strategy of MOH. During its development, we (nutrition unit) only used to hear that meetings are taking place but were not invited to engage in the process. Anyway this arose from the in-fights within our unit and disaggregated interaction with other actors' MOH012</p> <p>Struggles existed among officers that wanted the nutrition leadership role for so long. It was often stated in the corridors that there seemed to be a team within MOH that continuously failed whoever was allocated this duty' MOH010</p>	<p>It is just that the leader is not doing what they are supposed to be doing, but are busy implementing instead of coordinating' MOH013.</p> <p>Highly resourced agency x easily seconds someone to government but because they are going to continue reporting and are paid by agency x, i.e. their future is dependent on this agency, then it becomes challenging for them to stand up for the interests of any other actors' OPM040.</p>

Table D1: Conditions influencing frontline workers to adopt nutrition (dis)integrative practices

Conditions (M= Moroto, N=Namutumba)	Practices	Frontline workers	Effect on nutrition integration
<b>Structuring access to nutrition services</b>			
<ul style="list-style-type: none"> <li>Guidelines regularising procedure of providing nutrition services (M, N)</li> <li>Development actors' interpretation and directive about services (M, N)</li> <li>Recurrent capacity building for health workers (M, N)</li> <li>Nutrition equipment and supplies (M, N)</li> <li>Performance monitoring focusing on specific indicators (M, N)</li> <li>Specific indicators in management information system (M, N)</li> </ul>	Ritual performance of nutrition tasks	Health workers	<b>NUTRITION INTEGRATION</b>
<ul style="list-style-type: none"> <li>Pre-existing nutrition interventions (M, N)</li> <li>Inadequate or no resources (finances/human) (M, N)</li> <li>Poor utilisation of health services by clients (M)</li> <li>Directive of development actors to increase service utilisation (M)</li> <li>Combined performance monitoring of services (M, N)</li> <li>Communication from leadership (M)</li> <li>Networking and relationships between co-workers (M)</li> </ul>	Bundling nutrition actions with established services	Health workers, AEWs, CDOs	
<ul style="list-style-type: none"> <li>Pre-existing nutrition interventions (M)</li> <li>Double-dealing by clients for nutrition supplies (M)</li> <li>Failure to achieve performance benchmarks (M)</li> <li>Co-worker influence (M)</li> <li>Directive restructuring services from development actors (M)</li> </ul>	Scheduling nutrition services on a specific day	Health workers	
<ul style="list-style-type: none"> <li>Inadequate or no specific budget for nutrition interventions (M, N)</li> <li>Leadership promoting interdepartmental synergies (M)</li> <li>Networking and relationships with co-workers and development actors (M, N)</li> <li>Auxiliary benefits (M, N)</li> </ul>	Piggybacking onto nutrition services in other domains	Health workers, AEWs, CDOs	

Table D1: Conditions influencing frontline workers to adopt nutrition (dis)integrative practices

Conditions (M= Moroto, N=Namutumba)	Practices	Frontline workers	Effect on nutrition integration
<b>Controlling supply of nutrition services</b>			
<ul style="list-style-type: none"> <li>○ Directive of development actors on target clients (M)</li> <li>○ Performance monitoring focusing on a few specified indicators (M, N)</li> <li>○ Communication from leadership (M)</li> <li>○ High workload i.e. competing job tasks and or high client numbers (M, N)</li> <li>○ Performance monitoring focusing on specific indicators (M, N)</li> <li>○ Expectation of auxiliary benefits (N)</li> </ul>	<ul style="list-style-type: none"> <li>○ Creaming of clients</li> <li>○ Down prioritisation (fixating on a few nutrition actions)</li> </ul>	Health workers, CDOs	Nutrition integration / disintegration
<ul style="list-style-type: none"> <li>○ Ambiguous program design i.e. unclear allocation of roles (N)</li> <li>○ Expectation of auxiliary benefits (N)</li> </ul>	<ul style="list-style-type: none"> <li>○ Down prioritisation (Non-involvement)</li> </ul>	AEWs, CDOs	Nutrition disintegration
<b>Practices modifying the demand for nutrition services</b>			
<ul style="list-style-type: none"> <li>○ Pre-existing nutrition interventions (N)</li> <li>○ Lack of nutrition supplies (N)</li> <li>○ Clients' attitude and expectation (N)</li> </ul>	<ul style="list-style-type: none"> <li>○ Referral for progressive management</li> </ul>	Health workers	Nutrition integration/ disintegration
<ul style="list-style-type: none"> <li>○ Clients' attitude and expectation i.e. dependency (N)</li> <li>○ Ambiguous program design i.e. organisation structure (N)</li> </ul>	<ul style="list-style-type: none"> <li>○ Shifting blame to other entities</li> </ul>	AEWs	Nutrition disintegration

## Table D2. Illustrative quotes

### Ritual performance of nutrition tasks

‘We screen all OPD clients, the children with malnutrition - if they are in the red or yellow (MUAC) we admit them into OTC program and give them plumpynut (therapeutic food) for treatment. Depending on their condition, they are usually admitted for three months; ...we discharge and refer them to supplementary feeding and when they recover, we give them minerals and vitamins powder to take home’. M18

‘We conduct assessment, classification, and then health and nutrition talk. Nutrition assessment is integrated in all the departments that show some influxes in clients..... Those who are malnourished, we refer them to Iganga hospital for treatment, whether in OTC or inpatient care’. NAM2

### Bundling nutrition actions with established services

‘We assess clients for nutrition parameters whenever they come because it is a requirement. We take the weight, height, mid upper arm circumference and give nutrition education sessions. This is the routine during the triage before getting progressive services. This is done in all our clinics like outpatient department (OPD), maternity, immunisation and HIV/TB. For inpatients, we do not really take it as important because clients pass through OPD and are usually not kept here for long’. N9

‘Most people used not to come to health centres for the services..... That is why food distribution occurs at HC IIIs that implement the Maternal Child Health and Nutrition program (MCHN)sponsored by WFP. Food is an incentive for pregnant women and lactating mothers to come for antenatal care, maternity and immunisation services to prevent malnutrition. This has greatly increased coverage and utilisation of MCHN services’. M38

‘We integrate nutrition during community dialogues.....when we see children who are malnourished, we tell the parents how to make sure that child is helped. We tell them to go to hospital and there are very many partners that are helping us ensure that those malnourished children are helped like’. M14

### Scheduling nutrition services on particular days

‘The special day for therapeutic food is Thursday for those already admitted in the program. If we identify malnourished children on other days, they are admitted straight away, but given therapeutic food for only the days until their appointment on the next Thursday where they receive sachets to cover the whole week’. M11

‘Like for acute malnutrition management, they have clinic days which is usually Thursday, where they expect all severely malnourished children to come for care that day, just like you may have an HIV clinic day. So on that OTC/ nutrition day, you would really expect to have many people because that is their appointment date and they have to come to pick their treatment.’M22

### **Piggybacking onto nutrition services in other domains**

‘There is a lot of interaction because when we agriculture work, there are cross cutting components, where we collaborate with health and CDO. It is actually encouraged by leadership. Our leadership encourages us to work in synergies. It is also about self-respect and following the code of conduct at work, It is about sharing the cake’. M8

‘As a government [CDO] we do not have activities related to nutrition. Instead we work with partners [NGOs] and are involved in creating awareness. We go to them, but others come to us directly to participate in their activities, mostly like create awareness on nutrition, mostly. Nutrition is important to some of our friends here [partners] so we try to integrate because we are always in meetings about them’. M9

### **Creaming of clients**

‘We attach food to services mainly targeting pregnant women and lactating mothers to encourage them to come for antenatal visits, delivery in the health facility and to bring children for immunisations’. M40

‘We usually screen children for malnutrition, and those who meet the criteria are enrolled into OTC to receive plumpynut (Therapeutic food). The ones who recover are referred to AFI for supplementary feeding.....’M25

### **Down prioritisation: fixating on a few nutrition actions**

‘We decided to plot graphs showing our work so that in case anyone needs the information they can look at the charts and know what they want. Sometimes we are busy and so when they come, they register and take information displayed on the walls. Also it makes reporting easy for us and with assessments, we get through the process quickly’.M4

‘Our patients are assessed for nutrition parameters, their weight, height, MUAC, are routine for almost all children. We would love to do BMI for others but time is not enough.....When the client load is too high, there are somethings that we may not prioritise such as assessment and data entry. You may want to do all those things but at times we are so few. The high workload make is difficult so you either miss out or weigh with challenges and may not record...’ N15

### **Down prioritisation: non-involvement**

‘There is a nutrition project in schools.... which gives some money to them to make sure that they grow some food especially vegetables.....Production is normally expected to train on how gardens are set up, supervise and monitor how everything is running and submit a report to the coordinator. But personally I haven’t received the training, the project has its own trainers introduced to the schools.... So our role is not clear and yet we are expected to report’. N17

## Summary

## Summary

Many African governments have expressed ambitions to govern nutrition in a more integrated manner as specified in the overarching integrated nutrition strategies. The strategies are the main approach envisioned to enable the collective action of actors in different sectors and government levels to facilitate more effective reduction of malnutrition and its impacts on health, human capital and socio-economic development. This is expected to contribute towards realising the targets of the Sustainable Development Goal 2 on reducing hunger and all forms of malnutrition. Despite the popularity of the integrated nutrition strategies, little is known about their follow-up and ultimate success (or failure) in achieving integrated nutrition governance. This dissertation aims to assess and explain to what extent these ambitions to govern nutrition in a more integrated manner have proceeded beyond paper realities in Uganda. The aim is addressed in four research questions: (i) how has (mal)nutrition been framed by parliamentarians in Uganda over time; (ii) to what extent have nutrition concerns been integrated into cross-sectoral policy outputs over time; (iii) what policy mechanisms explain the observed nutrition policy (dis)integration patterns in Uganda; and (iv) what practices are adopted by frontline workers to enable or obstruct nutrition integration in service delivery?

The questions are investigated using qualitative methods and four public policy theoretical concepts: policy framing, policy integration, policy mechanisms and street-level bureaucracy. Identifying the processes, interactions and practices of the different actors is necessary to understand the changes in nutrition governance. By understanding the shifts towards more or less integrated nutrition governance, I generate information relevant to design strategies for scaling up investments and sustaining commitments to improve nutrition. This dissertation consists of four empirical studies that together address the overarching research question.

**Chapter 2** investigates the question of how (mal)nutrition has been framed by parliamentarians in Uganda over time. Understanding how (mal)nutrition is interpreted and by whom provides insights of why certain policy measures are prioritised or disregarded by policy makers. Based on the policy framing concept, qualitative content analysis was conducted on 131 documents from the Uganda Parliament Hansard for the period 2001- 2017. The study distilled seven distinct frames used by parliamentarians in nutrition-focused discussions. One, the *emergency nutrition frame* emphasises humanitarian response to curb malnutrition among citizens affected by conflict and environmental disasters. Two, the *chronic vulnerability frame* depicts the repetitive spikes in hunger and



deteriorating famine conditions and promotes long-term policy solutions. Three, the *disease-related frame* postulates malnutrition either as an outcome or a cause of diseases necessitating treatment and preventive health services. Four, the *school feeding frame* promotes school meals to reduce hidden hunger and stunting, and to boost school attendance and human capital development. Five, the *delicious poison frame* problematises overnutrition among parliamentarians and the detrimental repercussions of excessive food consumption habits and sedentary lifestyles. Six, the *poverty and inequality frame* postulates malnutrition as an outcome and a cause of increasing income disparities among citizens. Seven, the *diversification frame* underscores the reducing variety in both agriculture production and diversity ‘on the plate’ and advocates diversification of production. Nutrition policy ideas are championed by parliamentarians of regions affected by internal shocks, ministers whose sectors oversee explicit nutrition-related mandates, and to a limited degree by self-acclaimed nutrition advocates. The study suggests that applying different nutrition frames is important to maintain the issue on the political agenda in this constantly evolving environment. However, the key gap is that some drivers and manifestations of mal(?)nutrition have hardly been addressed (or not at all). Because of the desire to foster effective nutrition governance, holistic approaches including more systems-based framings are necessary to ensure that the progressive nutrition policy designs enable multisectoral action.

**Chapter 3** focuses on the question to what extent nutrition concerns have been integrated into cross-sectoral policy outputs over time. Tracking political commitment to improve nutrition has gained global interest and this study contributes to the growing initiatives of monitoring policy change. This study uses a novel policy integration perspective to conduct a qualitative content analysis identifying the extent to which eight ministries in Uganda integrated nutrition concerns across their policy outputs between 2001 and 2017. The study reveals an overall shift towards increased horizontal nutrition policy integration. The nutrition goals and instruments gradually increased in number and diversified, and ministries developed relatively extensive networks of actors with whom they collaborate, especially international agencies and partner countries. This process was very gradual, with an acceleration in the period 2011–2015, after the adoption of the UNAP. The study found that substantive and procedural instrument mixes were adopted. This indicates that Uganda’s integrated nutrition strategies, especially the UNAP, seem to have moved beyond symbolic policy, which merely satisfies donors’ demands, but were accompanied by substantial measures to support their implementation. The findings showed that nutrition

integration did not develop in a linear pattern, but that considerable differences exist across the policy integration dimensions and time periods, and among ministries. However, to ensure that the trend of nutrition integration is not reversed, scaling up the tracking of nutrition policy across sectors is a necessary action to take by domestic and international actors. Overall, the continuity of nutrition integration will benefit from government normalising it as part of sectors' regular mandates. This implies a shift away from the traditional ad hoc programmes to an approach which is conducive for the long-term continuity of nutrition policy integration processes.

**Chapter 4** builds on the observations in Chapter 3 to investigate what policy mechanisms explain the observed nutrition policy (dis)integration patterns in Uganda. This process tracing research identifies six coexisting mechanisms which explain the nutrition (dis)integration patterns observed in the sectors of health, agriculture, social development and the Prime Minister's Office. The study shows that most nutrition policy integration observed in the ministries resulted from various entrepreneurial activities of international actors (UNICEF, USAID and the World Bank). These international actors exert their influence through distinct types of mechanisms: both transferring pre-existing programs through the use of financial incentives (*international policy promotion*), and a looser, more flexible mechanism of providing technical assistance to empower domestic actors to strengthen nutrition integration (*issue promotion*). In spite of the heavy reliance on external actors, these activities often resulted in some form of long-term spin-offs, such as *instrumental policy learning* and *issue promotion* led by domestic policymakers. Policy learning is the deliberate attempt to use evidence and lessons from past experiences to modify policy instruments or calibrations for more effective goal attainment. The study found that nutrition disintegration emerged through two key policy mechanisms, namely: one, *leadership contestation* which denotes the competition and conflicts among bureaucrats as they struggle to maximise power and control of associated office benefits. Two, *turf war mechanism* characterised by conflictual and unproductive interactions as organisations respond to perceived threats regarding resources, competences and finances. Whereas integration-fostering mechanisms cannot be automated, both government and international actors working to scale up investments in nutrition need to consider and invest in the contextual conditions that allow for sustained nutrition policy integration and, ultimately, a more effective delivery of nutrition services. These include developing leadership for nutrition at different governance levels, domestic ownership and integration-fostering capacity, and fostering policy-oriented learning.

**Chapter 5** extends the scope of the study by providing a bottom-up perspective of what practices are adopted by frontline workers to enable or obstruct nutrition integration in service delivery. The comparative analysis applied the street-level bureaucracy theory to identify the practices of frontline workers (in health, agriculture and community development sectors) in Karamoja and Namutumba districts. This study reveals that nutrition integration into service delivery is predominantly perceived by health workers compared to agriculture and community development workers. The analysis uncovered nine practices adopted by frontline workers that ultimately affect the ways that nutrition services are delivered to citizens. Nutrition integration into delivery systems is commonly accomplished through ritualizing task performance; bundling with established services; scheduling services on specified days; and piggybacking onto services offered by other domains. Disintegration results from non-involvement and shifting blame to other entities. Three of the identified practices potentially have both integrative and disintegrative effects: creaming off citizens; down prioritisation by fixating on a few nutrition actions; and following the bureaucratic ‘jobsworth’. The study shows that donor projects are essential in facilitating nutrition integration into service delivery. As governments and international actors continue to make commitments to effectively improve nutrition outcomes and to develop sustainable food systems, it is vital to: (i) develop capacity to integrate nutrition at subnational levels, (ii) legitimize the nutrition-related responsibilities for frontline workers, (iii) ensure nutrition performance accountability is matched with the required finances and technical support, and (v) foster collective learning and cross-sectoral collaboration.

**Chapter 6** reflects on the important findings of the previous chapters and contributes to the understanding the process, practices and conditions fostering and constraining changes towards integrated nutrition governance. By combining different public policy concepts, the dissertation presents a novel approach to facilitate assessment and comparison of the patterns in nutrition governance across government levels, geographic boundaries and time horizons. The overall conclusion of the dissertation is that there is progress towards increased nutrition integration in political commitments and the policies adopted in different sectors. However, these commitments are rarely followed up with actual cross-sector services on the ground. The study has provided new insights about the political interpretations, the policy mechanisms and practices fostering and hampering integrated nutrition governance; as well as better understanding of the context-specific dynamics and drivers of nutrition (dis)integration. Donor involvement was a key determinant in

## *Summary*

ensuring that the endorsed integrated nutrition strategies proceeded beyond paper realities. Both the Ugandan government and international actors working to scale up investments in nutrition need to pay attention to the contextual conditions that allow for sustained nutrition policy integration and, ultimately, a more effective delivery of nutrition services. Investing in the domestic integrative capacities at different government levels is important to make the nutrition governance system resilient and retain its functions after external support is phased out. However, this is a long-term endeavour – not easily sustained through short-term funded projects – that necessitates going beyond tracking nutrition integration in sectoral policies and checking of performance indicators. Ultimately, only by following such a course of action will long-term global nutrition goals, such as the Sustainable Development Goal 2, stand a chance of becoming more than paper realities.

## Samenvatting

Veel Afrikaanse regeringen hebben de ambitie uitgesproken om voedingsbeleid meer te integreren, en hebben dit verwoord in overkoepelende geïntegreerde voedingsstrategieën. Deze strategieën hebben tot doel om het collectief handelen van actoren in verschillende sectoren en op verschillende niveaus in het overheidsapparaat beter op elkaar af te stemmen, om zo de problematiek van onder- en overvoeding en de effecten daarvan op gezondheid, menselijk kapitaal, en sociaal-economische ontwikkeling aan te pakken. Dit zal naar verwachting bijdragen aan het realiseren van het Sustainable Development Goals 2 om honger en alle vormen van onder- en overvoeding te verminderen. Hoewel geïntegreerde voedingsstrategieën populair zijn, is er weinig bekend over hun follow-up en of ze uiteindelijk succesvol (of onsuccesvol) zijn in het bereiken van de beoogde uitkomsten. Het doel van deze dissertatie is om te onderzoeken in welke mate de ambitie om voedingsbeleid meer te integreren zich in Oeganda heeft ontwikkeld tot meer dan een papieren werkelijkheid. Dit doel is in vier onderzoeksvragen gespecificeerd: (i) hoe hebben Oegandese parlementariërs de voedingsproblemen in de loop van de tijd geframed (ii) in welke mate zijn voedingsaspecten in de loop van de tijd geïntegreerd in intersectoraal beleid? (iii) welke beleidsmechanismen kunnen de waargenomen patronen van beleids(des)integratie in Oeganda verklaren? (iv) welke praktijken worden door dienstverleners in de eerste lijn gebruikt om integratie van voedingsaspecten in de publieke dienstverlening mogelijk te maken of tegen te werken?

Bij de beantwoording van de vragen worden kwalitatieve methoden ingezet, alsmede vier theoretische concepten uit de beleidswetenschap: framing, beleidsintegratie, beleidsmechanismen en *street-level bureaucracy*. Het identificeren van de processen, interacties en praktijken van de verschillende actoren is noodzakelijk om veranderingen in voedingsbeleid beter te begrijpen. De verkregen inzichten in de ontwikkelingen naar meer dan wel minder geïntegreerd voedingsbeleid hebben mij in staat gesteld informatie te presenteren voor hoe men voedingsstrategieën kan opschalen en in stand kan houden. Deze dissertatie bestaat uit vier empirische studies die samen de overkoepelende onderzoeksvraag beantwoorden.

**Hoofdstuk 2** gaat in op de vraag hoe voedingsproblemen in Oeganda door de tijd heen zijn geframed. Inzicht in hoe onder- en overvoeding wordt geïnterpreteerd en door wie, verheldert

waarom bepaalde beleidsmaatregelen de voorkeur hebben van beleidsmakers of waarom zij deze maatregelen niet willen nemen. Met het framing concept als leidraad, werden in totaal 131 documenten uit de *Uganda Parliament Hansard* (het parlementaire archief van Oeganda) uit de periode 2001-2017 geanalyseerd met behulp van kwalitatieve inhoudsanalyse. De studie leverde zeven verschillende frames op, die door parlementariërs werden gebruikt in discussies gericht op voeding. Het eerste, het ‘voeding-in-noodsituaties’-frame, richt zich op humanitaire voedingshulp aan burgers die door conflicten en natuurrampen zijn getroffen. Het tweede frame, het ‘chronische-kwetsbaarheid’-frame, richt zich op periodieke of chronisch toenemende situaties van hongersnood en het vinden van lange-termijnbeleidsoplossingen. Het derde frame, het ‘ziekte-gerelateerde’-frame, beschouwt onder- of overvoeding als het resultaat of de oorzaak van ziekten die behandeld en voorkomen moeten worden. Het vierde frame, het ‘schoolvoeding’-frame, stimuleert schoolmaaltijden om verborgen honger en verminderde groei te vermijden, om schoolverzuim te voorkomen en zo de ontwikkeling van menselijk kapitaal te stimuleren. Het vijfde frame, het ‘verleidelijke-vergif’-frame, richt zich op overvoeding onder parlementariërs en de negatieve gevolgen van buitensporige voedselconsumptie en een zittend leven. Het zesde frame, het ‘armoede-en-ongelijkheid’-frame, definieert onder- en overvoeding als gevolg en oorzaak van groter wordende inkomensongelijkheid tussen burgers. Het zevende frame, het ‘diversificatie’-frame, richt zich op de afnemende variatie in zowel de landbouwproductie als ‘op het bord’ en stimuleert de diversificatie van productie. Beleidsideeën voor voeding worden gepropageerd door parlementariërs uit regio's die door interne schokken zijn getroffen, door ministers die het mandaat hebben over voedingsgerelateerde beleidsgebieden en in beperkte mate door zelfbenoemde pleitbezorgers van voedingsaangelegenheden. De studie laat zien dat het hanteren van verschillende aan voeding gerelateerde frames belangrijk is om het onderwerp blijvend op de politieke agenda te houden in een constant veranderende context. Het blijkt echter wel dat sommige oorzaken en manifestaties van onder- of overvoeding amper of geen aandacht hebben gehad. Vanuit het oogpunt van effectief voedingsbeleid zijn holistische benaderingen gebaseerd op meer systemische frames nodig, om te zorgen voor een voortvarend voedingsbeleid dat multisectoraal handelen mogelijk maakt.

**Hoofdstuk 3** richt zich op de vraag in hoeverre in de loop van de tijd aandacht voor voeding is meegenomen in intersectorale beleidsstukken. Het systematisch in kaart brengen van politieke inzet om de voedingssituatie te verbeteren heeft wereldwijd belangstelling gekregen, en deze studie

draagt bij aan het groeiende aantal initiatieven om beleidsveranderingen te monitoren. Deze studie geeft een nieuw perspectief op beleidsintegratie door een kwalitatieve inhoudsanalyse toe te passen die laat zien in welke mate acht ministeries in Oeganda aandacht voor voeding integreerden in hun beleidsstukken tussen 2001 en 2017. De studie toont een algemene verschuiving aan naar horizontale voedingsbeleidsintegratie. De doelen en instrumenten gerelateerd aan voeding namen geleidelijk toe in aantal en diversiteit, en ministeries ontwikkelden relatief uitgebreide netwerken van actoren met wie ze samenwerken, met name internationale organisaties en partnerlanden. Dit proces vond zeer geleidelijk plaats, met een versnelling in de periode 2011-2015, na het aannemen van het Oegandese Actieplan Voeding (Uganda Nutrition Action Plan ofwel UNAP). Uit deze studie bleek dat een combinatie van zowel inhoudelijke als procedurele instrumenten werd ingezet. Dit toontaan dat de geïntegreerde voedingsstrategieën van Oeganda, met name het UNAP, meer zijn dan symboolpolitiek die alleen maar aan de eisen van donors voldoet, maar substantiële maatregelen behelst om de implementatie vorm te geven. De bevindingen laten zien dat de integratie van voedingsstrategieën zich niet in een lineair patroon ontwikkelde, maar dat er behoorlijke verschillen bestaan tussen de verschillende dimensies van beleidsintegratie, tussen verschillende tijdsperioden en tussen verschillende ministeries. Om er zeker van te zijn dat de trend van voedingsintegratie niet omdraait, is het echter noodzakelijk dat binnenlandse en internationale actoren de systematische monitoring van voedingsbeleid in alle sectoren opschalen. Over het algemeen geldt dat de continuïteit van beleidsintegratie kan worden verbeterd als de overheid die normaliseert als een deel van het reguliere mandaat van de verschillende sectoren. Hiervoor is een verschuiving nodig van de traditionele *ad hoc* programma's naar een benadering die bevorderlijk is voor de lange termijn-continuïteit van integratieprocessen in voedingsbeleid.

**Hoofdstuk 4** bouwt voort op de bevindingen van hoofdstuk 3 door te onderzoeken welke beleidsmechanismen de waargenomen patronen van beleids(des)integratie op voedingsgebied in Oeganda verklaren. Dit *process tracing* onderzoek identificeert zes naast elkaar bestaande mechanismen die de waargenomen voedings(des)integratie-patronen kunnen verklaren in de sectoren gezondheid, landbouw, sociale ontwikkeling en *Prime Minister's Office*. De studie toont aan dat de binnen de ministeries waargenomen manifestaties van beleidsintegratie voornamelijk tot stand zijn gekomen door activiteiten van internationale organisaties (UNICEF, USAID en de Wereldbank). Deze internationale actoren oefenen invloed uit via verschillende mechanismen: zowel via het overdragen van reeds bestaande programma's met behulp van financiële prikkels

(*international policy promotion*) als via een lossier, meer flexibel systeem, waarbij technische assistentie geleverd wordt om binnenlandse actoren in staat te stellen om voedingsintegratie te verbeteren (*issue promotion*). Ondanks het feit dat deze activiteiten sterk afhankelijk zijn van externe actoren, hebben ze toch vaak geleid tot een bepaalde vorm van langetermijn-spin-offs, zoals *instrumental policy learning* en *issue promotion* geleid door binnenlandse beleidsmakers. *Policy learning* is de bewuste poging om resultaten en lessen uit het verleden te gebruiken voor het aanpassen of kalibreren van beleidsinstrumenten om ze doelgerichter te maken. De studie toont aan dat beleidsdisintegratie ontstaat door twee belangrijke beleidsmechanismen. Ten eerste door *leadership contestation*: de strijd en conflicten onder ambtenaren die proberen hun macht te optimaliseren, samen met de daarbij behorende voordelen van hun ambt. En ten tweede het zgn. *turf war mechanism*, dat wordt gekarakteriseerd door conflicten en onproductieve interacties, wanneer organisaties reageren op waargenomen bedreigingen met betrekking tot hulpmiddelen, competenties en financiën. Hoewel integratie bevorderende mechanismen niet kunnen worden geautomatiseerd, moeten zowel de overheid als internationale actoren die werken aan het opschalen van investeringen in voeding rekening houden met en investeren in de contextuele condities. Investeren in de juiste contextuele condities faciliteert de integratie van voedingsbeleid en kan uiteindelijk leiden tot een effectievere levering van publieke dienstverlening op het gebied van voeding. Dit betekent leiderschap ontwikkelen op het gebied van voeding op verschillende overheidsniveaus, integratie van voedingsbeleid op de nationale agenda zetten, en stimuleren van beleidsgeoriënteerd leren.

**Hoofdstuk 5** breidt de reikwijdte van de studie verder uit door een bottom-up perspectief te bieden op de praktijken die eerstelijnswerkers hanteren om beleidsintegratie op het gebied van voeding in de publieke dienstverlening vorm te geven of te belemmeren. De vergelijkende analyse paste de *street-level bureaucracy* theorie toe om praktijken van eerstelijnswerkers in de sectoren gezondheid, landbouw, en gemeenschapsontwikkeling in de districten Karamoja en Namutumba aan het licht te brengen. Deze studie toont aan dat de integratie van voeding in de publieke dienstverlening vooral aandacht krijgt van gezondheidswerkers, maar minder van hen die werkzaam zijn in de sectoren landbouw en gemeenschapsontwikkeling. De analyse legt negen praktijken van eerstelijnswerkers bloot, die uiteindelijk bepalen op welke manier publieke dienstverlening rond voeding aan burgers plaatsvindt. Het vormgeven van voedingsintegratie in de dienstverlening wordt gewoonlijk bereikt door: ritualiseren van de werkwijze, bundeling met



andere vormen van dienstverlening, diensten inplannen op specifieke dagen, en door mee te liften met diensten die worden aangeboden door andere domeinen. Desintegratie wordt veroorzaakt door onverschilligheid en het afschuiven van de schuld op andere organisaties. Drie van de geïdentificeerde praktijken kunnen zowel integratie als desintegratie als effect hebben: afkomen van burgers; minder prioriteit geven door een focus op nieuwe voedingsacties; en vasthouden aan bureaucratische formaliteiten. De studie toont aan dat donorprojecten essentieel zijn voor de integratie van voedingsaspecten in de publieke dienstverlening. Terwijl overheden en internationale actoren zich blijven inzetten om op steeds effectieve wijze voedingsdoeleinden te bereiken en duurzame voedingssystemen te ontwikkelen, is het van groot belang: (i) mogelijkheden te ontwikkelen om integratie op sub-nationaal niveau te bewerkstelligen; (ii) de verantwoordelijkheden van eerstelijns werkers met betrekking tot voeding te legitimeren; (iii) zeker te stellen dat passende financiële en technische ondersteuning aanwezig is bij het afleggen van verantwoording over prestaties op voedingsgebied.

**Hoofdstuk 6** reflecteert op de belangrijkste resultaten van de voorgaande hoofdstukken en draagt bij aan het inzicht in de processen, de praktijken en de omstandigheden die veranderingen in de richting van geïntegreerd voedingsbeleid bevorderen dan wel beperken. Door verschillende beleidsconcepten te combineren, biedt deze dissertatie een nieuwe benadering om patronen in voedingsbeleid te kunnen analyseren en vergelijken op verschillende overheidsniveaus, en in verschillende gebieden en tijdsperiodes. De algemene conclusie van de dissertatie is dat er voortgang is geboekt qua toename van beleidsintegratie op voedingsgebied, met betrekking tot politieke inzet en beleid dat wordt ontwikkeld in verschillende sectoren. Deze inzet wordt echter zelden gevolgd door werkelijke intersectorale dienstverlening. Deze studie biedt nieuwe inzichten in de politieke interpretaties en praktijken die integratie van voedingsbeleid stimuleren dan wel belemmeren. De studie geeft ook inzicht in de context-specifieke dynamiek en de determinanten van voedings(des)integratie. De betrokkenheid van donors bleek essentieel om ervoor te zorgen dat geïntegreerde strategieën op het gebied van voeding verder kwamen dan papieren werkelijkheden. Het is nodig dat zowel de Oegandese overheid als internationale actoren, die samenwerken aan het opschalen van investeringen in voeding, ook aandacht besteden aan de contextuele voorwaarden die een duurzaam geïntegreerd voedingsbeleid mogelijk maken, en uiteindelijk leiden tot een effectievere publieke dienstverlening op het gebied van voeding. Investeren in binnenlandse integratiecapaciteiten op verschillende niveaus is belangrijk voor het

## *Summary*

tot stand brengen van een veerkrachtig overheidssysteem rond voeding en voor het behoud van essentiële functies wanneer de externe steun afgebouwd wordt. Dit is echter een streven voor de lange termijn, dat niet tot stand kan worden gebracht door projecten met korte-termijnfinanciering. Het is noodzakelijk dat beleidsintegratie verder gaat dan het volgen van integratie van voedingsaspecten in sectoraal beleid en het afvinken van prestatie-indicatoren. Uiteindelijk zal alleen via een dergelijke benadering het bereiken van globale voedingsdoelen op lange termijn, zoals het Duurzame Ontwikkelingsdoel 2, een kans hebben om meer dan een papieren werkelijkheid te worden.

## **About the author**

### *About the author*

Brenda Shenute Namugumya was born and grew up in Seeta Mukono district, Uganda. Her journey in the field of food and nutrition security started at Mt. St. Mary's College Namagunga where she was introduced to art and science of food preparation and product development in the home economics class. She obtained a Bachelor of Food Science and Technology and a Master in Applied Human Nutrition from Makerere University, Uganda. Her thesis researches focused on the traditional fermentation processes of cereal based beverages; and later on, the contribution of street-vended foods to the food and nutrition security of vendors.

After finishing internships at Nile Breweries Uganda Limited and World Food Programme Uganda office, Brenda Shenute started her career at Standard Chartered Bank Uganda Limited where she supported food industries and farmer organisations to access financial credit facilities. In 2009, she joined the Regional Centre for Quality of Health Care, Makerere University as a program officer supporting the USAID funded Food and Nutrition Technical Assistance Project (FANTA). Brenda Shenute had an extended career with FANTA (managed by FHI 360) of providing technical assistance to transform nutrition policy and programming at ministry and implementation levels. She served in various roles as a facilitator for the multisectoral nutrition coordination platforms, coordinator of the Uganda Nutrition Fellowship Program, nutrition trainer of trainers and researcher. She contributed to ensuring nutrition concerns became integrated in the health, agriculture, social and economic development policies at national and district level. She an alumni of the Mandela Washington Fellowship, cohort 2016, hosted by the University of Minnesota, USA.

Brenda Shenute was granted a scholarship by NUFFIC, The Dutch Organisation for Internationalisation in Education in 2016 to start her PhD research at the Public Administration and Policy Group of Wageningen University & Research, the Netherlands. In 2019, she was a visiting fellow at the Institute of Development Studies, University of Sussex, Brighton UK for one month. During the PhD journey, she served in the Wageningen School of Social Sciences (WASS) PhD council, and was an active member of the African choir at the International Catholic Community (ICC) Wageningen. In 2021, Brenda Shenute joined the Wageningen Centre for Development Innovations (WCIDI) where she works in different capacities to transform the food systems of low and middle income countries.

## Publications

**Namugumya BS**, Candel JJJ, Termeer CJAM, Talsma EF (2021). The framing of malnutrition by parliamentarians in Uganda. *Health Policy and Planning*. <https://doi.org/10.1093/heapol/cza009>.

**Namugumya BS**, Candel JJJ, Talsma EF, Termeer CJAM (2020). Towards concerted government efforts? Assessing nutrition policy integration in Uganda. *Food Security*. <https://doi.org/10.1007/s12571-020-01010-5> (2020) 12:355–368.

**Namugumya BS**, Candel JJJ, Talsma EF, Termeer CJAM (2020). A mechanisms-based explanation of nutrition policy (dis)integration processes in Uganda. *Food Policy*. 92 (2020) 101878.

Yourchuck A, Tumwine K, **Namugumya B**, Morla J, Doledec D, Mupere E. (2014). Health System Performance Assessment for IMAM/NACS in Uganda: Considerations for Delivery of Nutrition Services. Washington, DC: FHI 360/FANTA.

**Namugumya B**, Sethuraman K, Sommerfelt AE, Oot L, Kovach T, Musiimenta B. (2014). Reducing Malnutrition in Uganda: Estimates to Support Nutrition Advocacy – Uganda PROFILES 2013. Washington, DC and Kampala, Uganda: FHI 360/FANTA and Office of the Prime Minister, Uganda.

**Namugumya BS**. (2012). Advocacy to reduce malnutrition in Uganda: some lessons for sub Saharan Africa. Chapter 19, Page 163- 170. Reshaping agriculture for nutrition and Health edited by S Fan and R Pandya- Lorch. An IFPRI 2020 book.

**Namugumya BS**, Muyanja CK. (2011). Contribution of street foods to the dietary needs of street food vendors in Kampala, Jinja and Masaka districts, Uganda. *Public Health Nutrition*: 15(8), 1503–1511. doi:10.1017/S1368980011002710.

Muyanja C, Nayiga L, **Namugumya B**, Nasinyama G. (2011). Practices, Knowledge and risk factors of street food vendors in Uganda. *Food Control*. 22(2011) 1551–1558.

**Namugumya BS**, Ruzaaza G, Mwadime R, Sethuraman K, Okello E (2010). Opportunities for addressing malnutrition in Kitgum and Pader districts in Northern Uganda. Food and Nutrition Technical Assistance II Project (FANTA-2) AED, 2010.

*About the author*

**Namugumya BS**, Muyanja CMBK (2009). Traditional processing, microbiological, physiochemical and sensory characteristics of kwete, a Ugandan fermented maize based beverage. *African Journal of Food Agriculture, Nutrition and Development*. 9(4). ISSN 1684-5374.

**Under review**

**Namugumya BS**, Candel JJJ, Talsma EF, Termeer CJAM, Harris J (sub). Integrating/disintegrating nutrition actions in service delivery: The practices of frontline workers.

## **Acknowledgements**

## *Acknowledgements*

My PhD journey officially started in 2016, however, the preparatory phase occurred over a period of five years of applying to different schools and for funding without much success. Looking back at this journey, I feel greatly honoured to have received support, advice and encouragement from a number of people. I would like to express my sincere gratitude to them in this section.

To NUFFIC- the Dutch Organisation for Internationalisation in Education for funding this research. I am thankful to Inge Brouwer, Gerard Breeman and Fre Pepping for forwarding my application to PAP, after failing to secure funding through the Division of Health and Nutrition. I feel privileged that you remembered my research ideas and urged me to reapply the following year.

I express my gratitude to my supervision team, Katrien Termeer, Jeroen Candel and Elise Talsma, who guided and mentored me to learn some of the basic concepts and theories in public administration and policy, provided constructive criticisms and inspired me to think critically about my work from proposal development to finalizing the thesis. Katrien, your communication asking whether I was still interested in pursuing PhD studies is one of the moments that changed my professional life. Thank you for challenging me to see the bigger picture, providing valuable insights throughout the thesis process as well as creating a conducive environment for my ideas to thrive. Jeroen, thank you for the multiple discussions about theories, meticulous feedback on my manuscripts within a short time period, daily supervision and reminders to engage in some fun activities. The food policy dinners offered delicious dishes, and a more relaxed atmosphere to discuss various social issues as well as have a good laugh. Elise, I am grateful for connecting me to colleagues in the international nutrition community, the feedback on the manuscripts, and the positive energy whenever I felt low. To all my supervisors, I know that we will continue to collaborate on future projects.

A special word of thanks to other PAP research and teaching staff for the interesting discussions about the theories used in this thesis. Robbert Biesbroek, for the advice on the literature about social mechanisms and practices. Art Dewulf, for the insights on framing theory. Agatha Siwale (Ms. Agatha), for the suggestions to make my discussion more explicit. Tamara Metze, Otto Hospes and Sylvia Karlsson-Vinkhuyzen, I am grateful for the advice on my proposal. I also wish to appreciate Maarit Junnikkala for organising all the administrative issues and providing practical solutions whenever requested. Thank you for the warm welcome to your house, friendship, inspiration and gentle push to take a walk in the fields or go shopping. These activities provided



the much needed moments to relax. Catherine O'Dea and Joantine Berghuijs improved the language in most of the chapters, which enhanced the readability of this thesis.

I also recognize all the PhDs and postdocs at the Public Administration and Policy Group. Marijn, Sumit, Pantja, Ahmad, Wieke, Jonna, Andy, Efrat, Valencia, Eduardo, Yannick, Daniel, Louise, Olga, Jan, Giulia and Jelle. I benefited from your friendship, scientific opinions and fun activities. I am particularly grateful to Lara Sibbing, for organizing the food policy dinners, the trip to Belgium, preparing my first birthday dinner in the Netherlands and the many policy related theoretical reflections. Rebecca Sarku, my sister from Ghana, we started this PhD journey together, co-creating some jollof, fufu and matooke dishes; as well as making adaptive decisions to life in the Netherlands. I am happy we have completed at the same time. Congratulations Dr. Sarku. Looking forward many more future associations. Thank you to my paranymphs, Maarit Junnikkala and Yannick Buitenhuis.

In the third year of my PhD research, I was hosted as a visiting fellow by Jody Harris at the Institute of Development Studies (IDS), University of Sussex, Brighton UK for one month. Jody, thank you for the inspiring discussions and organising the engagements with other IDS colleagues. I thank the IDS Research fellows and the PhDs year 1-4 for the warm welcome and creating time to discuss the politics in bureaucracies. I am grateful to Miguel Loureiro, Stuart Gillespie, Nicholas Nisbett, Tom Harrison, Gemma Males, Becky Mitchell, Mireille Widmer, Kyumi, Moneeba Mahmood, Syed Abbas, Shandana Mohmand, Dina Zayed, Shipla Deshpande, Colin Anderson, Richard Crook, Anuradha Joshi and Felipe Guth. Huong, Stephanie and Raphael, the other visiting fellows, thank you for organizing the fun activities.

I acknowledge the support of my research assistants, in particular, Irene Yunia, Miriam Twinomugisha and Gloria Namuyanja. You were dedicated in searching the archives of different ministries and ensuring that we collected good quality data in Moroto and Namutumba. Thanks to all my study respondents at national and district levels for creating time to discuss the changes in nutrition services and policies. I am very grateful to the FANTastic team (Hanifa, Rebecca, Pauline, Diana, Anita, Esther, Lydia), Alex Mokori, Muniirah Mbabazi, Jacque Byarugaba, Davis Guma and the former FHI 360 colleagues. You all ensured I had a comfortable work environment, stable internet while in Kampala and advised how to organise my data collection. Anita Komukama

## *Acknowledgements*

and Davina Nabirye, I vividly remember my ‘visiting day’ in Amsterdam in the summer of 2019. I know that in the good times, we shall realise the plan to link up in New York!

I thank the members of my thesis committee, Prof. dr. Ewout Frankema, Prof. dr. Michiel S de Vries, Dr. Namukolo Covic, Prof. dr. Trui Steen, for accepting the invitation to be part of the committee that critically reviewed my thesis.

Outside academic work, my life in Wageningen was spent with members of the different communities who provided various forms of support and opportunities to unwind. I want to thank the Ugandan community, Catherine, Peter, Leah, Liz, Bernard, Christine, Robert O (Snr), Emmanuel, George, Awio, Robert O (Jr), Monique, Daniel and Haddy (RIP); the members of the African choir and the ICC Wageningen; and Rotarians Jjooga and Fred Kimuli of the Rotary Club of Kampala North.

Some friends became family. My sincere appreciation goes to Jan, Tallien and Luuk Brouwers, Rebecca Namara, Bridget and Ivan Kaggwa, James Ssemenda, Herman Brouwer and Boaz Musiimenta. You often checked in to find out how I was doing, assisted me to settle in Wageningen, and supported direct aspects of my life. You made my life outside the PhD a wonderful experience. My gratitude is not enough, I pray that you are blessed in all your endeavours. To my girlfriends, Norah, Imelda, Prossie, Lydia, Justine and Hanifa, thank you for the prayers, encouragement, the fine luncheons and sharing the vital life skills. I am passing the PhD ball to one of you. Fr. John Bosco, thank you for the prayers, fellowship and reassurances.

My life has been blessed with people who have mentored, encouraged me to pursue my aspirations and moral boosted even when I was uncertain about my decisions. Dr. Robert Mwadime and Dr. Charles Muyanja, you taught me that standing behind someone can make them flourish. You nurtured and coached me as young graduate without work experience to become a competent nutrition professional. Thank you for your patience, for creating space to experiment my ideas and pushing me to pursue opportunities in nutrition.

Herman, Joantine and Gerrit-Klaas Berghuijs, the new members of my big family, thank you for embracing me into your home, reviewing different versions of this thesis and for connecting the dots when I became too engrossed in my research. I look forward to an amazing journey ahead, Herman.

My pod mates, we maybe apart in distance but are not separated in our hearts. I am grateful that you always check in and celebrate every milestone with me. Sylvia Olivia, Irene Stella, Grace Olympia, Evelyn Charlotte, Angela Wendy, Beatrice, Aunt Milly, Roni and Immaculate Mutebi, Julius Mulindwa and Russell Bennett: Thank you for accepting me to be a lazy visitor in your homes and for all the good food and hilarious moments you ensured I enjoyed.

My parents, Lonvincer and Jocky dela Ssempijja, without your love and support this journey would have remained a dream. You always stimulated us to work hard and dream beyond our village. Your encouragement led to my confidence to complete many voyages with success. May you be blessed abundantly, Mummy. Daddy, your presence is always felt in our hearts. Today, I celebrate you both.



# Education Certificate

**Brenda Shenute Namugumya**  
**Wageningen School of Social Sciences (WASS)**  
**Completed Training and Supervision Plan**



Name of the learning activity	Department/Institute	Year	ECTS*
<b>A) Project related competences</b>			
Philosophy and Ethics of Food Science and Technology (PEFST)	WGS / VLAG	2017	1.5
Qualitative Data Analysis with Atlas.ti: a hands-on practical	Wageningen School of Social Sciences	2017	2.5
Writing PhD proposal	PAP/ Wageningen School of Social Sciences	2017	6
Healthy and sustainable diets: synergies and trade-offs	VLAG	2016	0.8
Academic publication and presentation in Social Sciences	Wageningen School of Social Sciences	2020	4
<b>B) General research related competences</b>			
Introduction course	Wageningen School of Social Sciences	2016	1
Systematic Approaches to Reviewing Literature	Wageningen School of Social Sciences	2016	4
2018 Summer School in Methods and Techniques, Budapest	EPCR Central European University, Budapest	2018	4
Essentials in Scientific Writing	Wageningen Graduate School	2017	1.8
<i>'Towards concerted government action: Assessing nutrition policy integration in Uganda'</i>	ECPR Conference, Hamburg	2018	1
Information Literacy including EndNote Introduction	Wageningen Graduate School	2016	0.6
<b>C) Career related competences/personal development</b>			
Writing Grant Proposals	Wageningen in'to Languages	2020	2
2016 Mandela Washington Fellowship for Young African Leaders: Public Administration Track	University of Minnesota	2016	6
PhD Council work compensation 2017	Wageningen School of Social Sciences	2017	2
WASS Junior Researcher Grant 2019	Institute of Development Studies, Sussex University	2019	5
PhD Carousel	Wageningen Graduate School	2017	0.5
<b>Total</b>			<b>42.7</b>

\*One credit according to ECTS is on average equivalent to 28 hours of study load



The research described in this thesis was financially supported by NUFFIC, under grant no.2100231700-510.

**Cover design:** Luuk Brouwers and Brenda S Namugumya

**Printed:** Proefschriftmaken.nl



