



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

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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 and 2017. Data was collected from interviews with 34 respondents, various policy and programming documents, and a focus group discussion. Our analysis reveals that *increased* nutrition policy integration is explained by four causal mechanisms: (1) international 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 supporting policy-oriented learning.

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; 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*

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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, 2019; 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; Falletti 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., 2020), we examined whether these INNs 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 3 and 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. The empirical analysis of the causal pathways are presented in Section 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.

2. Theoretical approach

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 cross-cutting 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, 2019). In our previous study, we assessed three of these integration dimensions for nutrition governance in Uganda: subsystem involvement, policy goals, and policy instruments (Candel and Biesbroek, 2016). *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.

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 (Biesbroek and Candel, 2019). Various factors are able to explain both strengthened integration and *dis*integration, depending on their specific calibrations and the contextual conditions under which they become activated (Peters, 2015).

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

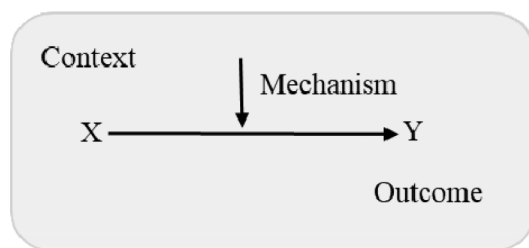


Fig. 1. CMO model (Pawson and Tilley 1997, p. 58).

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 Observed patterns of (un)intended outcomes can be explained by identifying the plausible causal set of Mechanisms within the situational Context of the process (Falleti and Lynch, 2009) (see Fig. 1).

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 conceptualized 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, 2015).

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).

3. Methodological approach

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 (for details see: Namugumya et al., 2020). 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 prioritizations. 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.

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). 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 min. 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 as well as interpret these.

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 organized 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 finalize the analysis.

4. Results

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).¹ 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) (Fig. 2).

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 Fig. 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 prioritized nutrition programs to politicians and MoH bureaucrats, conditioned 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 realize 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 maximize 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 endeavored 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 prioritized the high-level strategic policy discussions; thus leading to nutrition disintegration (6, 13, 34).

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,

¹ The numbers between parentheses refer to the respondents underpinning an empirical observation.

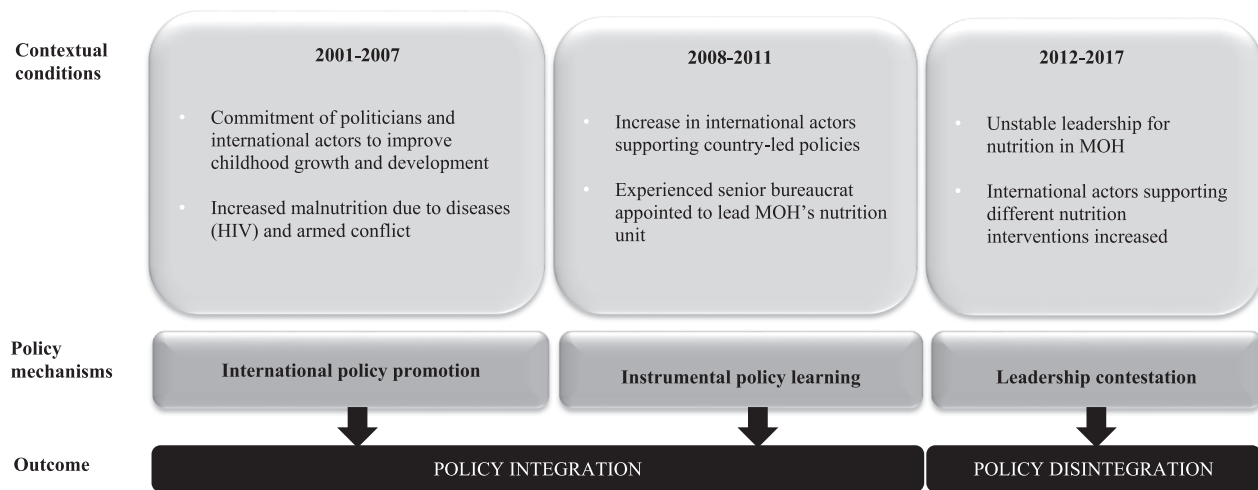


Fig. 2. Contextual conditions, policy mechanism and nutrition integration outcomes in MoH.

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*. (See Fig. 3)

The mechanism of *issue promotion* applies to both the periods between 2001 and 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, tenacity and/or luck to exploit opportunities so as to maximize their impact in complex and unpredictable policy environments (Cairney 2018; Mintrom and Norman 2009; Kingdon 1984). 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

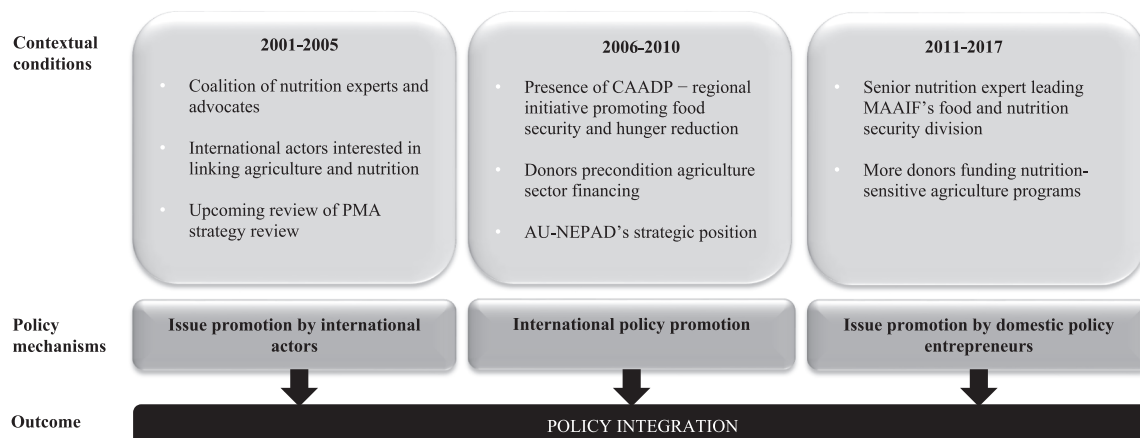


Fig. 3. Contextual conditions, policy mechanisms and nutrition integration outcomes in MAAIF.



Fig. 4. Contextual conditions, policy mechanism and nutrition integration outcomes in MGLSD.

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).

4.3. 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).

Mechanisms: Increased nutrition integration in MGLSD resulted from two co-existing mechanisms: *international policy promotion* and *issue promotion by international actors*, see Fig. 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 sensitize 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. 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) (see Fig. 5).

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*.

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 2015; 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 monopolize 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 prioritized 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.

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 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-centered policy change (Harris, 2019; Pelletier et al., 2018; FAO, 2017). 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*). Which 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

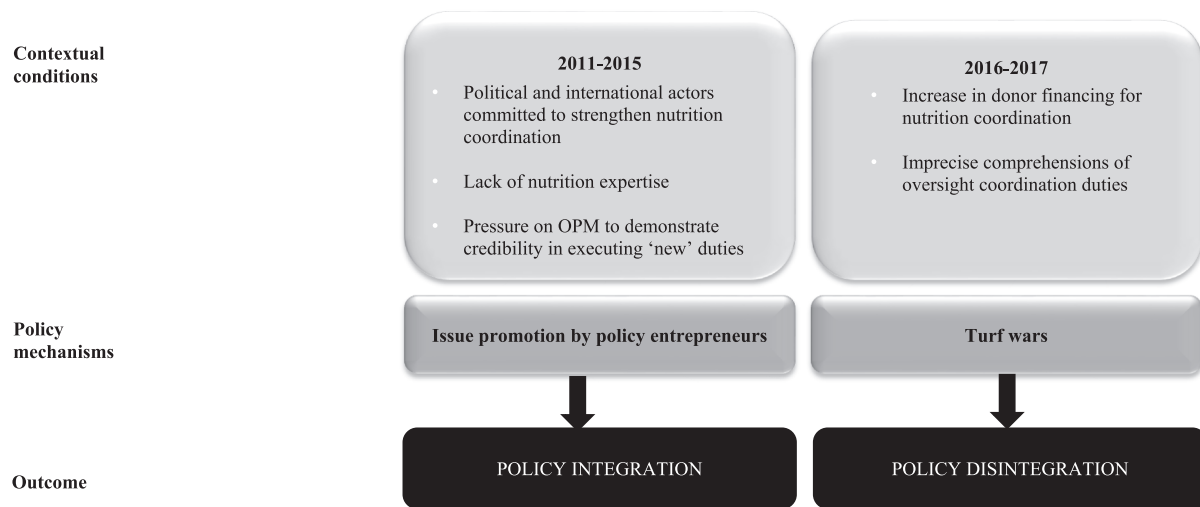


Fig. 5. Contextual conditions, policy mechanism and nutrition integration outcomes in OPM.

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. 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 realized 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, mobilize resources and develop networks with different audiences; and creating specialized 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.

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

Table 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	
Policy disintegration mechanisms	Instrumental policy learning	Leadership contestation	–	MoH	–	
		Turf wars	–	–	MoH	
			–	–	–	OPM

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.

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 prioritization 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., 2017).

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.

6. Conclusion

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.

CRedit authorship contribution statement

Brenda Shenute Namugumya: Conceptualization, Methodology, Investigation, Formal analysis, Writing - original draft, Validation, Visualization, Project administration. **Jeroen J.L. Candel:** Conceptualization, Methodology, Validation, Writing - review & editing, Visualization, Supervision. **Elise F. Talsma:** Writing - review & editing, Supervision. **Catrien J.A.M. Termeer:** Writing - review & editing, Supervision.

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