

Deliverable 1.4 - Review and analysis of a sample of national policies regarding nutrition

Policy review

July 2021

About the Nutrition Research Facility

The Knowledge and Research for Nutrition project of the European Commission (2020-2026) aims to provide improved knowledge and evidence for policy and programme design, management and monitoring & evaluation in order to reach better nutrition outcomes.

The project is implemented by Agrinatura - the European Alliance on Agricultural Knowledge for Development – which has established a Nutrition Research Facility, pooling expertise from European academia and having the ability to mobilise internationally renowned scientific networks and research organisations from partner countries.

The Nutrition Research Facility provides expert advice to the European Commission and to the European Union (EU) Member States and Partner Countries.

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List of Acronyms

Acronym	Description
ACED	Actions pour l'Environnement et le Développement Durable
AEN	The Africa Evidence Network
CMAM	Community-Based Management of Acute Malnutrition
DHS	Demographic and Health Surveys
DR-NCDs	Diet-related Non-Communicable Diseases
EIDM	Evidence-Informed Decision Making
EPA	Evidence Policy Action
EU	European Union
EUD	European Union Delegation
EVIPNet	The Evidence-Informed Policy Network
GINA	Global database on the Implementation of Nutrition Action
HSS	Health System Strengthening
IFPRI	International Food Policy Research Institute
IYCF	Infant and Young Children Feeding
IPA	Innovation for Poverty Action
MICS	Multiple Indicator Cluster Survey
NCDs	Non-Communicable diseases
NIPN	National Information Platforms for Nutrition
NRF	Nutrition Research Facility
SMART	Standardized Monitoring and Assessment of Relief and Transitions
SSA	Sub-Saharan Africa
TNWA	Transform Nutrition in West Africa
WHO	World Health Organisation

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Key messages

- 31 policy documents in relation to nutrition from 6 European Union partner countries in Sub-Saharan Africa (Benin, Burkina Faso, Ethiopia, Kenya, Malawi, Uganda) were reviewed to examine their explicit use of literature (grey or scientific) and of consultation with researchers for their development.
- All 6 countries (except Benin) have developed nutrition policies, frequently including nutrition-sensitive sectoral policies in Health and Agriculture/ Food Security; policies mostly address all forms of malnutrition for the whole population.
- Grey literature, especially from international agencies reports (WHO, UNICEF, FAO, IFPRI and World Bank), is cited much more than scientific literature in all policies, but scientific literature is far from absent. Both types of literature are mostly used in the “context” section of the documents and in policies related to non-communicable diseases, including diet-related (DR-NCDs), health and nutrition, and to a lesser extent in policy documents on agriculture/ food security.
- Information on policy development processes and the setting-up of a scientific committee to oversee the process is rare, but a few documents mention such committees and/or consultation with researchers. The need for strengthening evidence-informed decision making (EIDM) in future nutrition programming is mentioned in almost all policies, with particular emphasis in Malawi and Uganda.
- The policy review enabled the identification of policy documents and countries where the use of literature and promotion of EIDM is relatively high (e.g. the Kenyan national strategy for the prevention of NCDs; and more generally in Malawi and Uganda). In future qualitative analysis (from interviews with key informants) would be pertinent to more fully understand how policy development processes were undertaken concretely.

Introduction

The use of scientific evidence in policy-making processes is increasingly promoted as a “gold standard” in relation to nutrition, the rationale being that policies informed with best evidence can deliver better nutrition outcomes. Hence, a number of initiatives¹, including the Nutrition Research Facility (NRF), aim to facilitate evidence-informed decision making (EIDM), especially through enhanced research-policy dialogue and a demand-driven research agenda. One way to capture if scientific evidence is used in the policy development process, as an indicator of EIDM, is to review whether the content of nutrition-related policy documents make explicit reference to scientific evidence/ publications. An example of this is the recent policy reviews in Burkina Faso and Nigeria (Vanderkooy, Verstraeten, Becquey et al., 2019; Vanderkooy, Verstraeten, Adeyemi et al., 2019) produced by Transform Nutrition in West Africa (TNWA)². The content of policies was considered evidence-based when scientific references were cited³. Using textual analysis, they showed in particular i) that some policy documents do have scientific citations, and ii) that there were sectoral differences between the use of evidence in policy documents, i.e. the nutrition and health sector uses evidence more than the agriculture/ food security sector.

Such an approach may be limited as there are various channels through which scientific evidence can be incorporated in the elaboration of policy documents. Firstly, research evidence could be sourced in different ways and include references other than peer-reviewed academic articles: e.g. ‘grey’ literature, such as reports from national research institutions, international agencies’ reports, lessons learned from operational programs, data analysis, , non-peer-reviewed scientific publications, etc. All these sources can be used to identify the nutritional problems addressed by policy documents or to justify strategic planning and interventions outlined in these policy documents. Secondly, the use of research evidence might also be captured through other means than citations: e.g. setting-up scientific committees, consultation of researchers, academic working groups, etc. Such approaches provide information about the development process of policy documents; and the absence of citations of academic articles does not necessarily mean that policy documents or the policy making process are not evidence-informed.

Therefore, we analysed a sample of national policies relating to nutrition in European Union (EU) partner countries⁴ with a wider perspective to assess how evidence was explicitly incorporated through various channels in the documents. The aim of this policy review is to provide policymakers with insights on the different ways to explicitly use scientific evidence in policymaking (possible benchmarking with examples of good practice). Furthermore, by highlighting potential differences in the use of scientific inputs between documents and between countries, this analysis can help to identify examples of EIDM, hence countries where a qualitative analysis of policy-making processes could be undertaken by the NRF to better understand what EIDM means in practice.

¹ A list of initiatives similar to the NRF has been developed by the NRF Team (see Deliverable D1.2) and is regularly updated.

² TNWA (2017-2021) is a regional platform that aims to improve and support decisions and actions to accelerate reductions in maternal and child undernutrition. Led by IFPRI, the initiative facilitates an inclusive process of knowledge generation and mobilization that is guided by context and driven by local priorities. <https://westafrica.transformnutrition.org/fr/accueil/>

³ The analysis of the explicit use of scientific publications in the policy documents was part of a broader study reviewing the horizontal coherence (within one policy) and the vertical coherence (between policies and operational programmes) of nutrition policies.

⁴ Policy reviews may have different objectives, such as, to assess the degree of alignment of policies with international guidelines or commitments on a particular topic. For instance, Lachat & al. (2013) conducted a policy review to assess to what extent evidence-based recommendations (WHO recommendations) on NCDs were addressed in policy content. It was not possible here to adopt a similar approach, as the NRF Facility was not dealing with one specific nutrition topic at this stage.

Methods

In order to optimise the probability of collecting national policy documents that explicitly mentioned the use of research inputs, the study focussed on countries that have been targeted by a number of initiatives with complementary goals to the NRF, i.e. to enhance the research-policy dialogue and the use of evidence in policymaking. It was anticipated that stakeholders in these countries might be particularly sensitive to the interests of research for policymaking and, therefore, that policy documents may be more likely to be evidence-informed. For example, it is not unusual that policy documents include specific sections explaining how they have been drafted or a list of stakeholders that were consulted during the process of their elaboration.

Selection of countries

Countries were selected based on the following criteria:

- The continent where there is the highest number of EU partner countries: from the 42 partner countries that prioritised nutrition in their cooperation with the EU, over two thirds (29) are in Sub-Saharan Africa (SSA).
- The SSA countries that are the most targeted by initiatives promoting evidence-informed decision-making that are complementary to the NRF. With the information collected so far, 7 countries are targeted by at least 3 such initiatives: Benin, Burkina Faso, Ethiopia, Kenya, Malawi, Tanzania, Uganda (see Table 1).

Table 1. Countries the most targeted by initiatives promoting evidence-informed decision-making

Countries	Initiatives promoting evidence-informed decision making
Benin	The Africa Evidence Network (AEN), Evidence Policy Action (EPA), Actions pour l'Environnement et le Développement Durable (ACED)
Burkina Faso	Transform Nutrition West Africa (TNWA), National Information Platforms for Nutrition (NIPN), The Evidence-Informed Policy Network (EVIPNet), Innovation for Poverty Action (IPA)
Ethiopia	Transform Nutrition, NIPN, EVIPNet
Kenya	Transform Nutrition, NIPN, IPA
Malawi	EVIPNet, Johns Hopkins University's National Evaluation Platforms (NEP), IPA
Tanzania	EVIPNet, NEP, IPA
Uganda	NIPN, EVIPNet, IPA

Selection of national policies

The World Health Organisation's (WHO) Global database on the Implementation of Nutrition Action (GINA)⁵ was used for the identification of policy documents (Table 2). It was selected because it is a global platform for sharing standardized information on nutrition policies and action and has been used previously for identifying policy activity in nutrition (e.g. Lachat et al, 2013; Sunguya et al., 2014). A total of 31 policy documents were collected from GINA for six countries: Benin (6), Burkina Faso (8), Ethiopia (5), Kenya (4), Malawi (3) and Uganda (5). This sample is mainly comprised of nutrition policies but also includes a number of sectoral policies in Health, Agriculture and Food security and Social Development (see Table in the Appendix).

Limitations of using GINA included that one of our selected countries (Tanzania) was excluded from the sample, as it was not included in GINA. In addition, some documents mentioned in GINA were not

⁵ GINA is an interactive platform for sharing standardized information on nutrition policies and action. GINA is informed by WHO's periodically conducted global policy reviews, routine policy monitoring activities in collaboration with Regional and Country Offices as well as by partners' databases. It builds on the former WHO Global Database on National Nutrition Policies and Programmes developed after the 1st International Conference on Nutrition in 1992. (<https://extranet.who.int/nutrition/gina/>)

downloadable. Regarding Uganda, for instance, the most recent documents were inaccessible, and the review therefore only concerned policies published up to 2011.

Table 2. Identification and inclusion strategy for national policy documents

Targeted website approach	National policy documents were obtained from the WHO repository (https://extranet.who.int/nutrition/gina/).
Time limit	Policy documents published in the last 10 years (2010-2021) were eligible. This short time pane was chosen because most of the initiatives promoting evidence-informed decision-making are quite recent and it may take some time for these initiatives to be implemented and influence policy-making.
Type of documents	National policy documents and action plans.
Content of policy documents	All national policy documents related to nutrition were reviewed, including nutrition-sensitive policy documents (e.g. Health or Food Security policies). Only policies/strategies that had 'improving nutritional outcomes' as an explicit objective were included. Documents/regulations written in legal language (e.g. Food, Drugs and Chemical substances Regulations or Excise Tax Proclamations) which usually do not contain any scientific references and do not purport to be policy action documents <i>per se</i> were not included; neither were very broad or macroeconomic policy documents, e.g. Growth and Poverty Reduction Strategy and Development Assistance Framework, that did not explicitly target nutrition.
Geographical level	National level policy only.

Method for the analysis

Quantitative measures were generated to appraise whether there was an indication of use of grey literature and scientific literature (number of citations) and/or involvement of an expert committee (or consultations with researchers and experts) in the development of policies. For this analysis, grey literature is understood in a broad sense in order to be able to identify any effort made to reference the data or policy actions (e.g. interventions, programmes) put forward in the documents. This may include statistical reports, expert reports (often by international organizations), research studies, non-peer-reviewed scientific publications, etc. Scientific literature exclusively refers to articles published in peer-reviewed scientific journals. In only a few cases did it prove difficult to classify the reference as grey or scientific literature, so it was not deemed necessary to create an additional "third" category. In these cases, the choice was made by default to consider such evidence as grey literature. A given reference used several times was counted for only one reference and citations of other government policy documents ('internal citation') were not considered. In addition to counting publications (from grey or scientific literature) and mentioning (or not) an expert committee, a number of keywords (e.g. evidence, research) were used to identify whether the document stated a particular interest in research-policy dialogue and EIDM; subsequently the sentences illustrating this interest were extracted from the documents. The list of keywords was used as a means to identify the relevant sentences, which can include additional terms such as university* or expert*. The content of the included policy documents was screened and information on the quantitative measures extracted (as listed in Table 3) into an excel spreadsheet for each policy document by two members of the NRF team (Arlène Alpha/Michelle Holdsworth).

We classified the form of malnutrition that the policy targeted (Figure 1).

Figure 1: Classification of forms of malnutrition used

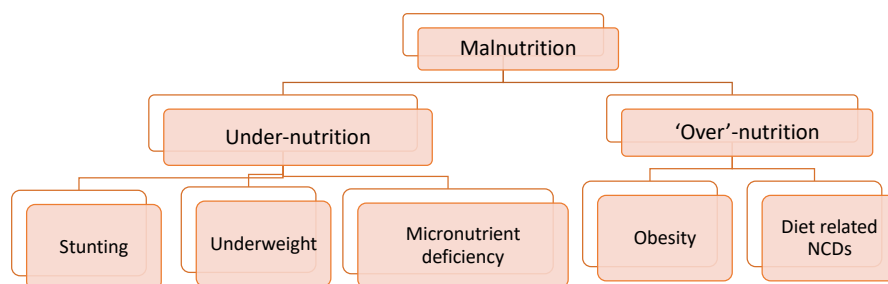


Table 3. Analysis strategy of the selected national policy documents

Policy title	e.g. Kenya National Strategy for the Prevention and Control of NCDs (2015-2020)
What is the form of malnutrition or associated diseases targeted by the policy?	DR-NCDs
Which is the target population of the policy?	Whole population
Is grey literature cited (1 if yes, # of page and extraction from the document)?	1: "Other NCDs of public health importance in Africa include haemoglobinopathies, mental disorders, violence and injuries, oral and eye diseases plus chronic diseases of an infective origin like rheumatic heart diseases" (WHO Brazzaville Report, 2011) (p21)
Is scientific published literature cited (1 if yes# of page and extraction from the document)?	1: "Children show signs of transition to a more sedentary lifestyle with only 12.6% of school children in a recent Nairobi study meeting the levels of adequate daily physical exercise" (Muthuri et al., BMC Public Health, 2014) (p26)
Is there an expert scientific committee? (Yes/No)?	N
Keywords used (research* OR scien* OR academi* OR evidence)	"cost-effective and evidence-based interventions are prioritized for implementation" (p30)
Comments	

Findings

The data extracted for the review are summarised in Annex 1 (pages 11-14).

Policies cover similar areas across countries

In the GINA database we found policies entitled "Nutrition policy/ programme/ action plan" in all countries (except **Benin**) and in two of them (**Burkina Faso and Malawi**) these policies existed in two versions as they were updated over the last 10 years. In addition, both Health policy and Agriculture/ Food Security policy are also frequent policy documents that tended to deal with all forms of malnutrition and target the whole population, which we found in four countries for health-related policy (**Benin, Burkina Faso, Ethiopia and Uganda**) and Agriculture/ Food Security policy (**Burkina Faso, Ethiopia, Kenya and Uganda**).

A number of policies addressing specific forms of malnutrition and/or targeting specific groups were also found in several countries. For instance, policies in three countries have been developed for preventing overweight/obesity and DR-NCDs (**Benin, Burkina Faso and Kenya**). Infant and Young Children Feeding (IYCF) was also an area of policies found in two countries (**Benin and Burkina Faso**). Children were targeted by School Health policies in two other countries (**Ethiopia and Kenya**), and in specific policies only in **Benin** for

infants (Breastfeeding to prevent undernutrition and micronutrient deficiencies, and Child monitoring and Growth for all forms of malnutrition). Lastly, we found only one policy in the GINA database on Micronutrient deficiencies (**Burkina Faso**), on Acute malnutrition (**Malawi**) and two policies that target social equity were only found in **Uganda** (for Orphans and other Vulnerable Children, and Social Development).

Grey literature is used much more than scientific literature in all countries

The use of grey literature was frequent in all policy documents. A number of reports and surveys were cited, especially to support data from national statistics services: e.g. Demographic and Health Surveys (DHS), Multiple Indicator Cluster Survey (MICS), National nutritional surveys, SMART surveys, Sanitary Statistical Yearbooks, etc. This illustrates the importance of national statistics services and nationally nutrition? relevant data in policy making.

Grey literature sources from international agencies reports were also frequently used, particularly the WHO, UNICEF, FAO, IFPRI and World Bank. As regard policies on overweight/obesity and DR-NCDs for instance, the WHO recommendations (e.g. Global Development of a global monitoring framework and targets for the prevention and control of NCDs, 2012) and WHO nutrition profiles were frequently cited. Policies targeting children under 5 (IYCF policies) also often refer to WHO Growth Standards and recommendations for vitamin A supplementation for women during postnatal period. The WHO framework for monitoring and evaluation of health system strengthening (HSS) was also mentioned (Health Sector Transformation Plan in **Ethiopia**). UNICEF and WHO documents are particularly cited in policy documents in relation to school health (e.g. in **Kenya**).

A number of specific studies or surveys, whether large national surveys or local surveys undertaken in development projects led by non-governmental organisations (e.g. ACF, HKI), were mentioned to illustrate or support the content of documents, especially when routine data are missing. The use of studies is sometimes claimed but without their references, thus only reporting on “a study”, “a research”, a “survey”, “a PhD”, etc. It is therefore difficult to identify if the research is grey literature or has been published. It is also not unusual to find figures without their sources specified.

Scientific literature was cited much less than grey literature in the included policy documents but was far from being absent. A number of scientific articles were cited in support of the characterisation of particular nutritional problems or the efficiency of particular nutrition interventions. We also found articles mentioned in the lists of references at the end of the included documents, but not specifically cited (e.g. in the National Nutrition Action Plan 2012-2017 of **Kenya**).

The number of citations of scientific articles varies a lot across policy documents

For a few policy documents, the number of references from scientific published literature was relatively high compared to grey literature. It should be noted however, that research was often cited without an explanation of how it was selected (‘retrieval process’) nor with any appraisal of its quality or validity. This is the case for instance with the National Nutrition Programme (2013-2015) in **Ethiopia**, in which almost as many citations of scientific literature were recorded as of grey literature (11 scientific vs 14 grey). Much of the cited scientific literature involved or was led by Ethiopian researchers. The **Kenya** National Strategy for the prevention of NCDs (2015-2020) also included numerous citations of scientific published literature (13 scientific vs 21 grey).

Articles from the leading medical journal *The Lancet* were cited several times, especially Black et al. (2008, 2013). The Plan for scaling up the promotion of optimal IYCF practices in **Burkina Faso** (2013-2025) for instance cited three articles from *The Lancet*, the same as in the National Nutrition Program (2016-2020) in **Ethiopia**. PhD and masters’ thesis are cited in a few policy documents, e.g. in the Plan for scaling up the promotion of optimal IYCF practices in **Burkina Faso**.

Data and literature are mainly used in the “context sections” of policy documents

In all countries, policy documents were well documented in the parts dedicated to the context and the description of the national nutritional situation. Grey literature and scientific literature (if any) were usually mentioned to provide evidence of the magnitude and the gravity of the nutritional problems, rather than to support what would work to prevent them.. Data from routine national surveys are cited more than wider scientific literature to describe the nutritional context. In each country, the policy documents with the highest number of citations from grey or academic literature are on NCDs, Health, Nutrition and in a lesser extent on Agriculture/ Food security.

Information on policy development process and of any Scientific Committee is rare

The search undertaken on keywords such as research, science or evidence shows that these terms were not frequently used in the included policy documents. When they were used, it was mostly to mention the need for reinforcing research activity in nutrition; and was referred to when research is one of the targets of the policy. This is the case for instance in the Strategic Plan for preventing NCDs in **Benin**, where it was stated *“the research sector needs to build on context-specific realities to develop innovative studies in the field of NCDs”* (p42).

The description of how the policy documents were developed was not systematic and even less frequent was the indication of any consultations with researchers. When such descriptions existed, they were most often inserted at the very beginning of documents, in the Preface or Foreword section, and claim the development process was participatory, inclusive and stakeholders’ categories are cited (e.g. ministries/ government officials, development partners, local authorities, civil society, private sector). Academia is often not explicitly cited but can be considered to be included in part through government officials. Sometimes a list of names with their organisations was given in the Appendix. The list provided in the National Strategy for IYCF in **Benin**, for instance, comprises at least three researchers out of 28 participants engaged in updating the policy document.

In **Uganda**, two policy documents dedicated a specific section to the development process: The Agriculture Sector Development Strategy and Investment Plan (DSIP, 2010/11-2014/15) and the Health Sector Strategic & Investment Plan 2010/11 (2014/15). The latter specifies that the Ministry of Health formed a Task Force to oversee the development of the policy, which included universities among other actors. It also mentions that there were consultations with a wide range of health experts and that consultants were recruited to facilitate policy elaboration (which is quite common in all countries though not always explicitly stated). Another document, the Uganda Nutrition Action Plan (2011-2016), indicated in its “Statement of commitment” that a Multi-Sectoral Technical Committee was established to conceptualize and draft the Plan which included experts on nutrition from academic institutions. The membership list provided in the document shows these experts were from the Makerere University School of Public Health, International Food Policy Research Institute (IFPRI) and Uganda National Academy of Sciences.

In **Burkina Faso**, the National Plan for Sanitary Development (2011-2020) explains that a draft document was elaborated by a Technical team then amended by a Scientific Committee and validated by a Steering Committee before its adoption by the government. In **Ethiopia**, the National School Health and Nutrition Policy (2012) was developed under the auspices of a Taskforce/ Technical Committee involving several ministries (led by Education/ Health) and international development partners and non-governmental organizations. This document also mentions that the 2008 Strategy on this area was based on extensive evidence collected during a nationwide situation analysis on the health, nutrition and education of schoolchildren conducted through a process of visits to all Ethiopian regions, a literature review, and consultations with multiple stakeholders. The Health Sector Transformation Plan also specifies that a series of consultations were conducted with stakeholders, including universities. The feedback received from these consultative workshops were carefully documented, reviewed and incorporated into the policy document accordingly.

Some policy documents referred to multi-stakeholder concertation platforms that comprise academia. This is the case for the different National Nutrition Programmes (2013-2015; 2016-2020) in **Ethiopia** which respectively mentioned the National Nutrition Coordination Body and the National Nutrition Technical Committee. The National Community-Based Management of Acute Malnutrition (CMAM) Operational Plan (2017-2021) in **Malawi** mentions that it was developed through the technical inputs of numerous stakeholders, including academic institutions.

Mention of EIDM varies across countries, with a strong focus in Malawi and Uganda

EIDM is mentioned in most of the policy documents, but with strong differences across policy documents and countries; the case of **Malawi** being quite singular with a strong focus on the topic. Some documents refer to evidence in vague terms without citing references: “the evidence suggests that”, it is “evidenced by”, “evidence from other projects shows”, “field evidence shows”, etc. Other documents suggest the development process was informed by evidence, but above all most of the documents insist on the need to further develop and use evidence in future nutrition programming.

In **Uganda**, the Agriculture Sector Development Strategy and Investment Plan (DSIP) mentions its formulation has benefited from a number of studies. The list of studies refers to grey literature, mainly reports on economic aspects at the macro or sectorial level (e.g. the World Bank’s Country Economic Memorandum, 2006; Public Expenditure Review of agriculture, GoU, 2007-9). The Health Sector Strategic & Investment Plan 2010/11 (2014/15) stresses the fact that its development has been informed by lessons from reviews of previous policy documents. The National Strategic Programme Plan of Interventions for Orphans and Other Vulnerable Children (2011/12—2015/16) indicated it was informed by a situational analysis of vulnerability of children in Uganda conducted in 2010.

In **Burkina Faso**, the attention paid to EIDM appears in several documents. The Integrated Strategic Plan for preventing NCDs (2016-2020) mentioned the low use of research findings in NCDs as a weakness and calls for considering scientific evidence to better address NCDs. The National Plan for Sanitary Development (2011-2020) and the National Health Policy (2011) underline efforts made to better disseminate research findings and mention in this regard the “*Forum sur la recherche scientifique et les innovations technologiques*” (FRIST) and the EVIPNet initiative. They also plan to prioritise the establishment of a national observatory on the use of research findings for health and advocacy for further EIDM when defining health policies and programmes.

Policy documents in **Ethiopia** also referred to the need of working with higher institutions, encouraging the production and dissemination of evidence and more explicitly to EIDM. In particular, the Health Sector Transformation Plan mentions “*Initiatives to improve [...] research and evidence for decision making*” (p14) and one strategic initiative (Improve Research and Evidence for Decision-Making) especially to “*Develop and implement evidence-based, scientifically sound policy decision and planning*” (...) “*Conduct basic and applied research to promote evidence-based practices*” (p107).

Malawi is singular as all its three policies put “evidence-based interventions” as a key guiding principle. The National Nutrition Policy (2013) states that “*All nutrition initiatives will be based on scientifically proven evidence and best practices*” (p34). The guiding principles in the CMAM Operational Plan (2017-2021) is that “*CMAM service delivery will be informed by scientifically tested strategies and best practices that are most likely to lead to optimal outcomes*” (p3). The National Multi-Sector Nutrition Policy, NMNP (2018-2022) indicates in its preface that “*This new Policy aims at ensuring that evidence-based, high impact nutrition interventions are developed and implemented at scale*” (piii). In this policy, the guiding principle is strongly linked to Monitoring & Evaluation: “*The NMNP will promote evaluation and learning, documentation of implementation successes, best practices, and application of lessons learnt in programming*” (p14). The 8th (and last) objectives of this policy is to “*Enhance evidence-based programming through nutrition monitoring, evaluation research, and surveillance*” (p13) and the policy specifies that “*Nutrition M&E further helps in evidence-based decision making*” (p30).

Hence, the need for better dissemination of research and alignment between the research agenda and Malawian government's priorities through strong collaboration between researchers and decision makers is particularly stressed. For example, the NMNP (2018-2022) supports strategies that aim to *"Promote coordination and collaboration of nutrition researchers in line with the national nutrition research strategy"* (p31). Academic and research institutions are identified as *"responsible for conducting nutrition research and disseminating findings to inform policy and programming"* (p35).

The National Nutrition Policy (2013) is also particularly illustrative of an EIDM lens in one of its priority areas on Research and Development. The expected outcomes of this priority area are: *"1) Promote evidence-based planning of nutrition programmes, projects and interventions; 2) Promote research that is responsive to national needs; 3) Improve collaboration among researchers, between researchers and policy makers, as well as extension workers for effective utilisation of generated research information; and 4) Improve documentation and dissemination of research findings and best practices in nutrition"* (p72-73). The document gives clear guidance of activities to be implemented for a research agenda *"that is responsive to national needs"*:

- *Conduct a research needs assessment to identify priority areas in the various sectors;*
- *Conduct a meeting with nutrition stakeholders and key policy makers to build consensus on the identified research priority areas;*
- *Conduct a working session to develop nutrition research agenda and protocols;*
- *Identify potential institutions to conduct research in nutrition;*
- *Disseminate the research agenda and protocols to key researchers;*
- *Mobilise resources to support the research activities"* (p73-74).

It is nevertheless interesting to note that the number of citations of scientific published literature was not higher in policy documents from **Malawi**, compared with other countries. This illustrates the need for putting the number of citations in perspective with the claim that evidence was used in the policy development process, and with further analysis of how and what evidence was concretely used throughout the process.

Finally, a number of documents do not claim they were informed explicitly by evidence, but EIDM was set as a specific objective for future programming. More broadly, the need for strengthening research was underlined in almost all documents with specific sections, programmes or areas of investment dedicated to this sector. In **Uganda**, all policies referred to the need for strengthening EIDM as a guiding principle. The emphasis on EIDM is particularly strong in the Health Sector Strategic & Investment Plan 2010/11 (2014/15) which advocates for a culture of EIDM. In its section on "Health Information, research and evidence generation", it states that: *"research has mainly been donor driven. Other challenges include the translation of research findings into policy and the dissemination of results. There are no regular meetings of researchers and policy makers to turn research findings into policy. There is lack of a national database for research done hence rendering it difficult to access"* (p24). The policy also mentions as the first principle for implementation that it should be evidence-based. In relation to one of its objectives (*"Deepen sector stewardship"*), a section on enabling *"evidence-based decision making, sector learning and improvement"* and another was on creating *"a culture in which health research plays a significant role in guiding policy formulation and action to improve the health and development of the people of Uganda"*. This latter section indicated that: *"Research is a tool that supports evidence-based policy and intervention formulation and is therefore an important component of the HSSIP. During HSSIP emphasis will be given to how research can be used to guide the development and implementation of policy, health promotion, disease prevention and early diagnosis and treatment"* (p125).

Discussion and recommendations

This review of a sample of national policies showed a number of similarities across policies and countries, e.g. greater use of grey literature compared to scientific references and limited indication of consultation

with academia, but also differences between policies and countries. In all six countries, the vast majority of policy documents in relation to nutrition are national nutrition policies, health and agriculture/ food security policies. This finding is consistent with Vanderkooy, Verstraeten, Becquey et al. (2019, p10) who found that of the 16 policies studied in Burkina Faso only four came from outside of the areas of nutrition, health and agriculture/ food security. Both types of literature (grey and scientific) are mostly used in the “context” section of the documents and in policies related to NCDs, health and nutrition, and to a lesser extent in policies on agriculture/ food security. Vanderkooy, Verstraeten, Becquey et al. (2019) also found that health policies in Burkina Faso were the most evidence-based with regards the description of the nutrition context. They also highlight the fact that *“Across all policy areas, citations are predominantly for statistics rather than textual information”* and *“Evidence that is cited mainly relates to prevalence levels of nutrition problems”* (p4). Information on policy development processes and the setting-up of a scientific committee to oversee the process is rare, but a few documents mention such committees and/or consultation with researchers. The need for strengthening EIDM in future nutrition programming is mentioned in almost all policies, with particular emphasis in Malawi and Uganda.

The policy review leads us to suggest at least three main recommendations to policymakers:

- i) Indicate sources of all data and studies cited in the policy documents. Sources are not systematically indicated throughout documents, and some are more accurate than others. Such accuracy is important to both improve the quality of the policy documents and to facilitate their monitoring and evaluation, as well as their updating.
- ii) Use existing evidence to justify policy options and interventions. While it is crucial to document the nutrition problems that the policy documents aim to tackle, it is equally important to explicitly indicate how choices in policy orientations and interventions are made in these documents, whether evidence was used, and then which type of source.
- iii) Explicitly define the policy development process. Explaining how the consultation process was organized, who were the actors consulted, including academia, the forms of consultations (workshops, committees, etc.) provides valuable information, which goes beyond the usual statement that documents were developed through participatory consultation with all stakeholders. This information not only improves transparency of the policy-making process, but is also be useful for evaluation and updating of policies.

For the NRF, the adopted methodology proved to be particularly relevant to undertake a rapid screening of a large number of policy documents, identify what the authors of the policies wanted to highlight in relation to the policy development process, the use of scientific inputs and more broadly the contribution of research in programming.

The main limitations of the review are related to only restricting our searches to the GINA database to identify policy documents, and to the extent of analysis of policies through textual analysis. Firstly, the GINA database does not register all documents in relation to nutrition and a number of recent policies were missing, in particular for Uganda. Additional policy documents could be identified through personal networks of the NRF Team members for future analysis, if required. However, the NRF members' knowledge of policy documents in relation to nutrition in LMICs suggests that the documents collected with GINA provided a wide range of policy documents in the countries studied. An important point of interest of the GINA database is also that it only includes endorsed policies that have been verified by the WHO offices in every country before sharing in GINA. Furthermore, this policy review did not intend to be exhaustive, therefore it did not require a systematic search of multiple sources, but rather the purpose was to use a sample of national policies to obtain an indication of how evidence is cited and mentioned (as a proxy for evidence use) in the content of policy documents related to nutrition. Secondly, explicit mention of the use of research inputs in policy documents does not explain how/whether such research evidence really influenced policy choices nor the content of policy documents. Conversely, the absence of explicit mention of the use of research inputs does not necessarily mean that evidence was not considered in practice (during discussions, for example).

These limitations could be overcome through subsequent activities of the NRF, for example conducting further research in one or two case study countries to conduct in-depth qualitative analysis of policymaking processes. Indeed, the analysis raises questions about how policies that cite many references and are sensitive to EIDM were concretely developed, and the role of academic institutions in their development (especially those involved in the Scaling up Nutrition academia platforms). Further qualitative investigation of policy making processes is needed (i.e. semi-structured interviews with key informants) in countries where an emerging “culture” of research-policy dialogue and of EIDM seem to be relatively developed. The analysis could focus on 1-2 particular illustrative examples of policies in relation to nutrition. The analysis showed that examples of NCDs policies (that include overweight/obesity and DR-NCDs) and of Malawi and Uganda appear to be good candidates. However, other criteria for the selection of countries and policies need to be taken into consideration, such as insights from complementary initiatives promoting EIDM, interest and support from decision makers and other stakeholders (national research institutions, EUDs, etc.).

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Annex - Summary of policy review

Annex 1. Policy documents identified in all 6 countries

Summary of type and scope of policy documents and use of research evidence							
Year of publication	Name of policy document identified in GINA	Form of malnutrition or associated diseases targeted	Population targeted	No. of citations of grey literature*	No. of citations of academic literature	Expert committee Y/N	
Benin							
2014	Strategic Integrated Plan against non-communicable Diseases (2014-2018)	Obesity and DR-NCDs	Whole population	8	2	N	
2015	National Strategy for Infant and Young Children Feeding (2015-2019)	All forms of malnutrition	Children under 5, esp. under 2 and pregnant and lactating women (1000 days)	8	0	N	
2016	Action Plan of the Health Sector Policy for Nutrition (2016-2020)	All forms of malnutrition	Mothers, infants, children and adolescents	0	0	N	
2016	Breastfeeding Reinforcement Plan in Benin (2016-2020)	Undernutrition and micronutrient deficiencies	Children from 0 to 24 months (1000 days)	4	0	N	
2016	National guidelines for children monitoring and growth in Benin, 2016	All forms of malnutrition	Children under 5	8	0	N	
2019	Strategic Plan for the prevention of non-communicable diseases (2019-2023)	Obesity and DR-NCDs	Whole population	10	0	N	
Burkina Faso							
2010	Strategic Nutrition Plan (2010-2015)	All forms of malnutrition	Whole population	10	0	N	
2011	National Health Policy, 2011	All forms of malnutrition	Whole population	5	0	N	
2011	National Plan for Sanitary Development (2011-2020)	All forms of malnutrition	Whole population	9	0	Y	
2013	National Policy on Food and Nutrition Security, 2013 (draft)	All forms of malnutrition	Whole population	14	0	N	

Deliverable 1.4 - Review and analysis of a sample of national policies regarding nutrition

2014	Plan for scaling up the promotion of optimal infant and young child feeding practices in Burkina Faso (2013-2025)	Stunting	Children from 0 to 59 months	9	3	N
2015	Plan to Strengthen the Fight Against Micronutrient Deficiencies (2015-2020)	Micronutrient deficiencies	Whole population	10	3	N
2016	National Nutrition Policy (2016-2025)	All forms of malnutrition	Whole population	12	1	N
2016	Strategic Integrated Plan against non-communicable diseases (2016-2020)	Obesity and DR-NCDs	Whole population	21	0	N
Ethiopia						
2012	National School Health and Nutrition Policy (2012)	Inadequate food consumption; stunting/wasting/underweight;/ iodine/vitamin A/iron deficiencies	School-age children (including under-fives) and adolescents (10 to 24 years old)	5	0	Y
2013	National Nutrition Programme (2013-2015)	All forms of malnutrition, with particular focus on low BMI, anemia, infant/young child feeding practices, iodine/iron/vitamin A deficiencies (under 5)	Adolescent girls, pregnant women, infants 0-6 months old, and infants and young children 6-24 months	14	11	N
2015	Health Sector Transformation Plan (2015/16 - 2019/20)	All forms of malnutrition	Whole population	36	3	N
2016	Nutrition Sensitive Agriculture Strategic Plan (draft), 2016	All forms of malnutrition	Does not specify	3	0	N
2016	National Nutrition Programme (2016-2020)	All forms of malnutrition	Whole population	14	7	N
Kenya						
2011	National Food and Nutrition Security Policy, 2011	All forms of malnutrition	Whole population	7	4	N
2011	National School Health Strategy	Malnutrition (stunting, underweight,	School children aged	16	1	N

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	Implementation Plan (2011-2015)	micronutrients), promoting good nutrition						
2015	National Nutrition Action Plan (2012-2017)	All forms of malnutrition	of	Whole population	4	0	N	
2015	Kenya national strategy for the prevention of non-communicable diseases (2015-2020)	Obesity and DR-NCDs		Whole population	21	13	N	
Malawi								
2013	The National Nutrition Policy (2013)	All forms of malnutrition	of	Whole population, with special emphasis on vulnerable groups (pregnant and lactating mothers, children U 15, orphans, elderly and people living with HIV and AIDS)	7	0	N	
2016	National Community-Based Management of Acute Malnutrition (CMAM) Operational Plan (2017-2021)	Acute malnutrition		Children 0-15 years of age	6	0	N	
2018	National Multi-Sector Nutrition Policy (2018-2022)	All forms of malnutrition	of	Whole population with emphasis on children U5, pregnant and lactating women, school aged children and other vulnerable groups (people living with HIV, and people affected by emergencies)	3	0	0	
Uganda								
2010	Agriculture Sector Development Strategy and Investment Plan (2010/11-2014/15)	All forms of malnutrition	of	Whole population	61	3	N	

Deliverable 1.4 - Review and analysis of a sample of national policies regarding nutrition

2011	Health Sector & Strategic Investment Plan (2010/11-2014/15)	All forms of malnutrition	Whole population	20	0	Y
2011	National Strategic Programme Plan of Interventions for Orphans and Other Vulnerable Children (2011/12-2015/16)	All forms of malnutrition	Orphans and other vulnerable children	14	0	N
2011	The Social Development Sector Strategic Investment Plan (2011/12-2015/16)	All forms of malnutrition	Vulnerable and disadvantaged populations	23	0	N
2011	Uganda Nutrition Action Plan (2011-2016)	All forms of malnutrition	Whole population, with focus on women of reproductive age, infants, and young children	4	0	Y

*excludes citations of other government policy documents ('internal citation').

