

*National Information Platform
for Nutrition (NIPN):
Information and Knowledge
Management Approach*



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Abbreviations and Acronyms

AC	Advisory Committee
CNA	Capacity Needs Assessment
C4N	Capacity for Nutrition
DAGs	Directed Acyclic Graphs
ENTAP	Ethiopia NIPN Technical Assistance Project
EPHI	Ethiopian Public Health Institute
EU	European Union
EUD	European Union Delegation to Ethiopia
FNP	Food and Nutrition Policy
FSNRD	Food Science and Nutrition Research Directorate
IFPRI	International Food Policy Research Institute
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IYCF	Infant and Young Child Feeding
M&E	Monitoring and Evaluation
MEL	Monitoring, Evaluation and Learning
MER SC	Monitoring, Evaluation and Research Steering Committee
MOH	Ministry of Health
NCD	Non-Communicable Diseases
NIPN	National Information Platform for Nutrition
NNP	National Nutrition Program
PQF	Policy Question Formulation
Q&A	Questions and Answers
QPM	Quarterly Progress Monitoring
SBCC	Social and Behavior Change Communication
SOP	Standard Operating Procedure
SSB	Sugar-Sweetened Beverages
SSS	Sugar-Sweetened Snacks
STPA	Senior Technical and Policy Advisor

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Introduction

The National Information Platform for Nutrition (NIPN) is a global initiative launched by the European Commission to support Scaling Up Nutrition countries that have a high malnutrition burden. It supports the generation of evidence that is used by nutrition stakeholders to develop policy, design programs and to allocate investments. Global support to the NIPN is managed by Capacity for Nutrition (C4N) which is part of the German Federal Ministry for Economic Cooperation and Development's Knowledge for Nutrition Program and is implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

The NIPN in Ethiopia was launched in 2018. It is hosted at the Ethiopian Public Health Institute (EPHI) within the Food Science and Nutrition Research Directorate (FSNRD). Technical assistance to the NIPN is provided by the International Food Policy Research Institute (IFPRI) under the Ethiopia NIPN Technical Assistance Project (ENTAP). Both institutions are funded by the EU Delegation to Ethiopia, with support from the Foreign Commonwealth and Development Office and the Bill and Melinda Gates Foundation.

The NIPN in Ethiopia aims to strengthen national capacity to monitor progress towards the reduction in under-nutrition and to implement more cost-effective and evidence-based nutrition policies and programs. It promotes evidence-based decision making for nutrition and supports the implementation of the National Nutrition Program (NNP) and the Food and Nutrition Policy (FNP).

Knowledge management and learning is high on the NIPN's agenda as the team generates research and knowledge to respond to nutrition policy research questions, to communicate findings to policy and decision makers, and to influence nutrition policies and programs. The NIPN in Ethiopia works under the national multisectoral nutrition governance structures. It engages multisectoral stakeholders to build monitoring, evaluation, and research capacities to support evidence-based decision making, to share nutrition-related research findings, to create visibility of NIPN research outputs, to develop strategies, document processes, and ensure that a systematic knowledge sharing approach is applied.

Understanding Knowledge Management

Several definitions of knowledge management exist. One definition states that it "is a process that emphasizes generating, capturing, sharing information and know-how and integrating these into business practices and decision making for the greater organizational benefit". (1) Another defines it as "the explicit and systematic management of vital knowledge and its associated processes of creating, gathering, organizing, diffusion, use and exploitation. It requires turning personal knowledge into corporate knowledge that can be widely shared throughout an organization and appropriately applied." (1) Knowledge is the insights, understandings, and practical know-how that people possess (2). Therefore, knowledge management is about applying the collective knowledge of the entire workforce to achieve specific goals. Knowledge management is essentially about facilitating the processes by which knowledge is created, shared, and used in organizations and includes three

components: people, processes, and technology (1, 2). According to Geraud Servin (1), it can involve a variety of things including:

- providing induction packs full of “know how” to new staff;
- conducting exit interviews when staff leave so that their knowledge is not lost to the organization;
- creating databases of all publications produced by an organization so that staff can access them from their desk;
- providing ongoing learning so that people can constantly update their knowledge;
- encouraging people with a common interest to network with each other;
- creating electronic filing systems that can be searched in a number of ways, making the information much easier to find;
- redesigning offices to be open plan so that staff and managers are more visible and talk to each other more;
- putting staff directories online so that people can easily find out who does what and where they are;
- creating intranets so that staff can access all kinds of organizational information and knowledge that might otherwise take a great deal of time and energy to find.

NIPN’s Information and Knowledge Management Approach

The NIPN contributes to the national effort of generating knowledge and learning in nutrition for data-driven decision making. Its outputs are based on information and knowledge that the team collects, or acquires, documents and shares. The types of information and knowledge the NIPN shares are closely aligned with its objectives and results framework (Table 1). It is also intrinsically linked to the NIPN’s annual work plans, and its communication strategy.

Table 1: Results framework

<p>Overall Objective: To contribute to the global reduction in chronic undernutrition to meet the World Health Assembly 2025 targets.</p> <p>Indicators: Number of stunted children reduced</p>
<p>Specific Objective: Strengthened national capacity to monitor progress towards undernutrition reduction and to implement more cost-effective and evidence-based policies.</p> <p>Indicators:</p> <ul style="list-style-type: none"> - Increase the average annual reduction rate (AARR) in the prevalence of stunted children as a result of improved planning and effectiveness of nutrition policies and interventions. - Country’s ability improved to monitor and analyze nutrition-specific and sensitive inputs, outputs, outcomes and impacts at national and sub-national levels. - Use NIPN to inform policy and decision-making in all sectors that influence nutrition
<p>Outputs:</p> <p>Result 1: EPHI and sectoral ministries and partners contributing to the NNP II have the capacity to operate and maintain the NIPN.</p> <p>Indicators:</p>

- Degree of achievement of the implementation plans agreed with the NIPN policy advisory committee, according to the Key Performance Indicators (KPIs) and their annual targets.
- Number and quality of nutrition specific and sensitive datasets obtained by NIPN.

Outputs:

Result 2: Ethiopia tracks progress in meeting its national objectives on undernutrition reduction and in monitoring nutrition investments to guide and inform the NNP-II/FNP implementation and contributing sectors.

Indicators:

- Requests for data or information made to NIPN.
- Outputs produced by the analysis unit.
- Government staff trained in the analysis of data.

Outputs:

Result 3: Ethiopia is able to translate NIPN findings in nutrition related policies and programs: sectoral senior officials/decision makers in nutrition have a better understanding and are making better use of evidence generated through the NIPN for strategic and programmatic decision making.

Indicators:

- NIPN is known by national stakeholders and visible.
- NIPN outputs are effectively disseminated and reach their targets and utilized for program and policy revision.
- Government staff trained in the formulation of evidence-based nutrition policies.

The NIPN also aims to be a prominent source of nutrition evidence and data in Ethiopia. As such, integrating knowledge management and learning into its work, and documenting its approach to it, are important. Developing key knowledge outputs will help the NIPN team members to search, sort and synthesize information, to increase critical thinking and communications abilities, to learn from experiences (before, during and after key project activities), and to acquire and/or adapt their skills, processes, and implementation along the way.

The NIPN’s knowledge management and learning approach aims to achieve the following:

- ensure a common understanding of good knowledge management practices, and of the processes applied to do so,
- increase NIPN’s efficiency to inform decision making,
- ensure high-level commitment to the NIPN’s objectives,
- create a knowledge sharing approach amongst team members and nutrition stakeholders,
- increase visibility for the NIPN,
- contribute to its sustainability.

The NIPN’s knowledge management and learning approach includes: the identification of needs and of knowledge resources, the acquisition and creation of information and knowledge outputs, the storage/retrieval of documentation, the application and sharing of knowledge outputs.

This document “NIPN Information and Knowledge Management Approach” describes what types of information and knowledge outputs the NIPN produces, how the NIPN creates, captures, manages, and uses these outputs to benefit the team, policy and decision makers, and NIPN stakeholders.

The NIPN’s Knowledge Outputs

Since its inception, the NIPN has produced several information and knowledge outputs. As the NIPN matures and evolves, these may change, but for now, the types of outputs can be categorized as:

1. Research outputs.
2. Project-based documentation.
3. Training and event documentation.
4. Data repository documentation.

The section that follows describes the types of knowledge outputs, how they are developed including the quality assurance for their content and design, where they are stored, and how they are shared.

1. Research Outputs

The NIPN’s conducts secondary analysis of existing data to respond to nutrition-related research questions, communicate findings to program implementers, policy and decision makers, so as to inform and influence policies and programs. Annually the NIPN team undergoes a nutrition policy question formulation (PQF) process by which multisectoral stakeholders share nutrition policy questions which they deem important to guide their policies and programs. These questions are then reviewed by the NIPN team to ensure they fall within the NIPN’s scope of conducting secondary data analysis and that data sources exist to respond to them. The team then prioritizes the questions for analysis. In addition, the NIPN also receives ad hoc questions from multisectoral government institutions and partners which may be timebound, urgent and which fall outside of the regular PQF process. A good example of this is the request by the Ministry of Health in 2020 for the NIPN to respond to seven key questions which guided the development of the Food and Nutrition Strategy.

Following receipt of nutrition policy research questions, the key activities of the NIPN is to conduct analysis and produce research outputs to share with the nutrition community in Ethiopia.

1.1. Responding to research questions

The NIPN Data Analysis Unit oversees the response to research questions. This process typically involves the following steps:

- conducting a literature review of existing evidence related to the specific research question,

- identifying datasets and data sources to use for the secondary analysis,
- preparing a data analysis plan and preparing the data,
- conducting the analysis,
- writing a research note or report and a related policy brief (where applicable),
- writing a manuscript (where applicable),
- preparing presentations and disseminating the results.

1.2. Quality control, proof reading, editing, design and layout.

The NIPN team also shares their outputs internally with NIPN, IFPRI and EPHI colleagues, as well as externally with selected stakeholders, for inputs and feedback into these documents. When manuscripts are submitted, these would undergo a peer-review process.

To ensure the quality of the outputs as well as the quality of the English writing, the NIPN team shares their research outputs with IFPRI’s Senior Technical and Policy Advisor (STPA), who conducts the final review and provides technical and/or policy-related inputs. The STPA also conducts proof reading and editing and contributes to the overall design and layout of the documents.

The NIPN Coordinator provides the final approval of the research outputs before they are shared.

1.3. Storing of research outputs

The NIPN team considers operational knowledge sharing as important to stay up-to-date and ensure access to working documents and files. The NIPN makes the documents accessible to NIPN staff, and stores them in the following locations:

- NIPN has a shared Google drive which one person manages, but which all staff can access.
- A shared Dropbox folder was created by IFPRI for documentation related to NIPN research outputs, including literature review, analysis, reports, and briefs.

Meeting notes are uploaded on both these shared folders for the team to access easily.

- Once completed and approval obtained by the NIPN Coordinator, the research outputs are included under NIPN “Resources” on the NIPN website <https://www.nipn.eph.gov.et/data-table>.

1.4. Sharing of research outputs

The NIPN in Ethiopia communicates its research findings with policy and decision makers in multiple ways, namely:

- Sharing the findings during the quarterly national nutrition program Monitoring, Evaluation and Research Steering Committee (MER SC) meetings, during bi-annual

NIPN Advisory Committee (AC) meetings, during national nutrition research conferences, and during nutrition research and policy webinars and/or seminars.

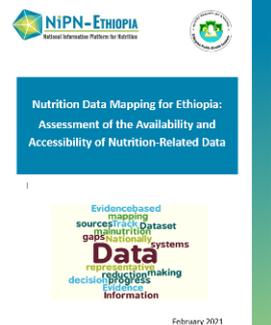
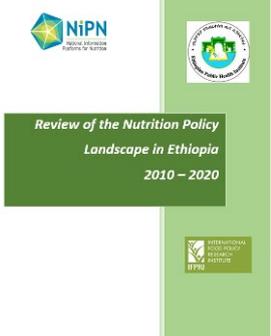
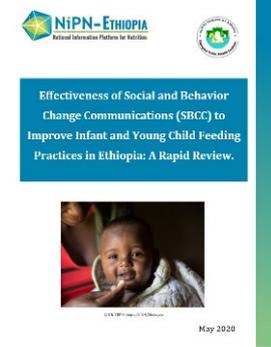
- Sharing summaries of the research outputs or policy briefs with key nutrition stakeholders (currently there are over 350 nutrition stakeholders on the NIPN Ethiopia distribution list).
- Placing the research outputs on the NIPN website (<https://www.nipn.ephi.gov.et/data-table>).
- Writing articles about the research outputs which are included in the quarterly NIPN newsletter and shared via email with the NIPN nutrition distribution list and placed on the website under “News” (<https://www.nipn.ephi.gov.et/news-letter>).
- Writing blogs about the research outputs which are included under the “Blog” section of the NIPN website (<https://www.nipn.ephi.gov.et/node/78>).
- Sharing the outputs with C4N to include on the Ethiopia page on the global NIPN website (<https://www.nipn-nutrition-platforms.org/>).

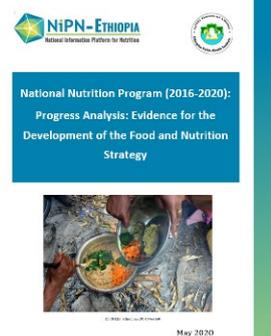
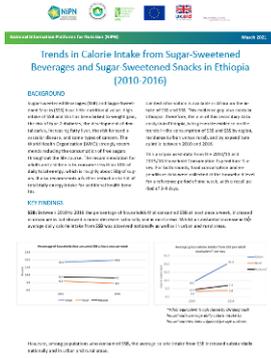
1.5. List of research outputs

The NIPN research outputs include research reports, research notes, policy briefs, manuscripts, newsletter articles, and presentations. The NIPN team is constantly producing new research outputs. Thus far, the NIPN team produced the following outputs as described in Table 2.

Table 2: NIPN research outputs

Title	Description	Type
<p>Progress in Water, Sanitation and Hygiene Service Coverage in Ethiopia: What More Do We Need to Do and Why?</p>	<p>In 2020, the NIPN team conducted secondary analysis to respond to the policy question: “Progress in Water, Sanitation and Hygiene (WASH) coverage and its contributions to the reduction in stunting and diarrhea”. Having completed the analysis, the NIPN team wrote a scientific report, a manuscript and a policy brief called “Progress in Water, Sanitation and Hygiene Service Coverage in Ethiopia: What More Do We Need to Do and Why?”. The brief is aimed at policymakers and key partners, including the private sector, and includes key findings with recommendations for program and policy changes.</p>	<ul style="list-style-type: none"> - Research report - Policy brief - Manuscript 
<p>Nutrition Data Mapping for Ethiopia: Assessment of the Availability and Accessibility of Nutrition-related Data</p>	<p>The government of Ethiopia recognizes that high quality and timely data are needed to identify the magnitude of malnutrition and to assess the impact of evidence-based interventions. To contribute to these efforts, the NIPN conducted a nutrition data mapping to provide an overview of the availability, accessibility, and quality of nutrition-related data for</p>	<ul style="list-style-type: none"> - Research report - Summary brief - Presentation

	<p>selected indicators among multisectoral nutrition actors in Ethiopia.</p>	
<p>Review of the Ethiopian Nutrition Policy Landscape 2010 – 2020</p>	<p>As part of the NIPN’s policy question formulation (PQF) process, a review of nutrition policy landscape (including policies, strategies, and guidelines) was conducted between January-May 2020. The goal was to document nutrition policy outputs over the last 10 years based on published policy documents. The specific objectives of the review were to identify and describe:</p> <ul style="list-style-type: none"> - the goal setting and framing of nutrition in policy documents from different sectors, - the policy instruments (or tools) used or proposed in policy documents to improve nutrition, - and the types of evidence used in existing policy documents. 	<ul style="list-style-type: none"> - Research report - Summary brief - Presentation 
<p>Effectiveness of Social and Behavior Change Communications (SBCC) to Improve Infant and Young Child Feeding Practices in Ethiopia</p>	<p>Appropriate infant and young child feeding (IYCF) practices are critical for optimal child growth and development. Despite some progress, the implementation of IYCF practices is still sub-optimal in Ethiopia. A key component of a strong, synergistic approach for improving the health and nutritional wellbeing of children is the use of social and behavior change communication (SBCC) interventions.</p> <p>The purpose of this review was to identify the types of SBCC approaches that are used in Ethiopia and to assess their effectiveness to improve IYCF practices.</p>	<ul style="list-style-type: none"> - Research report - Summary brief - Presentation 
<p>National Nutrition Program (2016-2020) Progress Analysis: Evidence for the Development of the Food and Nutrition Strategy</p>	<p>Ethiopia has achieved remarkable success in the reduction of malnutrition in the past decade. However, despite the notable progress, the burden of malnutrition is still high. The National Nutrition Program (NNP) II (2016-2020) is a multisectoral program that aims to accelerate the reduction of malnutrition through the implementation of evidence-based interventions that address nutritional problems across the lifecycle.</p> <p>This report provides an analysis of the progress made since the start of the NNP II compared to its</p>	<ul style="list-style-type: none"> - Research report - Summary brief - Presentation

	<p>targets.</p>	
<p>Trends in Calorie Intake from Sugar-Sweetened Beverages and Sugar-Sweetened Snacks in Ethiopia (2010-2016)</p>	<p>Sugar-sweetened beverages (SSB) and sugar-sweetened snacks (SSS) have little nutritional value. High intake of SSB and SSS has been linked to weight gain, the risk of type 2 diabetes, and other health problems. Limited information is available in Africa on the intake of SSB and SSS. This evidence gap also exists in Ethiopia. The aim of this secondary data analysis is to generate evidence on the trends in the consumption of SSB and SSS by region, residence (urban versus rural), and by expenditure quintile between 2010 and 2016.</p>	<ul style="list-style-type: none"> - Research report - Summary brief 

2. Project-based Documentation

For the NIPN program to be sustained, it is important to strengthen existing systems, to produce guidelines, strategies and to document processes, procedures, and approaches to serve as reference and guidance documents for use by NIPN members, researchers and key NIPN stakeholders. For the purposes of this document, project-based documentation (hereinafter referred to as “project-related knowledge outputs”) include the following:

- plans and strategic documentation,
- guidelines, standard operating procedures (SOPs) and check lists,
- process and procedure documentation.

2.1. Developing project-related knowledge outputs

The NIPN team consists of various staff members from the management, analysis, the monitoring and evaluation (M&E), and communications units. Overall responsibility for day-to-day implementation lies with the NIPN Coordinator, but various staff members are responsible for producing project-related knowledge outputs. This process for developing these outputs typically involves:

- identification of documentation needs,
- agreement by the team and NIPN Coordinator on the responsible individual to draft the documentation,
- drafting the first version of the document,

- sharing internally with the NIPN team and IFPRI for review,
- incorporating comments and finalizing the document.

2.2. Quality control, proof reading, editing, design and layout

To ensure the quality of the outputs as well as the quality of the English writing, the NIPN team shares project-related knowledge outputs with IFPRI's STPA, who conducts the final review and provides technical and/or policy-related inputs. The STPA also conducts the proof reading and editing and contributes to the overall design and layout of the documents.

The NIPN Coordinator provides the final approval of the documents before they are shared.

2.3. Storing of project-related knowledge outputs

The NIPN team considers operational knowledge sharing as important to stay up-to-date and ensure access to working documents and files. The NIPN makes the documents accessible to NIPN staff, and stores them in the following locations:

- NIPN has a shared Google drive which one person manages, but which all staff can access.
- A shared Drop box folder was created by IFPRI for documentation related to NIPN project-related knowledge outputs.

Meeting notes are uploaded on both these shared folders for the team to access easily.

- Hard copies of documents, such as participants' lists, are stored in folders either with the Communications Officer or the Monitoring, Evaluation and Learning (MEL) Officer, with in the NIPN office.
- Once completed and approval obtained by the NIPN Coordinator, the project-related knowledge outputs are included under NIPN "Resources" on the NIPN website <https://www.nipn.ephi.gov.et/>.

2.4. Sharing of project-related knowledge outputs

The NIPN in Ethiopia shares its project-related knowledge outputs in multiple ways.

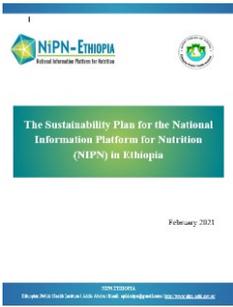
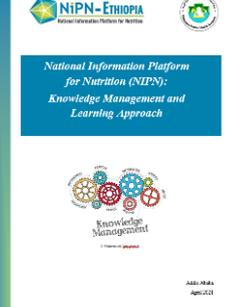
- Sharing new knowledge outputs as progress updates during the NIPN bi-monthly team meetings, during the quarterly national nutrition program MER SC and bi-annual NIPN AC meetings, as well as during C4N organized experience sharing webinars and quarterly progress monitoring (QPM) meetings.
- Placing the knowledge outputs on the NIPN website under "Resources" and "NIPN Produced Project Documentation" and/or "Reports" (<https://www.nipn.ephi.gov.et/resources>).
- Writing articles about project-related knowledge outputs which are included in the quarterly NIPN newsletter and shared via email with the NIPN nutrition distribution list and placed on the website under "News" (<https://www.nipn.ephi.gov.et/news-letter>).

- Sharing the outputs with C4N to include on the Ethiopia page on the global NIPN website (<https://www.nipn-nutrition-platforms.org/>).

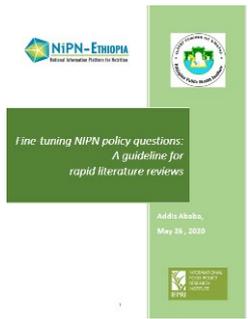
2.5. List of current project-related knowledge outputs

Whilst project-related knowledge outputs are continuously being developed, the list in Table 3 below provides a snapshot of some of the documents developed thus far.

Table 3: NIPN project-related outputs

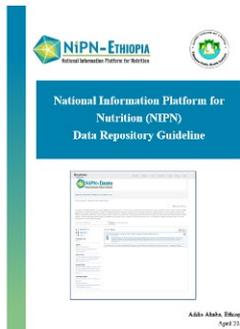
Title		Description
Plans and Strategic Documents		
The NIPN’s Sustainability Plan		This plan is prepared as a road map to guide the continuity of NIPN beyond the project period and ensure long-lasting impact in the nutrition sector. The specific objectives of the plan describe the NIPN’s interventions and specific actions which foster sustainability, the future plans for the sustained use of the NIPN and its services, and the NIPN’s fundraising plan to diversify its funding portfolio.
The NIPN’s Monitoring and Evaluation (M&E) Plan		This NIPN M&E Plan forms part of the implementation and project management of the NIPN. It describes the NIPN’s results framework, its intervention logic and theory of change, the M&E processes, the team, the data quality, and flow, data sources, collection, management, analysis, and reporting. It also provides an overview of the M&E matrix with indicators, targets, and means of verification.
The NIPN’s Knowledge Management and Learning Approach		The NIPN’s “NIPN Knowledge Management Approach” describes how the NIPN creates, captures, manages, and uses its information and knowledge to benefit the team, decision makers, and NIPN stakeholders.
The NIPN’s Communication Strategy		The strategy describes the relevant communication challenges, maps out the NIPN activities which require communication, links those activities to specific audiences, defines the key messages and proposes the different communication channels for each audience. This strategy is accompanied by an annual communication activity plan with timelines for planned communication activities.
Guidelines, SOPs, and Checklists		

The Guideline for Rapid Literature Reviews



This document provides guidance on how to conduct good quality rapid literature reviews and was developed to respond to a capacity gap and to support the policy question formulation processes. Rapid literature reviews are useful to identify global evidence and to guide national policy analysis; it can help to refine policy questions or can even help answer some policy questions. It is expected to be used by NIPN colleagues, partners, and researchers.

The NIPN's Data Repository Guidelines



The guideline provides a description of the NIPN Data Repository and explains the process and procedures used by the NIPN team to include information on the data repository. For each multisectoral dataset, the team develops a metadata description of the data set (following a specific outline) and a codebook for the dataset. The NIPN team also includes relevant documents related to the dataset such as the survey questionnaire, and any publications or officially released reports related to the dataset. Lastly, the data repository includes several mandatory and optional fields which the NIPN team completes offline before the information is published. The guidelines provide a hands-on description of each of these documents, and the steps and processes involved in developing the documentation and publishing it on the repository.

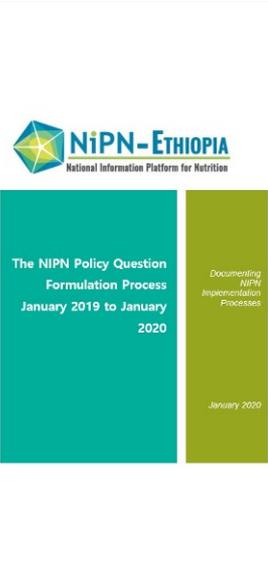
Guidelines and Checklists for NIPN's Implementation

National Nutrition Information Platform for Nutrition 4
Checklist for organizing Webinars 4

No.	Activities	Responsible	Duration	Frequency	Programs/Activities completed or to be completed
1	One month before the webinar				
1*	EPH and Addis Ababa University (AAU) are to be invited to participate in the webinar	Programs	One month before the webinar	1	For EPH, make an invitation or copy of presentation to be made and provide registration link
2*	Invited speakers and participants should be invited to participate in the webinar	Programs/Consultant	One month before the webinar	1	Send invitation letter to participants
3*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
4*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
5*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
6*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
7*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
8*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
9*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
10*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
11*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
12*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
13*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
14*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
15*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
16*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
17*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
18*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
19*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
20*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
21*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
22*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
23*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
24*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
25*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
26*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
27*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
28*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
29*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar
30*	Finalize the content of the webinar	Programs/Consultant	One month before the webinar	1	Finalize the content of the webinar

To guide the implementation of key activities, the NIPN team developed operational guidelines and implementation checklists. For instance, checklists were developed for the organization of seminars, webinars, conferences, and trainings. This ensures that knowledge on the “how to do” specific events and activities will not remain with one individual but is shared with a wider group of NIPN experts. In addition, NIPN always requests feedback from participants at NIPN events which the team documents and uses to improve the content and quality of its interventions.

Processes and Procedures

<p>The NIPN's Capacity Needs Assessment (CNA)</p>		<p>The CNA was conducted to identify needs and recommend strategies to strengthen capacities for nutrition M&E, policy research, data, and knowledge sharing. Seventeen government institutions were targeted with this assessment and based on the gaps identified, recommendations were made and a capacity strengthening plan developed.</p>
<p>The NIPN's Policy Question Formulation (PQF) Process</p>		<p>As part of the NIPN project cycle a PQF process takes place to help government ministries and the NIPN identify key nutrition policy questions which need to be answered to inform policy revisions, strategy development and program implementation. The initial PQF process was elaborate; it included literature reviews, interviews with key stakeholders and several consultative meetings. It resulted in consensus on 12 policy questions. This PQF report, describes the process NIPN undertook to identify the nutrition policy questions, to validate them through the two committees (NIPN AC and the MER SC), and includes lessons learned.</p>
<p>Causal Path Diagrams for Data Analysis</p>		<p>To respond to one of the research questions (What are the drivers of NCDs i.e., overweight/obesity, hypertension, and diabetes in Ethiopia?), NIPN embarked on a new approach for data analysis. The approach uses causal path diagrams otherwise known as 'directed acyclic graphs' (DAGs) which have been constructed as part of the methodological framework underpinning the analysis. This approach was used by the NIPN data analysis team.</p>

3. Training and Events Documentation

The NIPN team developed a communications strategy and on an annual basis develops a communications plan which is linked to its annual work plan. Trainings, advisory meetings, events, and webinars/seminars form part of the work plan and sharing of announcements and the dissemination of the presentations and proceedings are done using different communications channels, including through its newsletter, emails, website, and social media accounts (Facebook and Twitter).

As mentioned above, operational guidelines and checklists were developed to guide the organization of trainings, meetings, workshops, and events. These are mainly organized with in-person (physical) participation, but since the outbreak of COVID-19, in-person trainings,

workshops and events were replaced by virtual webinars and meetings and/or were conducted in hybrid formats (both in-person and virtual).

The NIPN distinguishes between trainings, advisory meetings, nutrition research and policy seminars/webinars, and events. These are further detailed as follows:

- **Trainings.** These include capacity building interventions which are conducted in a classroom setting or through mentorship and coaching approach, and through on-the-job learning.
- **Advisory meetings or workshops.** These include the quarterly MER SC meetings, chaired by EPHI and which plays an advisory function to the NIPN, and the bi-annual NIPN AC meetings, chaired by the MOH and which provides advice and guidance to the NIPN. Additional advisory meetings include meetings which are held with specialists and experts to obtain their advice on research or technical topics.
- **Nutrition policy and research seminars or webinars.** These bring together nutrition stakeholders both in-country and abroad to share specific research findings and to discuss policy-related topics.
- **Events.** These include national nutrition conferences, Global NIPN conferences, and international conferences in which NIPN team members participate.
- **Meetings.** Refer to in-country technical working group meetings, other types of committee meetings, and ad hoc meetings organized by NIPN or other stakeholders.

The documentation needs for trainings, meetings, and events are described below.

3.1. Trainings and capacity strengthening workshops.

Training sessions and capacity building workshops are planned by the NIPN on an annual basis and are accompanied by the following:

- The development and approval of the terms of reference, a training plan (agenda), and an invitation for the training.
- The development of training materials specifically destined to respond to the capacity needs identified.
- Pre- and post-evaluations to determine the level of achievement of participants in the trainings and their satisfaction with the training.
- List of participants and, as possible, photographs of the event.
- A training report, article or a blog describing the training.

3.2. NIPN policy and research seminars or virtual webinars, advisory meetings, events, conferences.

Depending on the type of event, the documentation needs will differ, although, in general, they include the following:

- The development and approval of a concept note (conference, research and policy seminar/webinar), an agenda, and a formal invitation.

- The development and/or consolidation of the presentations. These are internally reviewed, and feedback shared with presenters, if any.
- For in-person seminars and conferences, post-evaluations are done to determine the level of participants' satisfaction with the seminar/conference. These are not done for webinars, nor for advisory meetings.
- List of participants and, as possible, photographs taken. For webinars, depending on the virtual platform, a recording of the webinar is made.
- An event blog (describing the conference, seminar/webinar), or minutes of the meeting (in case of advisory meetings), plus a Questions and Answers (Q&A) report and presentations are posted on the NIPN website and included as articles in the NIPN newsletter.

3.3. Quality control, proof reading, editing, design and layout

The NIPN team also shares their outputs internally with NIPN, IFPRI and EPHI colleagues, for inputs and feedback into these documents.

To ensure the quality of the outputs as well as the quality of the English writing, the NIPN team shares their project-related knowledge outputs with IFPRI's STPA, who conducts the final review of training and event documentation. The STPA also conducts the proof reading and editing and contributes to the design and layout of the documents.

The NIPN Coordinator provides the final approval of the documents before they are shared.

3.4. Storing of training and event documentation

The NIPN team considers operational knowledge sharing as important to stay up-to-date and ensure access to working documents and files. Documentation is stored and shared in the following locations:

- NIPN has a shared Google drive which one person manages, but which all staff can access.
- A shared Drop box folder was created by IFPRI for documentation related to NIPN project-related knowledge outputs.

Meeting notes are uploaded on both these shared folders for the team to access easily.

3.5. Sharing of training and event documentation

The NIPN in Ethiopia shares its training and event documentation in multiple ways.

- Placing events or training announcements on the NIPN websites under "upcoming events" on the Home page. In the case of webinars and conferences, an events page is created for registration and/or which provides a virtual link to the event.
- Sharing the announcements through NIPN's social media accounts (Facebook and Twitter).

- Sharing invitations with either selected stakeholders or the NIPN distribution list via email.
- Providing updates as part of its progress updates during the NIPN bi-monthly team meetings and EPHI staff and management meetings, during the quarterly national nutrition program MER SC meetings, and bi-annual NIPN AC meetings, as well as during C4N QPM meetings.
- Writing short blogs, articles or meeting minutes about the trainings, seminars/webinars, advisory meetings, conferences, or other events. These are included on the NIPN website under “Events” (<https://www.nipn.ephi.gov.et/events>) and are included in the quarterly NIPN newsletter and shared via email to the NIPN nutrition distribution list and placed on the website under “News” (<https://www.nipn.ephi.gov.et/news-letter>).

4. NIPN Data Repository

The NIPN works to strengthen national monitoring, evaluation, and research capacity, to respond to nutrition-related research policy questions and to share results for policy and program decision making. To carry out its mandate, the NIPN does not collect new data but uses existing data and evidence to respond to policy questions. The NIPN relies on institutional data sources from different sectors and, as a result, the national nutrition stakeholders and decision makers are both the sources of data and the beneficiaries of NIPN’s outputs.

Creating an up-to-date centralized data repository, which provides information to data users on available multisectoral nutrition datasets, is a key output for the NIPN in Ethiopia.

The NIPN data repository is a central place where existing dataset descriptions are placed. For each existing dataset, a dataset description document (metadata), a codebook (or codebooks), data collection instruments/questionnaires, and relevant published articles related to the datasets, are included on the data repository. This allows data users to easily find and use the existing information to answer their own research questions. In addition, archiving descriptive information about the datasets helps prevent duplication of research and optimizes the use of existing resources.

In 2020, the NIPN created its data repository which makes use of the Harvard Dataverse data repository platform. It is an open access and free online data repository which has over 100,000 datasets and dataset descriptions from renowned researchers, projects, and research institutions around the world. It contains over 4,700 Dataverses (or data repositories) of which the NIPN is one. It allows for sharing, archiving, citing, accessing, and exploring research data.

The NIPN data repository is accessible either via the NIPN website at <http://www.nipn.ephi.gov.et/> via the “Data Repository” tab, or via the Harvard Dataverse platform (<https://dataverse.harvard.edu/dataverse/nipn>).

4.1. Developing the dataset documentation

The NIPN team has identified several datasets for use by the NIPN. The NIPN Data Manager is the Administrator of the NIPN data repository and oversees the development of dataset documentation for each of the identified datasets, and which includes the following:

- A metadata description.
- A codebook(s).
- Mandatory and optional Dataverse fields selected for completion by the NIPN team.
- A questionnaire(s).
- Publications or officially released reports.

4.2. Quality control, proof reading, editing, design and layout

The Data Manager agrees with NIPN team members (including IFPRI/NIPN staff) on who will be responsible for which dataset. The team member will draft the needful documentation. Once the draft files are completed s/he will share with the NIPN data repository team for review.

To ensure the quality of the outputs as well as the quality of the English writing, the NIPN team shares all their data repository documentation with IFPRI's STPA, who conducts the final review inclusive of technical inputs. The STPA also conducts proof reading and contributes to the design and layout of the documents.

If an external stakeholder's dataset(s) are used, the NIPN team obtains written approval from the stakeholder to develop the dataset documentation, shares the final documents with the stakeholder for review before loading the documentation on the data repository.

The NIPN Coordinator provides the final approval of the documents before sharing on the data repository.

4.3. Storing of data repository documentation

Once the documents are completed, the NIPN Data Managers stores the final versions on her computer, shares them with the team, loads the PDF versions to the data repository, and copies the text for the mandatory and optional fields and includes it directly on the data repository.

4.4. Sharing of data repository documentation

The NIPN in Ethiopia shares information related to the data repository in multiple ways, including:

- Sharing the updates during the bi-monthly NIPN team meetings, EPHI staff and management meetings, during quarterly national nutrition program MER SC and bi-annual NIPN AC meetings, during quarterly C4N QPM meetings.

- Writing articles about the data repository which is included in the quarterly NIPN newsletter and shared via email to the NIPN nutrition distribution list and placed on the website under “News” (<https://www.nipn.eph.gov.et/news-letter>).
- Sharing with C4N to be included on the Ethiopia page on the global NIPN website (<https://www.nipn-nutrition-platforms.org/>).

4.5. *List of current documents developed for the NIPN data repository*

The NIPN team continuously develops new dataset descriptions. To date, the NIPN has produced the following documentation related to the NIPN data repository (see Table 4).

Table 4. NIPN Data Repository Documentation Outputs

Title	Description
The NIPN Data Repository Guideline	The guideline provides a description of the NIPN Data Repository and explains the process and procedures used by the NIPN team to include information on the data repository. For each multisectoral dataset, the team develops a metadata description of the data set (following a specific outline) and a codebook for the dataset. The NIPN team also includes relevant document related to the dataset such as the survey questionnaire, and any publications or officially released reports related to the dataset. Lastly, the data repository includes several mandatory and optional fields which the NIPN team completes offline before the information is copied to the system and published. The guidelines provide a hands-on description of each of these documents, and the steps and processes involved in developing the documentation and publishing it on the repository.
Dataset documentation	
<p>For each of datasets below, the NIPN team developed, completed, and included the following documentation which was published on the data repository:</p> <ul style="list-style-type: none"> • metadata descriptions, • codebooks, • mandatory and selected optional fields, • questionnaires, • in some cases, other relevant information (officially released reports, publications). 	
1	Seqota Declaration Innovation Phase Impact Evaluation Household Baseline Survey
2	Evaluation of 1000 PLUS Nutrition Intervention in selected Woredas of Ethiopia: A Cross-Sectional Baseline Survey
3	Sustainable Under-Nutrition Reduction in Ethiopia (SURE) Program Evaluation (2016-2019) Baseline Survey
4	Program and Cost/Cost Effectiveness Implications for Ethiopia of adopting WHO Guidelines on Acute Malnutrition Admission and Discharge Criteria. The Case of Moderate Acute Malnutrition (MAM): A Cluster Randomized Control and Parallel Study.

Action Plans

The NIPN implements the project following the donor approved logical framework. The implementation is guided by the NIPN M&E Plan. On an annual basis, the NIPN team develops an annual work plan as well as an annual communication plan which targets the dissemination of key interventions. The NIPN knowledge management and learning approach and the ensuing documentation are intrinsically linked to these frameworks and plans.

For more details regarding the plans, please see Annex 1, The NIPN's 2021 annual plan; Annex 2, the NIPN four-year plan; and Annex 3, the NIPN logic framework.

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2. Omotayo, F. (2015). Knowledge Management as an important tool in Organizational Management: A Review of Literature. *Library Philosophy and Practice (e-journal)*. 1238. Retrieved from <http://digitalcommons.unl.edu/libphilprac/1238>

Annexes

Annex 1: The NIPN 2021 Annual Plan

Results/output	Activities	Timeline												Technical support needed
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1. National host entities (EPHI and sectoral ministries and partners contributing to the NNP-II) have the capacity to operate and maintain the NIPN	1.1. Involve AC & MER SC in NIPN activities													
	1.2. Implement the annual capacity development plan													IFPRI, EPHI
	1.3 Set up and use project management and monitoring system													
	1.4 Discuss suitability of the NIPN indicators													IFPRI, C4N
	1.5 Undertake action to work for the sustainability of the NIPN													IFPRI
	1.6 Facilitate collaboration of NIPN with other platforms													
	1.7 Finalize NIPN knowledge management and learning document													
	1.8 Operationalize NIPN central data repository system													IFPRI
	1.9 Explore operationalization of Seqota Declaration resource tracking report on the NIPN website													
2: Ethiopia tracks progress in meeting its national objectives on undernutrition	2.1 Increase visibility of NIPN as a data and evidence source													IFPRI
	2.2 Disseminate the findings of Analysis													IFPRI
	2.3 Update the NIPN Dashboard													IFPRI, C4N

Annex 2: The NIPN's four-year plan

Year 1														Implementing body
Activity	Half-year 1					Half-year 2								
	1	2	3	4	5	6	7	8	9	10	11	12		
A1.1 Set up the NIPN project management unit within EPHI														EPHI
A1.2 Establish the NIPN advisory committee														EPHI/MOH
A1.3 Set up the NIPN analysis unit within EPHI														EPHI
A1.4 Map sources of data of interest to the NIPN and define the principles for sharing and using data														EPHI/Ministries
A1.5 Create a centralised repository for data related to nutrition and define mode of operation														EPHI
A1.6 Build capacity of EPHI, EIAR and ministry staff to analyse data, interpret analysis, report findings and use evidence to formulate nutrition policies in all sectors														EPHI/IFPRI/GSF
A2.1 Identify and prioritise questions for analysis and develop annual work plans														EPHI
A2.2 Identify sources of data to address questions, ensure data quality and upload data sets														EPHI/Ministries
A2.3 Perform quantitative and qualitative analysis of data														EPHI
A2.4 Write reports on data analyzed with interpretation, conclusions and recommendations														EPHI
A2.5 Activity 2.6: Specific support to EIAR and sectoral ministries to undertake the questions – data – analysis – interpretation – dissemination cycle														
A3.1 Design and implement a communication and visibility plan														EPHI
A3.2 Create or support a web interface to present summary statistics from the NIPN														EPHI
A3.3 Present the findings of analysis in a format suitable for their intended audiences and disseminate information by different means														EPHI

Activity	Year 2		Year 3		Year 4		Implementing body
	3	4	5	6	7	8	
A1.1 Set up the NIPN project management unit within EPHI							EPHI
A1.2 Establish the NIPN advisory committee							EPHI/MOH
A1.3 Set up the NIPN analysis unit within EPHI							EPHI
A1.4 Map sources of data of interest to the NIPN and define the principles for sharing and using data							EPHI/Ministries
A1.5 Create a centralised repository for data related to nutrition and define mode of operation							EPHI
A1.6 Build capacity of EPHI, EIAR and ministry staff to analyse data, interpret analysis, report findings and use evidence to formulate nutrition policies in all sectors							EPHI/IFPRI/GSF/C4N
A2.1 Identify and prioritise questions for analysis and develop annual work plans							EPHI
A2.3 Identify sources of data to address questions, ensure data quality and upload data sets							EPHI/Ministries
A2.4 Perform qualitative and quantitative analysis of data							EPHI
A2.5 Write reports on data analysed with interpretation, conclusions and recommendations							EPHI
A2.6 Specific support to EIAR and sectoral ministries to undertake the questions – data – analysis – interpretation – dissemination cycle							EPHI
A3.1 Design and implement a communication and visibility plan							EPHI
A3.2 Create or support a web interface to present summary statistics from the NIPN							EPHI
A3.3 Present the findings of analysis in a format suitable for their intended audiences and disseminate information by different means							EPHI

Annex 3. Logical framework of the NIPN project

	Results chain	Indicators	Baseline	Targets	Sources and means of verification	Assumptions
Overall objective: Impact	To contribute to the global reduction of chronic under nutrition to meet the World Health Assembly 2025 targets	Numbers of stunted children reduced	EDHS 2016: Stunting: 38.4% Wasting: 9.9%	NNPII targets for 2020: Stunting: 26% Wasting: 4.9%	NIPN reports NNPII end-line survey EDHS 2021	Government and Partners are contributed to support for conducting the NNP II end-line survey. Contribute to the global reduction in the numbers of stunted children due to chronic under nutrition in alignment with the World Health Assembly 2025 targets and the Sustainable Development Goals.
Specific objective (s): Outcome (s)	Strengthened national capacity to monitor progress towards under nutrition reduction and to implement more cost-effective and evidence-based policies	Increase in the average annual reduction rate (AARR) in the prevalence of stunted children as a result of improved planning and effectiveness of nutrition policies and interventions Country's ability improved to monitor and analyse nutrition specific and sensitive inputs, outputs, outcomes and impacts at national and sub-national levels Use of NIPN to	Average annual reduction rate of stunted children (1.2%) No NIPN in 2015	AARR projection +5% by end of project NIPN is set up by the end of 2017 NIPN is operational by the end of 2018 NIPN database is created by the end of 2018 NIPN tracks progress towards under-nutrition reduction from the end of 2019 NIPN outputs are used by policy makers by the end of 2019	WHO stunting tracking reports MoUs for establishing NIPN NIPN reports and outputs NIPN policy advisory committee meetings SUN stage of preparedness reports	Effective utilization of NIPN findings results in better use of resources and management of programs. Ability of the Government to adequately support (and eventually co-finance) NIPN. Support from key institutions in the country, particularly with regard to sharing data and using country information. No major shocks or changes undermine efforts to improve nutrition outcomes.

		inform policy and decision making in all sectors that influence nutrition				
Outputs	Result 1: National host entities (EPHI and sectoral ministries and partners contributing to the NNP-II) have the capacity to operate and maintain the NIPN	Degree of achievement of the implementation plans agreed with the NIPN policy advisory committee, according to the Key Performance Indicators (KPIs) and their annual targets	NIPN will define research questions until end of 2017	NIPN work plan is defined by the end of 2017 80% progress against NIPN plan KPIs by the end of 2020	NIPN country project coordinator reports	Readiness and capacity among national institutions to support NIPN preparation, management and operations.
		Number and quality of nutrition specific & sensitive datasets obtained by NIPN	Preparation for central nutrition data repository in 2017	A central data repository is created by the end of 2018	NIPN data repository hosted at EPHI	
	Result 2: Ethiopia tracks progress in meeting its national objectives on undernutrition reduction and in monitoring nutrition investments to guide and inform the NNP-II implementation and contributing sectors (at minimum health and agriculture)	Requests for data or information made to NIPN	Research question formulation process will start in 2017	Questions are raised through the NIPN advisory committee	NIPN advisory committee meeting reports	There is a good cooperation and data sharing between institutions and the NIPN by all sectors and at all levels.
		Outputs produced by the analysis unit	No outputs in 2017	NIPN releases an annual report from 2018 and other regular outputs	Technical reports and related outputs from NIPN	
		Government staff trained in the	Need based training	At least 50 staff members benefit from	Number of staff benefiting from	

		analysis of data	related to NIPN will start in 2017	training activities by the end of the project	training each year (annual project report)	
	Result 3: Ethiopia is able to translate NIPN findings into nutrition related policies: NNCB and sectoral senior officials/decision makers in nutrition have a better understanding and are making better use of evidence generated through this project for strategic and programmatic decision making	NIPN is known by national stakeholders and visible	Visibility plan of action will be developed in 2017	Ministry staff actively participate in the NIPN activities Stakeholders involved in nutrition at country level acknowledge the role of NIPN	Number of staff from ministries participant in NIPN activities Feedback from stakeholders on the value of the NIPN	The government is committed to take over NIPN project output in order to improve nutrition related policies in all sectors and to disseminate findings at a higher level.
		NIPN outputs are effectively disseminated and reach their targets and utilized for program and policy revision	No outputs in 2017	Annual dissemination event from 2018 Printed documents are produced The NIPN web pages are regularly fed	Attendance to annual event Number of printed documents distributed Hits on the NIPN web pages	
		Government staff trained in the formulation of evidence-based nutrition policies	Identifying trainee and training areas in 2017	At least 50 staff members benefit from training activities by the end of the project	Number of staff benefiting from training each year (annual project report)	

