

PATHWAYS TO BETTER NUTRITION CASE STUDY EVIDENCE SERIES

Pathways to Better Nutrition



FINAL REPORT



JULY 2016







About SPRING

The Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project is a fiveyear USAID-funded Cooperative Agreement to strengthen global and country efforts to scale up highimpact nutrition practices and policies and improve maternal and child nutrition outcomes. The project is managed by the JSI Research & Training Institute, Inc., with partners Helen Keller International, The Manoff Group, Save the Children, and the International Food Policy Research Institute.

Disclaimer

This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of the Cooperative Agreement AID-OAA-A-11-00031 (SPRING), managed by the JSI Research & Training Institute, Inc. (JSI). The contents are the responsibility of JSI, and do not necessarily reflect the views of USAID or the U.S. Government.

Acknowledgments

The SPRING Pathways to Better Nutrition (PBN) team would like to thank Professor Dr. Geeta Bhakta Joshi, Mr. Madhu Marasini, Mr. Bishnu Nepal, Dr. Yagya Karki, and Mr. Radha Krishnan Pradhan from the National Planning Commission for their kind support to this activity. We would also like to thank USAID | Nepal, the Helen Keller International (HKI) Nepal office, the SPRING Knowledge Management Team, the Nepal Health Research Council, REACH, and UNICEF Nepal for their input and support during this work. Finally, we owe a debt of gratitude to the key informants at both the national level and in Achham, Kapilvastu, and Parsa for their time and thoughtful insight into the nutrition prioritization and budgeting process. This includes informants from government offices, donor agencies, academia, the private sector, civil society organizations, and United Nations groups who participated in this study.

For their contributions to the technical sections of this report, we want to acknowledge Dale Davis, Madhu Devkota, Sascha Lamstein, Anu Narayan, Gwyneth Cotes, Manisha Shrestha, and Akriti Rana.

Recommended Citation

Pomeroy-Stevens, Amanda, Madhukar B. Shrestha, Monica Biradavolu, Kusum Hachhethu, Robin Houston, Indu Sharma, and Jolene Wun. 2016. *Pathways to Better Nutrition in Nepal: Final Report.* Arlington, VA: Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project.

SPRING

JSI Research & Training Institute, Inc. 1616 Fort Myer Drive, 16th Floor Arlington, VA 22209 USA Phone: (703) 528-7474 Fax: (703) 528-7480 Email: <u>info@spring-nutrition.org</u> Internet: <u>www.spring-nutrition.org</u>

Contents

Acronyms	v
Definitions	vii
Executive Summary	ix
Introduction	1
Methods	5
Findings	
Understanding the MSNP	
Drivers of Change	15
Prioritization	24
Funding	
Discussion	
Recommendations	41
References	47
Annex 1. SPRING Pathways to Better Nutrition Qualitative Methods Nepal	
Annex 2. Illustrative Change Framework	
Annex 3. Budget Methods Nepal	65
Annex 4. Snapshots of Nutrition in Nepal	
Annex 5. Supplemental National Financial Figures	
Figures	
Summary of Multi-sectoral Engagement across WHO Countries	2
Proposed MSNP Committee Coordination Structure	3
PBN Study Locations	6
PBN Study Team and Location	6
Study Timeline	7
Study Stakeholder Groups	8
Budget Analysis Methodology	9
Drivers of Change for Nutrition in Nepal	
Total On- and Off-Budget Allocations for Nutrition, 2013–14 to 2015–16	
2015-16 On-Budget Allocation for Nutrition, by Sector	
Total On- and Off-Budget Allocations for Nutrition by MSNP Output Area, 2072–73	

Total On- and Off-Budget Allocations and Expenditure for Nutrition, 2013–14 to 2015–16	33
Summary of SPRING's Budget Methodology	67
SPRING's Modified Analysis Approach	71
Illustrative Results Framework of Nutrition Plan Activities, Outputs, and Impacts	118
Costs per Output Area, as Projected in MSNP for FY 2015–16	122
On-Budget Allocations per MSNP Output Area, 2015–16	123
Off-Budget Allocations, 2013-14 to 2015-16	124

Tables

Change in Priority of Nutrition, by Sector	24
2015-16 Nutrition Allocations as a Percent of Total Ministry Allocation	31
Summary of Funding for MSNP-related Projects	31
Expenditure of Nutrition-Related On-Budget Allocations	34
Key Informant Interviews – National Level	52
Key Informant Interviews – District Level	53
Key Informant Interviews – VDC Level	53
Summary of News Article Collection for PBN Case Study – Aggregated by Month	56
Number of Validation Interviews Conducted and Budget Headings by Sector	69
Number of Validation Interviews and Reviews Conducted and Activities by Funder	70

Acronyms

ADS	Agriculture Development Strategy
AFSP	Agriculture and Food Security Project
AMP	Aid Management Portal
ARI	acute respiratory infection
CHD	Child Health Division
CSANN	Civil Society Alliance for Nutrition, Nepal
CSO	civil society organization
DDC	district development committee
DNFSSC	district nutrition food security steering committee
EDP	external development partner
EU	European Union
GoN	Government of Nepal
HLNFSSC	High-Level Nutrition and Food Security Steering Committee
HMIS	health management information system
IRB	institutional review board
KI	key informant
KI KII	key informant key informant interview
KII	key informant interview
kii Lmic	key informant interview low- and middle-income country
KII LMIC M&E	key informant interview low- and middle-income country monitoring and evaluation
KII LMIC M&E MDG	key informant interview low- and middle-income country monitoring and evaluation Millennium Development Goal
KII LMIC M&E MDG MIS	key informant interview low- and middle-income country monitoring and evaluation Millennium Development Goal management information system
KII LMIC M&E MDG MIS MoAD	key informant interview low- and middle-income country monitoring and evaluation Millennium Development Goal management information system Ministry of Agricultural Development
KII LMIC M&E MDG MIS MoAD MoE	key informant interview low- and middle-income country monitoring and evaluation Millennium Development Goal management information system Ministry of Agricultural Development Ministry of Education
KII LMIC M&E MDG MIS MoAD MoE MoF	key informant interview low- and middle-income country monitoring and evaluation Millennium Development Goal management information system Ministry of Agricultural Development Ministry of Education Ministry of Finance
KII LMIC M&E MDG MIS MoAD MoE MoF	key informant interview low- and middle-income country monitoring and evaluation Millennium Development Goal management information system Ministry of Agricultural Development Ministry of Education Ministry of Finance Ministry of Federal Affairs and Local Development
KII LMIC M&E MDG MIS MoAD MoE MoF MoFALD MoH	key informant interview low- and middle-income country monitoring and evaluation Millennium Development Goal management information system Ministry of Agricultural Development Ministry of Education Ministry of Finance Ministry of Federal Affairs and Local Development Ministry of Health
KII LMIC M&E MDG MIS MoAD MoE MoF MoFALD MoH	key informant interview low- and middle-income country monitoring and evaluation Millennium Development Goal management information system Ministry of Agricultural Development Ministry of Education Ministry of Finance Ministry of Federal Affairs and Local Development Ministry of Health

NAGA	Nepal Nutrition Assessment and GAP Analysis
NFS	nutrition and food security
NFSSC	nutrition and food security steering committee
NNAP	national nutrition action plan
NNG	National Nutrition Group
NNFSS	National Nutrition and Food Security Secretariat
NPC	National Planning Commission
PBN	Pathways to Better Nutrition
RTOT	regional training-of-trainers
REACH	Renewed Efforts against Child Hunger and Undernutrition
SPRING	Strengthening Partnerships, Results, and Innovations in Nutrition Globally
SUN	Scaling Up Nutrition
TOR	terms of reference
ТОТ	training-of-trainers
UN	United Nations
UNDP	United Nations Development Program
UNICEF	United Nations International Children's Emergency Fund
U.S.	United States
USAID	United States Agency for International Development
USD	United States dollar
VDC	village development committee
VNFSSC	Village Nutrition Food Security Steering Committee
WASH	water, sanitation, and hygiene
WFP	World Food Programme
WHO	World Health Organization

Definitions

Allocations: Agreed-to and planned funds by the Ministry of Finance or other national financial planning body.

Expenditures (spending): Funds actually spent on planned activities by the ministry or implementing agency.

On-budget: Funds are managed through the Ministry of Finance and are reported in the Nepal budget (Red Book). For donors, this means that their funded activity receives a GoN program or project code, and is included in sector planning and budget documents.

Off-budget: Funds are not included in the regular government budget; funds (from external development partners) that are managed outside the treasury.

National transfer: Funds given by the national government to sub-national governments, with or without conditions.

Red Book: Nepal's official budget of record.

Releases: Funds actually transferred from the national treasury (or other financial body) to the ministry to implement activities.

Sector: Groups of institutions or parts of institutions that contribute to a common function, e.g., education

SPRING's Pathways to Better Nutrition (PBN) Case Study Evidence Series reports on findings that emerged from this twoyear, two-country, mixed-methods study on how nutrition-related activities are prioritized and funded. Please check the SPRING PBN webpage (<u>http://www.spring-nutrition.org/pbn</u>) for more information on the studies and other products in this series.

Executive Summary

A multi-sectoral approach is often thought to be the most effective way to reduce malnutrition.

With the renewed global attention on nutrition supported by the Millennium Development Goals (MDGs) and the Scaling Up Nutrition (SUN) movement, a multi-sectoral approach has returned to the forefront of nutrition programming (Levinson, Balarajan, and Marini 2013).

Nepal has a long tradition of using multi-sectoral approaches to reduce malnutrition. The Joint Nutrition Support Program of 1976 signaled the Government of Nepal's (GoN) support for nutrition as a policy priority, but momentum slowed in the 1980s and 1990s. The 2009 Nepal Nutrition Assessment and Gap Analysis provided the evidence-base for Nepal's Multisector Plan of Action for Nutrition (2013-2017) (MSNP). The plan was developed after a series of consultative meetings led by the National Planning Commission (NPC) with participation of key sector ministries, donors, United Nations (UN) groups, academia, and civil society organizations (CSOs).

Poor nutrition poses a great risk to Nepal's development and to the well-being and potential of its people. More than 40 percent of children were stunted in 2011, and more than 45 percent were anemic, despite improvements in the last decade and continued investment by the GoN and external development partners (EDPs) (MoHP, New ERA, and ICF 2012). We know that an estimated 2–3 percent of Nepal's gross domestic product (GDP) is lost every year because of vitamin and mineral deficiencies alone (World Bank 2012). A larger investment in nutrition will increase the

MSNP Output Areas

Output 1: Policies and plans updated/reviewed, and the incorporation of a core set of nutrition-specific and -sensitive indicators at national and subnational levels.

Output 2: Multi-sector coordination mechanisms functional at national and sub-national levels.

Output 3: Maternal and child nutritional care service utilization improved, especially among the unreached and poor segments of society.

Output 4: Adolescent girls' parental education, life skills, and nutrition status enhanced.

Output 5: Diarrheal diseases and ARI episodes reduced among young mothers, adolescent girls, and infants and young children.

Output 6: Availability and consumption of appropriate foods (in terms of quality, quantity, frequency, and safety) enhanced and women's workload reduced.

Output 7: Capacity of national and sub-national levels enhanced to provide appropriate support to improve maternal and child nutrition.

Output 8: Multi-sector nutrition information updated and linked at national and sub-national levels.

Source: Multi-sector Nutrition Plan (GoN and NPC, 2012)

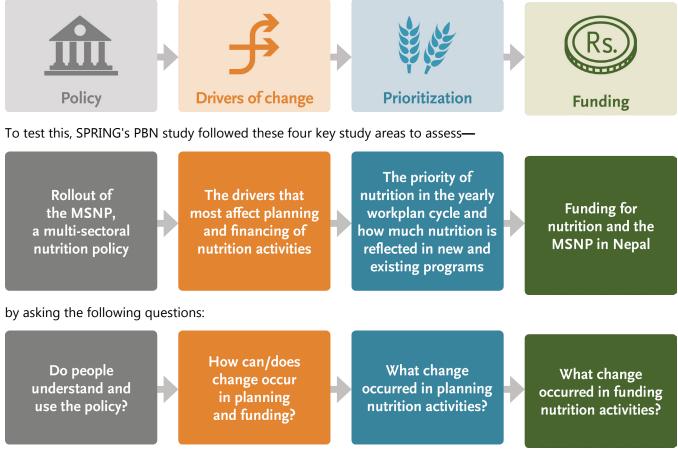
health and productivity of the Nepali population. Global estimates state that every U.S. dollar spent to reduce stunting can return an average savings of \$18 through increased cognitive and physical development and improved health (Hoddinott et al. 2013). Increased nutrition financing, therefore, is a strong predictor of future improvements in malnutrition and mortality.

The MSNP signals the country's commitment and is an important first step to addressing the immediate, underlying, and basic causes of malnutrition (UNICEF 1990). However, if the activities proposed in the plan are to be completed, stakeholders must own and prioritize the MSNP. While some important research on translating

nutrition policy to action has been conducted, there are still gaps in practical knowledge about how to achieve this.

The Pathways to Better Nutrition (PBN) study in Nepal (2014–2015) aimed to close this knowledge gap. The U.S. Agency for International Development's (USAID) SPRING project managed the PBN study, which was conducted in collaboration with NPC to support learning about the MSNP process. Over two years, the PBN study collected qualitative and quantitative data on planning, prioritizing, and funding related to nutrition-relevant activities within the context of the MSNP. Using a 360-degree view of the MSNP process, the PBN study interviewed stakeholders from the government, donors, UN groups, CSOs, private sector, and academia at the national level and in three districts: Achham, Kapilvastu, and Parsa. SPRING also interviewed nutrition and food security steering committee (NFSSC) members from one village development committee (VDC) within each of those districts.

SPRING hypothesized that the **MSNP** would positively influence the **understanding of the policy, enabling processes and drivers**, **prioritization**, and **funding** for nutrition over the two years of the study.



These questions necessitated a longitudinal, mixed-methods approach.

The goal of this study was to document how nutrition is prioritized and how that prioritization, in turn, influences the funding of nutrition. The lessons from this study can help Nepal and similar countries further institutionalize nutrition into the regular policy and planning cycle.

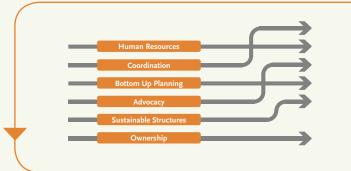
PATHWAYS TO BETTER NUTRITION Nepal – Findings



The PBN study found that the MSNP has helped to create an identity for nutrition, and has **increased priority and funding** for nutrition-related activities in Nepal.

Evidence points toward widespread improvement in involvement, understanding, and knowledge of the MSNP and multi-sectoral nutrition actions, both nationally and in three MSNP priority districts. There were also small improvements in knowledge of stakeholder roles and responsibilities, but work should continue to cover all stakeholder groups. In the three VDCs visited, it appears the MSNP has not yet penetrated that level.

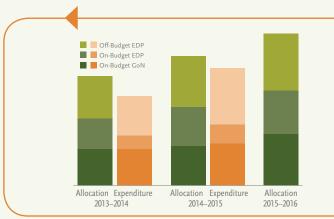




The study found six key drivers that the MSNP needs to affect to move prioritization forward. Of these, MSNP has positively affected three (advocacy, coordination, and sustainable structures) primarily through behavioral and structural changes, though some key implementation changes occurred during the study. Human resources, bottom-up planning, and ownership will need continued improvement.

Nationally, increases in priority of nutrition were found in several, but not all, key ministries and a few EDPs. The government ministries that improved mentioned MSNP as a positive influence (EDPs cited the global nutrition agenda just as often as MSNP) and included nutrition in their strategic sector documents. We documented widespread behavioral and structural changes as well as implementation changes, which included several major new and on-going projects that support MSNP. Evidence suggests the overall priority of nutrition has increased since 2014.

Sector	Gov.	Donor	UN	CSO	Private
Agriculture	1	×	→		M
Education	→		→		
Federal Affairs/ Local Government	Ť	→			
Health	+	+	1	×	
Gender & Social Welfare	*				
WASH/Urban Dev.	→	could not be assessed			



Increased priority in the sector ministries and EDPs has resulted in real yearly increases in nutrition-related funding of about 17 percent. Around one-fourth of this funding in 2015–2016 was due to projects specifically related to MSNP. GoN expenditure of nutrition-related funding is close to 100 percent, but on-budget EDP spending could be improved.



Relevance and Growth of Multi-sectoral National Nutrition Action Plans

A multi-sectoral approach is often thought to be the most effective way to address undernutrition. In the 1970s, many low- and middle-income countries (LMICs) established multi-sectoral national nutrition action plans (NNAPs) and agencies to coordinate efforts to reduce malnutrition, but these efforts were largely unable to develop permanent structures to sustain nutrition as the top priority (IBRD/IDA and World Bank 2013). While there was a strong theoretical case for multi-sectoral actions, little evidence existed at that

Figure 1. Summary of Multi-sectoral Engagement across WHO Countries

In WHO's 2013 Global Nutrition Policy Review	
	Majority involved at least the health.
64% had an officially adopted	education, and agriculture/food sectors in their nutrition coordination
17% located nutrition coordination in the President/Prime Minister's office	activities
Majority of remaining countries housed nutritic coordination in the Ministry of Health	n

time on how to effectively plan, deliver, and sustain multi-sectoral nutrition programs (Levinson, Balarajan, and Marini 2013). As a result, interest in NNAPs declined and a more siloed approach to nutrition was taken in the 1980s and 90s.

With the institution of the Millennium Development Goals (MDGs) and renewed global support for nutrition most notably the Scaling Up Nutrition (SUN) movement—the multi-sectoral approach has returned to the forefront of nutrition activity (Levinson, Balarajan, and Marini 2013).¹ Since 2010, a growing number of countries have returned to multi-sectoral nutrition approaches. Figure 1 shows a summary of the penetration of multisectoral approaches to nutrition across World Health Organization (WHO) member countries.

Although some important research has been conducted since the early days of multi-sectoral planning on translating nutrition policy to action—including *The Lancet* series in 2008 and 2013—gaps in knowledge on how a multi-sectoral approach can be implemented to effect change in nutritional outcomes remain.

Nepal's Multi-Sector Nutrition Plan—Continuing a Tradition of Multi-Sectoral Approaches

Nepal has a long tradition of using multi-sectoral approaches to reduce malnutrition. The Joint Nutrition Support Program of 1976 signaled the Government of Nepal's (GoN) support for nutrition as a policy priority, but momentum slowed in the 1980s and 1990s. In 2009, Nepal's Ministry of Health (MoH) and partners developed the *Nutrition Assessment and Gap Analysis (NAGA)*, which provided an evidence-base for developing the current multi-sectoral approach—the *Multi-sector Plan of Action for Nutrition (2013–2017)* (MSNP) (Shrimpton et al. 2014; GoN and NPC 2012). The plan was developed after a series of consultative meetings, steered by the National Planning Commission (NPC), and including the key sector ministries, donors, United Nations (UN) groups, academia, and civil society organizations (CSOs).

¹ <u>http://scalingupnutrition.org/</u>. SUN, launched in September 2010, supports national efforts to address malnutrition by engaging across stakeholders, sectors, and levels.

^{2 |} Pathways to Better Nutrition in Nepal

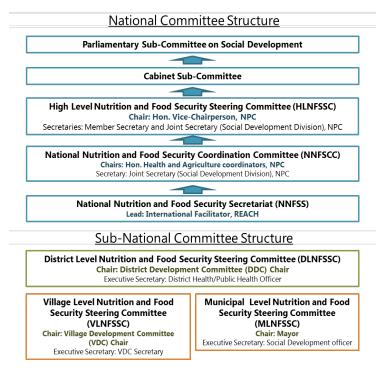
The goal of the five-year MSNP is to improve maternal and child nutrition, aiming to reduce maternal, infant, and child undernutrition by a third. This is meant to address the persistently high levels of undernutrition: more than 40 percent of children were stunted in 2011, and more than 45 percent were anemic, despite improvements in the last decade and continued investment by the GoN and external development partners (EDPs) (MoHP, New ERA, and ICF 2012). The plan describes challenges and constraints as well as capacity gaps and includes both nutrition-specific and nutrition-sensitive interventions. It calls for multi-sectoral efforts and names the Ministries of Agriculture Development (MoAD), Education (MoE), Health (MoH), Federal Affairs and Local Development (MoFALD), and Urban Development (MoUD) as the main delivery agencies. (The Ministry of Women, Children, and Social Welfare [MoWCSW] was included into MSNP activities after the plan was launched).

The MSNP is designed to achieve three major outcomes across eight output areas to attain its long-term vision:

- 1. Policies, plans, and multi-sector coordination improved at national and local levels.
- 2. Practices that promote optimal use of nutrition 'specific' and nutrition 'sensitive' services improved, ultimately leading to an enhanced maternal and child nutritional status.
- 3. Strengthened capacity of national and local governments on nutrition to provide basic services in an inclusive and equitable manner.

The rollout of the MSNP was planned to be incremental and 28 districts were identified for the first phase.² From these districts, six "prototype" districts (Achham, Kapilvastu, Bajura, Jumla, Nawalparasi, and Parsa) were selected for the implementation of MSNP in the first year. Within each prototype district, MSNP was implemented in two village development committees (VDCs), which were selected in consultation with the district-level stakeholders. In the FY 2015–16, MSNP was scaled up in seven additional pre-identified districts.





The management of MSNP is coordinated through the NPC and is organized by committees (figure 2). At the highest level, under direction from the National Development Council, the NPC is capable of sectoral coordination through the high-level Nutrition and Food Security Steering Committee (NFSSC). In theory, NPC reports through the cabinet sub-committee and parliamentary sub-committee on social development. The National Nutrition and Food Security Secretariat (NNFSS) supports NPC, and has helped develop platforms for government, donors, and CSOs, and plans to include academia and the private sector.

The district, VDC, and municipalities are also supposed to have NFSSCs, as indicated in the diagram.

² This is based in 11 criteria outlined in the MSNP.

Pathways to Better Nutrition Study Objectives

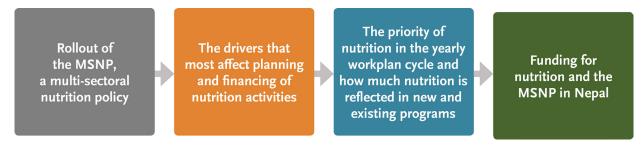
The SPRING project conducted the Pathways to Better Nutrition (PBN) study in two countries—Nepal (2014–2016) and Uganda (2013–2015)—to document the decision-making process for prioritizing and funding nutrition-relevant activities within the context of their NNAP. In Nepal, we studied the **MSNP**'s influence on **enabling processes and drivers**, **prioritization**, and **funding** over two years. Looking at these <u>four key study areas</u> will help efforts already underway to develop the plan or policy that will replace the MSNP.



Study Hypothesis and Research Questions

Our hypothesis, based on Nepal's documented political commitment to multi-sectoral nutrition and their positive track record for reducing undernutrition, is that the MSNP will improve the prioritization of nutrition during work planning, which will increase funding for nutrition over the course of the study's tenure.

To test this, SPRING assessed -



This is important because more money for nutrition will turn into gains in healthy and productive life years. Global estimates state that every dollar spent on reducing stunting can give an average savings of \$18 through increased cognitive and physical development and improved health (Hoddinott et al. 2013). Our research questions were:

Do people understand and use the policy? How can/does change occur in planning and funding?

What change occurred in planning nutrition activities?

What change occurred in funding nutrition activities?

These questions necessitated a longitudinal, mixed-methods approach. The details of this approach are covered in the next section.



Methods

Country and District Selection

Nepal (along with Uganda) was initially selected through a rigorous "most different" case selection methodology (Seawright and Gerring 2008) to represent countries of different contexts that have similar nutrition goals.

Nepal represents a country actively rolling out a multisectoral NNAP, with above average performance on the WHO nutrition governance indicators and a reduction of stunting in the last 10 years. After the initial selection of Nepal, the study team entered into discussions with the NPC and the USAID Mission to request permission to conduct the study and to determine the scope of the research.



SPRING also selected three "case" districts from the original six "prototype," or pilot, districts where the MSNP approach was rolled out. These districts were selected to maximize geographic, nutritional, and external development partner diversity in the final sample. These districts are **not** meant to be representative of the 75 districts in Nepal; rather they are meant as examples of the six MSNP prototype districts. Finally, one of the two VDCs engaged with MSNP was selected from each of the three districts.



Figure 4. PBN Study Team and Location

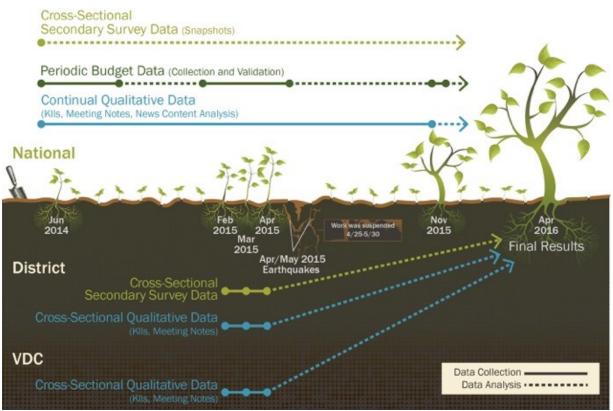
Study Team and Ethical Clearance

The study team comprised two principal investigators who had backgrounds in nutrition, economics, and health. The team also included a sociologist specializing in complex qualitative methods. All team members were registered on the Nepal Health Research Council Institutional Review Board (IRB) Protocol, approved in June 2014. The study protocol was also cleared by the John Snow, Inc. (JSI) IRB of Boston, Massachusetts. Figure 4 shows the team composition and their locations.

Timeline of Study

The PBN study used a one-to-many fully longitudinal mixed-methods design—meaning that both the qualitative and quantitative components ran over the same two-year period (Plano Clark et al. 2015). The quantitative data were collected yearly while the qualitative data were collected weekly. The study design depended on the interplay between these two data sources—the qualitative data provided insights into key events, successes, and barriers related to nutrition prioritization, as well as any new activities being planned, while the yearly budget data confirmed which of those activities made it into work plans and received funding. Both data sources spurred questions for follow-up inquiry. Secondary analysis of survey data—done just once at the start of the study—was useful as a reference to the current status of MSNP indicators, targets, drivers, and barriers related to nutrition across the country. Figure 5 shows the flow of these various data streams over the course of the study.

Figure 5. Study Timeline



The study (2014-2016) was timed to capture a significant portion of the MSNP's tenure (2013-2017), but was not designed to measure impact of the plan. Just after completing what was to be the first of two rounds of district data collection, Nepal suffered two high-magnitude earthquakes in April and May 2015 (*Kathmandu Post* 2015b). The study suspended all field work (national and district) from April 25 to May 30 2015 as a result. Additionally, just after Nepal's new constitution was adopted at the end of September, a blockade of the Indian border caused widespread fuel shortages in the country, restricting travel to some southern districts such as the PBN study site of Parsa (*Kathmandu Post* 2015d). This blockade ended in February 2016, after the end of the study.

Description of Stakeholders

The unit of analysis for this work was the stakeholder group. National key informants (KIs) were selected to represent all key stakeholder groups named in the MSNP, noted in figure 6.

Participants from each group were selected if they met at least one of the following criteria:

- Were involved in developing the MSNP or well versed on its objectives.
- Held a designated position in the MSNP structure within or beyond their specific

Figure 6. Study Stakeholder Groups

Government

Policy and Oversight

- National Planning Commission (NPC)
- National Nutrition and Food Security Secretariat (NNFSS)
- Ministry of Finance, Planning and Economic
 Development (MoF)
- District and VDC NFS coordination committees (3)
 Sectors
- Ministry of Agricultural Development (MoAD)
- Ministry & Department of Education (DoE & MoE)
 Ministry of Federal Affairs and Local Development
- (MoFALD)
- Ministry of Health (MoH)
- Ministry of Urban Development (MoUD)
 Ministry of Women, Children and Social Welfare (MoWCSW)
- beyond their specific organizational affiliations (if position-holder left during the study, we included the new incumbent).
- Was actively participating in or had a significant influence on the implementation and financing of the MSNP.
- Had some other important relationship to MSNP or nutrition policy and implementation.

Description of Data Collection and Analysis

Qualitative Data

Qualitative data were collected from key informant interviews (KII), MSNP-related meeting notes, and weekly Nepal news content analysis (see annex 1 for full details of collection for each of these data sources). Throughout the study, the case study team met weekly to discuss findings. All data were merged and grouped by themes relevant to the four key study areas: understanding of the **MSNP**, **drivers of change**, nutrition **prioritization**, and **funding**.

Three MSNP "Case" Districts

The study mirrored KI selection, recruitment, and ethical procedures for the data collection conducted in the three case districts of **Achham**, **Kapilvastu**, and **Parsa**. One VDC from each district was also sampled to understand the rollout of the MSNP to this lower level of government.

Qualitative and **limited budget data** were collected in spring 2015, just before the earthquakes. Data validation meetings were conducted in Achham and Kapilvastu in early 2016 to receive any feedback and to gauge how the situation may have changed. **Secondary survey data** were also used to create snapshots of each district.

Since district data were only collected once, they were analyzed separately from the longitudinal national data. District budget analysis was done only for the MSNP line item funding.

All final data processing and analysis was done in Nvivo. To identify changes over time in the final analysis, we developed a grid-style template (provided in annex 2) that allowed analysis of stakeholder group data over multiple time points and in each of the four key study areas. Within these areas, we acknowledged change had occurred if evidence between two or more time points showed changes in—

Non-Government

Donors

UN Groups

Civil Society

Private Sector

Academia

- perception (stakeholders noted changes in their own or others' attitudes, opinions, or knowledge)
- **behavior** (stakeholders noted changes in their own or others' behavior in prioritization or budgeting)
- **structure** (documented policy or guideline change, political shifts, new positions, organizational change)

Figure 7. Budget Analysis Methodology

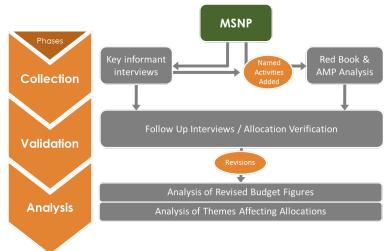
• implementation (documented change in activities or funding).

This list is in order of the relative intensity or significance—changes in perception and behavior can happen quickly but can also reverse later, while changes in structures and implementation take longer but are more permanent.

Budget Data

Figure 7 shows the overall methodology for the budget analysis (the details of this methodology are in annex 3).

The methodology follows the activities named in the MSNP implementation matrix; this means we searched for the same set of activities every year. Information from the KIIs supplemented this activity list. We searched for both "**onbudget**" (GoN and external partner funds run through the government budget, including both on- and off-treasury) and "**off-budget**" (external partner funds run outside the government budget, as designated by the Aid Management Portal [AMP]).



National on-budget data came from the annual Red Books and any available work plans or descriptions of activities. For national off-budget data, the best publicly available source was the AMP, developed by DevGateway and overseen by MoF's Office of International Economic Cooperation Coordination Division (Vota 2013). Off-budget content in this portal is entered by development partners and updated four times a year.³ In the three MSNP case districts, MSNP line-item data came from MoFALD internal budget documents and district-level budget memos.

The SPRING case study team then conducted in-depth validation interviews with all relevant budget planning offices as well as selected donors to confirm for each budget line item:

- Relevance to nutrition and relationship to the NNAP objective areas.
- Percentage of the line item that is nutrition-related.
- Nutrition-specific or nutrition-sensitive designation.⁴
- Objectives of the activities.⁵

³ http://amis.mof.gov.np/portal/about.

⁴ Nutrition activities were categorized as specific if they included one of the 10 *Lancet* nutrition-specific interventions. All other MSNP activities were considered nutrition sensitive. For further details, please see annex 3.

The final validated figures were compared with the qualitative findings to identify reasons for any changes seen in allocations and expenditures.

Secondary Survey Data

Publicly available survey data were used to create "snapshots" of nutrition across Nepal. These snapshots show the current status of the MSNP target indicators and selected indicators that describe each MSNP output area. The snapshots were created for both the sub-regions across Nepal and for the three MSNP case districts. Descriptive analyses (weighted, as needed) were conducted to create the estimates. The sub-regional and district snapshots, along with full description of the methods and data sources, are provided in annex 4.

Limitations

Due to the earthquake and blockade, this study modified its approach in the districts, which resulted in a crosssectional district dataset. Since the national study is longitudinal, we acknowledge that the district results will not be as complete. As mentioned, the earthquake also resulted in a break in national field data collection from April 25 to May 30 2015. News articles continued to be collected during this period, but coverage of non-earthquake stories were minimal. These unforeseen events not only affected our study, but also shifted priorities and funding in Nepal in significant ways that may have affected the results of this study.

Our stakeholder groups remained stable over time, though two new organizations were added to the KI list for donor and UN groups (one each) post-baseline because of their financial contributions to nutrition. Another time-related factor was change in personnel during the study, which meant a change in KIs. Overall, SPRING encountered minimal non-response. We were able to schedule endline interviews with KIs from nearly every organization included during the baseline, and had generally high compliance with follow-on and budget validation interview requests. Only 16 percent of national interviewees refused to be recorded, and none refused to be interviewed. Of the district and VDC interviewees, only one refused to be recorded and none refused to be interviewed.

Missing data affected the national off-budget data—the AMP's project listings appeared to be extensive and upto-date, but actual commitments and disbursements were often missing; 80-90 percent of nutrition-related projects in the first two years of data were missing these figures. Almost every project had project length and total project commitment figures, so SPRING used these data to create average yearly commitment when actual commitment data were missing.

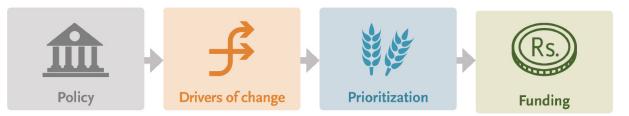
⁵ This was meant to help determine "sensitivity" weights, something suggested by the 3-Step Approach proposed by SUN (Fracassi and Picanyol 2015). However, this concept was hard for stakeholders to understand and did not appear to be information they wanted to use for budget estimation. SPRING has omitted all sensitivity weights from this analysis.

Findings



Final Report | 11

This findings section is organized by the four key study areas already defined, and listed again below.



For each section, we summarized the evidence we found over the time period of the study. The evidence from each preceding key area fed the evidence for the succeeding key area, accumulating by the end to provide a full picture of what drives prioritization and funding for nutrition in Nepal, and what role the MSNP plays in that process.

Inderstanding the MSNP

"Those who didn't know about nutrition are now aware of the importance of nutrition. There is awareness among multi-sectoral partners of nutrition." - National government stakeholder

The first step in implementing the MSNP was to make sure it was understood and used by all nutrition stakeholders in Nepal. This included not just an understanding of the purpose and content of the MSNP, but also of each stakeholder group's roles and responsibilities for supporting the policy. Finally, it was important for the MSNP to expand or increase knowledge of nutrition to a more multi-sectoral, nutrition-sensitive definition.

Understanding: At the beginning of the study, most stakeholder groups were aware of the MSNP but many were confused about whether it was a specific project, a plan, a set of guidelines, or a framework for planning. There was concern that a separate project would take away from existing sectoral nutrition actions.

During the course of the study, all government and several EDP stakeholder groups were involved in training-oftrainers (TOT) and regional TOTs and MSNP workshops, and most stakeholder groups also attended NNFSS meetings, which seemed to improve their general understanding of the MSNP and the sectors involved in the MSNP. In fact, one group worried there was too much time spent on training as compared to implementation of activities.

Across the three districts SPRING visited, there was good general understanding of nutrition in early 2015 (when the district interviews occurred). The MSNP and related trainings were cited as—

- 1. increasing understanding that nutrition involves all sectors
- 2. sharpening focus on the 1,000 days target groups
- 3. improving awareness that regular inter-sectoral coordination is needed.

By the end of the study, there appeared to be greater agreement that the MSNP was intended as a guiding framework, though a minority (primarily from nutrition-sensitive sectors or EDPs) still misunderstood it to be a project with dedicated funding. Several academic stakeholders and at least one sector ministry also seemed to think NPC was implementing the MSNP and thought they should not do so as a planning ministry.

"It appears as if NPC is trying to keep the resources and implement the MSNP, which is not their role. Other ministries should have been used to implement MSNP. Everyone has to play their own role." – National government stakeholder

Concept of Multi-sectoral Nutrition: At baseline, traditional nutrition actors (such as in the health sector) were most knowledgeable about nutrition and multi-sectoral actions, while many of the groups that were newer to nutrition either thought of it only as a health-related issue or did not think of it at all. By the end of the study a significant improvement was seen in the number of groups talking about nutrition multi-sectorally, crediting the same trainings and meetings mentioned above for their change of thinking. Donors and UN groups indicated that the global nutrition agenda, not necessarily the MSNP, was increasing nutrition awareness in their organizations.

Roles and Responsibilities: At the start, academia, CSOs, and the private sector stakeholder groups asked for greater coordination and clarity on their roles and responsibilities in the MSNP structure. During the course of the study, NNFSS helped develop terms of reference (TOR) for each stakeholder platform. By the end, several groups

specifically credited the NNFSS for improving their understanding of the MSNP and their roles, although academia seemed a bit frustrated with the stalled progress on establishment of the academia platform.

Taken together, this evidence points to widespread improvement in understanding of MSNP and multi-sectoral nutrition actions, and is the basis for the rest of our analysis. Knowledge of roles and responsibilities will need to continue to improve to cover all stakeholder groups.



Certain actions, or "drivers of change," help or hinder the influence of the MSNP on nutrition prioritization and funding. In our qualitative data analysis, we considered reasons given for why the priority and funding of nutrition did or did not improve over time, as well as responses to specific questions about what challenges or enablers stakeholders faced in their efforts to conduct their nutrition activities. Some of these drivers of change aligned with what we hypothesized as key factors at the beginning of the study, e.g., sustainable



Figure 8. Drivers of Change for Nutrition in Nepal

structures. Others, such as the influence of effective coordination, emerged from the data.

From these data, we identified a set of drivers that were most critical to prioritizing and funding nutrition in this context. In this section, we describe the weight of evidence for changes in each driver that were a result of the MSNP. Figure 8 is a summary of the drivers and the direction of change (no, some, or much improvement) that we observed over the course of the study.

While this list is not exhaustive, it highlights the primary enablers and barriers that effected stakeholders' ability or desire to increase the priority and funds allocated to nutrition activities.

Human Resources

An important driver of change in how nutrition is prioritized and funded is the human resources committed to nutrition. Human resources include all people engaged in nutrition, including clinical and community providers, clinical, policy management, and support staff at every level in every stakeholder group.

Multi-sectoral Coordination of Nutrition Activities

Coordination of nutrition planning, funding, and implementation across sectors, stakeholders, and government levels was also identified as critical to the scaling up of nutrition. This is a "soft" driver in that there may not be concrete signs of change, but changes in behaviors and perceptions as a result of improved coordination can make a large difference when it comes to what is prioritized and funded.

Bottom-Up Planning

The foundation of MSNP planning is the 14-step Nepali bottom-up planning process, defined by the Local Self Governance Act of 1999 (GoN and Ministry of Law and Justice 1999). One of the aims of the MSNP was to create a system at the grassroots level where people from all sectors work together with a district-level nutrition officer to coordinate the process of understanding nutrition problems and identifying sector roles to mitigate them. This system must function if the MSNP is to succeed at the community level.

High-Level Advocacy for Nutrition

Advocacy for nutrition and the MSNP is a very important driver of change because, without it, government and EDPs will not prioritize or allocate funds for nutrition.

"If there has been a massive [and convincing] advocacy...that factor will work a bit, otherwise, if [advocacy] has been [inadequate] then the budget funding will not be there." - National government stakeholder

Sustainable Structures

To maintain momentum for nutrition (or to accelerate progress), structures and processes for planning, funding, implementing, and monitoring nutrition activities must be in place. MSNP stakeholders have an important role in ensuring that nutrition is embedded into existing local and national policy and work planning structures, budgeting processes, and monitoring and evaluation (M&E) systems for the sustainability of commitment to nutrition.

Ownership of Nutrition

Collective national ownership of nutrition via the MSNP goes beyond understanding this plan. It means that each stakeholder group feels responsible for nutrition activities and is invested in the success of the movement. For the government, ownership also means nutrition remains a priority regardless of shifts in national plans and international donor priorities.

From this set of drivers, our evidence suggests the MSNP has had the most effect in improving coordination, advocacy, and sustainable structures. Details are provided below.

The MSNP's Influence on Drivers of Change

Human Resources

From the beginning of the study, three main issues related to human resources for nutrition persisted: inadequate staffing of the MSNP national support structure (within ministries, NPC, and NNFSS), turnover of nutrition focal positions, and lack of and overburdened nutrition implementation staff.

Staffing of MSNP National Support Structure

At the national level, we heard about shortages of staff in the ministries and in the NNFSS and NPC secretariats. We heard that there were not enough nutrition technical staff to keep up with need. For instance, during the time of the study, the Nutrition Unit under the MoH's Child Health Division had only three or four staff. The MSNP called for a national nutrition center; at baseline there were plans for establishing a nutrition center with 50 staff, but by the end of the study there was no progress on this.

There has been some shift in perceptions since 2014, with ministry stakeholders now clearly stating the need for a resource person (within their respective ministries) with technical knowledge on nutrition. The private sector stakeholder group also stated increased interest in gaining technical knowledge on nutrition.

Within the NNFSS (which provides direct support to NPC), a majority of stakeholders stated concern about the lack of government-appointed positions and what that meant for the sustainability of the secretariat. At the end of the study, most stakeholders felt strongly that there has to be government-appointed staff at the NNFSS or at least one full-time government staff whose role is exclusively in support of the MSNP.

"There should be permanent secretariat to support MSNP; donors support NNFSS, it is not permanent." - National UN stakeholder.

Over the course of the study, the NNFSS lost two positions (meaning the staffer had left and there were no plans to replace him/her).

Turnover of Nutrition Focal Positions

From the beginning and throughout the course of the study, staff turnover at almost every level and in every group was identified as one of the biggest barriers for the effective implementation and coordination of the MSNP. The negative effects of this frequent turnover were:

• The new staff do not have the same level of understanding of the MSNP and institutional memory is not transferred to new staff

"In the government, those who are assigned in the position will not have known anything, not even an "n" of the nutrition. Then again by the time you make them aware, understand, they will get transferred and you have to restart all over." - National CSO stakeholder

- New staff may not show the same level of commitment and interest for the MSNP.
- Vacancies and transition in decision-making positions limit what lower-level technical staff can achieve in support of the MSNP. This was noted specifically as an issue that delayed the approval of spending of nutrition funding (*Kathmandu Post* 2015c).

The frequent turnover of government and some donor and UN positions is due to many factors, including the civil service⁶ cycle and the reliance on short-term donor-funded staff to support some MSNP components. A number of MSNP focal positions changed over the course of the study. By the end, 43 percent of the ministry nutrition focal positions had turned over, and 5 percent were vacant.

Lack of and Overburdened Nutrition Staff at the Level of Implementation

At the national level and in the three study districts, we heard that availability of staff at the level of implementation was a key constraint. By the middle of the study, stakeholders noted that the district development committee (DDC)—which is responsible for overseeing the MSNP at the district level—was overburdened with multiple priorities. At the end of the study, some national stakeholders even said that the district and VDC staff had been complaining about the extra workload that MSNP placed on their already hectic schedules. During the annual performance review meeting of the Child Health Division (CHD) (FY 2013–14), participants expressed concern that there was no district-level person whose sole designation was to oversee nutrition activities (Paudel 2014).

National government staff stated that there were staff shortages (for nutrition and other activities) in all districts, but particularly in hard-to-reach districts. In Achham, which is just such a district, we heard from district and VDC staff that high turnover, shortage of staff, and lack of desirability for posting were human resource issues relating to the MSNP.

⁶ Civil servants are entitled to a transfer after two years. In reality, however, turnover occurs before the two years are over, sometimes as soon as three or four months.

Multi-sectoral Coordination of Nutrition Activities

"Multi-sectoral is always good to think about but is always challenging to make it happen." -National government stakeholder.

Coordination is not easy even within the same project or ministry, let alone across sectors and levels. Nevertheless, we saw much progress in this area over the course of the study. In mid-2014, many stakeholders indicated that they were used to working in isolation and that, particularly for EDP and newer government stakeholders, coordination for MSNP was not enough to bring busy people together. In particular, stakeholders highlighted coordination between departments (within the same sector) and inter-ministry coordination as most challenging. However, by the end of the study (late 2015), the perception was that coordination for MSNP and nutrition had improved.

Examples of improvement in coordination during the course of the study:

- By the end of data collection, government, donor, and CSO stakeholders said that they are now working in a consolidated form, especially when finalizing manuals and guidelines related to MSNP.
- During the study period, the three NNFSS MSNP working groups (advocacy and communication, capacity development, and M&E) became more active with regular meetings and follow-up activities.
- Government and donor stakeholder groups felt that coordination at the national level had improved over the course of the study, and many attributed it to the MSNP structures, particularly the placement of NNFSS in NPC and NNFSS's efforts to create active coordination platforms (working groups) across a wide range of stakeholders.

We also heard about areas that need further improvement. Stakeholders remained concerned that because highlevel NFS committees did not meet regularly, coordination at the cabinet and parliamentary level was insufficient. Stakeholders were also concerned with the lack of engagement of academia and the private sector, whose involvement remained relatively unchanged over the course of the study.

All of the above generally refers to the horizontal coordination at the national level. But lack of vertical coordination (from national to district and below) was noted as a barrier to implementation of nutrition activities. Some would like to see more coordination during work planning to help prioritize which project to fund. In the three districts that SPRING visited, stakeholders generally had a positive view of the district nutrition food security steering committee (DNFSSC), but the village nutrition food security steering committees did not seem to meet as regularly, mainly due to human resource issues (too few people who could sit on committees, too many committees, and no incentive for them to meet). Concerns about VDC coordination was echoed by national-level stakeholders, who also noted that it depends on the commitment and motivation of the VDC secretary. As of late summer 2015, DNFSSCs had not yet become active in many of the other districts in Nepal (Bhandari 2015).

Bottom-Up Planning

The MSNP calls for a bottom-up planning approach, but several stakeholders were concerned that this did not happen in practice.

"14-step planning is there but it is not in practice." - National government stakeholder.

Over the course of the study, sector ministries, NPC, donors, and UN agencies all made several efforts to strengthen the capacity for bottom-up planning for MSNP. Trainings throughout the study period and district support workshops during the first half of the study were conducted to help districts develop their plans for the

MSNP. Additionally, sector ministries also provided trainings to their respective district authorities on how to plan for the MSNP. Similarly, UN agencies helped ward, VDC, and districts plan and incorporate nutrition issues into their plans.

Despite these efforts, we noted few measurable changes in perceptions, behaviors, structures, or implementation related to bottom-up planning. By the end of the study, the perception seemed to be that further work is needed in this area. The key constraints related to bottom-up planning for the MSNP that we identified through our qualitative data analysis are listed below.

1. Toward the middle of the study, we heard in SPRING's three study districts that DNFSSCs made plans and sent proposals to national ministries but felt that selection of programs was highly influenced by national politics. On the other hand, some of the national stakeholders felt that the districts did not make realistic plans.

"Proposals come from the districts but that does not completely get approved because there is political influence at the [national] level. We have to accept that there is a political influence."

-National government stakeholder

2. During the same set of lower government interviews in early 2015, various stakeholders from the three VDCs SPRING visited told us that they were not given enough time to make the plans and send up their proposals.

"If you visit the people and ask them to prepare a plan in two hours, what can we expect the plan to be?" – District government stakeholder

3. Toward the end of the study, some ministry stakeholders mentioned that there were enough general discussions with the local stakeholders, but a lack of nutrition knowledge and lack of access to information (such as routine nutrition data and budgetary information) meant bottom-up planning was still not possible.

Due to limited data, we were unable to assess the perception of the execution of bottom-up planning within the private sector and CSOs.

Advocacy for Nutrition

Over the course of the study, we saw steady improvements in advocacy for nutrition. The diversity of stakeholder groups involved in the improvements was notable. The placement of the NNFSS within NPC signaled leadership by government since early in the rollout of the plan. Further developing high-level advocacy for nutrition was emphasized at the start of and reinforced throughout the study period. By the end of the study, nearly all nongovernment stakeholder groups (except private sector) felt that they had encouraged government to allocate resources for the MSNP, and at least half the stakeholders said that the MSNP had a role in their nutrition advocacy efforts.

Tangible markers of improvement in advocacy found in our analysis during the course of the study include the following actions:

- Government, academic, and UN stakeholders successfully advocated for the budget line item to support the MSNP in 2014.
- The communication and advocacy strategy for MSNP was finalized toward the middle of the study and will be the guiding document for all MSNP advocacy activities.

- The Civil Society Alliance for Nutrition, Nepal (CSANN) started forming district chapters in four of the six MSNP districts toward the middle of the PBN study to advocate for and raise awareness on nutrition and to ensure effective participation of all CSOs in nutrition. They also launched a set of talk shows to spread awareness on the MSNP and nutrition (CSANN 2015).
- The MSNP communications and advocacy working group had discussions about how to mobilize key parliamentarians and policy makers and increase their commitment to the MSNP.
- Stakeholders felt that UNICEF in particular played a key role nationally in advocating at the ministry level and above to strengthen coordination for the MSNP (both national and district) and to understand the constraints related to implementation of MSNP activities.
- Although occurring after the end of the official data collection for this study, a major improvement to ensure district-level advocacy for the MSNP was the development of the TOR for the district support agency.

District stakeholders have also realized the importance of advocacy. During the district support workshop in Kathmandu, which was held soon shortly after our PBN case study baseline, a participant from Achham underscored the importance of advocacy for the MSNP, saying,

"Every accomplishment in the district has been because of advocacy campaigns." (NPC 2014).

Some remaining barriers to improved advocacy relate to solidifying channels and partners at the highest levels. At the end of the study, some stakeholders were concerned that people who best understood MSNP were often midlevel officers who did not have decision-making authority. Throughout the study, the majority of government and nongovernment stakeholders were convinced that commitment at the parliamentary and cabinet levels was needed to ensure adequate and sustained resources for the MSNP.

"Advocacy is major part because it is about high- level authority. If we are able to advocate the situation then it will facilitate to allocate the money." - National government stakeholder

Sustainable Structures

Building nutrition into existing planning, financial, and monitoring structures is difficult, but our analysis indicates that this is an area in which MSNP stakeholders made significant improvements during the course of the study.

"The big question is of sustainability. Huge resource has come. If the ultimate result will be zero or if it gets back to normal or gets worse after remaining good for some time, then, that's a matter to worry about."

- National government stakeholder

Planning Structures

Most of the improvements in this area were at the national level. At the beginning of the study, several national ministry and EDP stakeholders noted that they primarily followed their own sector documents for making decisions about work planning.⁷ By the end of the study, many ministry stakeholders indicated that nutrition was more institutionalized into sector planning structures and documents. Several EDPs also noted behavioral changes in their organizations that were leading to greater inclusion of nutrition into strategy documents, though they cited the global nutrition agenda as the main reason for this. Tangible markers of institutionalization of nutrition into planning structures include the following actions:

⁷ This was also attributed to differences in the timing of planning cycles across the sectors.

^{20 |} Pathways to Better Nutrition in Nepal

- By the end of the study, four of the six ministries had revised their own sector policies in consideration of the MSNP. Several ministries also included nutrition in their training programs.
- Just after the end of the study, TOR for the district support agency to support MSNP were developed.

At the district and below, however, we heard that further guidance on how to build nutrition into the work planning cycle was still needed.

Financing Structures

At the start of the study, stakeholders had already been advocating for dedicated financial resources for the MSNP. In addition, during our baseline KIIs, several government stakeholders emphasized the need to improve planning, build capacity, and increase transparency for funding. By the end of the study, we saw significant structural and implementation changes related to both of these areas. Tangible markers of institutionalization of nutrition into financial structures include the following actions:

• The institution of the MSNP line item soon after the baseline interviews was a major boost to the financial sustainability of the MSNP.

"From this year, separate code for MSNP will be allocated in Red Book" – National government stakeholder.

• During the study, several stakeholders mentioned progress toward donor alignment with government priorities (not just for nutrition). The cabinet approved MoF's development cooperation policy, which emphasizes channeling aid through on-budget mechanisms and makes reporting of off-budget funds to AMP mandatory (MoF trends in on-budget aid, 2014/10/24).

"because of the policy document the government can now say where they stand in terms of prioritization of different types of aid." - National government stakeholder.

• By the end of the study, stakeholders from both sides felt that there had also been improvements in donor reporting to the AMP⁸, which gives a more complete picture of support for nutrition and other priority areas:

"The reporting is more systematic and donors do more regular reporting." National government stakeholder

"There have been improvements from the both sides. MoF is more active and we do more regular reporting. It is more systemized." – National donor stakeholder

Throughout the study, we heard of challenges relating to utilization of nutrition financial resources, due to issues such as late release of budgets and the lack of human resources in the districts. By the end of the study, spending for several projects had improved. At the district level, despite approval of the MSNP line item, some questioned whether it might be more efficient or sustainable to have some percentage of funds set aside for nutrition within the VDC budget itself –

"It's like this - there is no need to give separate budget for MSNP. Give it from the budget given to the VDCs. Increase their capacity." - National government stakeholder.

⁸ Some stakeholders noted issues of double reporting in AMP when donors give to UN agencies (both UN and donors would report).

M&E Structures

Less change was seen in M&E structures. We heard from a wide range of stakeholder groups that there was an unmet need for feedback mechanisms and a monitoring system for the MSNP. Although feedback mechanisms have improved via coordination structures (including the new Nutrition and Food Security Portal), the lack of effective reporting mechanisms for MSNP persists.

Key barriers identified by the stakeholders include the following:

- While some ministries (MoAD and MoH) said that they have incorporated some MSNP indicators into their regular management information system (MIS), there is no clear system for regular monitoring and review of all MSNP indicators across sectors.
- Although the draft common M&E framework for MSNP has been finalized, it took a long time to be finalized and even by the end of the study was not fully operational.
- Many government, donor, UN, and academic stakeholders expressed concern during follow-on and endline interviews that it is difficult to attribute change due to the MSNP, in part because there was no baseline or analysis plan.

"It's always anecdotal, OK, MSNP came and then we improved, but [how] much did MSNP improve?" - National UN stakeholder

• At the end of the study, ministries indicated additional concerns about monitoring at the district level because progress reports for MSNP activities go through only MoFALD.

Ownership of Nutrition

At the start of the study, there was wide variation in MSNP and nutrition ownership levels across stakeholder groups. While we did see some positive changes in perception relating to ownership, overall we found little change in this area.

At the beginning of the study, stakeholders emphasized the need for national ownership for MSNP.

"If we can internalize the MSNP activities as part of our regular jobs, then we can enhance the ownership" – National government stakeholder.

This was reinforced throughout the study. In the final national interviews, several of the more traditionally nutrition-engaged stakeholders said that the government now owned the MSNP as a national document. Keeping in mind relatively limited data for this group, it also appeared that CSO stakeholders were able to establish ownership of nutrition issues via the establishment of CSANN. However, many stakeholder groups that expressed less ownership or engagement at the start of the study continued to express a lack of ownership, because of several barriers.

Key barriers influencing the lack of ownership from different stakeholder groups include the following:

• Sector ministries noted that it was difficult to engage in district activities implemented with MSNP funds, since funding and reporting lines go through MoFALD only. By the end of the study, we heard very mixed responses on this issue: some non-ministry and EDP stakeholders expressed satisfaction with MSNP funds running through MoFALD, while others felt that it should have gone through the line ministries.

"NPC should have given the policy guidelines to line ministries and the funds should have been channeled through the line ministries to their respective district offices." - National UN stakeholder

- Academicians and stakeholders from the private sector also felt that they were unable to have a bigger
 role in the MSNP because of the delays in setting up official platforms⁹ for them and because their roles
 were not explicitly defined. Academicians saw their role in developing an evidence base for
 implementation, but felt they had not been utilized.
- By late 2015, some national-level stakeholders felt that the lack of government positions on the NNFSS signaled lack of ownership of nutrition at that level.

"NNFSS is externally funded by the donors, because of which there is limited ownership from the government." –National UN stakeholder

- In the three districts we visited, we heard that lack of government ownership is influenced by heavy donor involvement, lack of mandatory objectives and reporting, and lack of nutrition staff.
- Although the private sector signed the MSNP document, all stakeholders including the private sectors themselves felt that they have not owned the MSNP.

"We have not been able to do anything and we are staying idle and passive, yet, we are also worried about what we can do, and if you can tell us this is how you should be going ahead, go this way, this is the area where you can work, saying so if you show us the path or create an environment, then next time when you come for a follow up, we can also show some concrete results." –National private sector stakeholder

The six drivers described above helped us to follow if, how, and why prioritization and funding shifted over the course of the study. The next two sections describe these shifts.

⁹ The academia platform has not received official recognition and their TOR has not been endorsed.



Prioritization is the process of deciding which topics, programs, or activities are most important. Within any organization, prioritization helps administrators determine what will, and will not, be programmed and funded. The level of priority that nutrition receives relative to all other interests determines whether nutrition will receive any attention, and if so, if that attention and corresponding funding will be adequate.

We looked for the following evidence to determine the extent to which nutrition was prioritized by each sector and stakeholder group within a given sector:

- 1. Inclusion of nutrition as a named priority in the sector's strategy documents (or organizational strategy and investment documents for EDPs).
- 2. Creation of a nutrition and/or food security unit, division, or department, or addition of a major nutrition initiative or program.
- 3. Creation of, or increased leadership role in, a nutrition review process within a sector.
- 4. Explicit discussion of or planning for nutrition that would imminently result in one of the above.

Table 1 summarizes the changes we found. Some groups, like the MoH and UNICEF, started with nutrition as a high priority, so even though we didn't see huge change over time, they were continuing a positive trajectory. We also noted the status of nutrition in each government sector strategy at the end of the study.

Table 1. Change in Priority of Nutrition, by Sector (direction of arrows indicates change, color of arrows indicates relative level of priority by endline)

Sector	Gov.	Donor	UN	CSO	Private
Agriculture	1	*	→		1
Education	+		→		
Federal Affairs/ Local Government	1	→			
Health	1	1	1	*	
Gender & Social Welfare	*				
WASH/Urban Dev.	+	could not be assessed			

*EDPs work in multiple sectors, but for this analysis they were categorized into those for which they explicitly discussed their involvement in the work planning process. This means responses from some EDPs (such as USAID and the World Bank) are included in the group analysis for multiple sectors.

When compared to responses from earlier in the study, we saw tangible markers of improvement in the priority of nutrition in four of the six ministries, among donors in two sectors, and among UN and CSO partners within the health sector. Within the government, it was notable that three (MoAD, MoFALD, and MoH) of the six government sectors had nutrition as a named priority in the official sector strategy by the end of 2015, and an additional sector (MoE) had named nutrition as a core theme.

At the end of the study, we asked all stakeholders if they noticed any changes from the previous year's work planning in the way in which nutrition-relevant activities were prioritized, and the drivers they thought most influenced that change (or inhibited change, if that was the case). Government stakeholders in all but one of the ministries identified increased coordination as a positive influence on their prioritization of nutrition. MoAD, MoH, and MoFALD variously mentioned factors related to the building of sustainable structures to support nutrition planning, though MoH and MoFALD noted barriers in this driver as well. Increased ownership was also mentioned by MoFALD, MoH, and MoWCSW as influencing nutrition's level of priority in yearly work planning.

Human resources and bottom-up planning were more often described as barriers to increased priority for nutrition. Four ministries mentioned that inadequate number of staff and insufficient nutrition training were barriers, while three ministries mentioned bottom-up planning. Surprisingly, bottom-up planning was most often mentioned as a barrier in cases where the process itself was working fairly well, but the lower level government did not demand nutrition activities, which relates to advocacy.

Among donors and UN groups, we saw an overall increase in the level of priority for nutrition in health. Among donors, nutrition in agriculture also gained status. However, donor and UN groups cited the global nutrition agenda—not the MSNP—as the primary reason for this. We saw no change in donor and UN priority for nutrition in education and local development or in agriculture (among UN groups only). Lack of coordination and ownership appeared to be the primary reasons for this.

Among CSOs, we only had sufficient evidence on those working in the health sector. In that group, we found positive changes in their prioritization of nutrition, and they mentioned that the MSNP had been influential, primarily via its influence on CSO's feeling of ownership over nutrition.

For the private sector, we only had sufficient evidence on those working in the agriculture sector. Here we saw intention to engage at the beginning of the study, but efforts receded by the endline, due to a lack of coordination with the MSNP structure and a lack of nutrition capacity (human resources in the private sector).

In addition to the verbal descriptions, we also documented projects that were being planned specifically to support MSNP, or were being updated with the intention of aligning with the MSNP. Although the majority of the nutrition-related activities were continuations of regular nutrition-related work within each ministry or EDP, or were developed in response to the earthquake, a solid minority of new and continuing activities were related to the MSNP.

Ongoing Projects That Are Working To Align Activities with MSNP

2011-2016 - Suaahara & Suaahara II

Funded by USAID and coordinated with MoH. This community-focused project aims to improve the health and nutritional status of pregnant and lactating women, and children under two years of age. It supports the MSNP

and the Hygiene and Sanitation Master Plan 2011-2015, and over time has strengthened support to and alignment with MSNP structures in the districts and below.¹⁰

2012–2017 - Sunaula Hazar Din (Golden Thousand Days)

Funded by World Bank and managed and implemented by MoFALD. This project is designed to address the risk factors for chronic malnutrition while aligning with the MSNP. ¹¹

2013–2018 – Agriculture and Food Security Project (AFSP)

Funded by the World Bank and managed and implemented by MoAD in coordination with MoH. The project objective is to enhance food and nutritional security of targeted communities in selected locations of Nepal.¹²

Suaahara mirrors MSNP; it's a huge program with the funding of 72 million. The activities under the upcoming EU funding will be driven by the MSNP. The Golden Thousand Days program is also driven by MSNP. It is clear that MSNP is guiding nutrition programming and planning in Nepal. - National UN stakeholder

Projects Designed in Support of MSNP

2013–2015: Scaling Up Nutrition Multi-partners Trust Funds (SUN MPTF) for Civil Society Mobilization

Funded by United Nations Development Program (UNDP) and World Food Programme (WFP) and implemented by CSANN. The project focused on assessment and strengthening the capacity of CSOs on the MSNP and the SUN movement for policy advocacy, budget analysis, and monitoring and evaluation in coordination with NPC and NNFSS.¹³

2014–Ongoing: Multi-sector Nutrition Program (MSNP line item)

Funded by GoN and implemented by MoFALD. Our interviewees described this line item as direct support to roll out the MSNP in the six priority districts in 2014–15 and to expand to 10 districts in 2015–16. A portion of these funds (3 million Rs in 2014–15) were held back for NNFSS support.

2014–Ongoing: Supplementary MSNP Support for Health Sector

Funded by UNICEF and implemented by MoH (comes out of existing UNICEF line item). From budget documents, it appears that the above MSNP line item did not cover health. Instead, UNICEF extended its regular budget support for MoH to cover these MSNP district activities. A portion of these funds was held back for NNFSS support.

Various: Ad Hoc Support for NNFSS Positions and Nutrition and Food Security Portal

Funded by the European Union (EU) and the UN (REACH, WFP, UNDP, UNICEF) in support of NPC. From the interviews we heard that various funders supported all the positions on the NNFSS, with a combination of oneand two-year contracts. These positions are critical to the coordination of the MSNP structure, and also allowed the NFS portal to be built.

¹⁰ https://www.usaid.gov/nepal/fact-sheets/suaahara-project-good-nutrition

¹¹ MoFALD. Community Action for Nutrition Project: Sunaula Hazar Din. Project flyer.

¹² http://www.foodandenvironment.com/2013/10/agriculture-and-food-security-project.html.

¹³ UNDP, FAO. 2014. MPTF Office Generic Annual Programme 1 Narrative Progress Report – Year 2014.

2015–2019: Poshan Ko Laagi Haatemalo

Funded by the EU and implemented by UNICEF in coordination with all MSNP ministries. This new project was officially funded in December 2015 (just after the end of our study). Stakeholders and meeting notes described this project as direct support to all MSNP outcomes to combat chronic malnutrition and to foster socio-economic development in Nepal.

In sum, we saw major improvements in the priority of nutrition in all but one government ministry, and among many EDP groups in the health and agriculture sector. In four of the ministries, nutrition is now a named priority or a core theme in the official sector strategy. We documented several major new projects that support MSNP and its goals, and three major on-going nutrition-related activities have aligned themselves with MSNP.

SPRING has followed all funding for the above activities, as well as the continuing regular nutrition-related work within each ministry or EDP. The next and final section describes these funding totals.



The previous section showed that Nepal has been relatively successful at getting new nutrition activities prioritized and approved. But this alone does not guarantee that these activities will be fully implemented. After a work plan is approved, ministries and EDPs need to ensure that funds are **allocated**. After allocation, funds must be **released** to each sector (and sent from each sector to lower government) and these allocations must be spent (spending is otherwise known as **expenditure**). For each step, bottlenecks may reduce or even eliminate financial support for a given activity.

A negotiation process happens within ministries each year for **on-budget** nutrition activities (though donors and UN groups also provide on-budget funds, meaning they would also be part of that process). This process starts in September with work planning for local governments, and submission of initial budgets and programs in December and January. The process resolves with the submission of the final national budget by June and authorization by mid-July (Ghimire, Dahal, and Ghimire 2015).

Activities planned by EDPs (donors, UN groups, CSOs, and even the private sector) outside the government Red Book structure (**off-budget**) are supposed to be coordinated with MoF and relevant sector ministries. This process is primarily the responsibility of the EDP. Off-budget planning and funding may or may not align with the GoN budget calendar, and may in fact follow the fiscal calendar of the donor, UN group, or other EDP. The MoF has increased donor reporting into the Aid Management Portal since the start of the study, with what appears to be regular updating of the projects included. By our measures, about 80 percent of listed projects did not include actual yearly commitments or disbursements, which makes it difficult for the related ministries to incorporate this information into their work- and budget-planning. Fortunately, SPRING was able to extrapolate commitments from total project commitments and length of the project where those data were available.

We will describe the budget estimates and provide the qualitative feedback we received for on- and off-budget allocations, and then on- and off-budget expenditures.

Nepal Date Conversion

In this English version of the final report, we will use the Gregorian (Christian) calendar. For easy conversion, here are the corresponding years in the Vikram Samvat (Hindu) calendar:

Gregorian	Vikram Samvat
2013–2014	2070–2071
2014–2015	2071–2072
2015–2016	2072–2073

Allocations

Figure 9 shows the total (on- and off-budget) allocations for the three years included in this study. Combined allocations for nutrition in 2015–16 totaled Rs 17 billion (USD 169 million).

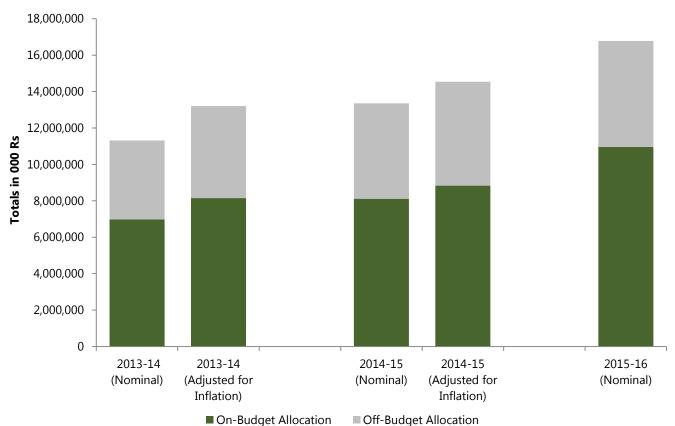


Figure 9. Total On- (Government and EDP) and Off-Budget (All Other EDP) Allocations for Nutrition, 2013–14 to 2015–16

On-budget (green segments) allocations steadily increased between each year. After adjusting for inflation, the real increase was about 17 percent per year, or ~35 percent total between 2013–14 and 2015–16. GoN funds make up about 30 percent of all nutrition allocations over time, but it is important to note that this amount will vary depending on how much of the sub-national grants are counted toward nutrition.

Off-budget funding (grey segment) also grew, though one should be cautious of these figures, given the previously mentioned data issues. From our interviews, it seems that government staff time is used to administer some of these off-budget activities, even though on-budget funding will not record this personnel time. Figure 10 shows how all nutrition funding flows by sector.

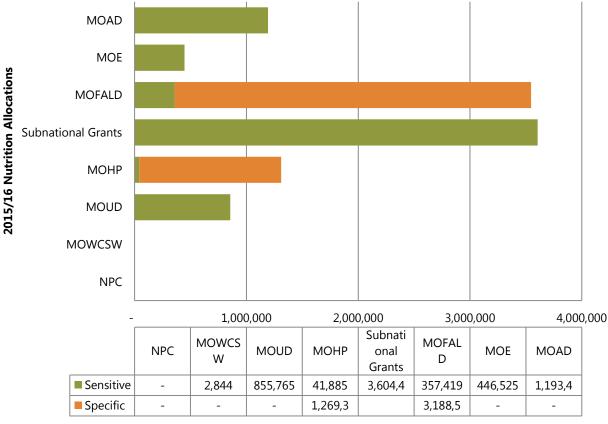


Figure 10. 2015-16 On- (Government and EDP) Budget Allocation for Nutrition, by Sector

000 Rs

* Nutrition activities categorized as specific if they included one of the 10 Lancet nutrition-specific interventions. All other MSNP activities were considered nutrition sensitive.

Sub-national grants were the largest contributor to total GoN allocations. These grants run through MoFALD to all municipalities, districts, and VDCs and provide unconditional funding at that level. These grants were the only onbudget items SPRING was unable to validate, so we used a conservative figure of 20 percent for these three line items. Changing that percentage will create significant changes to total GoN allocations. Since 2013–14, subnational grants have risen steadily, resulting in a 20 percent real increase in this type of funding.

In 2015–16, MoFALD still had the highest nutrition-related allocations, even when sub-national grants were split. The nutrition-specific funding (orange) in MoFALD comes from the Sunaula Hazar Din project and to the MSNP line item for districts. Both of these activities grew over time, Sunaula Hazar Din project exponentially so, resulting in a real increase of about 150 percent between 2013–14 and 2015–16.

MoH provided the next-largest contribution to nutrition-related funding, with about 1.3 billion Rs in 2015-16. Ninety-seven percent of this funding was nutrition-specific. The remainder of the funding was nutrition-sensitive and came from the Integrated Women Health Reproductive Health program and the National Health Education, Information, and Communication Centre. Funding fell over time, with a real decrease of 25 percent, mostly driven by decreases in the Integrated Women Health Reproductive Health program and the Integrated District Health program.

The MoAD is third with just over 1 billion Rs going to 10 nutrition-related activities, which were 100 percent nutrition-sensitive. The largest portion of these funds came from the Agriculture and Food Security Project and the cooperative farming heading. Increases in the Agricultural Research Program, Livestock Development Service

Program, and the Agriculture and Food Security Project combined for a real increase of just under 40 percent over the three study years.

Often advocacy groups will refer to the percentage of total ministry allocation as a benchmark for support to nutrition and other sub-sector priority areas. Table 2 provides these percentages for both years.

Ministry	2013/14	2014/15	2014/15
MoAD	3.4%	4.1%	4.5%
MoE	0.6%	0.6%	0.5%
MoFALD	8.0%	8.7%	9.3%
МоН	5.2%	3.0%	3.7%
MoUD	3.1%	3.4%	3.4%
MoWCSW	0.2%	0.2%	0.1%
NPC	0.0%	0.0%	0.0%

Table 2. 2015-16 Nutrition Allocations as a Percent of Total Ministry Allocation

We generally see increases over time in nutrition-related funding as a percent of total ministry allocation for most of the ministries, though MoE and MoWCSW had slight decreases over time. MoFALD (including sub-national grants) again ranks highest in percent of allocation, with about 9 percent of all MoFALD funds going toward nutrition in 2015–16. MoAD had 4.5 percent of funds for nutrition-related activities. 3.7 percent of all MoH funds went to nutrition in 2015–16. SPRING was unable to find any line items related to nutrition for NPC.

Returning to the MSNP-specific projects listed in the prioritization section, we can see their financial contribution to these totals. They supplied Rs 5.3 billion (USD 53 million) to the 2015–16 total, or about 28 percent.

Table 3. Summary of Funding for MSNP-related Projects

Project Name	Type of Funding*	Est. 2015–16 Allocation, USD	Est. 2015–16 Allocation, Rs	
Suaahara	Off-budget	\$11,000,000	1,094,390,000	
Sunaula Hazar Din (Golden Thousand Days)	On-budget (MoFALD)	\$31,044,195	3,088,587,000	
Agriculture and Food Security Project (AFSP)	On-budget (MoAD)	\$4,212,333	419,082,000	
Multi-sector Nutrition Program (MSNP line item)	On-budget (MoFALD)	\$1,005,133	100,000,000	
MSNP support for Health Sector	On-budget (MoH)	\$162,832	15,042,000	
Poshan Ko Laagi Haatemalo**	Off-budget	\$6,000,000	596,940,000	
REACH support for NNFSS Positions & NFS Portal	Off-budget	Unclear	Unclear	
% of total 2015–16 allocation	28	Total Allocation	5,314,041,000	

*Off-budget is designated by AMP, not by SPRING

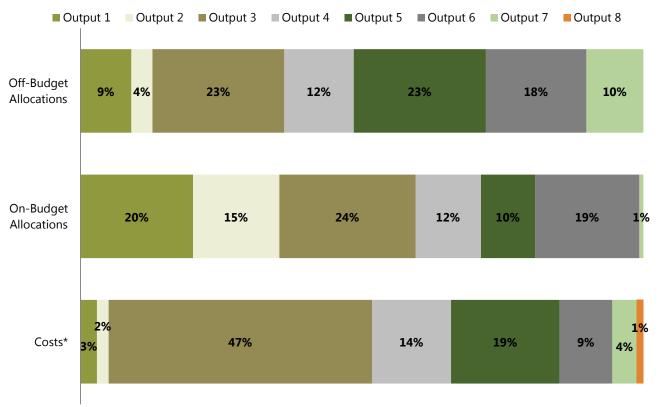
**Just approved in December 2015, year allocation is estimated from the average yearly commitment

Only the MSNP line item originates from GoN funds. Sunaula Hazar Din, AFSP, and MSNP support for the health sector are administered by MoFALD, MoAD, and MoH, respectively, but are funded by the World Bank and UNICEF. Suaahara is funded and administered by USAID (with significant involvement from MoH), while UNICEF

will implement the EU-funded Poshan Ko Laagi Haatemalo. This means much of the growth in MSNP-related funding is externally funded, which appears to follow a trend across Nepal for the most recent fiscal year (*Himalayan Times* 2015b). For the remaining ~70 percent of nutrition-related activities, ministry and EDP stakeholders in our qualitative interviews noted that they were not necessarily adjusting activities to align with MSNP, but rather continuing priorities for their own organizations.

This last point relates to how the balance of funding aligns with MSNP output areas (figure 11). Because the MSNP has projected costs for each output area, we can compare allocations to costs to identify any gaps in, or overallocation of, funding by area. This information can be used in planning to ensure that ministries and EDPs are aligning priority activities with the MSNP. Overall, allocations exceeded the projected cost for each year. For the last year we tracked, the MSNP projected Rs 1.7 billion would be needed (Rs 1.9 billion once adjusted to 2015–16 dollars). In comparing this to the Rs 10.9 billion allocated on-budget and Rs 5.8 billion allocated off-budget, there appears to be no gap in funding for MSNP.

Figure 11. Total On- (Government and EDP) and Off-Budget (All Other EDP) Allocations for Nutrition by MSNP Output Area, 2015-16



Relative Proportion per MSNP Output Area (2015-16 Allocations & MSNP Costed Plan)

*Source for projected costs: GoN, and NPC (2012).

However, this does not mean that allocations by MSNP output area match the cost projection. For output areas 7 and 8, the amount of allocations were neither sufficient to meet costs nor equal in emphasis to the costed plan. Meanwhile, the relative proportion of funding for output areas 1, 2, and 6 was much higher than the expected proportion in the costed plan. For output area 3, allocations were a much smaller percentage (or emphasis) as compared to the costed plan. How much of these funds are spent will also affect how well activities line up with the MSNP output areas.

32 | Pathways to Better Nutrition in Nepal

From this evidence, it appears the allocations are mostly sufficient (as compared to the costed plan) and growing steadily each year, but rely heavily on off-budget EDP funding for some nutrition-related activities, such as those in health and women and social welfare.

Expenditures

We found that for the three years examined, average yearly on-budget spending (green segments) was about 75 percent of total allocation. (Off-budget expenditure cannot be assessed with much accuracy, but some rough estimates are provided in the striped grey bars). Figure 12 shows the comparison of allocations to expenditure for each year.

Figure 12. Total On-(Government and EDP) and Off-Budget (All Other EDP) Allocations and Expenditure for Nutrition, 2013–14 to 2015–16

Recap of Activities in Each MSNP Output Area

Unless an age group is specified, all activities relate to those in the 1,000 days window.

Output 1 activities relate to nutrition policy and planning functions.

Output 2 activities relate to multi-sector coordination mechanisms.

Output 3 activities relate to maternal and child nutritional care.

Output 4 activities relate to adolescent girls' education, lifeskills, and nutrition.

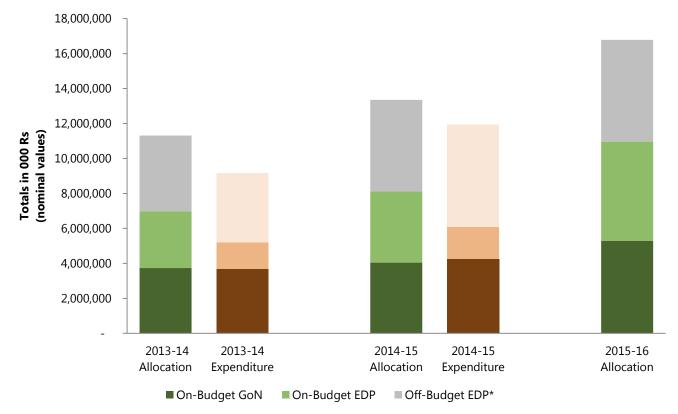
Output 5: activities relate to diarrheal diseases and ARI.

Output 6: activities relate to availability and consumption of appropriate foods and women's workload.

Output 7: activities relate to capacity building for nutrition.

Output 8: activities relate to updating multi-sector nutrition information platforms.

Source: Multi-sector Nutrition Plan (GoN and NPC, 2012)



On average, GoN sector ministries (dark green) spent all of their nutrition-related allocations, though this belies ministry variation. On-budget EDP spending (light green) rates were much lower; just under 50 percent of allocations were spent. Table 4 shows how the average yearly spending rates vary by ministry for all on-budget (GoN and EDP) nutrition-related funds.

2013-14	% External	% GoN	2014-15	% External	% GoN
MoAD	43	70	MoAD	64	83
MoWCSW	N/A	88	MoWCSW	N/A	67
MoUD	69	55	MoUD	54	85
МоЕ	94	67	МоЕ	43	69
MoFALD (incl. sub-national grants)	42	112	MoFALD (incl. sub-national grants)	41	116
МоН	38	83	МоН	35	63
Avg. national expenditure rate for nutrition allocations	47	99	Avg. national expenditure rate for nutrition allocations	45	105

Table 4. Expenditure of Nutrition-Related On-Budget (GoN and EDP) Allocations

In both years, sub-national grants were overspent, which contrasts with reports of development funds being frozen for district activities (*Himalayan Times* 2015a; Jha 2016). These grants are overseen by MoFALD, so they inflate that ministry's spending rate. Without them, MoFALD had one of the lowest expenditure rates, because of low spending on three EDP-funded activities: Rural Community Infrastructure Development Program (WFP), Linking Local Initiatives to New Knowledge & Skills (Helvetas), and Sunaula Hazar Din (World Bank). MoH has the lowest expenditure rates for EDP on-budget funding. This is not limited to nutrition; it appears that expenditure and reimbursement of on-budget EDP funding may be an issue elsewhere (*Kathmandu Post* 2014).

From our interviews and the news content analysis, two primary reasons appear to be causing the gap in onbudget spending for both GoN and EDPs.

- Delayed release of funds: On the first day of the fiscal year, the finance secretary authorizes spending for all line ministries. The sector ministries authorize spending thereafter, but in some cases this can be delayed for two months or more, reducing the time available to complete the work. This issue appears to effect much of the Nepali budget, so much so that GoN was considering declaring a "budget implementation year," which means that development projects currently underway will not need to get budgets authorized or approved by the NPC, as they attempt to get timelines back on track (*Kathmandu Post* 2015c). We heard that frequent staff transfers also slowed release of funds.
- *Procurement delays:* For community-led projects in particular, any given project can be delayed during the bidding and proposal process. For capital projects, this can also be delayed if the detailed project reports have not been developed prior to allocation (*Kathmandu Post* 2015a). This delays spending, and reduces the amount of time to spend those funds within the fiscal year.
- *Earthquake*: The effect of the earthquake on spending is unclear. We heard that it impeded implementation of some routine activities, but we heard in other interviews that funds were shifted from under-spent activities to be utilized for disaster relief (Shrestha 2015).

This evidence indicates steady increases in allocations for nutrition across most sources and sectors, although more work could be done to improve utilization and spending of these funds, in particular for on-budget EDP funds. As one national government stakeholder put it,

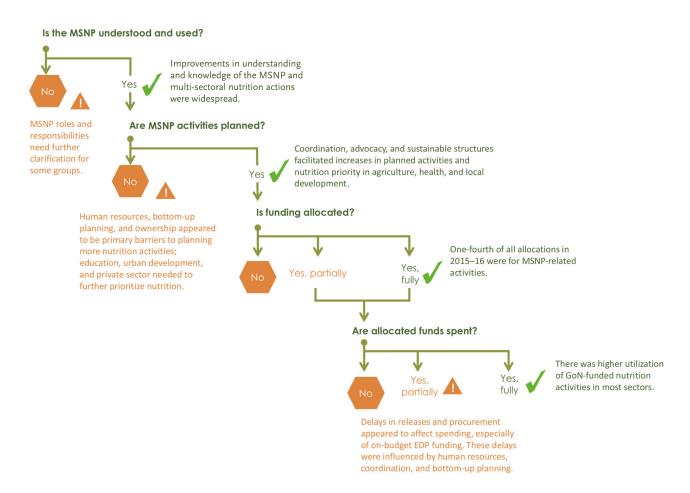
"Resource is not a problem, resource management is the problem."

This problem needs to be addressed at the levels of approval and implementation, and improvements to some key drivers such as human resources and coordination (between GoN and donors in particular). Bottom-up planning will be critical to improving utilization.



This study has found that the MSNP has helped to create better understanding of multi-sectoral nutrition, and has increased priority and funding for nutrition-related activities in Nepal.

Looking across the two years of evidence in this study, a key lesson is that even the most well-written multisectoral nutrition strategy must be accompanied by efforts to strengthen drivers of change to improve planning, funding, and implementing of nutrition activities. The framework below depicts where bottlenecks occur between the development of a plan and its actual delivery. We indicate where MSNP stakeholders have overcome these bottlenecks (\checkmark), and where they remain (\triangle).



The drivers of change cut across all levels of the analysis. Multi-sectoral coordination during planning, for instance, was often a positive catalyst for prioritizing nutrition, but lack of coordination on implementation created a barrier to spending of nutrition funds. MSNP appeared to contribute to barrier removal in the first three steps: understanding the MSNP and multi-sectoral nutrition action increased; improvements in multi-sectoral coordination, advocacy, and sustainable structures facilitated; and increased priority for nutrition and nutrition activities within agriculture, health, and local development sectors. These new or expanded MSNP-related nutrition activities contributed approximately one-quarter of nutrition allocations in 2015–16. We also noted relatively higher utilization (or spending) of GoN-funded nutrition activities for the last step in the diagram, though this is not directly related to MSNP.

The remaining bottlenecks shown have not prevented new MSNP activities from being planned or funded for the two years studied, but they may be slowing implementation of these activities. The bottlenecks outlined in this study indicate that MSNP roles and responsibilities should be clarified for some groups. Human resources, bottom-up planning, and ownership of nutrition need further improvements, particularly for stakeholders in the education, urban development, and private sectors; delays in releases and procurement are delaying spending, particularly for on-budget EDP projects. GoN and partners should continue to track planning and funding for the MSNP for the remaining two fiscal years of the plan's tenure (2016–17 and 2017–18) to see how further improvements can be made.

Our drivers of change echo findings from the NAGA (Pokharel et al. 2009), and the UNICEF process study on the development of the MSNP document (Shrimpton et al. 2014). Prior to the start of this PBN study, these efforts highlighted similar key drivers that were either constraining or helping advance the Nepali nutrition agenda. These drivers include multi-sector collaboration, high-level advocacy for nutrition, national nutrition capacity (especially human resources), community understanding, and bottom-up planning to ensure effective implementation. Linking these studies together over time paints a rich picture of how to leverage strengths and overcome weaknesses in these areas.

It is important to note that adequate allocations are necessary but do not guarantee improvements in nutritional status. Funds must be spent efficiently. This requires taking our analysis one step further and examining spending at the level of implementation. To meet the new global targets for investing in nutrition, GoN and EDPs must find efficiencies across sectors and projects to make the most of every dollar (Shekar et al. 2016). What we can say from our analysis is that more work is needed to close the spending gaps in many sectors. This particularly affected EDP on-budget funding, but to build more sustainable financing systems the answer cannot be to move this funding off-budget. EDPs face a tension between aligning with government systems and EDP concerns about the capacity of the government to use those funds effectively (*Himalayan Times* 2015b). However, as one national government stakeholder said,

"Whether we like it or not, the government is the ultimate authority so we have to work with the government, coordinate with the government, and go to the places where the government suggests."

Finally, the next MSNP costing methodology should aim to make it easier to compare costs and expenditures (including all management costs and costs at the district level as well), so that a more accurate investment case for MSNP output areas can be made. The 2011 costing exercise was based on an ingredients approach, a very standard method used for costing, which may under-estimate overhead and management costs, while the expenditure approach used for the budget and expenditure analysis may over-estimate these costs, Making it harder to compare these figures.

Much of our analysis on planning has focused on government sectors, because this is where much of the national decision-making occurs. This may seem to contradict the idea of multi-sectoral planning, but in fact, collaboration across sectors (led by NPC and NNFSS) compliments the ongoing routine planning processes that happen within sectors between GoN and EDPs without adding burden.

In addition to working within national-level sectors, we heard across the study period and at all final national and district dissemination events that districts and VDCs must be engaged for the MSNP to succeed. As one participant noted at the final national event,

"Success is 10 percent planning, 90 percent implementation."

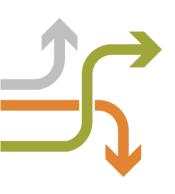
Other participants at the national dissemination event suggested creating concrete implementation guidance for districts and VDCs on how to increase local participation in nutrition activities. This recommendation was echoed in the three district dissemination events, where participants were happy to hear about the improvements, but noted that local ownership and participation is absolutely necessary for nutrition programs to be successful. One participant from Parsa said,

"We talked about holding village council, collecting plans at village level. How active were we? How many times did we participate? Did we mobilize our mechanisms? How many plans did we ask from the bottom level? We need to remind ourselves these questions. Our programs have not been successful as we have not reached such situation."

An eloquent closing thought came from the Joint Secretary of NPC Mr. Madhu Kumar Marasini. He stated in his closing remarks from the final national dissemination event that,

"...by combining our efforts; we can multiply the results. The fundamental principle of MSNP is also the same."

All MSNP stakeholders have the same goal in mind, and that is to accelerate the reduction of maternal and child malnutrition in Nepal. By aligning with (and coordinating via) MSNP structures, the costs of reaching this goal can be reduced and the sustainability of the results increased.



Recommendations

Final Report | 41

What follows are recommendations to overcome barriers and sustain the positive developments past the end of the current MSNP.

SPRING developed these recommendations based on the findings from this study and advice and suggestions from the stakeholders.

All partners should **continue advocacy and education campaigns** at the district and community levels.



#1

Although we documented significant progress in understanding of the multi-sectoral causes of malnutrition at the national level, significant gaps in understanding remained in the three districts and VDCs we visited. We heard from the national ministries that some VDC sector officers did not demand nutrition activities following the bottom-up process, e.g., in the urban development and education sectors where physical infrastructure was more desirable.

GoN and partners can continue investment to increase awareness of multi-sectoral nutrition through multiple channels (mass media, household, etc.) for all target groups at the community and local levels. Local-level policy and decision makers are key assets to help increase understanding of the importance of nutrition across multiple sectors, especially related to urban development and education. Their increased awareness will help generate demand for nutrition in the local planning process.

GoN and EDPs can move forward by **strengthening nutrition capacity and reducing turnover** at all levels within all sectors.



#2

During the course of the study, more than half of the national-level nutrition focal staff people who we interviewed turned over. By the end of 2015, four positions at NPC and NNFSS went vacant. Turnover also affected EDP nutrition staff. This turnover, combined with low technical capacity in nutrition among some ministries, strained national efforts to convene for the MSNP. In three districts and selected VDCs, government staff reported that nutrition activities were hard to support because of staff shortages, especially in hard-to-reach areas.

The GoN (and EDPs) should ensure continuity and institute handover protocols to keep institutional MSNP memory in each ministry and organization. The GoN could do this by building nutrition curriculum into the civil servant training period. NPC began working with the Ministry of General Administration and the Ministry of Finance to reduce transfers and create new positions for nutrition officers, and this could result in concrete guidelines in this area. At the district and VDC levels, we suggest creating a designated focal person for nutrition activities; GoN can discuss the feasibility of financial incentive schemes to keep those positions filled in hard-to-reach areas.

#3 NPC should consider revitalizing the parliamentary, cabinet, and high-level nutrition and food security committees to help advocate for and establish ownership of the MSNP effort.



Educating parliamentarians, lawmakers, and other high-level leaders about the importance of nutrition should be a prime agenda items for MSNP. In the original support structure plans, provisions for parliamentary and cabinet-level sub-committees and a high-level (Ministry Secretary-level) nutrition and food security steering committee (HLNFSSC) were made. Yet we were told that the parliamentary and cabinet-level sub-committees may not have ever met, and the HLNFSSC only met once or twice in the last two years.

Revitalizing the HLNFSSC and activating the sub-committees for advocacy on the MSNP could increase government ownership within the sector ministries. This could also motivate EDPs and the private sector to increase alignment of activities with the MSNP, especially if advocacy by these committees could link nutrition to the country's future economic development. In addition, creating better communication among all levels of nutrition and food security committees will help unify advocacy efforts from the HLNFSSC down to the VDCs.

NNFSS should keep working to **involve academia and the private sector** in the MSNP coordination structure.



#4

The MSNP support structure must include all stakeholders at every level. In our interviews, we were told that academia and the private sector had, so far, had much less engagement in MSNP coordination activities. Formal recognition of the academic coordination platform within the NNFSS had stalled, and a coordination platform for the private sector had not yet been formed by the end of the study.

Efforts to activate the academic platform should restart. In addition, academic stakeholders sit on the HLNFSSC, so restarting this convening mechanism means academia could provide the evidence needed to fuel advocacy at the highest level. The private sector will need a clear business case for engaging, which could be developed by reframing the argument for nutrition in terms of increased labor productivity and improved market opportunities for products that align with the national nutrition standards. Creating a private sector coordination platform would facilitate this discussion.

GoN should **implement the MSNP monitoring and evaluation framework** as soon as possible.



#5

By the end of the study, an MSNP monitoring and evaluation (M&E) framework was in final draft after review by all sector ministries, but approval stalled, possibly due to vacancies in the national MSNP support structure. Yet stakeholders at every level reinforced the need to coordinate monitoring data and evidence on the impact of the MSNP on nutritional indicators.

The GoN will need to approve and implement the draft M&E framework as soon as possible. The NPC may want to consider including nutrition financing indicators in this final plan. National ministries, districts, and below need an accompanying set of implementation guidelines to define exactly how sectors and districts are to collect this information. Technical assistance may be needed to pull all sector nutrition indicators into a national reporting structure. All stakeholders should **adhere to bottom-up planning processes for nutrition activities** to better meet needs at the local level.



Bottom-up planning is not unique to nutrition, but it is critical for understanding which nutrition programs will work best in each community. While some stakeholders felt that bottom-up planning was working for MSNP activities, others felt that bottom-up planning had been in name only and not in practice. Indeed, various stakeholders from three VDCs told us that they were not given enough time to make the plans and send up their proposals.

Central ministries, CSOs, and EDPs should build capacity to strengthen the planning process at the community level. This includes creating clear implementation guidelines on how to plan, budget, and conduct MSNP-related nutrition activities. As capacity is strengthened at the local level, the national ministries need to consider the local plans and proposals seriously. Where possible, the districts should be given some unconditional funding to help them fulfill local needs. Within the districts, the district development committee should lead efforts to plan for MSNP activities. Bottom-up planning schedules should give the VDCs sufficient time to assess community needs.

GoN and EDPs should consider intensifying efforts to **revitalize nutrition and food security committees at the VDC level** and into new MSNP districts



#7

While the GoN—via the MSNP line-item funding—and EDPs (for example, USAID, the World Bank, and UNICEF) have made significant progress in rolling out the district nutrition and food security steering committees in the six MSNP priority districts, much work is still needed to ensure that every VDC in those districts has an operating nutrition and food security committee. In addition, the new MSNP expansion districts—28 are listed in the MSNP—will need to develop nutrition and food security committees. We heard from every level that this was both a serious challenge and an absolute necessity for the long-term success of the MSNP. These committees are excellent platforms for all stakeholders to share data, generate evidence-based programming, and coordinate bottom-up planning for nutrition.

To move beyond the initial creation of the local committees, the human resource constraints noted in recommendation #2 must be reconciled. In addition, committee membership should be spread out to ensure that the same people at the VDC level are not overburdened with multiple meetings for different programs. EDPs should also engage and support VDC committee members—we heard from stakeholders in one VDC in Parsa that the Sunaula Hazar Din project has recently made progress in activating the VNFSSC. Finally, we heard anecdotally that the proposed district support agency could be another channel to support these committees.

#6

#8 All partners working in nutrition should align planned activities with MSNP objectives.



Evidence indicated that while EDPs—particularly donors and UN groups—gave substantial support to nutrition activities, they seemed to primarily follow their own global agenda for nutrition. While many referred to the MSNP for planning, it was often a secondary or tertiary document. This was also true of many (but not all) EDPs in the districts and VDCs we visited. Some partners, like the private sector, did not make any reference to the MSNP.

We heard from donor and UN stakeholders that they see increased coordination as the biggest potential benefit of the MSNP. Because of the amount of funding coming from these sources in Nepal, it is essential that these organizations communicate their plans, not only with the government but also with other EDPs. Increased coordination of nutrition activities is just as important for ministries, the private sector, and CSOs. It is, therefore, critical to embed all stakeholders into the MSNP coordination structure to ensure they are active and engaged.

At the national level, GoN could use the existing national nutrition secretariat and the national nutrition group (NNG) to encourage regular sharing of the draft sector and EDP plans for nutrition activities early in the budget cycle. At the local level, EDPs could work closely with the district and VDC committees to decide how to add more activities based on locally identified needs to their programs.

GoN should consider **increasing financial resources for MSNP support structures** described in the plan.



#9

MSNP support structures—such as the NNFSS, other steering committees, and NPC—are essential for oversight and management for nutrition planning in Nepal. These committees operate from the national to the VDC level. The evidence demonstrated that these structures were well received at the national and district levels—for instance, many stakeholders cited the NNFSS as helping them understand the MSNP, increasing their knowledge of multi-sectoral nutrition, helping them coordinate with other stakeholders, and learning how to prioritize nutrition. Currently however, all NNFSS positions are externally funded. At the time of our interviews, the nutrition and food security committees in our three VDCs had been formed but had never met.

Nationally, the GoN must start providing dedicated funds for NNFSS to ensure its continued existence, and/or greater funds for NPC staffing and involvement in coordination activities. GoN could provide additional dedicated nutrition funds to the VDCs (via the VDC block grants or another mechanism), or require that some percent of existing VDC block grants be used for this purpose to activate the below-district-level nutrition and food security steering committees.

EDPs and GoN should work together to **reduce bottlenecks in spending** of EDP on-budget funding, **and increase the timely reporting** of off-budget EDP disbursements.



#10

EDPs contributed about two-thirds of all nutrition-related funding, both on-budget and offbudget (outside the GoN systems). On-budget EDP funding was tracked with equal accuracy to GoN funds, but only about 50 percent of these funds were expended, on average, each year. For off-budget funds, the Ministry of Finance (MoF) increased donor reporting into the Aid Management Portal since the start of the study and it appears that projects are being updated regularly. However, even by the end of the study, only about one quarter of the listed projects included actual yearly commitments and disbursements, which made it difficult for stakeholders to incorporate this information into regular work and budget planning.

To reduce bottlenecks, EDPs and their partner ministries need to reduce delays in the release of funds, and they need to address procurement delays to give implementation-level staff enough time to spend these funds effectively. To improve timely off-budget reporting, EDPs must adhere to the MoF quarterly reporting schedule.

References

- Bhandari, Jhabindra. 2015. "Scaling up Nutrition." *My Republica*, July 31. http://myrepublica.com/opinion/story/25540/scaling-up-nutrition.html.
- CSANN. 2015. "Talk Show on MSNP." *The Connection*. Kathmandu, Nepal. https://www.youtube.com/watch?v=kNeWG8soep0.
- Fracassi, Patrizia, and Clara Picanyol. 2015. "Tracking Government Investments for Nutrition at Country Level." http://scalingupnutrition.org/wp-content/uploads/2015/02/150130_EN_SUMMARY-APPROACH_Tracking_Domestic_Investments_for_Nutrition1.docx.
- Ghimire, Madhav, Khem Prasad Dahal, and Dilli Prakash Ghimire. 2015. *Budget Formulation Process of the Government of Nepal*. Kathmandu, Nepal: Transparency International Nepal.
- GoN, and Ministry of Law and Justice. 1999. "Local Self Governance Act." Kathmandu, Nepal: GoN. http://www.undp.org/content/dam/nepal/docs/reports/governance/UNDP_NP_Local%20Self-Governance%20Act%201999,%20MoLJ,HMG.pdf.
- GoN, and NPC. 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)." Government of Nepal.
- Himalayan Times. 2015a. "Development Budget Freezes after Quake." *Himalayan Times*, July 20. http://thehimalayantimes.com/nepal/development-budget-freezes-after-quake/.

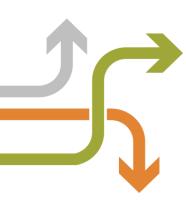
------. 2015b. "ALLOCATION FOR OFF BUDGET PROGRAMMES JUMPS TO 25.67 PERCENT THIS FISCAL YEAR." *Himalayan Times*, August 6. HTTP://THEHIMALAYANTIMES.COM/BUSINESS/ALLOCATION-FOR-OFF-BUDGET-PROGRAMMES-JUMPS-TO-24-67-PER-CENT-THIS-FISCAL/.

- Hoddinott, John, Harold Alderman, Jere R. Behrman, Lawrence Haddad, and Susan Horton. 2013. "The Economic Rationale for Investing in Stunting Reduction." *GCC Working Paper Series*, no. 13–08. http://thousanddays.org/tdays-content/uploads/The-Economic-Rationale-for-Investing-in-Stunting-Reduction.pdf.
- IBRD/IDA, and World Bank. 2013. "Improving Nutrition Through Multisectoral Approaches." 75102. Department for International Development (DFID), Government of Japan, Rapid Social Response, & The World Bank.
- Jha, Abadesh Kumar. 2016. "VDCs Fail to Carry out Dev Works." *eKantipur*, May 8. http://kathmandupost.ekantipur.com/printedition/news/2016-05-08/vdcs-fail-to-carry-out-dev-works.html.
- Kathmandu Post. 2014. "Rs 67 Billion to Go Unspent This FY." *eKantipur*, July 14. http://kathmandupost.ekantipur.com/printedition/news/2014-07-14/rs-67-billion-to-go-unspent-this-fy.html.
 - ——. 2015a. "Govt Told Not to Allocate Budget." *eKantipur*, April 3. http://kathmandupost.ekantipur.com/printedition/news/2015-04-03/govt-told-not-to-allocate-budget.htm.
 - ——. 2015b. "Deadly Earthquake: Death Toll Reaches 4,400." *eKantipur*, April 28.
 - ——. 2015c. "Govt to Declare Budget Implementation Year." eKantipur, July 13. http://kathmandupost.ekantipur.com/news/2015-07-13/govt-to-declare-budget-implementation-year.html.

Levinson, F. James, Yarlini Balarajan, and Alessandra Marini. 2013. "Addressing Malnutrition Multisectorally: What Have We Learned from Recent International Experience?" New York, NY: UNICEF, MDGF. http://www.aecid.es/Centro-

Documentacion/Documentos/Divulgaci%C3%B3n/Addressing_malnutrition_multisectorally_MDG_F_Item1_Fin al-links.pdf.

- Ministry of Health and Population (MoHP), New ERA, and ICF International, Inc (ICF). 2012. *Nepal Demographic and Health Survey 2011 Final Report*. Kathmandu, Nepal; and Calverton, Maryland, USA: MoHP, New ERA, and ICT. http://dhsprogram.com/pubs/pdf/FR257/FR257%5B13April2012%5D.pdf.
- NPC. 2014. "District Report Workshop for Effective Coordination and Implementation of the Multi-Sector Nutrition Plan (MSNP)." Kathmandu, Nepal: NPC.
- Paudel, Krishna Prasad. 2014. "National Annual Performance Review Meeting Child Health Program FY: 2070/71." presented at the National Annual Performance Review Meeting, Kathmandu, Nepal, December.
- Plano Clark, V. L., N. Anderson, J. A. Wertz, Y. Zhou, K. Schumacher, and C. Miaskowski. 2015. "Conceptualizing Longitudinal Mixed Methods Designs: A Methodological Review of Health Sciences Research." *Journal of Mixed Methods Research* 9 (4): 297–319. doi:10.1177/1558689814543563.
- Pokharel, Raj Kumar, Robin Houston, Phil Harvey, Ramu Bishwakarma, Jagannath Adhikari, Kiran Dev Pant, and Ritu Gartoulla. 2009. "Nepal Nutrition Assessment and Gap Analysis." Kathmandu, Nepal: CHD/MoHP.
- Seawright, Jason, and John Gerring. 2008. "Case Selection Techniques in Case Study Research A Menu of Qualitative and Quantitative Options." *Political Research Quarterly* 61 (2): 294–308.
- Shekar, Meera, Jan Kakietek, Mary D'Alimonte, Dylan Walters, Hilary Rogers, Julia Dayton Eberwein, Shan Soe-Lin, and Robert Hecht. 2016. "Investing in Nutrition: The Foundation for Development: An Investment Framework to Reach the Global Nutrition Targets." Washington, D.C: World Bank, Results for Development, Bill and Melinda Gates Foundation, CIFF, Thousand Days.
- Shrestha, Prithvi Man. 2015. "Unused Budgets Can Yield 'Rs5b' for Relief." *eKantipur*, May 11. http://kathmandupost.ekantipur.com/news/2015-05-11/unused-budgets-can-yield-rs5b-for-relief.html.
- Shrimpton, Roger, Shikha Basnet, Jennifer Crum, Saba Mebrahtu, and Pradiumna Dahal. 2014. "Documenting the Process of Developing the Nepal Multi-Sector Nutrition Plan and Identifying Its Strengths and Weaknesses: Report of a Research Project." Kathmandu, Nepal: UNICEF/EU. http://www.nnfsp.gov.np/PublicationFiles/a1a1d4b5-3db9-4668-a93b-921caca37d3d.pdf.
- UNICEF. 1990. "Strategy for Improved Nutrition of Children and Women in Developing Countries." JC 27/UNICEF-WHO/89.4. Policy Review Paper E/ICEF/1990/1.6. New York, NY: UNICEF.
- Vota, Wayan. 2013. "Nepal Aid Management Platform Goes Public." *Development Gateway*. June 25. http://www.developmentgateway.org/2013/06/25/nepal-aid-management-platform-goes-public/.
- World Bank. 2012. Nutrition in Nepal: A National Development Priority. Washington, D.C: World Bank.



ANNEX 1

SPRING Pathways to Better Nutrition Qualitative Methods Nepal

Methods

The PBN case study was a mixed-method, prospective study. A Grounded Theory Approach was used to identify key themes (drivers of change) across all qualitative data (key informant interviews and focus groups discussions, weekly news content, and meeting notes). Changes in these key themes, as well as changes in understanding of the MSNP, prioritization, and financing were assessed using an innovative longitudinal grid analysis for each stakeholder group. This approach was designed to obtain a thorough understanding of the issues described in the objectives and the following key domains of inquiry for the overall case study over time:

- learning on scaling up a multi-sectoral approach
- adaptation of interventions to local context(s)
- financing of nutrition-sensitive (sector level) and nutrition-specific (within sector) activities
- long-term sustainability

The following drivers were added also, based on the emergent themes from the data:

- coordination structures and mechanisms for MSNP
- human resources for nutrition
- advocacy for nutrition and MSNP
- ownership of nutrition by all sectors
- bottom-up planning processes.

Sources

Data for the qualitative data stream came from three sources, primarily:

- **Key Informant Interviews (KIIs):** at the national level, in-depth interviews were conducted at the baseline and endline of the study, with shorter follow-up interviews occurring in between as prompted by current events. In the districts, in-depth interviews were only conducted once, early in the study period, and group feedback was collected at the end of the study to validate the baseline findings.
- **News Content Analysis:** news articles were collected from the major Nepali news outlets on a weekly basis.
- **Meeting notes and reports:** notes and/or reports were collected from most official MSNP meetings and other notable nutrition gatherings in Nepal.

Key Informant Interviews

Recruiting Key Informants

National Level

The study research questions centered on how each key stakeholder institution will prioritize the activities proposed in the MSNP and how they will be funded while the plan is being rolled out. The KIs were chosen based on the following attributes:

• They were involved in developing the MSNP or are well versed on its objectives, if not previously involved.

- They were designated MSNP focal persons within government or were in planning divisions of line ministries or Ministry of Finance and assisted with making budgetary decisions.
- They were listed as MSNP working group or committee members.
- They actively participated in or have significant influence on the implementation and financing of the MSNP.
- They were recognized technical experts and opinion leaders based on the team's knowledge.
- They were available and willing to be interviewed by the case study team.

In addition, potential KIs needed to be affiliated with one of the key nutrition stakeholder institutions in Nepal. The Scaling Up Nutrition (SUN) movement categorized such institutions into six groups (SUN 2010).

- Government.
 - National Planning Commission
 - Ministry of Federal Affairs and Local Development (MoFALD)
 - Ministry of Finance (MoF)
 - Ministry of Agriculture and Development (MoAD)
 - Ministry of Urban Development (MoUD)
 - Ministry of Health (MoH)
 - Ministry of Education (MoE)
 - Ministry of Women, Children and Social Welfare (MoWCSW)
- Donor agencies (bilateral and multilateral aid agencies).
- Civil society organizations (CSOs).
- Business/private sector.
- United Nation (UN) groups.
- Academic/research institutions.

Sampling was purposive, and the sample for KIs included representatives of all six key stakeholder groups. In most cases, at least one focal person and one planning division representative were interviewed from each of the implementing line ministries named in the MSNP. The final list of KIs was determined through an iterative process between the case study team members in SPRING Home Office and Nepal.

SPRING staff made phone calls and visits to the offices of the final list of KIs to schedule interviews. An introduction letter from SPRING and support letter from the National Planning Commission (NPC) were delivered to the KIs to invite them to participate in the study.

District Level

District-level data were collected in three of the first six districts where the MSNP was rolled out ("prototype," or pilot, districts). These districts were selected to provide variation in geographic location, nutritional status, and the

predominant nutrition-related donor project being implemented in the district. The project's case study team members in Nepal received approval of district site selection from the NPC before the district visits.

District-level KIs were representatives from five of the six key stakeholder groups noted in the National-Level section (the district sample did not include members of academia). A few modifications in the recruitment process were made to accommodate circumstances at the district level. First, all members of the District Nutrition and Food Security Steering Committee (DNFSCC) were included as KIs. These members are also MSNP Focal Persons from each of the seven line agencies involved in the MSNP rollout: District Development Council, health, agriculture, women and child development, livestock, education, and water and sanitation. Second, local representatives from the UN and key donor agency implementing nutrition programs were included in the sample: In Parsa, KIs included representatives from the World Bank's Sunaula Hazar Din project; in Achham and Kapilvastu, KIs included KIs from USAID's Suaahara project. In addition, to the extent possible, KIs included other CSOs, e.g., representatives of local NGO federations and the Civil Society Alliance for Nutrition in Nepal. Third, stakeholders from the business/private sector were contacted, e.g., representatives of the local chambers of commerce.

The study design included one village development council (VDC) per district where the MSNP is being implemented. The KIs at the VDC were members of the Village Nutrition and Food Security Steering Committee (VNFSSC).

Basic Information about Key Informants

National Level

Continual data collection was used for national interviewing. A total of 42 national-level KII were conducted during the case study's baseline, and the numbers of individuals tracked increased to 44 by the end of the study. Followup interviews were triggered by information in the weekly news analysis and meeting notes. Due to changes of personnel in the government and other stakeholder groups, some KIs who had been interviewed in the baseline did not serve the same role throughout the course of this prospective study. Therefore, the case study followed the incumbents of the "positions," not the individual KIs. The number of in-depth and follow-on interviews over the course of the study are shown in Table 1.

	Government sector	Donor agency	UN group	CSO	Private sector	Research	Total
Baseline Interviews	21	3	8	4	3	3	42
Follow Up (Q1)	7	3	1	1	1	-	13
Follow Up (Q2)	6	-	-	-	-	-	6
Follow Up (Q3)	25	-	2	-	-	1	28
Follow Up (Q4)*	2	-	-	-	-	-	3
Follow Up (Q5)	26	-	-	-	-	1	27
Endline Interviews	25	5	7	4	2	1	44

Table 1. Key Informant Interviews – National Level

*data collection was suspended for one month during this quarter due to earthquake

District and VDC Levels

Data collection at the district and VDC level occurred just once, in early 2015. A total of 55 district-level KIIs were conducted, with an additional 30 KIIs conducted at the VDC level. Tables 2a and 2b provide a breakdown of the interviews by group.

	Government sector	Donor agency	UN group	cso	Private sector	Research	Total
Achham	10	-	3	7	1	-	21
Kapilvastu	14	-	1	4	1	-	20
Parsa	12	-	1	1	-	-	14
							55

Table 2a. Key Informant Interviews – District Level

Table 2b. Key Informant Interviews – VDC Level

	Government sector	Donor agency	UN group	cso	Private sector	Research	Total
Achham	8	-	-	1	-	-	9
Kapilvastu	6	-	-	2	-	-	8
Parsa	9	-	-	4	-	-	13
							30

Key Informant Interview Tools

The NPC supported the national- and district-level KIIs by providing introduction letters. The Institutional Review Board (IRB) of John Snow, Inc. and the IRB of the Nepal Health Research Council (NHRC) approved the research protocol and the national KII guide.

National Level

The national KII guide for baseline data collection was developed to capture information related to the study objectives. The national KII guide included four sections: knowledge of and current responsibilities related to MSNP rollout; processes and rationales to identify and budget for selected priority activities to implement MSNP; perceptions of scaling up nutrition and its realization in Nepal through MSNP; and budgeting processes. Due to the differences in the functions that each stakeholder group assumes in support of the MSNP, a core body of questions was developed that applies to all groups. Specific questions were developed to ask each group of stakeholders about its unique contribution to the MSNP. Six sets of KII guides were developed, all following a similar structure.

The draft KII guide went through several rounds of deliberations and revisions among the case study team and the consultants. It was pilot-tested with a national nutrition leader in-country to assess the clarity and appropriateness of the questions, as well as the time required to complete all the questions. The KII guide was then finalized after the inputs and feedback from the pilot test were incorporated.

For follow-up interviewing, we used a semi-structured approach with usually three to five questions about a current event or budget activity. The design of the KII tool at endline followed a reiterative process, similar to that in the baseline, to ensure that the questions asked were relevant to KIs from all stakeholder institutions and closely related to the overall research questions of the case study.

The national endline KII guide included seven sections:

- knowledge of and current responsibilities related to MSNP rollout
- prioritization and budget processes
- influences on prioritization and budgeting processes
- perceptions on implementation
- coordination
- sustainability
- M&E and financial data reporting for MSNP.

Additional questions about specific events or themes identified throughout the case study for particular sectors were added to the KII guide at the endline.

District Level

For the district level, the KII guide adopted the overall structure of the national KII guide. Modifications were made to fit the MSNP and the SUN movement within the local context. The district KI guide was divided into five sections:

- current nutrition programs in the district and their funding sources
- understanding of the MSNP and its objectives
- identifying, prioritizing, and planning activities under MSNP
- district coordination and implementation of MSNP
- perceptions of scaling up.

News Content Analysis

A set of seven media/news sources were searched retrospectively each week using a set of search terms to follow the same stakeholder groups, related organizations, and events. Four **primary sources** were searched:

- The Kathmandu Post
- The Himalayan Times
- My Republica
- Kantipur

The **search terms** used to find relevant articles were: Nutrition, Health, Agriculture, Food Security, Water and Sanitation, Education, Earthquake, Budget, NPC, MoF, MoFALD, MoAD, MoH,¹⁴ MoWCSW, MoUD, MoE, Achham,

 $^{^{\}rm 14}$ now MoH

^{54 |} Pathways to Better Nutrition in Nepal

Kapilvastu and Parsa. If, in the weekly research meetings, specific projects or events were mentioned, those titles were also used in that week's search.

News articles were captured by the research analyst if they met specific inclusion criteria. These articles were summarized and presented for discussion with the entire case study team on a weekly basis. The qualitative analyst included the news articles in the master NVivo file for analysis and/or marked for use to guide follow-up with KIs.

Inclusion criteria:

- Mentions anything about the MSNP
- Mentions nutrition in any of the official policy or annual/multi-year plan for one of the key study sectors
- Mentions nutrition-related initiatives in one of the sectors above, or a major shift in ministry priorities
- Mentions developments in national (government-wide) budgets/finances concerning each of the above areas by the key study sectors
- Mentions flow of funding from national level to regions/districts/localities
- Mentions any major event that may have an impact on the budget or priorities of one of the sectors listed above (examples include natural events impacting food, agriculture, or access to public services such as the earthquake)

Table 3 shows the tallies of the news articles included in the final analysis, broken down by month and related stakeholder group. A total of 281 articles were included.

	Government sector	Donor agency	UN group	CSO/CBOs	Private sector	Research	Total
June 2014	*	*		*		*	12
July 2014	*	*			*	*	12
August 2014	*	*			*		14
September 2014	*	*		*			13
October 2014	*	*	*	*			16
November 2014	*	*	*	*	*		16
December 2014	*		*	*	*	*	16
January 2015	*					*	12
February 2015	*		*	*			5
March 2015	*	*		*	*		7
April 2015	*	*	*	*			17
May 2015	*	*				*	19
June 2015	*	*	*	*		*	22
July 2015	*	*	*	*	*	*	70
August 2015	*	*	*	*			19
September 2015	*	*	*				9
October 2015	*	*					2
Total							281

Table 3. Summary of News Article Collection for PBN Case Study – Aggregated by Month, with Relevant Stakeholder Groups Starred

Document Analysis

Three types of documents, in addition to published news, were collected continually throughout the study and used to identify changes regarding MSNP implementation and staffing. These documents were:

- **Meeting notes**: Official meeting notes were collected for MSNP and nutrition-related meetings, including MSNP working group meetings, NNFSS coordination committee meetings, MSNP review workshops, annual meeting of the Nepal Nutrition Foundation, meetings and workshops organized by CSANN, and a few sector review meetings.
- **Key documents**: New or modified documents of MSNP-related strategies and implementation plans were obtained and cited as needed for evidence of change in policy, plans, or implementation approach.
- **Event documentation**: These events included workshops, nutrition-related conferences, MSNP working group meetings, and fora that discuss MSNP. Where possible, the SPRING in-country team participated in these events, took notes, and obtained related materials (such as meeting minutes or presentation slides). Documents were summarized and presented at weekly staff meetings; inclusion of documents was agreed upon using the same inclusion criteria as the news content listed above.

Data Collection, Processing, and Analysis

Collection

The SPRING project conducted the baseline national interviews in July 2014 in Kathmandu. Follow-up interviews were scheduled throughout the case study timeline at the national level; endline interviews were conducted at the national level between October and December 2015.

District and VDC interviews were collected in Parsa, Achham, and Kapilvastu from February to April 2015. The timing for the district interviews was delayed at the request of donors and government officials, to allow for MSNP activities to begin in these districts. Due to the earthquake and blockade, this study modified its approach in the districts – this resulted in a cross-sectional dataset for the districts. Since the national study was longitudinal, we acknowledge that the district results will not provide as complete or up to date a picture as the rest of the study. The team conducted a rapid validation of the results in three case districts in February 2016 and March 2016 to identify what, if any, of the conclusions from the 2015 data were no longer reflective of the current situation in those districts.

All national- and district-level KIIs were scheduled to occur in the KIs' offices and lasted for 30 to 80 minutes. The support letter from the NPC was presented to every KI at the national level. Each KI was asked to sign a written informed consent form giving the case study team permission to 1) ask the KI questions and 2) record the conversation. In the baseline national interviews, all but two KIs agreed to be interviewed, and slightly more declined to be recorded. In the endline national interviews, none of the KIs refused to be interviewed and only 16 percent declined to be recorded.

All signed consent forms were kept in a safe place and submitted to the IRB of the NHRC upon the completion of the data collection.

When permission was granted, the interviews were recorded with a Sony MP3 Portable Digital Voice Recorder (Model ICD-PX333 and 312). In addition, the case study team and consultants took notes in English.

Processing

Notes from KIIs were reviewed on the day of the interviews. All handwritten notes were typed up within days of the interviews. The interviews were carried out in English and Nepali, or a mix of Nepali and English. At the district and village levels, the majority of interviews were conducted in Nepali, with some in Hindi (in Parsa and Achham) and English. Recordings were directly translated (if applicable) and transcribed into English. The recording was erased from the recorder once it was transferred to a computer for transcription. The file was permanently deleted from the computer once the transcription of notes was completed. For interviews that did not have accompanying recordings, notes from each of the case study team members present for the interview were consolidated and finalized. The full notes were transcribed verbatim and prepared in Microsoft Word documents. Each KI was assigned a code in the notes and transcripts. The codes and the transcripts/notes were stored in a folder on the SPRING project's central portal that is only accessible to authorized case study team members.

News sources and documents were copied and pasted into Microsoft Word documents, when possible (if a PDF or PowerPoint document, this was not possible). Each news source or document was identified by date published or by date of personal communication; if available, a URL link to the original source was provided. All news sources and documents are stored in a folder on the SPRING project's central portal.

Analysis

Transcripts, notes, news sources, and documents were uploaded and processed in NVivo 10 (QSR International, Australia). The SPRING project adopted the grounded theory approach to allow the key themes to emerge from the transcripts and notes (Lingard, Albert, and Levinson 2008). During the initial review of the transcripts/notes, special attention was paid to emerging themes that were most aligned with the case study's primary concerns about the prioritization and funding of activities for the rollout of MSNP, and with the key domains of the case study.

To generate themes, the research team met weekly; they discussed the information collected (or interviews transcribed), determined the relevance of the information to the research questions, and created action items for events that the research team needed to further investigate. The data streams served as probes for information or reactions during interviews. Research team members read through selected interviews and shared overall impressions from these discussions.

Initial codes (i.e., master nodes for coding in NVivo 10) were first identified after the baseline KI notes were reviewed. The case study team then discussed and determined the key themes of the technical briefs for the case study, which informed the codes created for analysis, including sub-nodes. These additional codes and sub-nodes were developed according to either the existing conceptual framework or themes emerging from the data, and were only added after discussion and consensus across the qualitative research team. A codebook was created to define the codes and sub-nodes .The coding was performed by a qualitative analyst and reviewed by the qualitative lead of the case study team.

Strengths and Limitations

Qualitative research methods have unique strengths and are appropriate to study a small number of cases in depth. They are also appropriate to describe and explain a complex process, such as implementing a country's scaled-up nutrition plan. For a longitudinal case study, qualitative methods have the flexibility to be responsive to changes in the field, improving the utility of the findings and recommendations through adaptation of data collection instruments and analysis. Asking the same questions of different individuals helps uncover discrepancies in facts and sequences, triangulate information to reach a consensus, and collect views and opinions—which could be divergent—on the implementation of national rollout. Such an exercise will reveal insights about why things are moving or not and indicate potential resolutions to challenges in the rollout.

Some general weaknesses of qualitative research also applied in this case study, namely that the study had a small sample size and was relatively resource intensive. Perhaps the weakness of greatest concern was that the results may not be directly generalizable to the other countries. The case study has tried to align reporting of findings to issues that can be applicable in other countries. SPRING also did a cluster analysis of other countries with similar nutrition governance, income, and socio-demographic characteristics, to identify where these findings may or may not have cross-country applicability.

The strengths and limitations of the quantitative portion of this study are addressed in the Budget Methods Annex and Snapshot Methods Annex.

Due to changes of personnel in the government and other stakeholder groups, some KIs who had been interviewed in the baseline did not serve the same role throughout the course of this prospective study. As such, the case study interviewed the incumbents of the "positions," not the individual KIs. The in-country case study researchers were active members in the country's nutrition community and they closely observed the personnel changes of KI positions so that follow-up interviews could be scheduled with the right individuals. With any new interviewee, the same procedures were followed regarding introduction letters and the signing and filing of consent forms. If in-country staff members identified new funding or activities over the course of the study through the other data streams, KIs from new organizations were also interviewed.

References

- Lingard, L., M. Albert, and W. Levinson. 2008. "Grounded Theory, Mixed Methods, and Action Research." *BMJ* 337: a567–a567. doi:10.1136/bmj.39602.690162.47.
- SUN. 2010. A Road Map for Scaling-Up Nutrition (SUN): First Edition. Geneva, Switzerland: SUN Movement.



Step 1. Sort your Date by Each Sector/Data Group

Sample list of groupings, to be adjusted according to context in each country

- ✓ Government: Ministry Of Health
- ✓ Government: Ministry of Education
- ✓ Government: Ministry of Agriculture
- ✓ Government: Ministry of Gender (Uganda) or Women, Children and Social Welfare (Nepal)
- ✓ Government: Ministry of Trade (Uganda only)
- ✓ Government: Ministry of Urban Development (Nepal only), Water and Environment (Uganda only)
- ✓ Government: Ministry of Local Government (Uganda) or Federal Affairs and Local Development (Nepal)
- ✓ Government: Ministry of Finance
- ✓ Government: OPM, NPA, parliament (Uganda); or NPC, NNFSS, parliament (Nepal) *include anyone in the nutrition coordination structure
- ✓ Academia
- ✓ Private sector
- ✓ CSO: Implementing community-based organizations
- ✓ CSO: Organizational bodies (CSANN and UCCO-SUN)
- ✓ Donors and UN groups combined, minus USAID and UNICEF and World Bank (Nepal only)
- ✓ Donors subgroup: USAID
- ✓ UN Groups subgroup: UNICEF
- ✓ Donors subgroup: World Bank

Step 2. Use the top row of the table below to make your timeline for each group. Be sure to note:

Date: Date of collection or publication for interview, news or notes

Data Type: National interview; district interview; news; meeting notes; budget validation

Data Source: If it is an interview, note the key informant code. Since several of these are mixed groups, it is also helpful to note which organization (e.g., FAO, WFP, if in UN group).

We need to identify *problem* timelines, where:

- 1. We have data only at the beginning or the end, even if there are multiple time points condensed into one of those periods
- 2. Position holders have changed multiple times (more than once for two or more of the group key informants)
- 3. We have two or fewer time points

Timeline for XX	Time point 1	Time point 2	Time point 3	Time point 4	Time Point n
(group name from step 1)	(date)	(date)	(date)	(date)	(date)
	(Data Type)				
	(Data source)				

Timeline can be done in Excel or in Word (Step 3).

Step 3. Analyze each timeline for change:

Once you have filled in the white boxes from Nvivo, this will give you an idea of which themes have data across the timeline, and then you can evaluate for change.

Use the green boxes to code for change in Nvivo. These should be a synthesis of the data (analysis) over the time points, not copying and pasting of data. Use the bottom row to note most marked change, and also whether you see gradual change over multiple time points, or one big change at one time point (also known as a turning point). Please note where on the timeline this change occurred. If no changes seem to be occurring, note this in the box.

With any theme, consider the following questions to determine if change occurred:

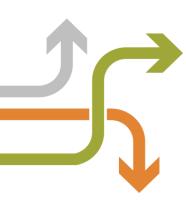
- Has any change occurred, even subtle change?
- What change occurred?
- How and through what mechanisms has changes occurred?
- Why has change occurred?*

Change Codes

- **perception** (stakeholders noted changes (or we note very clear changes) in their own or others attitudes, opinions, or knowledge)
- **behavior** (stakeholders noted changes in their own or others behavior in prioritization or budgeting)
- **structure** (documented policy or guideline change, political shifts, new positions, organizational change)
- implementation (documented change in activities or funding).

*Nepal—add child nodes to "Earthquake."

PULL FROM TIMELINE TABLE (STEP 2) Timeline for XX (group name from STEP 1)	Time point 1 (date) (Data Type) (Data source)	Time point 2 (date) (Data Type) (Data source)	Time point 3 (date) (Data Type) (Data source)	Time point 4 (date) (Data Type) (Data source)	Time Point n (date) (Data Type) (Data source)	
Theme	Time Point 1	Time Point 2	Time Point 3	Time Point 4	Time Point 5	Describe change type
Prioritization	Include reference to relevant quotes and text in Nvivo					(use codes)
Financing						
Scale-up						
Coordination						
Sustainable Structures						
Advocacy						
Adaptation						
Other emergent themes 1–n						
Structural change outside of themes (has KI left position, office reorganized, etc.)						
Analysis of most significant change across interview/time point (Pick the strongest area of change from above, or note any marked change in attitude, etc. IF THERE DOES NOT SEEM to be notable change anywhere, leave blank.)						



ANNEX 3

SPRING Pathways to Better Nutrition Budget Methods Nepal

Defining Budget Analysis

Political will for nutrition must be reflected through financial support at the national and subnational levels (USAID 2014). There are several steps involved in tracking financing support: costing, budget analysis, expenditure analysis, and expenditure tracking. Our efforts focused on budget and expenditure analysis: estimating what funding is allocated and spent to implement the nutrition activities in the MSNP.

Budget analysis can be defined as applied analysis of government and donor budgets with the explicit intention of having impact on a policy debate or furthering policy goals (International Budget Project 2001); it includes efforts to improve budget literacy of policymakers, program planners, and other key stakeholders. Our budget analysis is meant to better inform stakeholders advocating for the MSNP of their available resources. This can lead to more effective advocacy for greater nutrition funding, more transparency in how those funds will be spent, and clearer negotiation for donor funding.

We also conducted an **expenditure analysis** to determine what percentage of funds were spent for nutrition activities.

In conducting its budget analysis for nutrition in Nepal, we adhered to three key principles:

- 1. **Data is both taken from and defined by local documents,** relying on the MSNP activity matrix to define areas of analysis and local budget documents as primary data sources, with a preference for government documents for all data, including off-budget funding.
- 2. All analysis assumptions are aligned with the SUN 3-Step approach but then validated and adapted for the Nepali context, based on feedback from nutrition stakeholders in Nepal.
- 3. **Data collection, validation, and analysis were broken down by MSNP objective areas** to assist the National Planning Commission (NPC) and sectors in using it for future planning.

The MSNP contains an explicit implementation matrix (Annex I of the MSNP) that defines the interventions in support of the MSNP, expected outputs, the government agency responsible for leading each activity, and other participants. An approximate cost assigned to each activity is also included in the consolidated cost action plan in Annex I of the MSNP. The advantages of using this scheme are that the activities are set for the five-year period of the MSNP, allowing SPRING to follow the same set of activities over time.¹⁵ It also allowed for comparing estimated financial allocation and expenditures to the costed plan. Finally, by having both the qualitative and budget research teams work from the same document, the budget analysis was aligned with the qualitative assessment of prioritization.

Methods

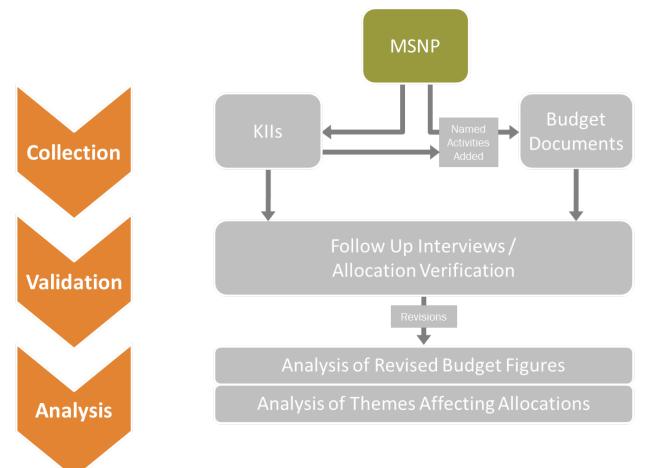
The PBN case study was a prospective, mixed-methods study. Budget analysis was an integral part of the study design, to compare with results of the qualitative data (collected via key information interviews (KIIs)) on activity prioritization and feed further inquiry into planning for nutrition. There were no standard documented methods for extracting budget data, especially for a subsector such as nutrition. For our methodology for extracting nutrition-specific and nutrition-sensitive funding data from donor and government budget documents, we adapted guidance from several sources:

¹⁵ However, the Government of Nepal has updated the MSNP activity matrices to take out or add new activities for each sector during the study period. SPRING has tried to incorporate these changes where possible in the analysis, but made sure to use the same set of activities for each fiscal year.

- SUN Donor Network guidance for tracking global investments in the Development Assistance Committee database (DAC) (SUN Donor Network 2013)
- International Budget Partnership (The International Budget Project 2001)
- Examination of the MSNP implementation matrix (GoN and NPC 2012)
- Cross-country learning with SPRING's Uganda PBN case study
- Consultation with the Nepali government ministries and key donors

We collected and analyzed budget data for **three budget cycles:** 2013–14, 2014–15, and 2015–16. We collected data at the national level for government, donor, and United Nations (UN) groups, and took an abbreviated look at secondary budget documents in three districts for government and selected donor funds. Figure 1 gives an overview of the process of data collection, validation, and analysis.

Figure 1. Summary of SPRING's Budget Methodology



We used the process for data extraction and analysis described below to address objectives 1 and 2 of the budget analysis. SPRING documented this process and developed tools to help others replicate this analysis to meet objective 3 (SPRING 2015). Figure 1 lays out the main steps of SPRING's process SPRING, which fall mainly under three areas: data collection, data validation, and data analysis. Further information on each area is included below. For additional detail on how to carry out a budget analysis activity, please see also our Budget Analysis Tool and User's Guide (SPRING 2015).



Data Collection

We took the following steps to ensure that all relevant data were collected for use in the budget analysis process:

- 1. Regular group extraction meetings to ensure all members of the PBN team understand the budget analysis process
- 2. Feedback on ambiguous terms to nutrition stakeholders for guidance
- 3. Notation and documentation in extraction sheets
- 4. Cross-referencing figures from multiple sources, where available

At both the national and district levels, we worked primarily with government budget documents to ensure that data were recognizable to the stakeholders who will be using the data. We compiled a preliminary list of budget headings that are nutrition-relevant from KIIs, where nutrition focal persons often identify nutrition-relevant activities during the qualitative data collection. These activities were shared with budget analysts on the PBN team, who used that information and the MSNP activity matrix to identify budget headings that may include nutrition-relevant funding and extract the information into an Excel file for the validation phase.

While it can be difficult to identify nutrition-relevant funding from the budget documents alone, PBN analysts focused on any budget headings that had objectives, outputs, or other descriptions that could align with one of the activities from the MSNP activity matrix. This broad collection of budget headings was validated by nutrition stakeholders within the ministry in budget validation meetings and triangulated with the information from qualitative interviews.

National Level

The team conducted qualitative and budget interviews with stakeholders from the six key groups named by SUN for scaling-up nutrition activities between July 2014 and December 2015.

Government

- National Planning Commission
- Ministry of Federal Affairs and Local Development (MoFALD)
- Ministry of Finance (MoF)
- Ministry of Agriculture and Development (MoAD)
- Ministry of Urban Development (MoUD)
- Ministry of Health (MoH)
- Ministry of Education (MoE)
- Ministry of Women, Children and Social Welfare (MoWCSW)

External Development Partners (EDPs)

- Donor agencies
- CSOs
- Business/private sector

• UN groups

• Academic/research institutions

We requested budgets, supplemental documents, work plans, and any other documents needed to identify nutrition funding for each of the groups **bolded** in the above lists. For the other groups, we inquired about approximate funding for their nutrition work and source of funding but did not pursue the full budgeting exercise.

On-Budget Funding

For on-budget funding (which includes all from government funds, as well as some from external sources), data collection focused on the Red Book budget, as well as more detailed sector or ministry work plans, when they were available.

For validation, we requested contacts for the planning offices related to all the line items identified. In each validation meeting with these planning offices, a questionnaire (included at the end of this annex) was used to help ensure thorough review of the data. Table 1 describes the breakdown of validation interviews for on-budget funding.

Nepal						
	Validation Interviews	Budget Headings				
MoAD	7	8				
MoE	3	4				
MoWCSW	2	2				
МоН	1	4				
MoFALD	6	11				
MoUD	5	11				
Totals	24	40				

Table 1. Number of Validation Interviews Conducted and Budget Headings by Sector

Off-Budget Funding

Off-budget funding (all other EDP activities) was first identified through the MoF's Aid Management Portal (AMP) (Vota 2013). Data on external funding, both on- and off-budget, were supplemented by responses from the qualitative interviews with donors and UN agencies.

AMP data are collected and reported very differently from the Red Book data. Initial extraction returned 1,100 entries for the first round (2013–14 and 2014–15), and an additional 210 entries for the second round (2015–16). Given the extensive number of projects and donors, in-person validation interviews were done only for a selection of the largest projects, four in total. As an alternative, we utilized the extensive project documentation required for nearly all EDP projects and conducted validation by reviewing every project's relevance, dates, objectives, outcomes, and indicators, as well as any financial data available, including total project commitments (Table 2).

Off-Budget							
	Validation Validation via Interviews Project Documents		Projects				
Donor	3	55	62				
UN	1	23	24				
CSO	0	29	29				
Private	0	1	1				
Other/Undefined	0	5	5				
Totals	4	113	121				

District Level

Due to resource constraints, the district-level analysis in Nepal was not as extensive as in the Ugandan PBN study. In Nepal, we collected government-proposed, confirmed and spent budgets for the MSNP line item funds starting in the 2014–15 fiscal year. These funds were discussed in all relevant district-level interviews with:

- Government (the seven sectors funded through this line item)
- UNICEF representative (who provided MSNP funding for the health sector)

In addition, we were able to collect qualitative information on the budgets and budgeting process from:

- Primary nutrition donor agencies operating in each district
- CSOs that carry out donor activities in each district

Where full district government budgets were also available, we used these to augment the final analysis.

Data Collection Examples

- a. The Red Book has a heading that includes "household food security" in the title. This would be added to the extraction sheet.
- b. A key informant mentions in the interview that her organization plans to implement a nutrition awareness day using funds from the Integrated District Health Program.

Both would be added to the preliminary list of headings in a budget extraction sheet.



Data Validation Process

After developing a preliminary list of nutrition-relevant budget headings, we validated the extracted ministry and EDP budget data through meetings with the key informants for each ministry or EDP. This validation

looked not only at whether the data were relevant to the MSNP, but also whether they were correctly categorized for data analysis (see data validation interview tool at the end of this annex). See below for more detail on data analysis classifications, but key informants were asked to validate whether the budget heading should be categorized as (1) stand-alone or integrated, (2) specific or sensitive, or (3) dominant or partial.

Any projects, programs, or activities that could not be validated by the country or global team (for donors) or line ministry or the NPC (for government) was dropped from the analysis. In this validation step, we researched and

included projects identified by key informants to ensure that supplemental documentation allowed them to be correctly added to the analysis.

Data Validation Example

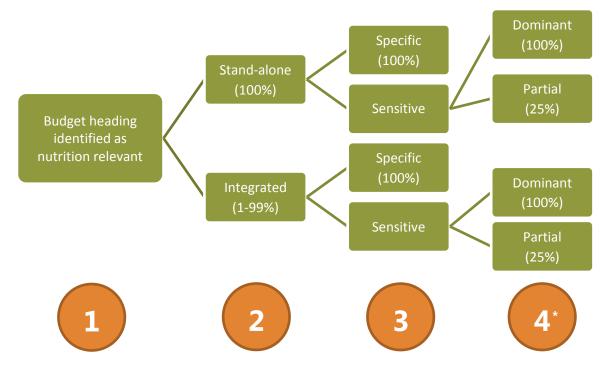
- a. Nutrition and budget staff within the ministry are asked to review the budget heading that includes "household food security." They confirm that this heading does include nutrition-related activities and that it is **integrated**, **sensitive**, and **dominant** (based on definitions presented below). They provide a budgeted work plan for that activity that provides the amount of the total budget heading that is going toward the nutrition-related activities. It remains in the budget extraction sheet with the total nutrition-related funding modified to match their estimate.
- b. During a validation meeting, the donor budget officer says that the nutrition awareness day was not included in the final official budget for the ministry budget heading. The activity is marked as "unfunded" in the budget extraction sheet and not included in subsequent analysis.

Data Processing and Analysis

We based our budget analysis process on budget data **collected** from documents and key informant interviews and **validated** through additional meetings and emails. From this point, data were analyzed according to a simple formula. The process is outlined in Figure 2. Our approach is based on and informed

by the SUN 3-Step Approach, but some modifications have been made to make it more specific to the Nepali context.

Figure 2. SPRING's Modified Analysis Approach



1. As described above, during the data **collection** and **validation** phases PBN analysts used Excel data extraction sheets to collect relevant data, including budget codes and other identifying information, budget heading descriptions, allocations, expenditures (if available), references to the MSNP activity matrix, and other

clarifying notes. If analysts discovered that an activity or budget heading was not actually relevant to the MSNP, they excluded it from the analysis.

- 2. **Integrated** means that the budget heading included a number of activities, and the nutrition-relevant activity is only a portion of the total amount reflected in the budget heading. In contrast, **stand-alone** budget headings include only nutrition-relevant activities (i.e., nutrition-relevant activities make up 100 percent of the budget heading). This classification was determined based on the available information in the budget, key informant interviews, and validation meetings. SPRING tried to work with the following budget documents to determine these breakdowns accurately:
 - Subheading budgets
 - Heading work plans or activity reports

When this was not possible, we used information on the budget heading objectives, listed activities, outputs, or inputs to estimate the percentage of the total going toward MSNP activities. For only three headings (district, village development committee [VDC], and municipality grants) were none of the above available to make an estimation. We assigned arbitrary weights of 20 percent for these three line items, based on work in other countries on subnational grants.

Data Analysis Example

The examples below illustrate some of the various ways that this classification could be made:

- a. A budget heading is described as a "food security and nutrition survey." This is an example of a budget heading where all funding is relevant to nutrition because all funding is going to support the nutrition activity. One hundred percent of the funding is counted for the data analysis process.
- b. A budget heading that is titled "Food Security" includes seven activities, two of which are nutritionrelated. In a validation interview, the budget officer confirms from a heading budget that these two activities are allocated 15 percent of the total heading. Thus, 15 percent of the total heading is counted for the data analysis process.
- 3. As described above, nutrition activities can be classified as **specific** or **sensitive**. For this analysis, the MSNP activity matrix defined the scope of programming that counted as nutrition-relevant, but this additional classification described the activity's effect on improving nutrition outcomes. PBN analysts used the definitions below, sourced from internationally recognized guidance (Lancet 2013a; SUN Donor Network 2013).

Nutrition-specific interventions: Directly address the immediate causes of malnutrition, including care, health, and feeding practices. These activities are often (but not always) addressed within the health sector.

<u>Nutrition-sensitive</u> interventions: Indirectly address the underlying and basic causes of malnutrition, which could include food security/availability, resources for feeding and caregiving, or access to health services, among others. These activities are most often addressed in non-health sectors such as agriculture, education, gender and social development, trade and industry, water and environment.

Those nutrition-relevant activities that fall within the scope of the MSNP but are not nutrition-specific we classified as nutrition-sensitive. The examples below illustrate some of the various ways that this classification could be made.

- a. A donor has budgeted for a vitamin A supplementation activity. This is on the list of nutrition-specific activities and included under MSNP Output 3.2, and would therefore be classified as nutrition-specific.
- b. We hear in an interview that a ministry budget heading includes identifying locally available foods for contributing to enhanced dietary diversification. This addresses MSNP Output 6.2, but it does not fit in the list of nutrition-specific activities, so it is categorized as nutrition-sensitive.
- c. A CSO is implementing a plan to reduce salt intake among school-age children. Some global actors consider this activity to be nutrition- sensitive (or even nutrition-specific), but it is not addressed in the MSNP activity matrix. Funding for this activity will not be included in the final analysis.
- 4. For nutrition-sensitive activities only, the SUN Donor Network and 3-Step Approach have encouraged the use of weights to adjust final estimates to account for the activity's contribution to the nutrition outcomes, in effect reducing the influence of activities that were not explicitly planned to improve nutrition. In practice, this effort has been difficult. The SUN Donor Network admits that "although partially mitigated by a detailed methodology with stringent criteria for inclusion, the approach is subjective" (SUN 2013). Given the subjectivity of the weights, we present all final results **unweighted** in the main report, but with annex tables provided with weights if a country chooses to use them.

If you choose to use weighted results: To reduce subjectivity as much as possible, the PBN analysts used the following definitions to classify nutrition-sensitive activities. Keep in mind that SUN guidance on what weights to use for each type of activity is rapidly evolving, so countries should refer to SUN's latest guidance before using.

Dominant nutrition activities (either in a stand-alone budget heading or as an integrated portion): if the stated primary objective, results, outcomes, and indicators of the project have a direct effect on nutrition-sensitive activities. These budget headings are counted at 100 percent.

Partial nutrition activities (either in a stand-alone budget heading or as an integrated portion): if only secondary objectives, results, outcomes, and indicators of the project have an indirect effect on nutrition-sensitive activities. These lines are counted at only 25 percent. The reason for this suggested weighting is to avoid overcounting those activities with only a distant effect on nutrition outcomes. For example, a large-scale project like a social safety net with child cash transfers often has only secondary nutrition-related goals, despite being included in the MSNP.

This distinction was made during data validation interviews, with PBN analysts asking respondents whether the nutrition goals for an activity were the primary goals or if they were only of secondary (or lower) importance. The examples below illustrate some of the various ways that this classification could be made.

- a. A community-led micro-irrigation activity (Output 6.1 in MSNP) lists improving nutrition of smallholder farmers as an explicit goal in the work plan provided during validation. This budget heading is classified as nutrition-sensitive **dominant** and counted at 100 percent.
- b. Funding for an open defecation–free activity (Output 5.2 in MSNP) has a primary goal of reducing disease, but does not mention nutrition in any of its secondary goals, outcomes, or indicators. This budget heading is classified as nutrition-sensitive **partial** and counted at 25 percent.

Once the budget heading has been classified according to these breakdowns, a simple formula was applied to obtain analysis results:

- For **unweighted estimates**, simply calculate the *amount of funding relevant to nutrition*:
 - This is the full "allocated budget" for stand-alone budget headings.
 - For integrated budget headings, the nutrition-related funding amount is "allocated budget" multiplied by the integration percentage.

Note: While unweighted results do not differentiate between amounts that are nutrition-specific or nutrition-sensitive, it can still be illustrative to look at the results separately for each group.

- To obtain weighted estimates, multiply the amount of funding relevant to nutrition by:
 - o 25% for budget headings classified as nutrition-sensitive-partial
 - o 100% for budget headings classified as nutrition-specific or nutrition-sensitive-dominant

Note: These weighted results **should not** be used for routine accounting or M&E purposes. They are most useful for advocacy campaigns and for reporting to SUN.

Additional Considerations for Data Analysis

Exchange Rates

All ministry budget data are in current-year Nepali rupees (Rs). However, the MoF reported off-budget donor funding in current-year U.S. dollars (USD). We report final estimates in both USD and Rs. Inter-bank exchange rates averaged over each year were used from the Nepal Rashtra Bank's "Current Macroeconomic and Financial Situation 2015–16."

Deflation/Inflation Rates and Base Year

National level analysis began at 2013–2014. For final reporting, we used nominal values for current-year estimates. For any discussion of the change over time, the figures were inflated to 2015–2016 dollars. Inflation rates come from Nepal Rashtra Bank's "Current Macroeconomic and Financial Situation 2015–16."

Tracking Overlapping Donor Funds

Funding lines in some groups overlapped, particularly for donor, UN, and CSOs. Many bilateral donors provided funding to UN agencies and CSOs, as well as to the Government of Nepal. When funding UN agencies, bilaterals rarely identified the funding as nutrition, which meant the UN agency decided how to allocate those funds within the larger category of giving. We chose to follow donor and UN funds at the project level, rather than starting from the top (i.e., global allocation level), which meant that these funds counted as UN funds. For CSOs, the AMP often had a secondary designation of the donor giving the funding to that CSO—for these activities we counted only the donor funds and not the CSO funds to avoid double counting.

Limitations

Data Quality

In the AMP, while the list of EDP projects was comprehensive and total project commitments were reported for all entries, actual yearly commitments and disbursements were missing for many activities. Where we could not complete these data from our interviews, we imputed the missing data from the total project commitment figure divided by the number of project years. This applies to approximately 50 percent of EDP projects, those that are off-budget.

On-budget EDP projects and Government of Nepal (GoN) activities were unaffected, since Red Book data appeared to be of good quality. In validation interviews with government officials, only one correction was made to an on-budget expenditure figure for 2013–2014 and 2014–2015, and none were made for 2015–2016.

Subjectivity of "Sensitive"

Defining 'nutrition-sensitive' can be complicated. Changes have occurred in the designation of nutrition-sensitive categories and how to weight them at the global level—SUN now has draft guidance that has moved away from set weights for nutrition-sensitive activities, and has added some new categories. Using the MSNP activity list allowed us to maintain a standard set of activities to track over time. In addition, since we did not use any weights in our final analysis, these changes did not affect the main results. However, the supplementary weighted figures were affected and may not align with the latest global set of weighting. We have provided a breakdown of funding by dominant and partial in Annex 5 that allows GoN and other to change weights as needed.

Evolution of Nutrition Designation

We based this analysis on what was included in the MSNP. However, during the period of the study, MoWCSW's role was slightly expanded, and certain activities listed in the original MSNP were also cut, such as MSNP Output 6.4: Provide support for clean and cheap energy to reduce women's workload. This final analysis reflects the list of MSNP as of mid-2015.

References

- Government of Nepal, and NPC. 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)." Government of Nepal.
- Lancet. 2013a. "2013 Lancet Series: Maternal and Child Nutrition." June 6. http://www.thelancet.com/series/maternal-and-child-nutrition.
- Lancet, The. 2013b. "Executive Summary of The Lancet Maternal and Child Nutrition Series." *The Lancet Global Health* 382 (9890). http://download.thelancet.com/flatcontentassets/pdfs/nutrition-eng.pdf.
- Scaling Up Nutrition. 2013. "SUN Donor Network Resource Tracking." In SUN Movement Annual Progress Report 2014, 38–41. http://scalingupnutrition.org/wp-content/uploads/2014/11/141117-SUN-Donor-Resource-Tracking.pdf.
- SPRING. 2015. "User's Guide to the Nutrition Budget Analysis Tool." Arlington, VA: Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) Project. https://www.springnutrition.org/publications/series/users-guide-nutrition-budget-analysis-tool/budget-analysis-process.
- SUN Donor Network. 2013. "Methodology and Guidance Note to Track Global Investments in Nutrition." Scaling Up Nutrition. http://scalingupnutrition.org/wpcontent/uploads/2013/12/RESOURCE_TRACKING_METHODOLOGY_SUN_DONOR_NETWORK.pdf.
- The International Budget Project. 2001. "A Guide to Budget Work for NGOs." Washington, D.C.: Center on Budget and Policy Priorities. www.internationalbudget.org.
- USAID. 2014. "Multi-Sectoral Nutrition Strategy 2014-2025." http://www.usaid.gov/sites/default/files/documents/1867/USAID_Nutrition_Strategy_5-09_508.pdf.

Vota, Wayan. 2013. "Nepal Aid Management Platform Goes Public." *Development Gateway*. June 25. http://www.developmentgateway.org/2013/06/25/nepal-aid-management-platform-goes-public/.

Sample Data Validation Tool

For Ministry X Budget Activities

INTERVIEWER STEP 1: CIRCLE THE LINE ITEM YOU ARE GOING TO DISCUSS BELOW – only fill in answers for that ONE line item in this sheet. Please print enough questionnaires for each line item in this list.

Heading # 1	Heading Title 1
Heading # 2	Heading Title 2
Heading # 3	Heading Title 3
Heading # n	Heading Title n

Q#	Question (INTERVIEWER: FILL OUT IN ENTRY FORM ONLY FOR CIRCLED LINE ITEM ABOVE)	Answer
1	Does the budget line item listed have any component related to nutrition?	YES or NO (If no, show national nutrition action plan (NNAP) activity list. If still no, END of interview)
2	We would like to estimate what part of this budget line item is related to nutrition. Can you share with us a work plan or budget breakdown of this line item, or provide a specific amount of funding going toward nutrition? (If no, ask them to estimate percentage based on objectives, outputs, and/or indicators of heading.)	YES or NO Document provided (keep copy): Or estimated %:
3	(If no work plan, or confusion) As compared to the NNAP activity list (at end of this file) , can you describe for us what within this heading is related to these NNAP activities (list activities), and approximately what the budget was for?	Estimated Amount:
4	For nutrition-sensitive activities, does this nutrition activity have a primary (is the main objective of this work to improve nutrition) or a secondary outcome of improving nutrition?	PRIMARY SECONDARY
5	If secondary, are you able to estimate what percentage of the nutrition portion of this line item is focused on improving nutrition?	% Or DO NOT KNOW
6	Please see the <i>expenditure</i> figure for this line item. This comes from the (YEAR, BUDGET DOCUMENT TITLE, and specify which year of data it represents). Can you tell us if you believe this figure has changed since the budget was published?	YES or NO If no, go to #8

Q#	Question (INTERVIEWER: FILL OUT IN ENTRY FORM ONLY FOR CIRCLED LINE ITEM ABOVE)	Answer
7	If so, whom should we contact for the revised amounts?	
8	Do you plan to continue the nutrition activities in this line item for next year (e.g., 2016–2017)?	YES or NO

ONCE COMPLETED, ENTER ALL DATA INTO WORKSHEET (Validation Interview Tool_Govt_WORKSHEET.xls)

INTERVIEWER STEP 2: After reviewing all line items, please answer:

1. Which nutrition-related activities in your budget have we forgotten to include? Please list line item and nutrition related aspect:

Heading number	Heading or Project Title	Year of Line Item	Are Figures in Budget Accurate?	Stand-alone or integrated (see Q2-3)	Specific or Sensitive? (if specific, list from options on last page)	Dominant or Partial (see Q4-5)

2. Are there any new NNAP-related activities being planned for FY 2016–2017? YES NO

If YES, Please list:

Full Budget Entry:

Heading number	Heading or Project Title	NNAP or Identified Activity	Funding Type	Source of Funds	13–14 Allocated	13–14 Expend	14–15
-------------------	--------------------------	-----------------------------------	--------------	--------------------	--------------------	-----------------	-------

Nutrition-Specific Activities

SPRING defines the following activities as nutrition-specific:

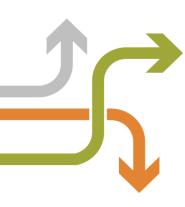
- Management of severe acute malnutrition
- Preventive zinc supplementation
- Promotion of breastfeeding
- Appropriate complementary feeding
- Management of moderate acute malnutrition
- Peri-conceptual folic acid supplementation or fortification

7, | Pathways to Better Nutrition in Nepal

- Maternal balanced-energy protein supplementation
- Maternal multiple micronutrient supplementation
- Vitamin A supplementation
- Maternal calcium supplementation

This matches the list given in the executive summary of the 2013 Lancet Series (Lancet 2013b). The one additional consideration SPRING gives for donor funding is whether the government has explicitly named it as nutrition funding.

NNAP Activity List (Numbered for Easy Identification)





Snapshots of Nutrition in Nepal

"Snapshots of Nutrition" Reader's Guide

These snapshots are intended to present the diversity of factors affecting malnutrition in the country based upon the dimensions outlined by Nepal's Multi-Sector Nutrition Plan (MSNP). Best read alongside other evidence from SPRING's 'Pathways to Better Nutrition' (PBN) Case Study Series, the snapshots can be used in the following ways:

- By nutrition program planners in Nepal to help inform what weaknesses are, and are not, modifiable in their subregion; what new interventions to plan and advocate for in next year's work plan; and what aspects of current interventions may need revision in order to meet the 2017 MSNP targets.
- By nutrition policy makers in Nepal at the national and local level to prioritize plans and funding for activities tailored to improve the indicators furthest from the national average or MSNP targets.
- By nutrition monitoring and evaluation officers both in Nepal and elsewhere to use as a data point to work from in planning their evaluation of the effectiveness of the MSNP from 2013 onward.

Snapshots of Nutrition in Nepal: Achham District

These district snapshots have been constructed as part of the "Pathways to Better Nutrition" (PBN) case studies implemented by the USAID-funded SPRING project, focusing on three case study districts where SPRING and its partners have done extensive data collection.

Using key indicators and objectives named in the 2012 Multi-Sector Nutrition Plan (MSNP), the snapshots present the diversity of factors affecting malnutrition in the country. These district snapshots are best interpreted in conjunction with other SPRING PBN products, including Factors Affecting Nutrition around Nepal, Sub-Regional Snapshots of Nutrition around Nepal (Pomeroy and Wun 2014).

The snapshots assess what objectives or set of constraints are most pressing in each district.

The contextual factors that will affect subnational implementation of national nutrition policy may vary across regions and districts.

SUMMARY OF KEY MSNP INDICATORS FOR ACHHAM DISTRICT

Key Indicator	Level in Achham District	MSNP National Target (2017)
Completion of primary education ⁵	49.36%	(Increased)
Stunting, children under 5 years ⁶	51.7%	29%
Underweight, children under 5 years ⁶	36%	20%
Wasting, children under 5 years ⁶	10.7%	5%
Outcome Indicator	Level in Achham District	MSNP National Target (2017)
3 IYCF practices ⁷	30%	(Increased)
Any anemia, children 6-59 months ⁴	41%	(Reduced)
Any anemia, women of reproductive age ⁴	29%	(Reduced)
ARI incidence rate among children under		
5 years (per 1000) ^{8*}	1924.17	(Reduced)
Diarrhea incidence rate among children under		
5 years (per 1000) ^{8*}	1424.66	(Reduced)

Sources: ⁴UNFCO(2013), ⁵Intensive Study and Research Center (2014), ⁶CBS, NPC, WFP, UNICEF and The World Bank (2014), ⁷DoHS (2014), ⁸HMIS (2013/14) ^{*}In a year, a child can have more than one incidence of diarrhea/Acute respiratory infection (ARI)

DESCRIPTION OF ACHHAM DISTRICT CHARACTERISTICS (IN COMPARISON TO NATIONAL STATISTICS)

Location¹: Rural

Road Density²: Above Average (9 km/100 km²)

Poverty Headcount³: Below Average (47.2%)

Women's Literacy Rate⁴: Below Average (37%)



Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq km=Urban, >300 persons per sq km=Rural. Source: ¹CBS (2012)

Road density is calculated as the ratio of the total length of road (in km) to the total land area (in km2). Source: 2 DoR (2013/14)

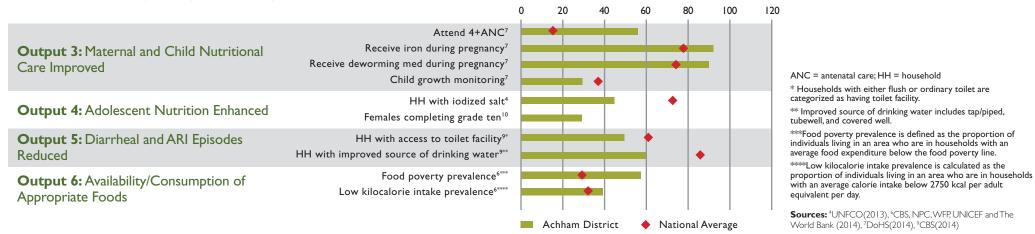
Poverty headcount. Source: ³CBS and The World Bank (2013)

Women's literacy rate is for fifteen years and above. Source: ⁴UNFCO (2013)

MSNP Output Descriptions:

- Outputs 1-2: Refer to policy development and coordination (no district barriers/drivers available)
- Output 3: Maternal and child nutritional care service utilization improved
- Output 4: Adolescent girls' parental education, life skills, and nutrition status enhanced
- Output 5: Diarrheal diseases and ARI episodes reduced among young mothers, adolescent girls, and infants and young children
- Output 6: Availability and consumption of appropriate foods (in terms of quality, quantity, frequency, and safety) enhanced and women's workload reduced
- Outputs 7-8: Refer to human resources and information systems (no district barriers/drivers available)

Drivers and Barriers are organized by the bolded outputs.



Sources

Central Bureau of Statistics. 2012. National Population and Housing Census 2011 (National Report). Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat, Central Bureau of Statistics.

²Department of Roads. 2014. Strategic Road Network of Nepal 2013/14. Kathmandu, Nepal: Government of Nepal Ministry of Physical Infrastructure & Transport, Department of Roads.

³CBS, and The World Bank. 2013. Small Area Estimation of Poverty, 2011. Kathmandu, Nepal: Central Bureau of Statistics, The World Bank.

⁴UNFCO. 2013. United Nations Field Coordination Office (UNFCO), District Profiles 2013 (Achham, Parsa, Kapilvastu). Nepal: UNFCO.

⁵Intensive Study and Research Center Pvt. Ltd. 2014. District and VDC Profile of Nepal 2014/15:A Socio-Economic Development Database of Nepal. Fifth. Kathmandu, Nepal: BookArt Nepal.

⁶Haslett, Stephen, Geoffrey Jones, Maris Isidro, and Alison Sefton. 2014. Small Area Estimation of Food Insecurity and Undernutrition in Nepal. Kathmandu, Nepal: Central Bureau of Statistics, National Planning Commissions Secretariat, World Food Programme, UNICEF and World Bank.

⁷Ministry of Health and Population. 2014. Department of Health Services, Annual Report 2070/71 (2013/2014). Kathmandu, Nepal: Government of Nepal Ministry of Health and Population, Department of Health Services.

 $^8\mathrm{Nepal}$ HMIS 2013/4 Data – data provided by the HMIS division.

9Nepal Central Bureau of Statistics. 2014. Population Monograph of Nepal (Economic Demography). First. Vol. III. 3 vols. Kathmandu, Nepal: Central Bureau of Statistics.

¹⁰DEO 2015 - data provided by District Education Office, Achham

This snapshot is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of the Cooperative Agreement AID-OAA-A-11-00031 (SPRING), managed by JSI Research & Training Institute, Inc. (JSI) with partners Helen Keller International, the Manoff Group, Save the Children, and the International Food Policy Research Institute. The contents are the responsibility of JSI, and do not necessarily reflect the views of USAID or the United States Government.

Snapshots of Nutrition in Nepal: Kapilvastu District

These district snapshots have been constructed as part of the "Pathways to Better Nutrition" (PBN) case studies implemented by the USAID-funded SPRING project, focusing on three case study districts where SPRING and its partners have done extensive data collection.

Using key indicators and objectives named in the 2012 Multi-Sector Nutrition Plan (MSNP), the snapshots present the diversity of factors affecting malnutrition in the country. These district snapshots are best interpreted in conjunction with other SPRING PBN products, including Factors Affecting Nutrition around Nepal, Sub-Regional Snapshots of Nutrition around Nepal (Pomeroy and Wun 2014).

The snapshots assess what objectives or set of constraints are most pressing in each district.

The contextual factors that will affect subnational implementation of national nutrition policy may vary across regions and districts.

SUMMARY OF KEY MSNP INDICATORS FOR KAPILVASTU DISTRICT

Key Indicator	Level in Kapilvastu District	MSNP National Target (2017)
Completion of primary education ⁵	49.24%	(Increased)
Stunting, children under 5 years ⁶	35.9%	29%
Underweight, children under 5 years ⁶	46.4%	20%
Wasting, children under 5 years ⁶	25.8%	5%
Outcome Indicator	Level in Kapilvastu District	MSNP National Target (2017)
3 IYCF practices ⁷	23%	(Increased)
Any anemia, children 6-59 months ⁴	49%	(Reduced)
Any anemia, women of reproductive age ⁴	33%	(Reduced)
ARI incidence rate among children under		
5 years (per 1000) ^{8*}	520.27	(Reduced)
Diarrhea incidence rate among children under		
5 years (per 1000) ^{8*}	473.72	(Reduced)

Sources: ⁴UNFCO(2013), ⁵Intensive Study and Research Center (2014), ⁴CBS, NPC, WFP, UNICEF and The World Bank (2014), ⁷DoHS (2014), ⁸HMIS (2013/14) ^{*}In a year, a child can have more than one incidence of diarrhea/Acute respiratory infection (ARI)

DESCRIPTION OF KAPILVASTU DISTRICT CHARACTERISTICS (IN COMPARISON TO NATIONAL STATISTICS)

Location¹: Peri-Urban

Road Density²: Above Average (13 km/100 km²)

Poverty Headcount³: Below Average (35.5%)

Women's Literacy Rate⁴: Below Average (45%)



Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq km=Urban, >300 persons per sq km=Rural. Source: ¹CBS (2012)

Road density is calculated as the ratio of the total length of road (in km) to the total land area (in km2). Source: 2 DoR (2013/14)

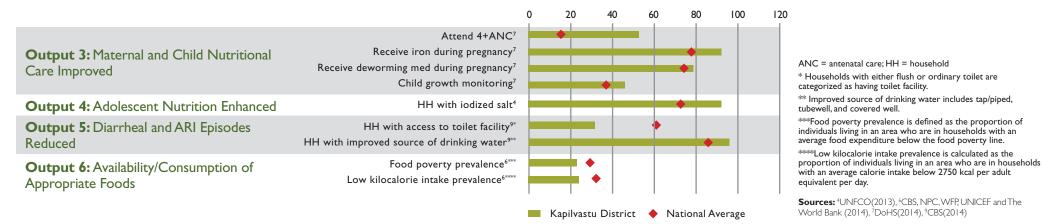
Poverty headcount. Source: ³CBS and The World Bank (2013)

Women's literacy rate is for fifteen years and above. Source: ⁴UNFCO (2013)

MSNP Output Descriptions:

- Outputs 1-2: Refer to policy development and coordination (no district barriers/drivers available)
- Output 3: Maternal and child nutritional care service utilization improved
- Output 4: Adolescent girls' parental education, life skills, and nutrition status enhanced
- Output 5: Diarrheal diseases and ARI episodes reduced among young mothers, adolescent girls, and infants and young children
- Output 6: Availability and consumption of appropriate foods (in terms of quality, quantity, frequency, and safety) enhanced and women's workload reduced
- Outputs 7-8: Refer to human resources and information systems (no district barriers/drivers available)

Drivers and Barriers are organized by the bolded outputs.



Sources

Central Bureau of Statistics. 2012. National Planning Commission Secretariat, Central Bureau of Statistics.

²Department of Roads. 2014. Strategic Road Network of Nepal 2013/14. Kathmandu, Nepal: Government of Nepal Ministry of Physical Infrastructure & Transport, Department of Roads.

³CBS, and The World Bank. 2013. Small Area Estimation of Poverty, 2011. Kathmandu, Nepal: Central Bureau of Statistics, The World Bank.

⁴UNFCO. 2013. United Nations Field Coordination Office (UNFCO), District Profiles 2013 (Achham, Parsa, Kapilvastu). Nepal: UNFCO.

⁵Intensive Study and Research Center Pvt. Ltd. 2014. District and VDC Profile of Nepal 2014/15:A Socio-Economic Development Database of Nepal. Fifth. Kathmandu, Nepal: BookArt Nepal.

⁶Haslett, Stephen, Geoffrey Jones, Maris Isidro, and Alison Sefton. 2014. Small Area Estimation of Food Insecurity and Undernutrition in Nepal. Kathmandu, Nepal: Central Bureau of Statistics, National Planning Commissions Secretariat, World Food Programme, UNICEF and World Bank.

⁷Ministry of Health and Population. 2014. Department of Health Services, Annual Report 2070/71 (2013/2014). Kathmandu, Nepal: Government of Nepal Ministry of Health and Population, Department of Health Services.

⁸Nepal HMIS 2013/4 Data – data provided by the HMIS division.

⁹Nepal Central Bureau of Statistics. 2014. Population Monograph of Nepal (Economic Demography). First Vol. III. 3 vols. Kathmandu, Nepal: Central Bureau of Statistics.

¹⁰DEO 2015 - data provided by District Education Office, Achham

This snapshot is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of the Cooperative Agreement AID-OAA-A-I I-00031 (SPRING), managed by JSI Research & Training Institute, Inc. (JSI) with partners Helen Keller International, the Manoff Group, Save the Children, and the International Food Policy Research Institute. The contents are the responsibility of JSI, and do not necessarily reflect the views of USAID or the United States Government.

Snapshots of Nutrition in Nepal: Parsa District

These district snapshots have been constructed as part of the "Pathways to Better Nutrition" (PBN) case studies implemented by the USAID-funded SPRING project, focusing on three case study districts where SPRING and its partners have done extensive data collection.

Using key indicators and objectives named in the 2012 Multi-Sector Nutrition Plan (MSNP), the snapshots present the diversity of factors affecting malnutrition in the country. These district snapshots are best interpreted in conjunction with other SPRING PBN products, including Factors Affecting Nutrition around Nepal, Sub-Regional Snapshots of Nutrition around Nepal (Pomeroy and Wun 2014).

The snapshots assess what objectives or set of constraints are most pressing in each district.

The contextual factors that will affect subnational implementation of national nutrition policy may vary across regions and districts.

SUMMARY OF KEY MSNP INDICATORS FOR PARSA DISTRICT

Key Indicator	Level in Parsa District	MSNP National Target (2017)
Completion of primary education ⁵	45.5%	(Increased)
Stunting, children under 5 years ⁶	38.5%	29%
Underweight, children under 5 years ⁶	34%	20%
Wasting, children under 5 years ⁶	15.5%	5%
Outcome Indicator	Level in Parsa District	MSNP National Target (2017)
3 IYCF practices ⁷	9%	(Increased)
Any anemia, children 6-59 months⁴	47%	(Reduced)
Any anemia, women of reproductive age ⁴	43%	(Reduced)
ARI incidence rate among children under		
5 years (per 1000) ^{8*}	537.72	(Reduced)
Diarrhea incidence rate among children under		
5 years (per 1000) ^{8*}	416.40	(Reduced)

Sources: ⁴UNFCO(2013), ⁵Intensive Study and Research Center (2014), ⁶CBS, NPC, WFP, UNICEF and The World Bank (2014), ⁷DoHS (2014), ⁸HMIS (2013/14) ^{*}In a year, a child can have more than one incidence of diarrhea/Acute respiratory infection (ARI).

DESCRIPTION OF PARSA DISTRICT CHARACTERISTICS (IN COMPARISON TO NATIONAL STATISTICS)

Location': Peri-Urban

Road Density²: Below Average (6 km/100 km²)

Poverty Headcount³: Below Average (29.2%)

Women's Literacy Rate⁴: Below Average (44%)



Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq km=Urban, >300 persons per sq km=Rural. Source: ¹CBS (2012)

Road density is calculated as the ratio of the total length of road (in km) to the total land area (in km2). Source: 2 DoR (2013/14)

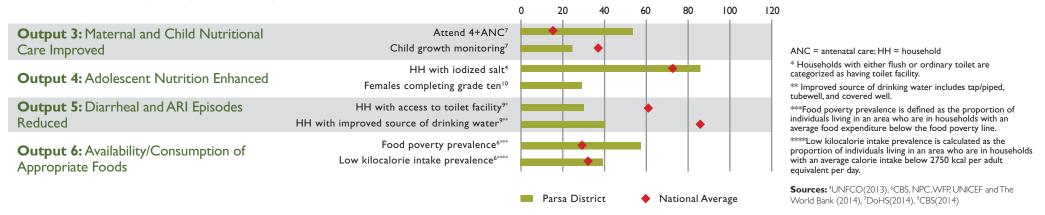
Poverty headcount. Source: ³CBS and The World Bank (2013)

Women's literacy rate is for fifteen years and above. Source: ⁴UNFCO (2013)

MSNP Output Descriptions:

- Outputs 1-2: Refer to policy development and coordination (no district barriers/drivers available)
- Output 3: Maternal and child nutritional care service utilization improved
- Output 4: Adolescent girls' parental education, life skills, and nutrition status enhanced
- Output 5: Diarrheal diseases and ARI episodes reduced among young mothers, adolescent girls, and infants and young children
- Output 6: Availability and consumption of appropriate foods (in terms of quality, quantity, frequency, and safety) enhanced and women's workload reduced
- Outputs 7-8: Refer to human resources and information systems (no district barriers/drivers available)

Drivers and Barriers are organized by the bolded outputs.



Sources

Central Bureau of Statistics. 2012. National Population and Housing Census 2011 (National Report). Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat, Central Bureau of Statistics.

²Department of Roads. 2014. Strategic Road Network of Nepal 2013/14. Kathmandu, Nepal: Government of Nepal Ministry of Physical Infrastructure & Transport, Department of Roads.

³CBS, and The World Bank. 2013. Small Area Estimation of Poverty, 2011. Kathmandu, Nepal: Central Bureau of Statistics, The World Bank.

⁴UNFCO. 2013. United Nations Field Coordination Office (UNFCO), District Profiles 2013 (Achham, Parsa, Kapilvastu). Nepal: UNFCO.

⁵Intensive Study and Research Center Pvt. Ltd. 2014. District and VDC Profile of Nepal 2014/15:A Socio-Economic Development Database of Nepal. Fifth. Kathmandu, Nepal: BookArt Nepal.

⁶Haslett, Stephen, Geoffrey Jones, Maris Isidro, and Alison Sefton. 2014. Small Area Estimation of Food Insecurity and Undernutrition in Nepal. Kathmandu, Nepal: Central Bureau of Statistics, National Planning Commissions Secretariat, World Food Programme, UNICEF and World Bank.

7/Ministry of Health and Population. 2014. Department of Health Services, Annual Report 2070/71 (2013/2014). Kathmandu, Nepal: Government of Nepal Ministry of Health and Population, Department of Health Services.

⁸Nepal HMIS 2013/4 Data – data provided by the HMIS division.

9Nepal Central Bureau of Statistics. 2014. Population Monograph of Nepal (Economic Demography). First Vol. III. 3 vols. Kathmandu, Nepal: Central Bureau of Statistics.

¹⁰DEO 2015 - data provided by District Education Office, Achham

This snapshot is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of the Cooperative Agreement AID-OAA-A-11-00031 (SPRING), managed by JSI Research & Training Institute, Inc. (JSI) with partners Helen Keller International, the Manoff Group, Save the Children, and the International Food Policy Research Institute. The contents are the responsibility of JSI, and do not necessarily reflect the views of USAID or the United States Government.

SUMMARY OF KEY MSNP INDICATORS* FOR CENTRAL HILL SUBREGION

Key Indicator	Level in Central Hill	MSNP National Target (2017)
Completion of primary education ¹	40.2%	(increased)
Low birthweight (<2.5kg) ¹	18.3%	(reduced)
Stunting, children under 5 years ¹	31.3%	29%
Underweight, children under 5 years ¹	22.5%	20%
Underweight, non-pregnant women ¹	11.5%	15%
Wasting, children under 5 years ¹	10.3%	5%
Outcome Indicator		
3 IYCF practices, children 6–23 months ¹	36.0%	(increased)
Access to SAM services	unavailable	(increased)
Any anemia, children 6–59 months ¹	40.2%	(reduced)
Any anemia, WRA ¹	19.5%	(reduced)
ARI in past 2 weeks, children under 2 years ¹	3.8%	(reduced)
Daily workload, women ²	6.9 hours	(reduced)
Diarrhea in past 2 weeks, children under 2 years ¹	11.2%	(reduced)
Early initiation of breastfeeding ¹	40.3%	(increased)
Indoor smoke exposure, children under 5 years	unavailable	(reduced)
Indoor smoke exposure,WRA	unavailable	(reduced)
lodine Deficiency, children 6–23 months	unavailable	(reduced)
Vitamin A deficiency, children 6–23 months	unavailable	(reduced)

*The MSNP names several outcome level activities, only those named as an indicator are listed here. IYCF = Infant and Young Child Feeding; SAM = Severe Acute Malnutrition; ARI = Acute Respiratory Infection. Daily workload is defined as the weekly number of hours spent on household or employment per week, divided by 7.

Sources: Nepal MoHP, New ERA, ICF International Inc. (2012); ² Nepal CBS (2012b); ³ Government of Nepal NPC (2012).

DESCRIPTION OF CENTRAL HILL CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Peri-Urban

Households in lowest national wealth quintile*: Above average (20%)

Percentage of households on paved road: Above average (80%)

Households receiving remittances: Below average (37%)

Literacy rate for women of reproductive age: Above average (76%)

Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq. km.=Urban, 500< persons per sq. km.>300=Peri-Urban, <300 persons per sq. km.=Rural. Source: Nepal CBS (2012a).

*Considered a measure of poverty. Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).

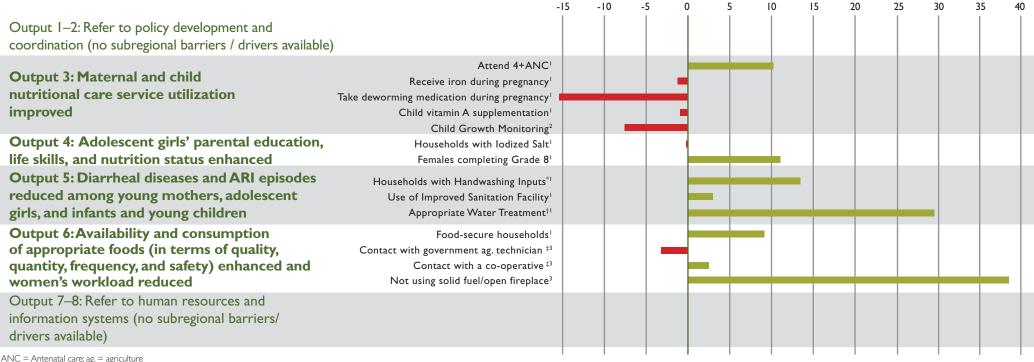
Remittances are defined as any money received by individuals not living in the household. Source: Nepal CBS (2012b).

Literacy rates are compared to national average.

Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).



Drivers and Barriers are organized by the bolded outputs. Difference from national average (percentage points), except where noted below.



ANC = Antenatal care; ag. = agriculture

* Households having an observed place for handwashing with soap and water. + Includes boiling, bleaching, straining, filtering, and solar disinfecting. + Among agricultural households, in the past 12 months. S Defined as receiving seeds, fertilizer, or credit from a co-operative (agricultural savings and credit association) in the past 12 months. Among agricultural households.

Sources: 'New ERA, and ICF International Inc. (2012); ²Nepal MoHP (2012); ³Nepal CBS (2012b).

HOUSEHOLD CONSUMPTION OF MICRONUTRIENT-RICH FOODS (PAST 7 DAYS), AND SOURCE (PAST 12 MONTHS)

	Household Consumption (past 7 days) P	In the last 12 Months, % of Households that have obtained this type of food, by source		
		Produced	Purchased	In Kind
Vitamin A-rich fruits & vegetables*	85.4	37.4	87.0	46.5
Eggs	60.7	17.1	79.8	3.1
Dairy	78.3	16.5	78.2	18.1
Meats	74.0	18.8	96.1	12.5

Sources

Government of Nepal National Planning Commission (NPC). 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)". Government of Nepal

Nepal Ministry of Health and Population (MoHP), 2012. Annual Report: Department of Health Services, 2067/68 (2010/2011). Government of Nepal Ministry of Health and Population, Kathmandu, Nepal.

Ministry of Health and Population (MOHP) [Nepal], New ERA, and ICF International, Inc. 2012. "Nepal Demographic and Health Survey 2011 Final Report". Kathmandu, Nepal; and Calverton, Maryland, USA. http://dhsprogram.com/pubs/pdf/FR257/FR257%5B13April2012%5D.pdf.

Nepal Central Bureau of Statistics (CBS). 2012a. "National Population and Housing Census 2011". Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat.

Nepal Central Bureau of Statistics (CBS). 2012b. Nepal Living Standards Survey 2010-2011: Third Round. Kathmandu, Nepal: Nepal Central Bureau of Statistics.

*Includes leafy green vegetables, papayas, mangos, and colocassia. Source: Nepal CBS (2012b).

- \$ | Pathways to Better Nutrition in Nepal

SUMMARY OF KEY MSNP INDICATORS* FOR CENTRAL MOUNTAIN SUBREGION

Key Indicator	Level in Central Mountain	MSNP National Target (2017)
Completion of primary education ¹	33.1%	(increased)
Low birthweight (<2.5kg) ¹	22.6%	(reduced)
Stunting, children under 5 years ¹	45.5%	29%
Underweight, children under 5 years ¹	34.7%	20%
Underweight, non-pregnant women ¹	14.9%	15%
Wasting, children under 5 years ¹	7.9%	5%
Outcome Indicator		
3 IYCF practices, children 6–23 months ¹	25.5%	(increased)
Access to SAM services	unavailable	(increased)
Any anemia, children 6–59 months ¹	33.1%	(reduced)
Any anemia,WRA ¹	19.2%	(reduced)
ARI in past 2 weeks, children under 2 years'	10.5%	(reduced)
Daily workload, women ²	8.3 hours	(reduced)
Diarrhea in past 2 weeks, children under 2 years ¹	12.8%	(reduced)
Early initiation of breastfeeding	42.8%	(increased)
Indoor smoke exposure, children under 5 years	unavailable	(reduced)
Indoor smoke exposure,WRA	unavailable	(reduced)
lodine Deficiency, children 6–23 months	unavailable	(reduced)
Vitamin A deficiency, children 6–23 months	unavailable	(reduced)

*The MSNP names several outcome level activities, only those named as an indicator are listed here.

IYCF = Infant and Young Child Feeding; SAM = Severe Acute Malnutrition; ARI = Acute Respiratory Infection.

Daily workload is defined as the weekly number of hours spent on household or employment per week, divided by 7.

Sources: ¹Nepal MoHP, New ERA, ICF International Inc. (2012); ² Nepal CBS (2012b); ³ Government of Nepal NPC (2012).

DESCRIPTION OF CENTRAL MOUNTAIN CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Rural

Households in lowest national wealth quintile*: Below average (19%)

Percentage of households on paved road: Below average (31%)

Households receiving remittances: Above average (60%)

Literacy rate for women of reproductive age: Below average (62%)

Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq. km.=Urban, 500< persons per sq. km.>300=Peri-Urban, <300 persons per sq. km.=Rural. Source: Nepal CBS (2012a).

*Considered a measure of poverty. Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).

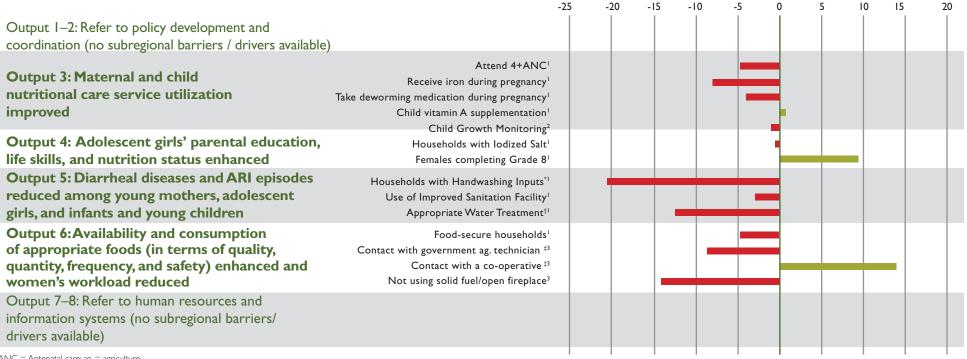
Remittances are defined as any money received by individuals not living in the household. Source: Nepal CBS (2012b).

Literacy rates are compared to national average.

Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).



Drivers and Barriers are organized by the bolded outputs. Difference from national average (percentage points), except where noted below.



ANC = Antenatal care; ag. = agriculture

*Households having an observed place for handwashing with soap and water: †Includes boiling, bleaching, straining, filtering, and solar disinfecting. ‡Among agricultural households, in the past 12 months. §Defined as receiving seeds, fertilizer, or credit from a co-operative (agricultural savings and credit association) in the past 12 months. Among agricultural households.

Sources: 'New ERA, and ICF International Inc. (2012); ²Nepal MoHP (2012); ³Nepal CBS (2012b).

HOUSEHOLD CONSUMPTION OF MICRONUTRIENT-RICH FOODS (PAST 7 DAYS), AND SOURCE (PAST 12 MONTHS)

	Household Consumption (past 7 days) P	In the last 12 Months, % of Households that have obtained this type of food, by source		
		Produced	Purchased	In Kind
Vitamin A-rich fruits & vegetables*	85.3	81.4	57.1	79.5
Eggs	38.5	50.0	73.7	15.4
Dairy	53.2	30.8	38.5	62.2
Meats	66.7	50.6	99.4	32.1

Sources

Government of Nepal National Planning Commission (NPC). 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)". Government of Nepal.

Nepal Ministry of Health and Population (MoHP), 2012. Annual Report: Department of Health Services, 2067/68 (2010/2011). Government of Nepal Ministry of Health and Population, Kathmandu, Nepal.

Ministry of Health and Population (MOHP) [Nepal], New ERA, and ICF International, Inc. 2012. "Nepal Demographic and Health Survey 2011 Final Report". Kathmandu, Nepal; and Calverton, Maryland, USA. http://dhsprogram.com/pubs/pdf/FR257/FR257%5B13April2012%5D.pdf.

Nepal Central Bureau of Statistics (CBS). 2012a. "National Population and Housing Census 2011". Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat.

Nepal Central Bureau of Statistics (CBS). 2012b. Nepal Living Standards Survey 2010-2011: Third Round. Kathmandu, Nepal: Nepal Central Bureau of Statistics.

*Includes leafy green vegetables, papayas, mangos, and colocassia. Source: Nepal CBS (2012b).

9& Pathways to Better Nutrition in Nepal

SUMMARY OF KEY MSNP INDICATORS* FOR CENTRAL TERAI SUBREGION

Key Indicator	Level in Central Terai	MSNP National Target (2017)
Completion of primary education ¹	46.7%	(increased)
Low birthweight (<2.5kg) ¹	10.4%	(reduced)
Stunting, children under 5 years ¹	40.5%	29%
Underweight, children under 5 years ¹	32.0%	20%
Underweight, non-pregnant women ¹	26.4%	15%
Wasting, children under 5 years ¹	13.9%	5%
Outcome Indicator		
3 IYCF practices, children 6–23 months ¹	8.8%	(increased)
Access to SAM services	unavailable	(increased)
Any anemia, children 6–59 months ¹	46.7%	(reduced)
Any anemia,WRA ¹	42.6%	(reduced)
ARI in past 2 weeks, children under 2 years	4.2%	(reduced)
Daily workload, women ²	7.5 hours	(reduced)
Diarrhea in past 2 weeks, children under 2 years ¹	16.7%	(reduced)
Early initiation of breastfeeding	31.3%	(increased)
Indoor smoke exposure, children under 5 years	unavailable	(reduced)
Indoor smoke exposure,WRA	unavailable	(reduced)
lodine Deficiency, children 6–23 months	unavailable	(reduced)
Vitamin A deficiency, children 6–23 months	unavailable	(reduced)

*The MSNP names several outcome level activities, only those named as an indicator are listed here.

IYCF = Infant and Young Child Feeding; SAM = Severe Acute Malnutrition; ARI = Acute Respiratory Infection.

Daily workload is defined as the weekly number of hours spent on household or employment per week, divided by 7.

Sources: ¹Nepal MoHP, New ERA, ICF International Inc. (2012); ² Nepal CBS (2012b); ³ Government of Nepal NPC (2012).

DESCRIPTION OF CENTRAL TERAI CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Urban

Households in lowest national wealth quintile*: Below average (9%)

Percentage of households on paved road: Above average (72%)

Households receiving remittances: Above average (57%)

Literacy rate for women of reproductive age: Below average (42%)

Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq. km.=Urban, 500< persons per sq. km.>300=Peri-Urban, <300 persons per sq. km.=Rural. Source: Nepal CBS (2012a).

*Considered a measure of poverty. Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).

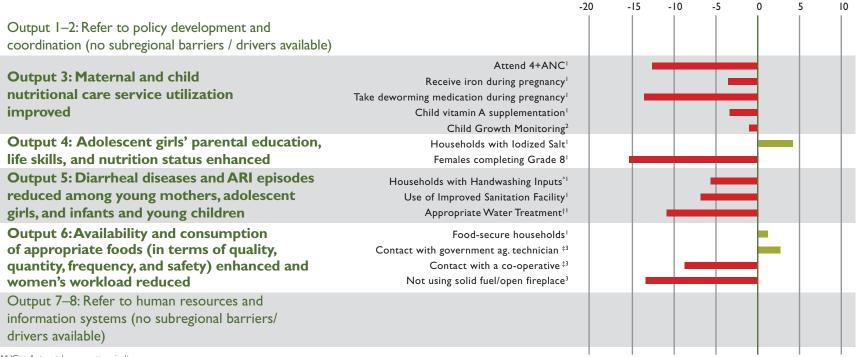
Remittances are defined as any money received by individuals not living in the household. Source: Nepal CBS (2012b).

Literacy rates are compared to national average.

Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).



Drivers and Barriers are organized by the bolded outputs. Difference from national average (percentage points), except where noted below.



ANC = Antenatal care; ag. = agriculture

*Households having an observed place for handwashing with soap and water: †Includes boiling, bleaching, straining, filtering, and solar disinfecting. ‡Among agricultural households, in the past 12 months. §Defined as receiving seeds, fertilizer, or credit from a co-operative (agricultural savings and credit association) in the past 12 months. Among agricultural households.

Sources: 'New ERA, and ICF International Inc. (2012); ²Nepal MoHP (2012); ³Nepal CBS (2012b).

HOUSEHOLD CONSUMPTION OF MICRONUTRIENT-RICH FOODS (PAST 7 DAYS), AND SOURCE (PAST 12 MONTHS)

	Household Consumption (past 7 days) P	In the last 12 Months, % of Households that have obtained this type of food, by source		
		Produced	Purchased	In Kind
Vitamin A-rich fruits & vegetables*	81.1	56.4	95.6	57.1
Eggs	33.6	11.5	68.6	1.4
Dairy	82.6	29.2	86.1	16.1
Meats	66.4	12.7	93.0	14.2

Sources

Government of Nepal National Planning Commission (NPC). 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)". Government of Nepal.

Nepal Ministry of Health and Population (MoHP), 2012. Annual Report: Department of Health Services, 2067/68 (2010/2011). Government of Nepal Ministry of Health and Population, Kathmandu, Nepal.

Ministry of Health and Population (MOHP) [Nepal], New ERA, and ICF International, Inc. 2012. "Nepal Demographic and Health Survey 2011 Final Report". Kathmandu, Nepal; and Calverton, Maryland, USA. http://dhsprogram.com/pubs/pdf/FR257/FR257%5B13April2012%5D.pdf.

Nepal Central Bureau of Statistics (CBS). 2012a. "National Population and Housing Census 2011". Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat.

Nepal Central Bureau of Statistics (CBS). 2012b. Nepal Living Standards Survey 2010-2011: Third Round. Kathmandu, Nepal: Nepal Central Bureau of Statistics.

*Includes leafy green vegetables, papayas, mangos, and colocassia. Source: Nepal CBS (2012b).

9(| Pathways to Better Nutrition in Nepal

SUMMARY OF KEY MSNP INDICATORS* FOR EASTERN HILL SUBREGION

Key Indicator	Level in Eastern Hill	MSNP National Target (2017)
Completion of primary education ¹	42.3%	(increased)
Low birthweight (<2.5kg) ¹	21.7%	(reduced)
Stunting, children under 5 years ¹	45.5%	29%
Underweight, children under 5 years ¹	28.6%	20%
Underweight, non-pregnant women ¹	11.8%	15%
Wasting, children under 5 years ¹	10.5%	5%
Outcome Indicator		
3 IYCF practices, children 6–23 months ¹	34.8%	(increased)
Access to SAM services	unavailable	(increased)
Any anemia, children 6–59 months ¹	42.3%	(reduced)
Any anemia, WRA ¹	26.1%	(reduced)
ARI in past 2 weeks, children under 2 years ¹	2.3%	(reduced)
Daily workload, women ²	8.5 hours	(reduced)
Diarrhea in past 2 weeks, children under 2 years ¹	10.8%	(reduced)
Early initiation of breastfeeding ¹	50.2%	(increased)
Indoor smoke exposure, children under 5 years	unavailable	(reduced)
Indoor smoke exposure,WRA	unavailable	(reduced)
lodine Deficiency, children 6–23 months	unavailable	(reduced)
Vitamin A deficiency, children 6–23 months	unavailable	(reduced)

*The MSNP names several outcome level activities, only those named as an indicator are listed here.

IYCF = Infant and Young Child Feeding; SAM = Severe Acute Malnutrition; ARI = Acute Respiratory Infection.

Daily workload is defined as the weekly number of hours spent on household or employment per week, divided by 7.

Sources: ¹Nepal MoHP, New ERA, ICF International Inc. (2012); ² Nepal CBS (2012b); ³ Government of Nepal NPC (2012).

DESCRIPTION OF EASTERN HILL CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Rural

Households in lowest national wealth quintile*: Above average (34%)

Percentage of households on paved road: Below average (23%)

Households receiving remittances: Below average (42%)

Literacy rate for women of reproductive age: Above average (74%)

Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq. km.=Urban, 500< persons per sq. km.>300=Peri-Urban, <300 persons per sq. km.=Rural. Source: Nepal CBS (2012a).

*Considered a measure of poverty. Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).

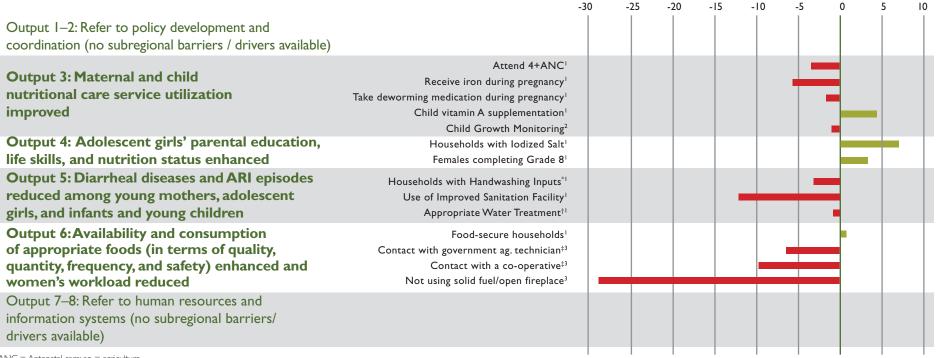
Remittances are defined as any money received by individuals not living in the household. Source: Nepal CBS (2012b).

Literacy rates are compared to national average.

Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).



Drivers and Barriers are organized by the bolded outputs. Difference from national average (percentage points), except where noted below.



ANC = Antenatal care; ag. = agriculture

*Households having an observed place for handwashing with soap and water: †Includes boiling, bleaching, straining, filtering, and solar disinfecting. ‡Among agricultural households, in the past 12 months. §Defined as receiving seeds, fertilizer, or credit from a co-operative (agricultural savings and credit association) in the past 12 months. Among agricultural households.

Sources: 'New ERA, and ICF International Inc. (2012); ²Nepal MoHP (2012); ³Nepal CBS (2012b).

HOUSEHOLD CONSUMPTION OF MICRONUTRIENT-RICH FOODS (PAST 7 DAYS), AND SOURCE (PAST 12 MONTHS)

	Household Consumption (past 7 days) P	In the last 12 Months, % of Households that have obtained this type of food, by source		
		Produced	Purchased	In Kind
Vitamin A-rich fruits & vegetables*	88.7	95.8	63.2	58.3
Eggs	31.5	66.0	28.0	4.2
Dairy	64.4	61.1	23.8	36.6
Meats	73.8	79.4	98.6	22.2

Sources

Government of Nepal National Planning Commission (NPC). 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)". Government of Nepal.

Nepal Ministry of Health and Population (MoHP), 2012. Annual Report: Department of Health Services, 2067/68 (2010/2011). Government of Nepal Ministry of Health and Population, Kathmandu, Nepal.

Ministry of Health and Population (MOHP) [Nepal], New ERA, and ICF International, Inc. 2012. "Nepal Demographic and Health Survey 2011 Final Report". Kathmandu, Nepal; and Calverton, Maryland, USA. http://dhsprogram.com/pubs/pdf/FR257/FR257%5B13April2012%5D.pdf.

Nepal Central Bureau of Statistics (CBS). 2012a. "National Population and Housing Census 2011". Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat.

Nepal Central Bureau of Statistics (CBS). 2012b. Nepal Living Standards Survey 2010-2011: Third Round. Kathmandu, Nepal: Nepal Central Bureau of Statistics.

*Includes leafy green vegetables, papayas, mangos, and colocassia. Source: Nepal CBS (2012b).

9* | Pathways to Better Nutrition in Nepal

SUMMARY OF KEY MSNP INDICATORS* FOR EASTERN MOUNTAIN SUBREGION

Key Indicator	Level in Eastern Mountain	MSNP National Target (2017)
Completion of primary education ¹	51.3%	(increased)
Low birthweight (<2.5kg) ¹	21.9%	(reduced)
Stunting, children under 5 years ¹	45.0%	29%
Underweight, children under 5 years ¹	23.5%	20%
Underweight, non-pregnant women ¹	10.0%	15%
Wasting, children under 5 years ¹	15.0%	5%
Outcome Indicator		
3 IYCF practices, children 6–23 months ¹	32.9%	(increased)
Access to SAM services	unavailable	(increased)
Any anemia, children 6–59 months ¹	51.3%	(reduced)
Any anemia, WRA ¹	26.5%	(reduced)
ARI in past 2 weeks, children under 2 years ¹	2.1%	(reduced)
Daily workload, women ²	10 hours	(reduced)
Diarrhea in past 2 weeks, children under 2 years ¹	10.8%	(reduced)
Early initiation of breastfeeding ¹	52.5%	(increased)
Indoor smoke exposure, children under 5 years	unavailable	(reduced)
Indoor smoke exposure,WRA	unavailable	(reduced)
lodine Deficiency, children 6–23 months	unavailable	(reduced)
Vitamin A deficiency, children 6–23 months	unavailable	(reduced)

*The MSNP names several outcome level activities, only those named as an indicator are listed here.

IYCF = Infant and Young Child Feeding; SAM = Severe Acute Malnutrition; ARI = Acute Respiratory Infection.

Daily workload is defined as the weekly number of hours spent on household or employment per week, divided by 7.

Sources: ¹Nepal MoHP, New ERA, ICF International Inc. (2012); ² Nepal CBS (2012b); ³ Government of Nepal NPC (2012).

DESCRIPTION OF EASTERN MOUNTAIN CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Rural

Households in lowest national wealth quintile*: Above average (37%)

Percentage of households on paved road: Below average (2%)

Households receiving remittances: Above average (68%)

Literacy rate for women of reproductive age: Above average (76%)

Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq. km.=Urban, 500< persons per sq. km.>300=Peri-Urban, <300 persons per sq. km.=Rural. Source: Nepal CBS (2012a).

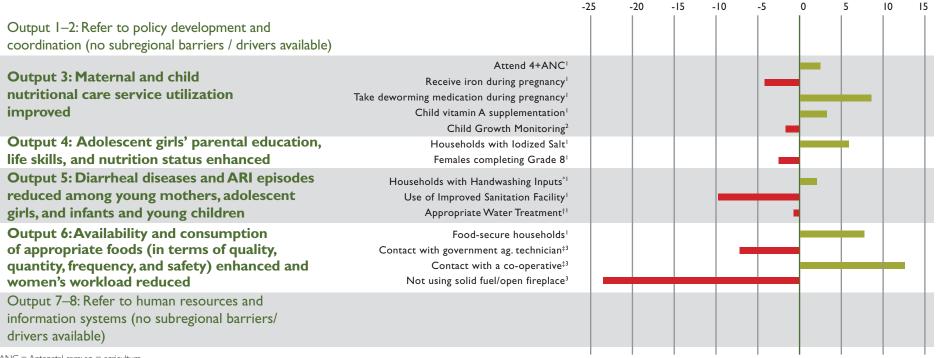
*Considered a measure of poverty. Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).

Remittances are defined as any money received by individuals not living in the household. Source: Nepal CBS (2012b).

Literacy rates are compared to national average.



Drivers and Barriers are organized by the bolded outputs. Difference from national average (percentage points), except where noted below.



ANC = Antenatal care; ag. = agriculture

*Households having an observed place for handwashing with soap and water: †Includes boiling, bleaching, straining, filtering, and solar disinfecting. ‡Among agricultural households, in the past 12 months. §Defined as receiving seeds, fertilizer, or credit from a co-operative (agricultural savings and credit association) in the past 12 months. Among agricultural households.

Sources: 'New ERA, and ICF International Inc. (2012); ²Nepal MoHP (2012); ³Nepal CBS (2012b).

HOUSEHOLD CONSUMPTION OF MICRONUTRIENT-RICH FOODS (PAST 7 DAYS), AND SOURCE (PAST 12 MONTHS)

	Household Consumption (past 7 days)		In the last 12 Months, % of Households th have obtained this type of food, by source		
		Produced	Purchased	In Kind	
Vitamin A-rich fruits & vegetables*	82.4	89.8	74.1	55.6	
Eggs	42.6	69.4	38.0	2.8	
Dairy	54.6	43.5	40.7	27.8	
Meats	69.4	68.5	98.1	14.8	

Sources

Government of Nepal National Planning Commission (NPC). 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)". Government of Nepal.

Nepal Ministry of Health and Population (MoHP), 2012. Annual Report: Department of Health Services, 2067/68 (2010/2011). Government of Nepal Ministry of Health and Population, Kathmandu, Nepal.

Ministry of Health and Population (MOHP) [Nepal], New ERA, and ICF International, Inc. 2012. "Nepal Demographic and Health Survey 2011 Final Report". Kathmandu, Nepal; and Calverton, Maryland, USA. http://dhsprogram.com/pubs/pdf/FR257/FR257%5B13April2012%5D.pdf.

Nepal Central Bureau of Statistics (CBS). 2012a. "National Population and Housing Census 2011". Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat.

Nepal Central Bureau of Statistics (CBS). 2012b. Nepal Living Standards Survey 2010-2011: Third Round. Kathmandu, Nepal: Nepal Central Bureau of Statistics.

*Includes leafy green vegetables, papayas, mangos, and colocassia. Source: Nepal CBS (2012b).

9, | Pathways to Better Nutrition in Nepal

SUMMARY OF KEY MSNP INDICATORS* FOR EASTERN TERAI SUBREGION

Key Indicator	Level in Eastern Terai	MSNP National Target (2017)
Completion of primary education ¹	49.5%	(increased)
Low birthweight (<2.5kg) ¹	18.1%	(reduced)
Stunting, children under 5 years ¹	31.4%	29%
Underweight, children under 5 years ¹	24.0%	20%
Underweight, non-pregnant women ¹	19.3%	15%
Wasting, children under 5 years ¹	8.0%	5%
Outcome Indicator		
3 IYCF practices, children 6–23 months ¹	25.1%	(increased)
Access to SAM services	unavailable	(increased)
Any anemia, children 6–59 months ¹	49.5%	(reduced)
Any anemia,WRA ¹	44.9%	(reduced)
ARI in past 2 weeks, children under 2 years ¹	7.6%	(reduced)
Daily workload, women ²	7 hours	(reduced)
Diarrhea in past 2 weeks, children under 2 years ¹	12.1%	(reduced)
Early initiation of breastfeeding	46.8%	(increased)
Indoor smoke exposure, children under 5 years	unavailable	(reduced)
Indoor smoke exposure,WRA	unavailable	(reduced)
lodine Deficiency, children 6–23 months	unavailable	(reduced)
Vitamin A deficiency, children 6–23 months	unavailable	(reduced)

*The MSNP names several outcome level activities, only those named as an indicator are listed here.

IYCF = Infant and Young Child Feeding; SAM = Severe Acute Malnutrition; ARI = Acute Respiratory Infection.

Daily workload is defined as the weekly number of hours spent on household or employment per week, divided by 7.

Sources: 'Nepal MoHP, New ERA, ICF International Inc. (2012); ² Nepal CBS (2012b); ³ Government of Nepal NPC (2012).

DESCRIPTION OF EASTERN TERAI CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Urban

Households in lowest national wealth quintile*: Below average (4%)

Percentage of households on paved road: Above average (81%)

Households receiving remittances: Above average (61%)

Literacy rate for women of reproductive age: Above average (71%)

Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq. km.=Urban, 500< persons per sq. km.>300=Peri-Urban, <300 persons per sq. km.=Rural. Source: Nepal CBS (2012a).

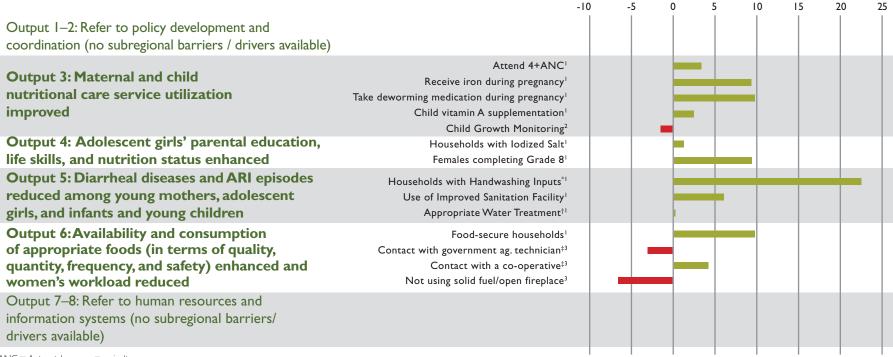
*Considered a measure of poverty. Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).

Remittances are defined as any money received by individuals not living in the household. Source: Nepal CBS (2012b).

Literacy rates are compared to national average.



Drivers and Barriers are organized by the bolded outputs. Difference from national average (percentage points), except where noted below.



ANC = Antenatal care; ag. = agriculture

*Households having an observed place for handwashing with soap and water: †Includes boiling, bleaching, straining, filtering, and solar disinfecting. ‡Among agricultural households, in the past 12 months. §Defined as receiving seeds, fertilizer, or credit from a co-operative (agricultural savings and credit association) in the past 12 months. Among agricultural households.

Sources: 'New ERA, and ICF International Inc. (2012); ²Nepal MoHP (2012); ³Nepal CBS (2012b).

HOUSEHOLD CONSUMPTION OF MICRONUTRIENT-RICH FOODS (PAST 7 DAYS), AND SOURCE (PAST 12 MONTHS)

	Household Consumption (past 7 days)		In the last 12 Months, % of Households that have obtained this type of food, by source		
		Produced	Purchased	In Kind	
Vitamin A-rich fruits & vegetables*	82.4	64.9	96.7	52.3	
Eggs	34.3	26.2	62.4	1.1	
Dairy	75.1	33.3	81.0	15.8	
Meats	69.5	29.4	93.9	19.0	

Sources

Government of Nepal National Planning Commission (NPC). 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)". Government of Nepal.

Nepal Ministry of Health and Population (MoHP), 2012. Annual Report: Department of Health Services, 2067/68 (2010/2011). Government of Nepal Ministry of Health and Population, Kathmandu, Nepal.

Ministry of Health and Population (MOHP) [Nepal], New ERA, and ICF International, Inc. 2012. "Nepal Demographic and Health Survey 2011 Final Report". Kathmandu, Nepal; and Calverton, Maryland, USA. http://dhsprogram.com/pubs/pdf/FR257/FR257%5B13April2012%5D.pdf.

Nepal Central Bureau of Statistics (CBS). 2012a. "National Population and Housing Census 2011". Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat.

Nepal Central Bureau of Statistics (CBS). 2012b. Nepal Living Standards Survey 2010-2011: Third Round. Kathmandu, Nepal: Nepal Central Bureau of Statistics.

*Includes leafy green vegetables, papayas, mangos, and colocassia. Source: Nepal CBS (2012b).

%\$\$ | Pathways to Better Nutrition in Nepal

SUMMARY OF KEY MSNP INDICATORS* FOR FAR-WESTERN HILL SUBREGION

Key Indicator	Level in Far- Western Hill	MSNP National Target (2017)
Completion of primary education ¹	40.9%	(increased)
Low birthweight (<2.5kg) ¹	23.7%	(reduced)
Stunting, children under 5 years ¹	57.5%	29%
Underweight, children under 5 years ¹	39.7%	20%
Underweight, non-pregnant women ¹	23.4%	15%
Wasting, children under 5 years ¹	7.9%	5%
Outcome Indicator		
3 IYCF practices, children 6–23 months ¹	29.8%	(increased)
Access to SAM services	unavailable	(increased)
Any anemia, children 6–59 months ¹	40.9%	(reduced)
Any anemia, WRA ¹	28.8%	(reduced)
ARI in past 2 weeks, children under 2 years ¹	7.4%	(reduced)
Daily workload, women ²	8.2 hours	(reduced)
Diarrhea in past 2 weeks, children under 2 years ¹	13.1%	(reduced)
Early initiation of breastfeeding	53.6%	(increased)
Indoor smoke exposure, children under 5 years	unavailable	(reduced)
Indoor smoke exposure,WRA	unavailable	(reduced)
lodine Deficiency, children 6–23 months	unavailable	(reduced)
Vitamin A deficiency, children 6–23 months	unavailable	(reduced)

*The MSNP names several outcome level activities, only those named as an indicator are listed here.

IYCF = Infant and Young Child Feeding; SAM = Severe Acute Malnutrition; ARI = Acute Respiratory Infection.

Daily workload is defined as the weekly number of hours spent on household or employment per week, divided by 7.

Sources: ¹Nepal MoHP, New ERA, ICF International Inc. (2012); ² Nepal CBS (2012b); ³ Government of Nepal NPC (2012).

DESCRIPTION OF FAR-WESTERN HILL CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Rural

Households in lowest national wealth quintile*: Above average (59%)

Percentage of households on paved road: Below average (30%)

Households receiving remittances: Above average (56%)

Literacy rate for women of reproductive age: Below average (55%)

Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq. km.=Urban, 500< persons per sq. km.>300=Peri-Urban, <300 persons per sq. km.=Rural. Source: Nepal CBS (2012a).

*Considered a measure of poverty. Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).

Remittances are defined as any money received by individuals not living in the household. Source: Nepal CBS (2012b).

Literacy rates are compared to national average.



Drivers and Barriers are organized by the bolded outputs. Difference from national average (percentage points), except where noted below.

		-30	-23	-20	-15	-10	-5	0	5	10	15
Output 1–2: Refer to policy development and coordination (no subregional barriers / drivers available)											
nutritional care service utilization Take deworming medical improved Child vitam Child Child	Attend 4+ANC ¹ ron during pregnancy ¹ ion during pregnancy ¹ in A supplementation ¹ d Growth Monitoring ²										
life skills, and nutrition status enhancedFemaleOutput 5: Diarrheal diseases and ARI episodes reduced among young mothers, adolescentHouseholds with Use of Impro	olds with lodized Salt ¹ s completing Grade 8 ¹ Handwashing Inputs ^{*1} ved Sanitation Facility ¹ ate Water Treatment ^{†1}	-			•						
Output 6: Availability and consumptionForof appropriate foods (in terms of quality, quantity, frequency, and safety) enhanced andContact with gover Contact	od-secure households ¹ mment ag. technician ^{‡3} with a co-operative ^{‡3} id fuel/open fireplace ³										
Output 7–8: Refer to human resources and information systems (no subregional barriers/ drivers available)											

ANC = Antenatal care; ag. = agriculture

*Households having an observed place for handwashing with soap and water: †Includes boiling, bleaching, straining, filtering, and solar disinfecting. ‡Among agricultural households, in the past 12 months. §Defined as receiving seeds, fertilizer, or credit from a co-operative (agricultural savings and credit association) in the past 12 months. Among agricultural households.

Sources: 'New ERA, and ICF International Inc. (2012); ²Nepal MoHP (2012); ³Nepal CBS (2012b).

HOUSEHOLD CONSUMPTION OF MICRONUTRIENT-RICH FOODS (PAST 7 DAYS), AND SOURCE (PAST 12 MONTHS)

	Household Consumption (past 7 days)		In the last 12 Months, % of Households th have obtained this type of food, by sourc		
		Produced	Purchased	In Kind	
Vitamin A-rich fruits & vegetables [*]	85.6	94.4	54.2	79.6	
Eggs	13.4	22.2	29.2	3.2	
Dairy	83.3	74.5	15.7	41.2	
Meats	33.8	23.6	94.9	38.4	

Sources

Government of Nepal National Planning Commission (NPC). 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)". Government of Nepal.

Nepal Ministry of Health and Population (MoHP), 2012. Annual Report: Department of Health Services, 2067/68 (2010/2011). Government of Nepal Ministry of Health and Population, Kathmandu, Nepal.

Ministry of Health and Population (MOHP) [Nepal], New ERA, and ICF International, Inc. 2012. "Nepal Demographic and Health Survey 2011 Final Report". Kathmandu, Nepal; and Calverton, Maryland, USA. http://dhsprogram.com/pubs/pdf/FR257/FR257%5B13April2012%5D.pdf.

Nepal Central Bureau of Statistics (CBS). 2012a. "National Population and Housing Census 2011". Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat.

Nepal Central Bureau of Statistics (CBS). 2012b. Nepal Living Standards Survey 2010-2011: Third Round. Kathmandu, Nepal: Nepal Central Bureau of Statistics.

*Includes leafy green vegetables, papayas, mangos, and colocassia. Source: Nepal CBS (2012b).

10& Pathways to Better Nutrition in Nepal

SUMMARY OF KEY MSNP INDICATORS* FOR FAR-WESTERN TERAI SUBREGION

Key Indicator	Level in Eastern Terai	MSNP National Target (2017)
Completion of primary education ¹	60.4%	(increased)
Low birthweight (<2.5kg) ¹	25.3%	(reduced)
Stunting, children under 5 years ¹	31.5%	29%
Underweight, children under 5 years ¹	24.7%	20%
Underweight, non-pregnant women ¹	23.7%	15%
Wasting, children under 5 years ¹	15.2%	5%
Outcome Indicator		
3 IYCF practices, children 6–23 months ¹	22.2%	(increased)
Access to SAM services	unavailable	(increased)
Any anemia, children 6–59 months ¹	60.4%	(reduced)
Any anemia, WRA ¹	41.9%	(reduced)
ARI in past 2 weeks, children under 2 years ¹	11.0%	(reduced)
Daily workload, women ²	6.7 hours	(reduced)
Diarrhea in past 2 weeks, children under 2 years ¹	8.8%	(reduced)
Early initiation of breastfeeding ¹	54.3%	(increased)
Indoor smoke exposure, children under 5 years	unavailable	(reduced)
Indoor smoke exposure,WRA	unavailable	(reduced)
lodine Deficiency, children 6–23 months	unavailable	(reduced)
Vitamin A deficiency, children 6–23 months	unavailable	(reduced)

*The MSNP names several outcome level activities, only those named as an indicator are listed here.

IYCF = Infant and Young Child Feeding; SAM = Severe Acute Malnutrition; ARI = Acute Respiratory Infection.

Daily workload is defined as the weekly number of hours spent on household or employment per week, divided by 7.

Sources: ¹Nepal MoHP, New ERA, ICF International Inc. (2012); ² Nepal CBS (2012b); ³ Government of Nepal NPC (2012).

DESCRIPTION OF FAR-WESTERN TERAI CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Rural

Households in lowest national wealth quintile*: Below average (10%)

Percentage of households on paved road: Average (61%)

Households receiving remittances: Above average (62%)

Literacy rate for women of reproductive age: Above average (69%)

Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq. km.=Urban, 500< persons per sq. km.>300=Peri-Urban, <300 persons per sq. km.=Rural. Source: Nepal CBS (2012a).

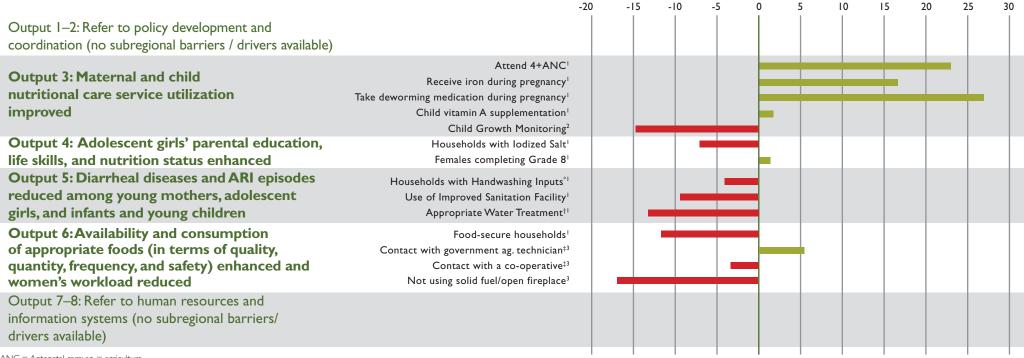
*Considered a measure of poverty. Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).

Remittances are defined as any money received by individuals not living in the household. Source: Nepal CBS (2012b).

Literacy rates are compared to national average.



Drivers and Barriers are organized by the bolded outputs. Difference from national average (percentage points), except where noted below.



ANC = Antenatal care; ag. = agriculture

*Households having an observed place for handwashing with soap and water: †Includes boiling, bleaching, straining, filtering, and solar disinfecting. ‡Among agricultural households, in the past 12 months. §Defined as receiving seeds, fertilizer, or credit from a co-operative (agricultural savings and credit association) in the past 12 months. Among agricultural households.

Sources: 'New ERA, and ICF International Inc. (2012); ²Nepal MoHP (2012); ³Nepal CBS (2012b).

HOUSEHOLD CONSUMPTION OF MICRONUTRIENT-RICH FOODS (PAST 7 DAYS), AND SOURCE (PAST 12 MONTHS)

	Household Consumption (past 7 days)		In the last 12 Months, % of Households th have obtained this type of food, by sourc		
		Produced	Purchased	In Kind	
Vitamin A-rich fruits & vegetables*	86.0	94.3	80.3	74.1	
Eggs	21.9	39.9	46.9	1.3	
Dairy	67.5	46.9	50.4	35.5	
Meats	55.3	39.9	96.1	23.7	

Sources

Government of Nepal National Planning Commission (NPC). 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)". Government of Nepal.

Nepal Ministry of Health and Population (MoHP), 2012. Annual Report: Department of Health Services, 2067/68 (2010/2011). Government of Nepal Ministry of Health and Population, Kathmandu, Nepal.

Ministry of Health and Population (MOHP) [Nepal], New ERA, and ICF International, Inc. 2012. "Nepal Demographic and Health Survey 2011 Final Report". Kathmandu, Nepal; and Calverton, Maryland, USA. http://dhsprogram.com/pubs/pdf/FR257/FR257%5B13April2012%5D.pdf.

Nepal Central Bureau of Statistics (CBS). 2012a. "National Population and Housing Census 2011". Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat.

Nepal Central Bureau of Statistics (CBS). 2012b. Nepal Living Standards Survey 2010-2011: Third Round. Kathmandu, Nepal: Nepal Central Bureau of Statistics.

*Includes leafy green vegetables, papayas, mangos, and colocassia. Source: Nepal CBS (2012b).

10(| Pathways to Better Nutrition in Nepal

SUMMARY OF KEY MSNP INDICATORS* FOR MID-WESTERN HILL SUBREGION

Key Indicator	Level in Mid- Western Hill	MSNP National Target (2017)
Completion of primary education ¹	36.0%	(increased)
Low birthweight (<2.5kg) ¹	24.7%	(reduced)
Stunting, children under 5 years ¹	51.7%	29%
Underweight, children under 5 years ¹	37.1%	20%
Underweight, non-pregnant women ¹	18.6%	15%
Wasting, children under 5 years ¹	13.7%	5%
Outcome Indicator		
3 IYCF practices, children 6–23 months ¹	17.5%	(increased)
Access to SAM services	unavailable	(increased)
Any anemia, children 6–59 months ¹	36.0%	(reduced)
Any anemia,WRA ¹	22.5%	(reduced)
ARI in past 2 weeks, children under 2 years ¹	7.6%	(reduced)
Daily workload, women ²	8.5 hours	(reduced)
Diarrhea in past 2 weeks, children under 2 years ¹	14.1%	(reduced)
Early initiation of breastfeeding ¹	46.0%	(increased)
Indoor smoke exposure, children under 5 years	unavailable	(reduced)
Indoor smoke exposure,WRA	unavailable	(reduced)
lodine Deficiency, children 6–23 months	unavailable	(reduced)
Vitamin A deficiency, children 6–23 months	unavailable	(reduced)

*The MSNP names several outcome level activities, only those named as an indicator are listed here.

IYCF = Infant and Young Child Feeding; SAM = Severe Acute Malnutrition; ARI = Acute Respiratory Infection.

Daily workload is defined as the weekly number of hours spent on household or employment per week, divided by 7.

Sources: 'Nepal MoHP, New ERA, ICF International Inc. (2012); ² Nepal CBS (2012b); ³ Government of Nepal NPC (2012).

DESCRIPTION OF MID-WESTERN HILL CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Rural

Households in lowest national wealth quintile*: Above average (56%)

Percentage of households on paved road: Below average (25%)

Households receiving remittances: Below average (49%)

Literacy rate for women of reproductive age: Below average (64%)

Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq. km.=Urban, 500< persons per sq. km.>300=Peri-Urban, <300 persons per sq. km.=Rural. Source: Nepal CBS (2012a).

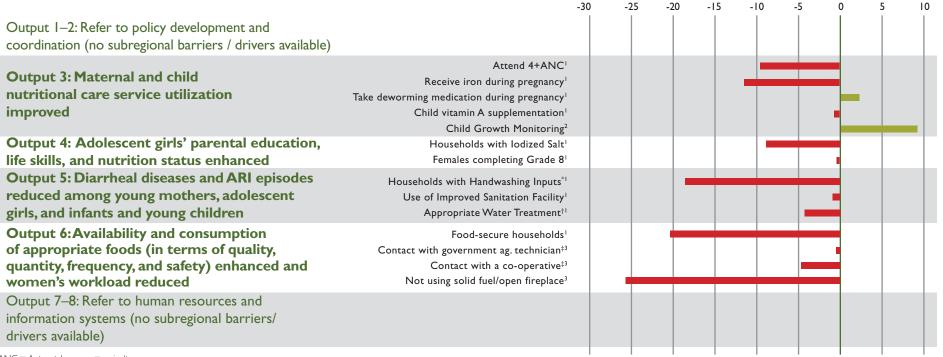
*Considered a measure of poverty. Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).

Remittances are defined as any money received by individuals not living in the household. Source: Nepal CBS (2012b).

Literacy rates are compared to national average.



Drivers and Barriers are organized by the bolded outputs. Difference from national average (percentage points), except where noted below.



ANC = Antenatal care; ag. = agriculture

*Households having an observed place for handwashing with soap and water: †Includes boiling, bleaching, straining, filtering, and solar disinfecting. ‡Among agricultural households, in the past 12 months. §Defined as receiving seeds, fertilizer, or credit from a co-operative (agricultural savings and credit association) in the past 12 months. Among agricultural households.

Sources: 'New ERA, and ICF International Inc. (2012); ²Nepal MoHP (2012); ³Nepal CBS (2012b).

HOUSEHOLD CONSUMPTION OF MICRONUTRIENT-RICH FOODS (PAST 7 DAYS), AND SOURCE (PAST 12 MONTHS)

	Household Consumptior (past 7 days)		In the last 12 Months, % of Households that have obtained this type of food, by source		
		Produced	Purchased	In Kind	
Vitamin A-rich fruits & vegetables*	85.8	96.5	40.9	72.8	
Eggs	25.5	58.9	30.1	1.3	
Dairy	66.7	48.4	37.1	47.6	
Meats	63.4	69.6	97.8	36.6	

Sources

Government of Nepal National Planning Commission (NPC). 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)". Government of Nepal.

Nepal Ministry of Health and Population (MoHP), 2012. Annual Report: Department of Health Services, 2067/68 (2010/2011). Government of Nepal Ministry of Health and Population, Kathmandu, Nepal.

Ministry of Health and Population (MOHP) [Nepal], New ERA, and ICF International, Inc. 2012. "Nepal Demographic and Health Survey 2011 Final Report". Kathmandu, Nepal; and Calverton, Maryland, USA. http://dhsprogram.com/pubs/pdf/FR257/FR257%5B13April2012%5D.pdf.

Nepal Central Bureau of Statistics (CBS). 2012a. "National Population and Housing Census 2011". Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat.

Nepal Central Bureau of Statistics (CBS). 2012b. Nepal Living Standards Survey 2010-2011: Third Round. Kathmandu, Nepal: Nepal Central Bureau of Statistics.

*Includes leafy green vegetables, papayas, mangos, and colocassia. Source: Nepal CBS (2012b).

10* | Pathways to Better Nutrition in Nepal

SUMMARY OF KEY MSNP INDICATORS* FOR MID-WESTERN TERAI SUBREGION

Key Indicator	Level in Mid- Western Terai	MSNP National Target (2017)
Completion of primary education ¹	56.9%	(increased)
Low birthweight (<2.5kg) ¹	23.9%	(reduced)
Stunting, children under 5 years ¹	43.5%	29%
Underweight, children under 5 years ¹	32.1%	20%
Underweight, non-pregnant women ¹	20.2%	15%
Wasting, children under 5 years ¹	13.2%	5%
Outcome Indicator		
3 IYCF practices, children 6–23 months ¹	24.6%	(increased)
Access to SAM services	unavailable	(increased)
Any anemia, children 6–59 months ¹	56.9%	(reduced)
Any anemia,WRA ¹	49.0%	(reduced)
ARI in past 2 weeks, children under 2 years ¹	12.9%	(reduced)
Daily workload, women ²	6.8 hours	(reduced)
Diarrhea in past 2 weeks, children under 2 years ¹	14.7%	(reduced)
Early initiation of breastfeeding ¹	45.6%	(increased)
Indoor smoke exposure, children under 5 years	unavailable	(reduced)
Indoor smoke exposure,WRA	unavailable	(reduced)
lodine Deficiency, children 6–23 months	unavailable	(reduced)
Vitamin A deficiency, children 6–23 months	unavailable	(reduced)

*The MSNP names several outcome level activities, only those named as an indicator are listed here.

IYCF = Infant and Young Child Feeding; SAM = Severe Acute Malnutrition; ARI = Acute Respiratory Infection.

Daily workload is defined as the weekly number of hours spent on household or employment per week, divided by 7.

Sources: ¹Nepal MoHP, New ERA, ICF International Inc. (2012); ² Nepal CBS (2012b); ³ Government of Nepal NPC (2012).

DESCRIPTION OF MID-WESTERN TERAI CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Rural

Households in lowest national wealth quintile*: Above average (21%)

Percentage of households on paved road: Above average (70%)

Households receiving remittances: Above average (62%)

Literacy rate for women of reproductive age: Below average (66%)

Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq. km.=Urban, 500< persons per sq. km.>300=Peri-Urban, <300 persons per sq. km.=Rural. Source: Nepal CBS (2012a).

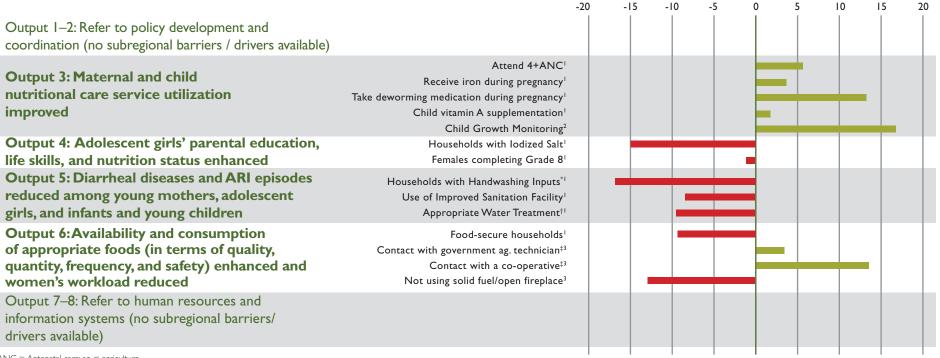
*Considered a measure of poverty. Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).

Remittances are defined as any money received by individuals not living in the household. Source: Nepal CBS (2012b).

Literacy rates are compared to national average.



Drivers and Barriers are organized by the bolded outputs. Difference from national average (percentage points), except where noted below.



ANC = Antenatal care; ag. = agriculture

*Households having an observed place for handwashing with soap and water: †Includes boiling, bleaching, straining, filtering, and solar disinfecting. ‡Among agricultural households, in the past 12 months. §Defined as receiving seeds, fertilizer, or credit from a co-operative (agricultural savings and credit association) in the past 12 months. Among agricultural households.

Sources: 'New ERA, and ICF International Inc. (2012); ²Nepal MoHP (2012); ³Nepal CBS (2012b).

HOUSEHOLD CONSUMPTION OF MICRONUTRIENT-RICH FOODS (PAST 7 DAYS), AND SOURCE (PAST 12 MONTHS)

	Household Consumption (past 7 days)		In the last 12 Months, % of Households th have obtained this type of food, by source		
		Produced	Purchased	In Kind	
Vitamin A-rich fruits & vegetables*	81.5	78.4	71.3	63.9	
Eggs	29.6	39.8	52.8	2.2	
Dairy	59.3	27.8	69.8	26.9	
Meats	66.4	41.7	90.7	36.4	

Sources

Government of Nepal National Planning Commission (NPC). 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)". Government of Nepal.

Nepal Ministry of Health and Population (MoHP), 2012. Annual Report: Department of Health Services, 2067/68 (2010/2011). Government of Nepal Ministry of Health and Population, Kathmandu, Nepal.

Ministry of Health and Population (MOHP) [Nepal], New ERA, and ICF International, Inc. 2012. "Nepal Demographic and Health Survey 2011 Final Report". Kathmandu, Nepal; and Calverton, Maryland, USA. http://dhsprogram.com/pubs/pdf/FR257/FR257%5B13April2012%5D.pdf.

Nepal Central Bureau of Statistics (CBS). 2012a. "National Population and Housing Census 2011". Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat.

Nepal Central Bureau of Statistics (CBS). 2012b. Nepal Living Standards Survey 2010-2011: Third Round. Kathmandu, Nepal: Nepal Central Bureau of Statistics.

*Includes leafy green vegetables, papayas, mangos, and colocassia. Source: Nepal CBS (2012b).

10, | Pathways to Better Nutrition in Nepal

SUMMARY OF KEY MSNP INDICATORS* FOR WESTERN HILL SUBREGION

Key Indicator	Level in Western Hill	MSNP National Target (2017)
Completion of primary education ¹	43.6%	(increased)
Low birthweight (<2.5kg) ¹	15.6%	(reduced)
Stunting, children under 5 years ¹	36.0%	29%
Underweight, children under 5 years ¹	16.8%	20%
Underweight, non-pregnant women ¹	8.3%	15%
Wasting, children under 5 years ¹	8.4%	5%
Outcome Indicator		
3 IYCF practices, children 6–23 months ¹	39.0%	(increased)
Access to SAM services	unavailable	(increased)
Any anemia, children 6–59 months ¹	43.6%	(reduced)
Any anemia,WRA ¹	35.9%	(reduced)
ARI in past 2 weeks, children under 2 years ¹	12.5%	(reduced)
Daily workload, women ²	7.9 hours	(reduced)
Diarrhea in past 2 weeks, children under 2 years ¹	14.1%	(reduced)
Early initiation of breastfeeding	48.4%	(increased)
Indoor smoke exposure, children under 5 years	unavailable	(reduced)
Indoor smoke exposure,WRA	unavailable	(reduced)
lodine Deficiency, children 6–23 months	unavailable	(reduced)
Vitamin A deficiency, children 6–23 months	unavailable	(reduced)

*The MSNP names several outcome level activities, only those named as an indicator are listed here.

IYCF = Infant and Young Child Feeding; SAM = Severe Acute Malnutrition; ARI = Acute Respiratory Infection.

Daily workload is defined as the weekly number of hours spent on household or employment per week, divided by 7.

Sources: ¹Nepal MoHP, New ERA, ICF International Inc. (2012); ² Nepal CBS (2012b); ³ Government of Nepal NPC (2012).

DESCRIPTION OF WESTERN HILL CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Rural

Households in lowest national wealth quintile*: Above average (23%)

Percentage of households on paved road: Below average (52%)

Households receiving remittances: Above average (64%)

Literacy rate for women of reproductive age: Above average (79%)

Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq. km.=Urban, 500< persons per sq. km.>300=Peri-Urban, <300 persons per sq. km.=Rural. Source: Nepal CBS (2012a).

*Considered a measure of poverty. Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).

Remittances are defined as any money received by individuals not living in the household. Source: Nepal CBS (2012b).

Literacy rates are compared to national average.



Drivers and Barriers are organized by the bolded outputs. Difference from national average (percentage points), except where noted below.

		-20	-15	-10	-5	0	5	10	15
Output 1–2: Refer to policy development and coordination (no subregional barriers / drivers available)									
Output 3: Maternal and child nutritional care service utilization improved	Attend 4+ANC ¹ Receive iron during pregnancy ¹ Take deworming medication during pregnancy ¹ Child vitamin A supplementation ¹ Child Growth Monitoring ²				+	€			
Output 4: Adolescent girls' parental education, life skills, and nutrition status enhanced Output 5: Diarrheal diseases and ARI episodes reduced among young mothers, adolescent	Households with Iodized Salt ¹ Females completing Grade 8 ¹ Households with Handwashing Inputs ^{*1} Use of Improved Sanitation Facility ¹				-	-			
girls, and infants and young children	Appropriate Water Treatment ^{†1}					-	-		
Output 6:Availability and consumption of appropriate foods (in terms of quality, quantity, frequency, and safety) enhanced and women's workload reduced	Food-secure households ¹ Contact with government ag. technician ^{‡3} Contact with a co-operative ^{‡3} Not using solid fuel/open fireplace ³					ŀ		-	
Output 7–8: Refer to human resources and information systems (no subregional barriers/ drivers available)									
ANIC = Antenatal care; ag = agriculture		1	1		1			1	1

ANC = Antenatal care; ag. = agriculture

*Households having an observed place for handwashing with soap and water: †Includes boiling, bleaching, straining, filtering, and solar disinfecting. ‡Among agricultural households, in the past 12 months. §Defined as receiving seeds, fertilizer, or credit from a co-operative (agricultural savings and credit association) in the past 12 months. Among agricultural households.

Sources: 'New ERA, and ICF International Inc. (2012); ²Nepal MoHP (2012); ³Nepal CBS (2012b).

HOUSEHOLD CONSUMPTION OF MICRONUTRIENT-RICH FOODS (PAST 7 DAYS), AND SOURCE (PAST 12 MONTHS)

	Household Consumption (past 7 days)		In the last 12 Months, % of Households the have obtained this type of food, by source		
		Produced	Purchased	In Kind	
Vitamin A-rich fruits & vegetables*	76.8	83.6	63.5	74.7	
Eggs	35.0	36.0	61.0	1.9	
Dairy	73.8	50.1	47.6	40.0	
Meats	63.6	40.3	96.3	21.2	

Sources

Government of Nepal National Planning Commission (NPC). 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)". Government of Nepal.

Nepal Ministry of Health and Population (MoHP), 2012. Annual Report: Department of Health Services, 2067/68 (2010/2011). Government of Nepal Ministry of Health and Population, Kathmandu, Nepal.

Ministry of Health and Population (MOHP) [Nepal], New ERA, and ICF International, Inc. 2012. "Nepal Demographic and Health Survey 2011 Final Report". Kathmandu, Nepal; and Calverton, Maryland, USA. http://dhsprogram.com/pubs/pdf/FR257/FR257%5B13April2012%5D.pdf.

Nepal Central Bureau of Statistics (CBS). 2012a. "National Population and Housing Census 2011". Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat.

Nepal Central Bureau of Statistics (CBS). 2012b. Nepal Living Standards Survey 2010-2011: Third Round. Kathmandu, Nepal: Nepal Central Bureau of Statistics.

*Includes leafy green vegetables, papayas, mangos, and colocassia. Source: Nepal CBS (2012b).

1% | Pathways to Better Nutrition in Nepal

SUMMARY OF KEY MSNP INDICATORS* FOR WESTERN MOUNTAIN SUBREGION

Level in Western Mountain	MSNP National Target (2017)
52.7%	(increased)
21.6%	(reduced)
59.5%	29%
42.0%	20%
22.2%	15%
10.4%	5%
16.0%	(increased)
unavailable	(increased)
52.7%	(reduced)
33.1%	(reduced)
4.5%	(reduced)
8.5 hours	(reduced)
14.9%	(reduced)
54.2%	(increased)
unavailable	(reduced)
	Mountain 52.7% 21.6% 59.5% 42.0% 22.2% 10.4% 16.0% unavailable 52.7% 33.1% 4.5% 8.5 hours 14.9% 54.2% unavailable unavailable unavailable unavailable unavailable unavailable

*The MSNP names several outcome level activities, only those named as an indicator are listed here.

IYCF = Infant and Young Child Feeding; SAM = Severe Acute Malnutrition; ARI = Acute Respiratory Infection.

Daily workload is defined as the weekly number of hours spent on household or employment per week, divided by 7.

Sources: ¹Nepal MoHP, New ERA, ICF International Inc. (2012); ² Nepal CBS (2012b); ³ Government of Nepal NPC (2012).

DESCRIPTION OF WESTERN MOUNTAIN CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Rural

Households in lowest national wealth quintile*: Above average (60%)

Percentage of households on paved road: Below average (0%)

Households receiving remittances: Below average (43%)

Literacy rate for women of reproductive age: Below average (42%)

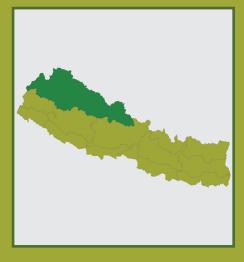
Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq. km.=Urban, 500< persons per sq. km.>300=Peri-Urban, <300 persons per sq. km.=Rural. Source: Nepal CBS (2012a).

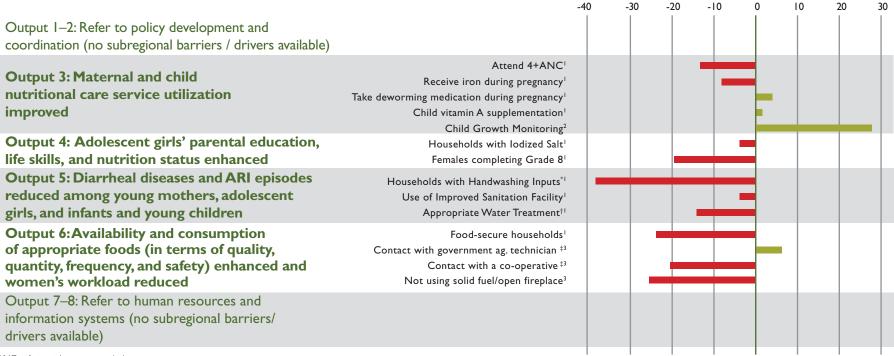
*Considered a measure of poverty. Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).

Remittances are defined as any money received by individuals not living in the household. Source: Nepal CBS (2012b).

Literacy rates are compared to national average.



Drivers and Barriers are organized by the bolded outputs. Difference from national average (percentage points), except where noted below.



ANC = Antenatal care; ag. = agriculture

*Households having an observed place for handwashing with soap and water: †Includes boiling, bleaching, straining, filtering, and solar disinfecting. ‡Among agricultural households, in the past 12 months. §Defined as receiving seeds, fertilizer, or credit from a co-operative (agricultural savings and credit association) in the past 12 months. Among agricultural households.

Sources: 'New ERA, and ICF International Inc. (2012); ²Nepal MoHP (2012); ³Nepal CBS (2012b).

HOUSEHOLD CONSUMPTION OF MICRONUTRIENT-RICH FOODS (PAST 7 DAYS), AND SOURCE (PAST 12 MONTHS)

	Household Consumption (past 7 days)		In the last 12 Months, % of Households the have obtained this type of food, by source		
		Produced	Purchased	In Kind	
Vitamin A-rich fruits & vegetables*	78.5	88.9	30.6	70.8	
Eggs	6.9	16.0	16.0	2.8	
Dairy	70.8	73.6	11.1	43.1	
Meats	46.5	34.7	91.7	41.0	

Sources

Government of Nepal National Planning Commission (NPC). 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)". Government of Nepal.

Nepal Ministry of Health and Population (MoHP), 2012. Annual Report: Department of Health Services, 2067/68 (2010/2011). Government of Nepal Ministry of Health and Population, Kathmandu, Nepal.

Ministry of Health and Population (MOHP) [Nepal], New ERA, and ICF International, Inc. 2012. "Nepal Demographic and Health Survey 2011 Final Report". Kathmandu, Nepal; and Calverton, Maryland, USA. http://dhsprogram.com/pubs/pdf/FR257/FR257%5B13April2012%5D.pdf.

Nepal Central Bureau of Statistics (CBS). 2012a. "National Population and Housing Census 2011". Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat.

Nepal Central Bureau of Statistics (CBS). 2012b. Nepal Living Standards Survey 2010-2011: Third Round. Kathmandu, Nepal: Nepal Central Bureau of Statistics.

*Includes leafy green vegetables, papayas, mangos, and colocassia. Source: Nepal CBS (2012b).

11& Pathways to Better Nutrition in Nepal

SUMMARY OF KEY MSNP INDICATORS* FOR WESTERN TERAI SUBREGION

Key Indicator	Level in Western Terai	MSNP National Target (2017)
Completion of primary education ¹	48.8%	(increased)
Low birthweight (<2.5kg) ¹	14.9%	(reduced)
Stunting, children under 5 years ¹	39.9%	29%
Underweight, children under 5 years ¹	34.4%	20%
Underweight, non-pregnant women ¹	21.3%	15%
Wasting, children under 5 years ¹	7.6%	5%
Outcome Indicator		
3 IYCF practices, children 6–23 months ¹	23.0%	(increased)
Access to SAM services	unavailable	(increased)
Any anemia, children 6–59 months ¹	48.8%	(reduced)
Any anemia,WRA ¹	32.7%	(reduced)
ARI in past 2 weeks, children under 2 years	5.3%	(reduced)
Daily workload, women ²	7 hours	(reduced)
Diarrhea in past 2 weeks, children under 2 years ¹	17.9%	(reduced)
Early initiation of breastfeeding	51.9%	(increased)
Indoor smoke exposure, children under 5 years	unavailable	(reduced)
Indoor smoke exposure,WRA	unavailable	(reduced)
lodine Deficiency, children 6–23 months	unavailable	(reduced)
Vitamin A deficiency, children 6–23 months	unavailable	(reduced)

*The MSNP names several outcome level activities, only those named as an indicator are listed here.

IYCF = Infant and Young Child Feeding; SAM = Severe Acute Malnutrition; ARI = Acute Respiratory Infection.

Daily workload is defined as the weekly number of hours spent on household or employment per week, divided by 7.

Sources: ¹Nepal MoHP, New ERA, ICF International Inc. (2012); ² Nepal CBS (2012b); ³ Government of Nepal NPC (2012).

DESCRIPTION OF WESTERN TERAI CHARACTERISTICS (IN COMPARISON TO OTHER SUBREGIONS)

Location: Peri-Urban

Households in lowest national wealth quintile*: Below average (3%)

Percentage of households on paved road: Above average (86%)

Households receiving remittances: Above average (70%)

Literacy rate for women of reproductive age: Above average (74%)

Notes:

Location definitions are derived from the number of population living in the following categories: >500 persons per sq. km.=Urban, 500< persons per sq. km.>300=Peri-Urban, <300 persons per sq. km.=Rural. Source: Nepal CBS (2012a).

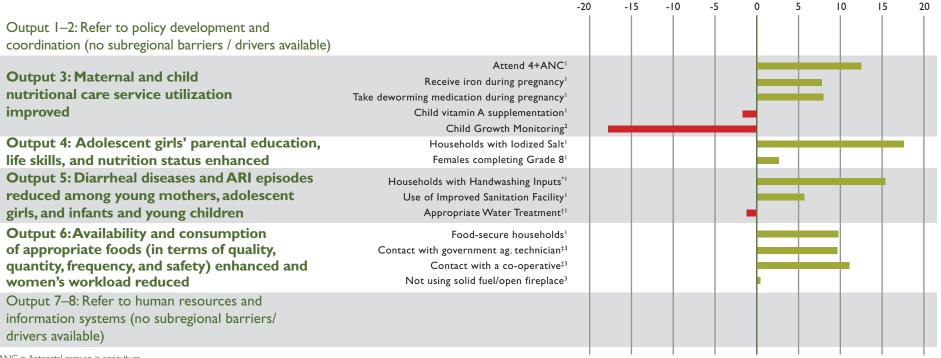
*Considered a measure of poverty. Source: Nepal MoHP, New ERA, and ICF International Inc. (2012).

Remittances are defined as any money received by individuals not living in the household. Source: Nepal CBS (2012b).

Literacy rates are compared to national average.



Drivers and Barriers are organized by the bolded outputs. Difference from national average (percentage points), except where noted below.



ANC = Antenatal care; ag. = agriculture

*Households having an observed place for handwashing with soap and water: †Includes boiling, bleaching, straining, filtering, and solar disinfecting. ‡Among agricultural households, in the past 12 months. §Defined as receiving seeds, fertilizer, or credit from a co-operative (agricultural savings and credit association) in the past 12 months. Among agricultural households.

Sources: 'New ERA, and ICF International Inc. (2012); ²Nepal MoHP (2012); ³Nepal CBS (2012b).

HOUSEHOLD CONSUMPTION OF MICRONUTRIENT-RICH FOODS (PAST 7 DAYS), AND SOURCE (PAST 12 MONTHS)

	Household Consumption (past 7 days)		In the last 12 Months, % of Households the have obtained this type of food, by source		
		Produced	Purchased	In Kind	
Vitamin A-rich fruits & vegetables*	75.7	66.9	93.1	64.1	
Eggs	37.7	15.5	76.2	1.2	
Dairy	66.4	25.0	78.7	14.1	
Meats	68.3	17.8	90.5	24.3	

Sources

Government of Nepal National Planning Commission (NPC). 2012. "Multi-Sector Nutrition Plan: For Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal, 2013-2017 (2023)". Government of Nepal.

Nepal Ministry of Health and Population (MoHP), 2012. Annual Report: Department of Health Services, 2067/68 (2010/2011). Government of Nepal Ministry of Health and Population, Kathmandu, Nepal.

Ministry of Health and Population (MOHP) [Nepal], New ERA, and ICF International, Inc. 2012. "Nepal Demographic and Health Survey 2011 Final Report". Kathmandu, Nepal; and Calverton, Maryland, USA. http://dhsprogram.com/pubs/pdf/FR257/FR257%5B13April2012%5D.pdf.

Nepal Central Bureau of Statistics (CBS). 2012a. "National Population and Housing Census 2011". Kathmandu, Nepal: Government of Nepal National Planning Commission Secretariat.

Nepal Central Bureau of Statistics (CBS). 2012b. Nepal Living Standards Survey 2010-2011: Third Round. Kathmandu, Nepal: Nepal Central Bureau of Statistics.

*Includes leafy green vegetables, papayas, mangos, and colocassia. Source: Nepal CBS (2012b).

11(| Pathways to Better Nutrition in Nepal

Selection of Indicators in Nepal Subregion Snapshots

This document provides an explanation of what indicators are included in the SPRING "Pathways to Better Nutrition" (PBN) country subregional snapshots. It also provides the methodology for attachment of indicators to the activities named in the national nutrition plans. While this Annex discusses Nepal specifically, the same methods were used for the snapshots in both case study countries (See SPRING's website for further details on the Uganda PBN Case Study).

Description of Characteristics

The first set of indicators in the snapshots was chosen to give a very brief insight into the variation of context across sub-regions. In consultation with experts, review of situation analyses, and review of the CIA country profiles for Nepal, SPRING found facets of variation that **cannot** be easily modified but **can** affect nutritional status and program-ming. The following facets appeared to be important:

- Urbanicity¹⁶
- Poverty level
- Road access
- Remittances received
- Female literacy

Other factors that were considered included religious or ethnic populations; significant differentials in geography; reliance on agriculture for livelihood; and political unrest.

Summary of Key Plan Indicators

The snapshots next provide a summary table of the key indicators for Nepal. The first section is drawn directly from the Purpose Indicators named in Nepal's Multi-Sector Nutrition Plan (MSNP). See the MSNP for the details on these indicators. Generally speaking, the key indicators in this summary table correspond to higher level results in the illustrative results framework in Figure 1 (at end of this document), which SPRING developed to show logical pathways to the key indicators affecting nutrition status in Nepal (and in Uganda; see the Uganda-specific case study work for further details).

The indicators in this first summary table line up temporally with "late" outcomes in the framework.¹⁷ The indicators in the second component of this table are derived from outcome indicators delineated in the MSNP, which mostly correspond to early outcomes in the illustrative results framework in Figure 1 and are health indicators that are proximate determinants of anthropometric measures of malnutrition. In addition, this component includes some health behaviors considered late intermediate outputs and range from individual behaviors (such as daily workload for women) to results that manifest in the environment (access to SAM services, for instance).

¹⁶ The degree to which a geographical unit is urban – <u>http://www.urbanicity.us/Urbanicity.html</u>

¹⁷ Final impacts are on mortality and long-term morbidity, however none of the analyzed national plans address these, and as such they are not included in the snapshots.

Identified Barriers and Drivers of Better Nutrition, by Selected MSNP Output Areas

SPRING has provided a set of indicators to represent the Output areas in the MSNP. These indicators link to specific activities named in the plan to overcome barriers and drive improvement in nutrition. SPRING has defined a methodology for selection that is meant to provide a representative selection of indicators.

Given the correspondence of the MSNP key indicators to late intermediate outputs, early outcomes, and late outcomes in the results framework in Figure 1, SPRING considered activities up to and including early intermediate outputs for inclusion as "drivers or barriers", as they precede, and can potentially affect, the key indicators.

Using this framework as a starting point, SPRING examined the MSNP's logical frame-work and action plan in each plan to attach indicators to the listed interventions, as one would for a performance monitoring plan (PMP). The team checked the main compendiums for nutrition and nutrition-sensitive indicators to find measurable indicators that could be attached.¹⁸ Some of these sources are:

- WHO infant and young child feeding indicator compendium
- CORE Group essential nutrition actions trilogy
- Measure DHS reproductive health compendium
- USAID review of health systems strengthening measures
- USAID feed the future indicator list
- JMP water and sanitation measures
- UNDP gender-sensitive service delivery indicator guide
- DHS guide to statistics

From the final set of standardized indicators, one to six indicators per output were chosen to represent the barriers and drivers in each subregion. Selected indicators were chosen to provide a diversity of information from both the supply and demand side, and from the individual, household and system level. The final set of indicators was also evaluated by the following criteria:

- 1. Representativeness of activity for objective theme
- 2. Global relevance
- 3. Availability of indicator in existing data collection mechanisms (surveys, HIS, etc.)
- 4. Variation across subregions

Where possible, SPRING ensured that data availability did not have undue influence over the other criteria. For some, an indicator was disqualified because it was not linked to an activity useful to reporting below national level (for instance the activities in MSNP Outputs 1, 2, 7, and 8). To get a sense of what barriers and drivers transcended country context, SPRING also conducted a crosswalk of the Nepal implementation plan with the other PBN country, Uganda, for similar action areas. Indicators for activities that overlapped were prioritized for inclusion in the snapshots.

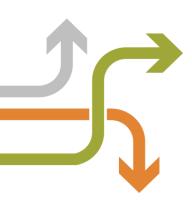
¹⁸ Every attempt was also made to standardize use of indicators for similar activities across the two countries, Nepal and Uganda

Household Consumption of Micronutrient-Rich Foods, and Source, Table

The final table in the snapshot describes the consumption of foods important for at-taining recommended micronutrient levels, as well as the source of these foods, in each subregion. The data on food source cannot be evaluated against the national average as other drivers and barriers would. However, this information is still useful for the plan-ning of nutrition interventions in Output 6 related to consumption of nutritious local foods, access to markets, and/or agricultural production.

Figure 1 below shows generally SPRING's arrangement of some of the key activities proposed over the course of a results framework.

	Inputs	Process	Early Intermediate Outputs	Late Intermediate Outputs	Early Outcomes	Late Outcomes	Impacts	
	inputs	Frocess	Increasing Coverage of:	Increasing Behaviors of:	Decreased Prev. of:	Decreased Prev. of:		
Itions			IFA tablets/ANC	IFA compliance	Maternal Anemia	Stunting/Low Birth Weight		
) Interver	Improve political advocacy for nutrition	Financing Mechanisms	Courseline	Exclusive/Appropriate Breastfeeding		Stunting/Underweight		
Nutrition (Specific) Interventions	Strengthen commodity delivery/ infrastructure & Human Resources	Hiring/Training/Retention Policy and Governance Strategies (NPA, other)	Counseling	Diversified eating	Maternal/Child Anemia	Stunting/Underweight/ Low Birth Weight		
trition	Improve coordination	Community Engagement Changes to Supply Chain	Zinc	Appropriate treatment of Diarrhea	Diarrhea	Stunting/Underweight		
Ñ	& implementation of policies	cies Service Infrastructure	Hand washing commodities (soap, tippy tap, latrines)	Use of handwashing commodities	Diarrhea	Stunting/Underweight	Child Mortality	
tions	Strengthen IS and research in nutrition innovation	Changes to nutrition & food security surveillance systems Aid interventions aimed	Deworming commodities	Appropriate treatment with de-wormer	Diarrhea	Stunting/Underweight	Nutrition-related Morbidity	
Nutrition (Sensitive) Interventions	\$/Funding Strengthen community involvement	at decreasing household shocks Agricultural training	Inputs for and knowledge of bio-fortification	Consumption of bio- fortified foods	Maternal/Child Anemia, Micronutrient Deficiencies	Stunting/Underweight/ Low Birth Weight		
(Sensitiv	Improve government & private sector coverage of nutrition services	on practices and productivity	Food secure households		Wasting/Micronutrient Deficiencies	Stunting/Underweight/ Low Birth Weight		
Nutrition	of full full set vices		Food production Food storage	Diet Diversity	Wasting/Micronutrient Deficiencies	Stunting/Underweight/ Low Birth Weight		
	Country Context: Sociodemographics, Epidemiology/nutritional status at baseline, cultural norms, and existing systems							



ANNEX 5

Supplemental National Financial Figures These figures provide further detail on our "Pathways to Better Nutrition" (PBN) analysis of Nepal's national nutrition funding.

Nepal Date Conversion:

In this English version of the final report, we will use the Gregorian (Christian) calendar. For easy conversion, here are the corresponding years in the Vikram Samvat (Hindu) calendar:

Gregorian	Vikram Samvat
2013–2014	2070–2071
2014–2015	2071–2072
2015–2016	2072–2073

On-Budget Allocations

Summary of Nutrition Allocations over Time

Unweighted

000s, Rs	Sensitive-Partial	Sensitive-Dominant	Specific						
	2013-14 Allocations								
Subtotals	4,028,322	925,174	2,015,241						
Total			6,968,737						
2014-15 Allocations									
Subtotals	4,587,184	935,326	2,579,699						
Total			8,102,209						
	2015-16 Allocations								
Subtotals	5,377,129	1,109,666	4,457,903						
Total			10,944,698						

Taking into account integration percentages, the 2015–16 total on-budget nutrition allocation is **approximately 11 billion Rs (111 million USD).** Those activities that are "Sensitive-Dominant" and "Specific" can be considered as planned explicitly to improve nutrition outcomes. Those that are "Sensitive-Partial" are MSNP activities, but they do not include nutrition as an explicit objective, outcome or indicator.

To use these figures for global SUN reporting, the sensitive-partial activities need to be weighted to 25 percent of their value, to reflect their less direct affect on nutrition outcomes. The next table provides these weighted estimates.

Weighted

000s, Rs	Sensitive-Partial	Sensitive-Dominant	Specific					
2013-14 Allocations								
Weight	25%	100%	100%					
Subtotals	1,007,081	925,174	2,015,241					
Total			3,947,496					
2014-15 Allocations								
Weight	25%	100%	100%					
Subtotals	1,146,796	935,326	2,579,699					
Total			4,661,821					
	2015-16 Allocations							
Weight	25%	100%	100					
Subtotals	1,344,282	1,109,666	4,457,903					
Total			6,911,851					

Applying sensitivity weights to the figures above, the 2015–16 total on-budget nutrition allocation changes to **approximately 7 billion Rs (70 million USD).** This weighting applies a standard 25 percent discount to those sensitive-partial activities. To apply weights that vary by activity, you will need to use the SPRING nutrition budget analysis tool.

Summary of On-Budget Nutrition Allocations by Sector

Unweighted

	2013–14 Allocations		2014–15 Allocations			2015–16 Allocations			
000s, Rs	Sensitive- Partial	Sensitive- Dominant	Specific	Sensitive- Partial	Sensitive- Dominant	Specific	Sensitive- Partial	Sensitive- Dominant	Specific
MoAD	460,386	275,055	0	391,177	566,965	0	456,134	737,275	0
ΜοΕ	455,538	0	0	486,537	0	0	446,525	0	0
MoFALD	116,190	478,529	590,600	99,726	225,414	1,696,689	132,755	224,665	3188,587
Subnational Grants	2536000	0	0	2971000	0	0	3604446	0	0
МоНР	0	80,090	1,424,641	0	55,637	883,010.3	0	41,885	1,269,316
MoUD	457,265	91,500	0	635,793	87,310	0	734425	105,841	0
MoWCSW	2,943	0	0	2,951	0	0	2,844	0	0
NPC	0	0	0	0	0	0	0	0	0

Weighted

	2013–14 Allocations			2014–15 Allocations			2015–16 Allocations		
000s, Rs	Sensitive- Partial	Sensitive- Dominant	Specific	Sensitive- Partial	Sensitive- Dominant	Specific	Sensitive- Partial	Sensitive- Dominant	Specific
Weight	25%	100%	100%	25%	100%	100%	25%	100%	100%
MoAD	115,097	275,055	0	97,794	566,965	0	114,034	737,275	0
MoE	113,885	0	0	121,634	0	0	111,631	0	0
MoFALD	29,048	478,529	590,600	24,931.5	225,414	1,696,689	33,189	224,665	3,188,587
Subnational Grants	634,000	0		742,750	0		901,112	0	
МоНР	0	80,090	1,424,641	0	55,637	883,010	0	41,885	1,269,316
MoUD	114,316	91,500	0	158,948	87,310	0	183,606	105,841	0
MoWCSW	736	0	0	738	0	0	711	0	0
NPC	0	0	0	0	0	0	0	0	0

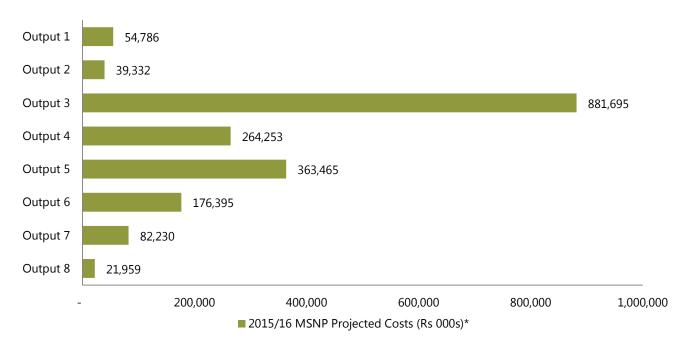
Applying sensitivity weights most affects:

- Subational grants (MoFALD)
- MoE
- MoWCSW

These sectors are made up of only sensitive-partial activities.

Summary of On-Budget Allocations by MSNP Output/Activity Areas

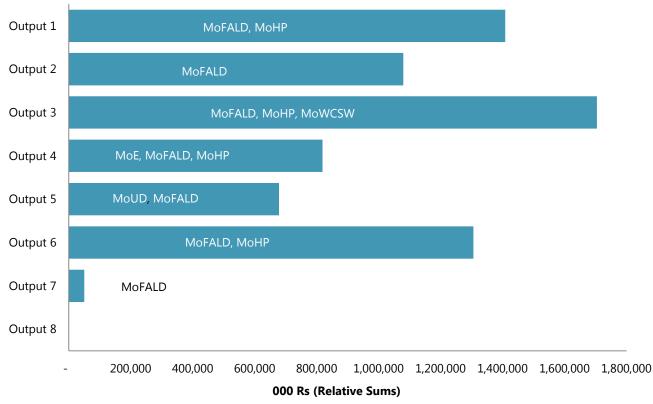
Figure 1. Costs per Output Area, as Projected in MSNP for FY 2015–16



Source: MSNP Consolidated Cost Action Plan

As a reminder of the projected costs given by the MSNP, the Figure 1 provides these costs by MSNP output area. We have adjusted them for inflation to 2015–16 dollars (they were provided in 2013).





*Sums do not include Sub-National Grants, which could not be assigned MSNP areas. We were unable to locate any NPC funding.

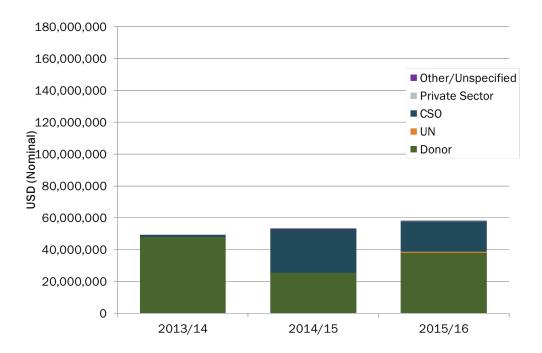
Figure 2 shows the same breakdown, but of allocation in 2015–16. Relative to other output areas, Outputs 1 and 3 have the most related allocations in 2015–16. However, Output 6 had the most project/headings related to it, with nine Red Book headings from MoAD and MoFALD. Output 4 also had many projects (6) and many sectors (3) supporting it.

These figures are not exact, and do not include off-budget activities like the Nepal Food Security Monitoring System (NeKSAP), Suahaara, or Sunita.

Off-Budget Allocations

Summary of Off-Budget Nutrition Allocations over Time

Figure 3. Off-Budget Allocations, 2013-14 to 2015-16 (Unweighted)



Off-budget funding appears to have grown in real terms by 1 percent per year (see Figure 3 above), but given the data quality issues, this should be interpreted as no change over time.

The majority of off-budget funds came from donor projects (green), such as Suaahara, NeKSAP, SUNITA, and others. CSO funding follows closely behind (blue). UN groups (orange) such as the Food and Agriculture Organization, the World Food Programme, and UNICEF had numerous activities listed, but few had complete commitments data, as such is likely higher than what we see here.

Summary of Nutrition-Related Off-Budget Allocations

Unweighted

2015–16 Allocations						
000s Rs	Sensitive- Partial	Sensitive- Dominant	Sensitive – Could not be determined	Specific		
Subtotals	1,584,565	2,826,514	1,176,378	236,032		
Total				5,823,489		

Taking into account integration percentages, the 2015–16 total is **approximately 6 billion Rs (59 million USD)**. *Sensitivity could not be determined for about 1 billion Rs (12 million USD)*.

Weighted

2015–16 Allocations							
000s Rs	Sensitive- Partial	Sensitive- Dominant	Sensitive—could not be determined	Specific			
Weight	25%	100%	Not counted	100%			
Subtotals	396,141	2,826,514		236,032			
Total				3,458,688			

Applying sensitivity weights to the figures above, the 2015—16 total changes to **approximately 3.5 billion Rs (35 million USD)**.

Key Funders

(Unweighted figures)

Off-Budget Donor and UN

Funder	Projects	2015—16 Commitment (USD)	Sector
USAID	16	26,900,000	Agriculture, health, WASH
Norway	1	3,447,860	Local development
Germany	5	3,889,585	Health/multiple
DFID	2	2,875,878	WASH
WFP	2	395,745	Other
Australia	2	320,504	WASH, education, women
FAO	6	317,473	Agriculture
Japan	2	176,494	Health/multiple

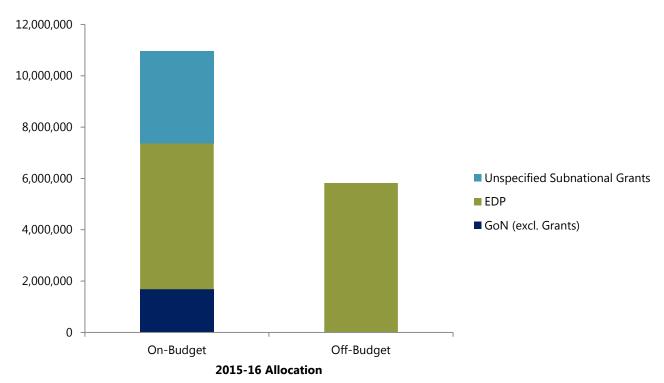
Off-Budget CSO

CSOs	Projects	2015—16 Total Commitment (USD)	Sector
Save the Children	6	5,495,952	Women, children, and social welfare; health; livelihoods
United Mission to Nepal	1	5,104,878	Agriculture, education, health, local development
Heifer International	1	4,526,482	Agriculture, livelihoods
WaterAid Nepal	1	3,267,604	WASH, health
Sunrise Children's Association, Inc. Australia/Nepal	1	471,313	Education
Latter-day Saint Charities	1	131,881	Women, children, and social welfare

The profile of missing data in the AMP is as follows:

- 86 percent of nutrition-relevant 2013–14 activities had a reported 2013–14 commitment of 0 USD/no entry
- 91 percent of nutrition-relevant 2014–15 activities had a reported 2014–15 commitment of 0 USD/no entry
- 83 percent of nutrition-relevant 2015–16 activities had a reported 2015–16 commitment of 0 USD/no entry

The AMP contains both on and off-budget funding. Although we only report off-budget estimates from this source, we were able to use the on-budget AMP data to compare to the more reliable Red Book figures. We found many disparities in the totals reported. In addition, we held validation interviews for the off-budget funds from USAID and UNICEF, and their accounting differed from the totals in the AMP.



Role of Subnational Grants

There are no clear guidelines globally on how to handle central grants and transfers—the most accurate way to handle is a survey of districts, but this is not practical. As one example, our PBN Uganda study (a sister study to this one) did detailed budget analysis in two districts found around 10-15 percent of central transfers were nutrition-related, but as those included many more categories other than grants it is unfair to compare.

What is helpful is that, in the Red Book, many central transfers are already split out into specific headings—for instance, the MSNP heading.

ADDITIONAL PBN DOCUMENTS

To access the full complement of PBN reports, briefs, and snapshots, please go to www.spring-nutrition.org/pbn

ABOUT SPRING

The Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project is a five-year USAID-funded cooperative agreement to strengthen global and country efforts to scale up high-impact nutrition practices and policies and improve maternal and child nutrition outcomes. The project is managed by JSI Research & Training Institute, Inc., with partners Helen Keller International, The Manoff Group, Save the Children, and the International Food Policy Research Institute.

SPRING

JSI Research & Training Institute, Inc. 1616 Fort Myer Drive, 16th Floor Arlington, VA 22209 USA

Tel: 703-528-7474 Fax: 703-528-7480

Email: info@spring-nutrition.org Web: www.spring-nutrition.org

This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of the Cooperative Agreement No. AID-OAA-A-11-00031 (SPRING), managed by JSI Research & Training Institute, Inc. (JSI). The contents are the responsibility of JSI, and do not necessarily reflect the views of USAID or the United States Government.

