



# EXPERIENCES AND LEARNING FROM THE ‘MICRONUTRIENT POWDERS CONSULTATION: LESSONS LEARNED FOR OPERATIONAL GUIDANCE’

Christina Nyhus Dhillon, Independent Consultant, Geneva, Switzerland; Danya Sarkar, SPRING, Virginia, USA; Rolf Klemm, Helen Keller International, Washington, DC, USA; Lynnette M. Neufeld, Global Alliance for Improved Nutrition, Geneva, Switzerland; Rahul Rawat, International Food Policy Research Institute, Dakar, Senegal; Alison Tumilowicz, Global Alliance for Improved Nutrition, Geneva, Switzerland; Sorrel Namaste, SPRING, Virginia, USA

Christina Nyhus Dhillon

## INTRODUCTION

Micronutrient powders (MNP) are single-dose sachets of vitamins and minerals that are mixed into food immediately before consumption. MNP are—

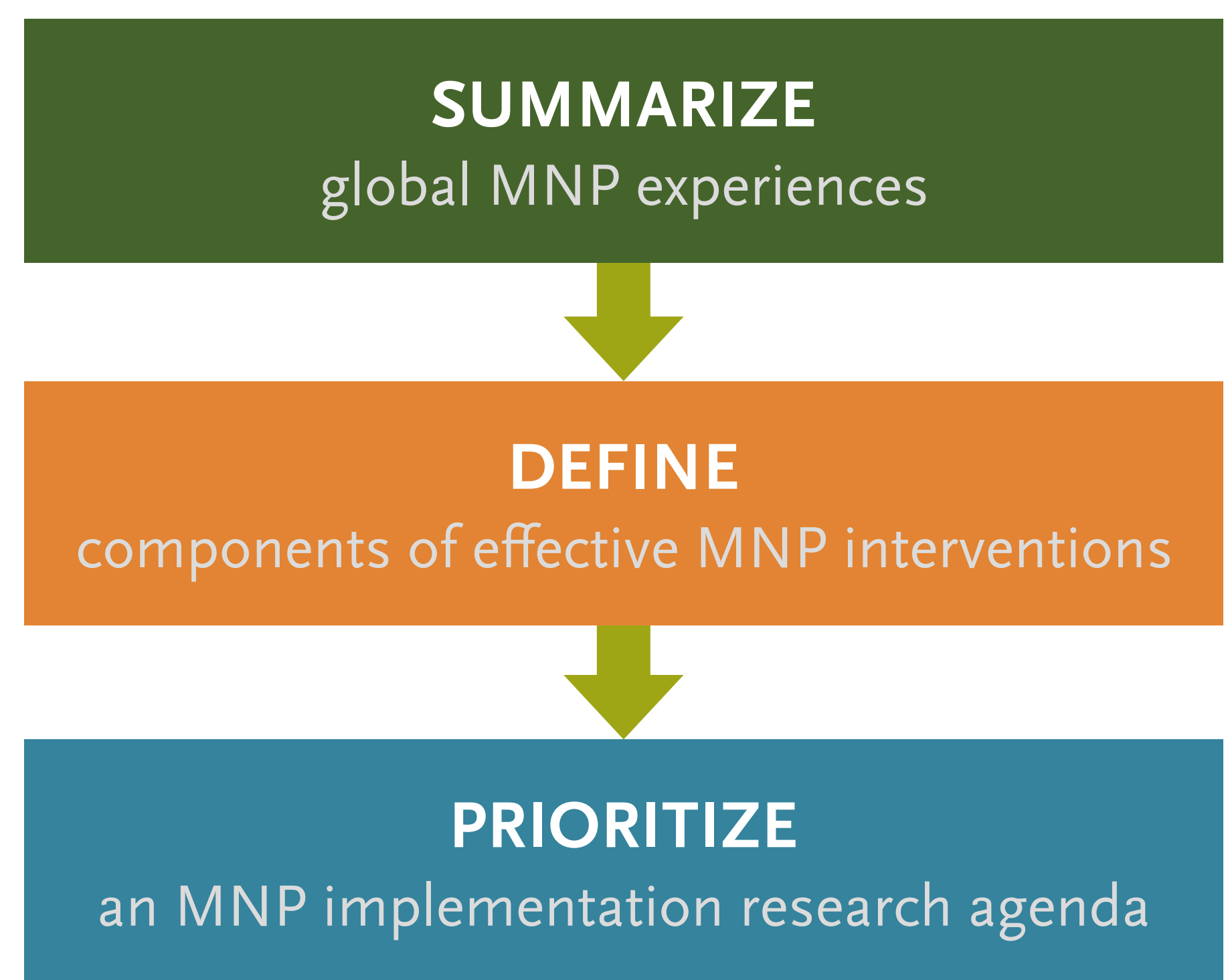
- efficacious in reducing both anemia and iron deficiency
- relatively easy to use and usually do not affect the taste of foods
- available in large quantities at a relatively low cost.

However, operationalizing MNP interventions remains a complex challenge.



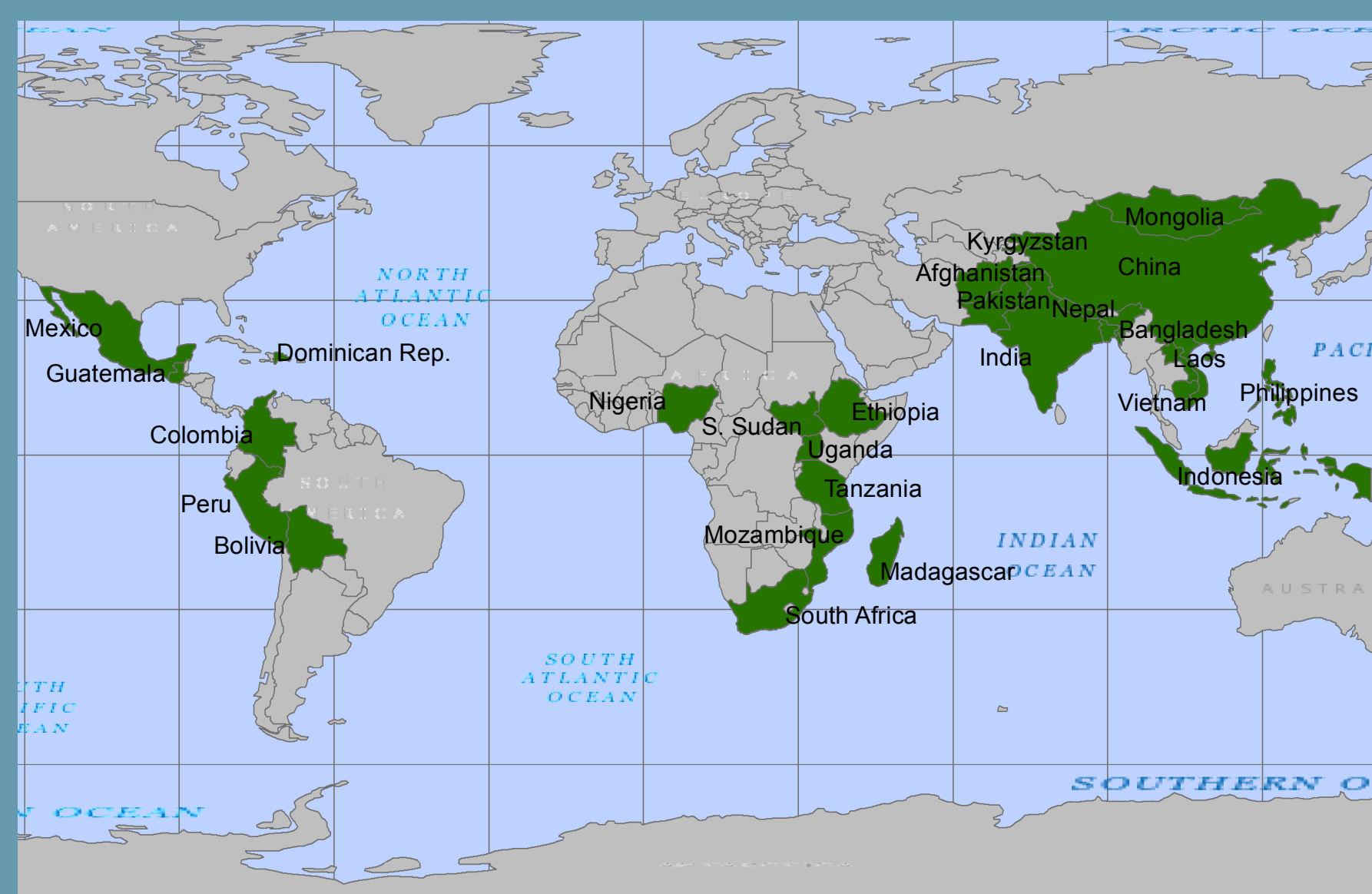
Photo credit: [http://ross.typepad.com/blog/2006/10/sprinkles\\_simpl.html](http://ross.typepad.com/blog/2006/10/sprinkles_simpl.html)

## OBJECTIVES



## METHODS

USAID’s global nutrition project, SPRING, convened MNP experts in a year-long effort to share evidence and experience for MNP interventions, complementing existing resources.

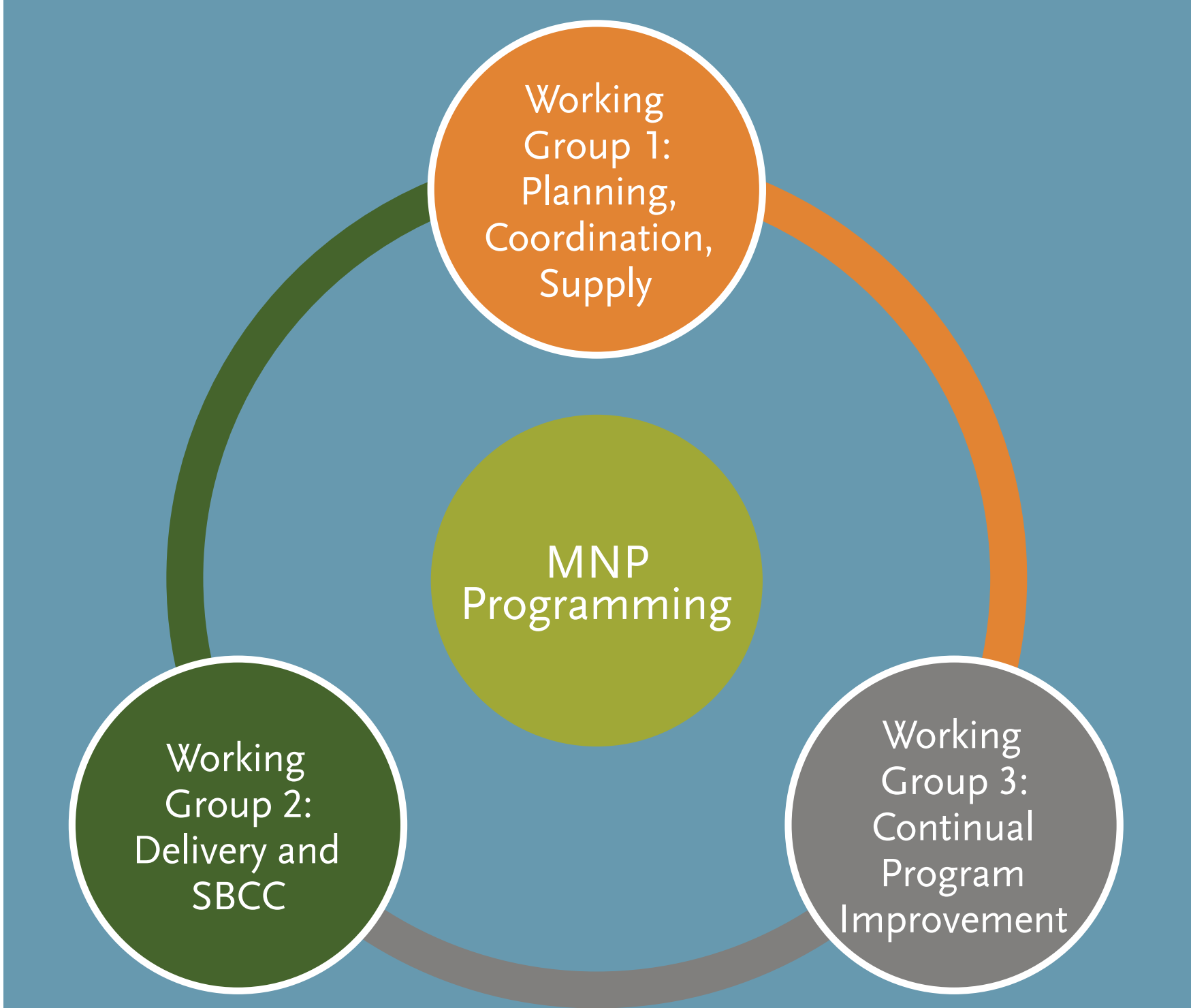


Primary data collected through 47 key informant interviews drawing from experiences in 28 countries. All informants had direct experience providing technical assistance to or implementing MNP interventions.

WE OBTAINED SECONDARY DATA FROM A SYSTEMATIC LITERATURE SEARCH.

A total of **81** peer-reviewed articles, **19** guidance documents, and **55** program reports or conference presentations were identified as having information on implementation experiences and were reviewed.

## MNP CONSULTATION MEMBERS



## KEY FINDINGS

### PLANNING, COORDINATION & SUPPLY

- An assessment of the nutrition situation that includes micronutrient data is advisable, but anemia prevalence is often the only available data.
- Advocacy, planning, and coordination have been more successful when built from existing policies, programs, systems, and resources.
- MNP are considered cost-effective, but funding remains a challenge in many countries. Initial costs can be borne or shared by external partners, but government financing or innovative delivery strategies (i.e. fee-for-product approaches) may be needed for sustainability.
- MNP are predominantly sourced from international suppliers; in a few cases, local production has been feasible with substantial investment and capacity building. Product quality is critical to build and sustain program trust.



Photo credit: SPRING

### DELIVERY, BEHAVIOR CHANGE, AND TRAINING

- Delivery of MNP is most common through IYCF programs given their complementarity, but often the IYCF program needs to be strengthened.
- Different combinations of models, platforms, and channels of models have potential (see figure).
- Continual behavior change communication and training have been needed to increase and sustain coverage and adherence.
- Tailoring training for private and public sectors has been necessary.

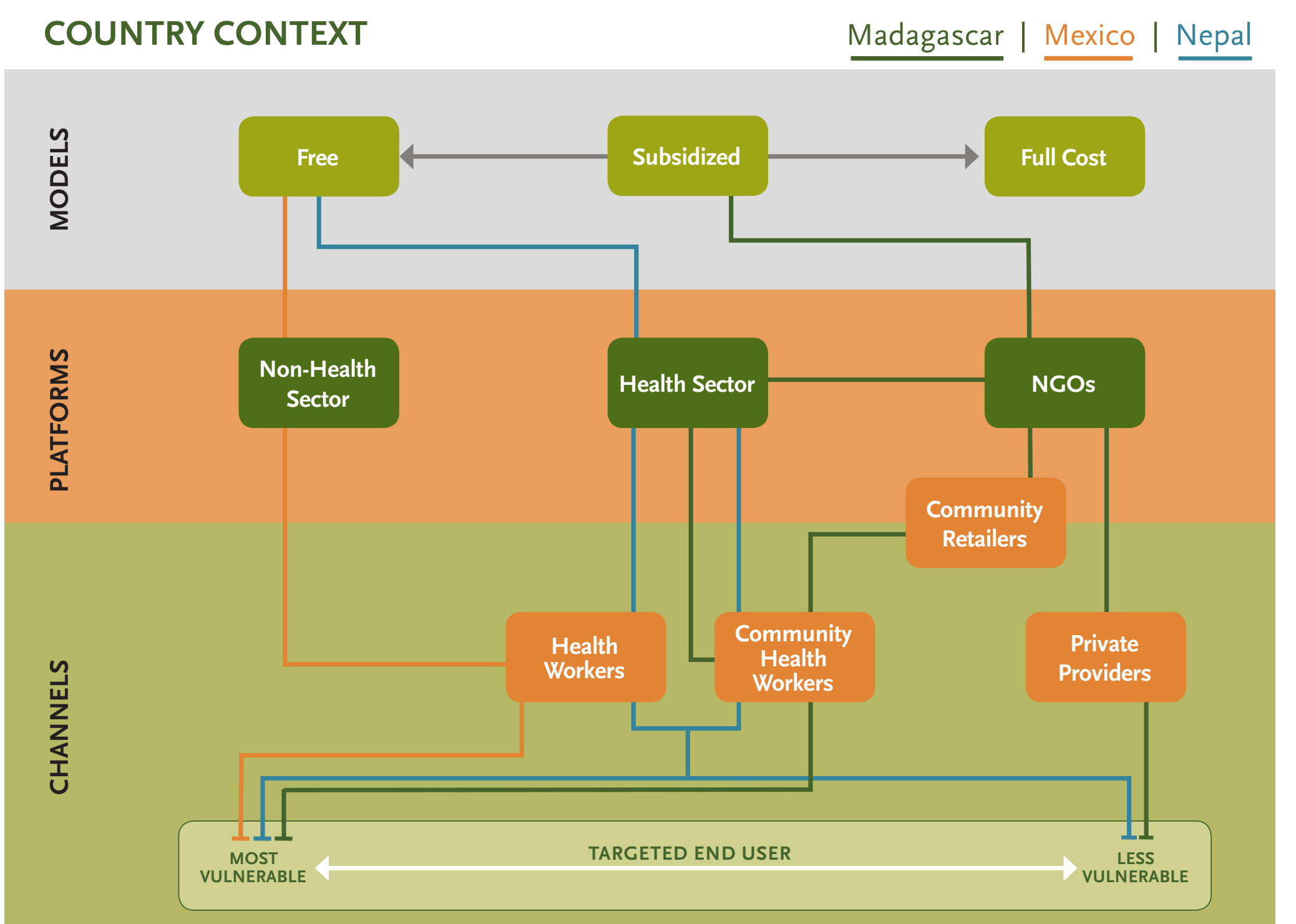


Figure. Delivery Strategies

### CONTINUAL PROGRAM IMPROVEMENT

- A clearly articulated program theory has been developed in many MNP interventions but has rarely been used to track progress and make course corrections.
- Technical capacity to monitor and evaluate activities usually relies on external institutions, which often end their support after programs' initial research phase.
- Supervisory systems and how they should be used to improve implementation is poorly documented for MNP interventions.

## DISCUSSION

There is a lack of documented implementation experiences, particularly for larger or scaled MNP interventions. High-quality process evaluations and/or learning from large-scale or national MNP programs are needed to illuminate the best practices and constraints of sustaining an effective, scaled program.

Some areas of implementation research needed, as identified during the consultative process:

- Identify best practices to build funding into scale-up plans and national programs and avoid “eternal pilots”
- Determine if a mixed or subsidized model can maintain equitable accessibility while maintaining acceptable profit margins to keep the private sector engaged
- Examine how to effectively link monitoring and process evaluation to decision-making processes

## ACKNOWLEDGEMENTS

This work is in part made possible by the generous support of the American people through the United States Agency for International Development (USAID). The Global Alliance for Improved Nutrition (GAIN) and the Home Fortification-Technical Advisory Group (HF-TAG) provided additional support for some of the working groups.

Working Group 1 Members: Judy Canahuati, USAID, USA; Diane DeBernardo, USAID, USA; Christophe Guyonnet, GAIN Premix Facility, Switzerland; Carrie Hubbell Melgarejo (Rapporteur), SPRING, USA; Rolf Klemm (Chair), HKI, USA; Shelley Marcus, Tufts University, USA; Possolo, Edna, Government of Mozambique; Timothy Quick, USAID, USA; Claudia Roca, JSI, USAID | DELIVER PROJECT, Guatemala; Claudia Schauer, The Hospital for Sick Children, Canada; Ruth Situma, UNICEF, USA; Nigel Sunley, Sunley Consulting, South Africa; Gustavo Iván Tapia Terán, Independent Consultant, Bolivia; Stanley Zlotkin, SGHI, Canada Working Group 2 Members: Sally Abbott, USAID, USA; Nancy Aburto, WFP, Italy; Elizabeth Bontrager, USAID, USA; Deepika Nayar Chaudhery, Micronutrient Initiative, India; Marcia Griffiths, Manoff Group, USA; Mohammad Raisul Haque, BRAC, Bangladesh; Maria Elena Jeffers, CDC/IMMPACT, USA; Hou Krooun, HKI, Cambodia; Sorrel Namaste (Rapporteur), SPRING, USA; Rahul Rawat (Chair), IFPRI, Senegal; Ietje Reerink, PSI, Madagascar Working Group 3 Members: Anabelle Bonvecchio Arenas, National Institute of Public Health, Mexico; Alexis D'Agostino (Rapporteur), SPRING, USA; Ruben Grajeda, PAHO/WHO, USA; Elaine Gray, USAID, USA; Imanaliva, Cholpon, UNICEF, Kyrgyzstan; Laura Irizarry, Independent Consultant, Peru; Zeina Maalouf-Manasseh, FANTA, USA; Mulokozi, Genesee, Government of Tanzania; Lynnette Neufeld, (Co-chair), GAIN, Switzerland, Minarto Noto Sudardjo, Millennium Challenge Account, Indonesia; Melanie Thurber, USAID, USA; Narantsetseg Tevegsuren, WVI, Mongolia; Alison Tumilowicz, (Co-chair), GAIN, Switzerland; Michael Zimmermann, ETH, Switzerland; Non-Working Group Participants: Kanika Bahl, R4D, Gwyneth Coles, SPRING, USA; Omar Dary, USAID, USA; Raphael Makonnen, USAID, USA; Traci Mow, USDA, USA; Christina Nyhus Dhillon, SPRING Consultant, USA; Irwin Rosenberg, Tufts University, USA; Danya Sarkar, SPRING, USA; Michelle Schaan, USAID, USA; Kellie Stewart, USAID, USA; Carolyn Wetzel-Chen, MCC, USA

## PRODUCTS OF THE MNP CONSULTATION

